BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

Application under Section 14, 15, 86 (1) (d) of the Electricity Act, 2003 read with Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 with respect to Grant of Transmission License to Mohanlalganj Transmission Limited

APPLICATION NO :.....

Mohanlalganj Transmission Limited
(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

Volume I of II

Page 1 to 306

Registered office:
B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016

Address for Correspondence:
C/o ED (TBCB), Power Grid Corporation of India Limited
Saudamini, Plot no.2, Sector -29, Gurgaon 122001

BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION
LUCKNOW

Application under Section 14, 15, 86 (1) (d) of the Electricity Act, 2003 read with Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 with respect to Grant of Transmission License to Mohanlalganj Transmission Limited

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MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

APPLICATION No :.....

IN THE MATTER OF

Application under Section 14, 15, 86 (1) (d) of the Electricity Act, 2003 read with Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 with respect to Grant of Transmission License to Mohanlalganj Transmission Limited

Mohanlalganj Transmission Limited
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Registered office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi 110 016
Address for correspondence: C/o ED (TBCB), Power Grid Corporation of India Limited, Saudamini, Plot no.2, Sector -29, Gurgaon 122001.....**APPLICANT**

AND

Pashchimanchal Vidyut Vitran Nigam Limited (PVVNL)
CE (Commercial) , Hydel Colony, Victoria Park,
Meerut-250001 .....**RESPONDENT(S)**

And Others

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

	following enclosures: ▪ Scope of Project: Enclosure-1 ▪ Certificate of Registration/incorporation: Enclosure-2 ▪ Memorandum of Association and Articles of Association: Enclosure-3 ▪ Copy of Power of Attorney of the signatory to commit the application or its promoter : Enclosure-4 ▪ Details of Income Tax Registration – Enclosure-5 ▪ Draft Licence: Enclosure-6 ▪ Financial Statements of the Applicant as certified by Bid Process Coordinator – PFCCL: Enclosure-7 ▪ Credit Rating of Power Grid Corporation of India Limited, the Holding Company of the Applicant Company: Enclosure-8 ▪ Organisational & Managerial Capability : Enclosure-9 ▪ Approach & Methodology : Enclosure-10		
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Filed by
Mohanlalganj Transmission Limited
(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

Represented by Rajiv Gandhi
Project Incharge, Mohanlalganj Transmission Limited

Place: Lucknow
Date : 06/06/2022

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

APPLICATION No :.....

IN THE MATTER OF

Application under Section 14, 15, 86 (1) (d) of the Electricity Act, 2003 read with Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 with respect to Grant of Transmission License to Mohanlalganj Transmission Limited

Mohanlalganj Transmission Limited
(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)
Registered office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi 110 016
Address for correspondence: C/o ED (TBCB), Power Grid Corporation of India Limited, Saudamini, Plot no.2, Sector -29, Gurgaon 122001.....**APPLICANT**

AND

Pashchimanchal Vidyut Vitran Nigam Limited (PVVNL)
CE (Commercial) , Hydel Colony, Victoria Park,
Meerut-250001 .....**RESPONDENT(S)**

And Others

To
The Secretary
Uttar Pradesh Electricity Regulatory Commission
Lucknow

Sir,

The application filed under Section 14, 15, 86 (1) (d) of the Electricity Act, 2003 read with Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 with respect to Grant of Transmission License to **Mohanlalganj Transmission Limited**, may please be registered. The original and five copies alongwith of the application are enclosed. The application alongwith annexures and enclosures are also being submitted on a compact disc (CD).

Applicant
Mohanlalganj Transmission Limited
(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

Represented by Rajiv Gandhi
Project Incharge, Mohanlalganj Transmission Limited

Place: Lucknow
Date: 06/06/2022

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

APPLICATION No :.....

IN THE MATTER OF

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AND

Pashchimanchal Vidyut Vitran Nigam Limited (PVVNL)
CE (Commercial) , Hydel Colony, Victoria Park,
Meerut-250001 .....**RESPONDENT(S)**

And Others

To
The Secretary
Uttar Pradesh Electricity Regulatory Commission
Lucknow

MEMO OF PARTIES

Mohanlalganj Transmission Limited
(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)
Registered office: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi110 016
Address for correspondence: C/o ED (TBCB), Power Grid Corporation of India Limited, Saudamini, Plot no.2, Sector -29, Gurgaon 122001.....**APPLICANT**

VERSUS

1 Pashchimanchal Vidyut Vitran Nigam Limited (PVVNL)
CE (Commercial) , Hydel Colony, Victoria Park,
Meerut-250001 .....RESPONDENT(S)

2 Purvanchal Vidyut Vitaran Nigam Limited
SE (Commercial)
Vidhut Nagar, Bhikharipur, P.O. DLW,
Varanasi- 221010.....RESPONDENT

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

3 Dakshinanchal Vidhyut Vitaran Nigam Limited(DVVNL)
EE (Commercial)
Urja Bhawan, Nh-2 9 Agra-Delhi bypass Road0 Sikandra,
Agra-282002.....RESPONDENT

4 Madhyanchal Vidyut Vitran Nigam Limited
EE (Commercial)
4A, Ghokle Marg,
Lucknow – 226001.....RESPONDENT

5 Kanpur Electricity Supply Company Limited
SE (Commercial)
Kesa House, 14/17 Civil lines,
Kanpur-208001.....RESPONDENT

6 Uttar Pradesh Power Transmission Corporation Limited,
Director (Works & Project)
Shakti Bhawan 14 Ashok Marg,
Lucknow- 226001..... RESPONDENT

7 PFC Consulting Limited
Chief General Manager
(A wholly owned subsidiary of Power Finance Corporation Ltd.)
9th Floor, A-Wing,
Statesman House, Barakhambha Lane
Connaught Place, New Delhi – 110 001..... RESPONDENT

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

INDIA NON JUDICIAL

Government of Uttar Pradesh

सत्यमेव जयते

NAUSHEEN KHATOON E-STAMP VENDOR
Licence No. 287
SADAR-LUCKNOW

e-Stamp

Certificate No.	:	**IN-UP10452484023802U**
Certificate Issued Date	:	06-Jun-2022 04:17 PM
Account Reference	:	NEWIMPACC (SV)/ up14348904/ LUCKNOW SADAR/ UP-LKN
Unique Doc. Reference	:	SUBIN-UPUP14348904125164881262 98U
Purchased by	:	MOHANLALGANJ TRANSMISSION LIMITED
Description of Document	:	Article 4 Affidavit
Property Description	:	NA
Consideration Price (Rs.)	:	
First Party	:	MOHANLALGANJ TRANSMISSION LIMITED
Second Party	:	PASHCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED PVVNL
Stamp Duty Paid By	:	MOHANLALGANJ TRANSMISSION LIMITED
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

NOTARIAL NOTARIAL

Please write or type below this line

S.K. SHUKLA
NOTARY
GOVT. OF U.P. INDIA

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

06/06/22
Advocate & Notary
L.N. - 1/17, Gandhi Nagar
Lucknow

Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

06-Jun-2022 04:17 PM 06-Jun-2022 04:17 PM 06-Jun-2022 04:17 PM

BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

APPLICATION No :.....

IN THE MATTER OF

Application under Section 14, 15, 86 (1) (d) of the Electricity Act, 2003 read with Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 with respect to Grant of Transmission License to Mohanlalganj Transmission Limited

Mohanlalganj Transmission Limited
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AND

Pashchimanchal Vidyut Vitran Nigam Limited (PVVNL)
CE (Commercial) , Hydel Colony, Victoria Park,
Meerut-250001.....**RESPONDENT(S)**

And Others

AFFIDAVIT

I, Rajiv Gandhi son of Late Sh. S. K. Gandhi residing at C 62 Saket, Golf View Apartments, New Delhi-17 do hereby solemnly affirm and state as follows:

1. I am the Authorised Signatory of the Applicant Company in the above matter and I am duly authorized by the Applicant Company to affirm this affidavit. I say that I am conversant with the facts and circumstances of this case.

2. The statements made in paragraphs of the application, are true to my knowledge and belief based on the information received and I believe them to be true.

3. I say that there are no proceedings pending in any court of law / tribunal or arbitrator or any other authority, wherein the Applicant is a party and where issues arising and / or reliefs sought are identical or similar to the issues in the matter pending before the Hon'ble Commission.

06/06/12
Advocate & Notary
L.N. - 1/17, Gandhi Nagar
Lucknow

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Rajiv Gandhi
Authorised Signatory
Mohanlalganj Transmission Limited
(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

Place: Lucknow
Date: 06.06.2022

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

VERIFICATION:

I, the Deponent above named hereby solemnly hereby affirm that the contents of the above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed therefrom. Verified by me on this the 06 day of June 2022 at Lucknow.

Deponent

Witness

NOTARY S.K. SHUKLA Advocate & Notary L.N. - 1/17, Gandhi Nagar Lucknow GOVT. OF U.P. INDIA

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

SWORN AND VERIFIED BEFORE ME.
06/06/22
S.K. SHUKLA
Advocate & Notary
L.N. - 1/17, Gandhi Nagar
Lucknow

Ex. I Know & identified the deponent who has signed before me.

BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

Application No.....

IN THE MATTER OF

Application under Section 14, 15, 86 (1) (d) of the Electricity Act, 2003 read with Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 with respect to Grant of Transmission License to Mohanlalganj Transmission Limited

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AND

Pashchimanchal Vidyut Vitran Nigam Limited (PVVNL)
CE (Commercial) , Hydel Colony, Victoria Park,
Meerut-250001 .....**RESPONDENT(S)**

And Others

Application

The Applicant respectfully submits as under:

1. **Mohanlalganj Transmission Limited** hereby submits this application under Section 14, 15 and 86 (1) (d) of the Electricity Act, 2003 and Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 (hereinafter referred to as "Transmission License Regulations") to establish Transmission System for Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" on build, own, operate and maintain basis (hereinafter referred to as "the Project") consisting of the following elements:

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
A)	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines**			
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.	18 months	30.49%	Elements at Sl. No. 1, 2 & 3 shall be required simultaneously
2.	LILO of Sarojani Nagar (400kV) - Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)			
3.	LILO of Lucknow (PGCIL) 400 kV - Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)			
B)	**Construction of LILO Line**			
1.	LILO of 765 kV Ghatampur - Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	61.17%	-
2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months	0.49%	-
C)	**Construction of LILO lines on Monopole**			
1.	LILO of one circuit on monopole or any other suitable lattice structure in	9 months	7.85%	

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	compliance to related IS-802 of CEA guideline of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida			

Note:

i. *UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost.*

ii. *GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.*

In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably.

2. UP Power Transmission Corporation Limited vide its letter No. 55/PS/DIR (W&P)/PTCL/Mohanlalganj dated February 09, 2021 has appointed PFC Consulting Limited (PFCCL) to be the Bid Process Coordinator (BPC) (hereinafter referred to as BPC) for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish Transmission System for Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida, on build, own, operate and maintain basis (hereinafter referred to as "the Project") through Tariff Based Competitive Bidding process. A copy of the letter is enclosed and marked as **Annexure-1**, (Page ..19.... to Page ..27....).

3. That a company under the Companies Act 2013 by the name "**Mohanlalganj Transmission Limited"** having its registered office at New Delhi has been incorporated on 08.06.2021 by PFC Consulting Limited as its wholly owned subsidiary to initiate the activities for execution of the Project and subsequently to act as Transmission Service Provider (TSP) after being acquired by the successful bidder selected through Tariff Based Competitive Bidding process.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

4. BPC has initiated the bidding process and issued the request for qualification (hereinafter to be referred as ' RFQ') document for selection of successful bidder who is to acquire the TSP in accordance with the "Tariff Based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by Government of India, Ministry of Power under section – 63 of The Electricity Act, 2003 and as amended from time to time.

5. Power Grid Corporation of India Limited (POWERGRID) participated in the Request for Qualification (RFQ) process conducted by the BPC and subsequently, POWERGRID was declared as Qualified Bidder by the BPC to participate in the Request for Proposal (RfP) process. A copy of the Letter from BPC declaring POWERGRID as the Qualified bidder is enclosed and marked as **Annexure-2**, (Page ..28.... to Page ..29...).

6. BPC has floated the RFP documents and a copy of the RFP and the Amendments / Clarifications furnished by BPC are enclosed and marked as **Annexure-3**, (Page .30.... to Page ..271..).

7. The bidding was undertaken by the BPC and the e-reverse auction was held on 03.09.2021. However, the Letter of Intent (LoI) was issued only on 12.05.2022 by the BPC to Power Grid Corporation of India Limited who was the successful bidder. A copy of the LoI alongwith the details of Annual Transmission Charges and the correspondences between BPC & POWERGRID and clarifications furnished by BPC before acceptance of LoI by POWREGRID which are an integral part of LoI is enclosed and marked as **Annexure-4, (Page .272.. to Page .281..)**.

8. As per the provisions 2.6 of Request for Proposal (RFP) and LoI issued, it is stated that within 10 days of issuance of LoI, the TSP is required to inter-alia acquire the SPV, apply to the Uttar Pradesh Electricity Regulatory Commission for Grant of Transmission License. Vide letter dated 30.05.2022, the BPC in terms of provision Clause 2.4 of RFP has extended the date upto 13.06.2022 for completion of all activities by the successful bidder. A copy of the relevant extract of the RFP and the letter from BPC is enclosed and marked as **Annexure-5, (Page .282. to Page 285..)**.

9. That in accordance with the LoI, Power Grid Corporation of India Limited on 30.05.2022 has furnished the Contract Performance Guarantees for an aggregate value of Rs. 15.33 Crores (Fifteen Crore Thirty Three Lakh only) separately in favour of each of the Long Term Transmission Customers listed out in the RFP documents. The details of CPGs issued in favour of LTTCs are given below:

S. No.	BG Details	Issued to	Amount and Expiry Date
1.	16090100017532 dated 30.05.2022 from Axis Bank Limited	Pashchimanchal Vidyut Vitran Nigam Limited	4,75,23,000 Claim upto: 29.02.2024 Valid upto: 28.02.2025
2.	16090100017530 dated 30.05.2022 from Axis	Purvanchal Vidyut Vitran Nigam Limited	3,67,92,000 Claim upto: 29.02.2024

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

	Bank Limited		Valid upto: 28.02.2025
3.	16090100017529 dated 30.05.2022 from Axis Bank Limited	Dakshinanchal Vidhyut Vitran Nigam Limited	3,37,26,000 Claim upto: 29.02.2024 Valid upto: 28.02.2025
4.	16090100017527 dated 30.05.2022 from Axis Bank Limited	Madhyanchal Vidyut Vitran Nigam Limited	2,91,27,000 Claim upto: 29.02.2024 Valid upto: 28.02.2025
5.	16090100017531 dated 30.05.2022 from Axis Bank Limited	Kanpur Electricity Supply Company Limited	61,32,000 Claim upto: 29.02.2024 Valid upto: 28.02.2025

The copy of CPG furnished to LTTCs are enclosed and marked as **Annexure-6, (Page .286.. to Page .306...).**

10. That the signed Transmission Service Agreement (TSA) dated 9th July 2021 entered between the identified Long Term Transmission Customers and **"Mohanlalganj Transmission Limited "** was provided on 30.05.2022 by the BPC and the same is enclosed and marked as **Annexure-7, (Page 307.. to Page .507....).**

11. That Power Grid Corporation of India Limited has acquired the **Mohanlalganj Transmission Limited on 30.05.2022,** after payment of Acquisition Price of Rs. 9,10,45,329 /- as intimated by BPC, execution of the Share Purchase Agreement and completing all procedural requirements specified in the RFP documents. A copy of the Share purchase agreement is enclosed and marked as **Annexure – 8, (Page .508... to Page .526...).**

12. That Section 14 of the Electricity Act, 2003 (the Act) provides that the Appropriate Commission may, on an application made under section 15 of the Electricity Act, 2003, grant License to any person to transmit electricity as a transmission licensee in any area as may be specified in the License. The word 'person' has been defined in section 2 (49) of the Act to include any company or body corporate or association or body of individuals, whether incorporated or not, or artificial juridical person.

    That in accordance with the Regulation 3.2 of Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 the application is filed before the Hon'ble UPERC for Grant of Tranmsision License.

13. That Section 15(1) of the Act provides that every application under Section 14 shall be made in such manner and in such form as may be specified by the Appropriate Commission and shall be accompanied by such fees as may be prescribed.

    That in accordance with the Regulation 3.2.1 of Uttar Pradesh Electricity Regulatory Commission (Fees and Fines) Regulation 2010 the applicant has paid the fees for filing the application for Grant of Transmission License with details as under:

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

In Favour of	Demand Draft No.	Amount (in Rs.)	Bank Details
Secretary, Uttar Pradesh Electricity Regulatory Commission	506239	5,00,000	ICICI Bank Limited Sector-29 Gurgaon

14. That the applicant - **Mohanlalganj Transmission Limited** incorporated under the Companies Act, 2013 is a 100% wholly owned subsidiary of Power Grid Corporation of India Limited who has been selected on the basis of the Tariff Based Competitive Bidding as per the Tariff Based Competitive Bidding Guidelines for Transmission Service issued by Govt. of India, Ministry of Power and thus eligible for issuance of transmission license.

15. It is submitted that application for the licence sought for an area does not include either whole or any part of any cantonment, aerodrome, fortress, arsenal, dockyard or camp or of any building or place in the occupation of the Government for defence purposes.

16. Duly filled Form 1 for Grant of Transmission License in accordance with the Regulation 3.2.1 of UPERC (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931, is enclosed herewith and marked as **Annexure-9, (Page ..527... to Page ...666...)**.

17. Further, in accordance with 3.2.2 of UPERC (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 the details of information / documents are as under :

    a) the 'Draft Licence' to be proposed by the applicant with the name and address. "Draft License'is enclosed as part of Form-1 placed at **Annexure-9 – Enclosure-6, (Page ...527... to Page ...531...)**.

    b) Maps of the proposed area of licence showing the route of the transmission line, locations of sub-stations and such other details as the Commission may specify on a scale of
    i. not less than 10 Centimeters to a kilometer, or
    ii. if no such maps are available, of not less than that of the largest scale ordinance maps available, or
    iii. on such other scales as may be approved by the Commission

    Maps are enclosed as part of detailed project report placed at **Annexure-10-AA3, (Page ..715.... to Page ..730....)**.

    c) A detailed description of the existing transmission network within the licensee's proposed Area of Activity, including the single line diagram of the transmission network along-with a executive summary of the existing facilities, details of other equipment/apparatus in his area including number and details of sub-stations, details of power transformers, a description of the metering mechanism and other relevant details of the system including details of ownership of the said facilities.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

The requirement of Tansmission scheme has been evolved by UP Power Transmission Corporation Limited with the Project description provided in the Bidding documents as under:

The proposed Transmission System shall be utilized to meet the power requirement of State of Uttar Pradesh and the surplus power, if any, shall be fed into Northern Grid to meet the power requirement of other states in Northern Region.

The Transmission System proposed to be implemented is divided into three parts i.e. Construction of 400/220/132 kV GIS substation, Mohanlalganj with associated lines, 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida with associated lines.

The scope of the Applicant (Project Developer) is to establish the following elements which has been provided in the Bidding documents:

S. No.	Details of Transmission Elements
A) Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-	
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.
2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)
3	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)

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B) Construction of LILO Line	
1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing
2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur
C) Construction of LILO lines on Monopole	
1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA guideline of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida

Note:

i. *UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.*

ii. *GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.*
In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably.

Apart from the above there is no other scope specified to be established by the Applicant.

d) a detailed project report in relation to the construction, operation and maintenance of the transmission system proposed to be undertaken by the Applicant.

The detailed project report is enclosed and marked as **Annexure-10, (Page .661.. to Page .735..).**

e) a list of all the local authorities vested with the administration of any portion in the proposed Area of Licence;
List of authorities are as mentioned below:
1. Revenue Department, Govt. of Uttar Pradesh
2. National Highway Authority of India
3. Public Works Department, Govt. of Uttar Pradesh
4. Ministry of Railways, Govt. of India
5. Power and Telecom Co-ordination Committee

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6. Ministry of Civil Aviation, Govt. of India
7. Central Transmission Utility and State Transmission Utility
8. Ministry of Environment and Forest Clearance
9. Central Electricity Authority
10. All Muncipal Corporation and Village Panchayat falling under area of work
11. Inland Waterway Authority of India, Ministry of Shipping, GoI
12. Ministry of Defense
13. Any other relevant Authority required for Development, Financing, Construction, Maintaining / Renewing all such Consents and Clearances / Permit in order to carry out obligation under TSA.

f) an approximate statement describing any land which the applicant proposes to acquire for the purpose of the Licensed Business and the means of such acquisition;

As per the provisions of the Bidding documents, UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to applicant as is where basis at free of cost on lease basis at a nominal lease rent.

g) an approximate statement of the capital proposed to be expended in the Area of Licence and such other particulars as the Commission may require;

The details enclosed as part of detailed project report placed at **Annexure-10, (Page ..667.. to Page 735...)**

h) relevant information pertaining to the availability of adequate number of competent personnel to construct, operate and maintain the transmission system effectively and efficiently, the availability of infrastructure facilities and the financial capacity to carry out the project;

The details enclosed as part of Form-1 placed at **Annexure-9-Enclosure-9, (Page .658. to Page .661..)**

i) a copy of the Memorandum and Articles of Association, if the applicant is a body corporate and similar constitutional documents in all other cases;

The details enclosed as part of Form-1 placed at **Annexure-9- Enclosure-3, (Page 536... to Page .576..)**

18. In accordance with the requirement under section 15 (3) of the Act and regulation 3.7.4 of UPERC (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931, a copy of the Application is also being served simultaneously to the UP Power Transmission Corporation Limited - the STU, for their recommendation.

19. That a copy of the Application is also served simultaneously to PFCCL - the Bid Process Coordinator, to enable submission of confirmation on the bidding process

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

and also furnish requisite documents / information before the Hon'ble Commission and thereby ensure processing of application.

20. In accordance with the requirement under Regulation 3.7.6 of UPERC (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931, the Application along with annexures and enclosures has been hosted on the website www.powergrid.in/subsidiaries to facilitate access to the application by any person through the internet.

21. That the Applicant has fulfilled all the requirements as per Section-14 and 15 of the Electricity Act 2003 and UPERC (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 for grant of Transmission license.

22. That the Applicant shall publish the requisite Notices in the newspapers as per UPERC (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 and after publication, the Applicant shall place a copy of the same before the Hon'ble Commission.

23. It is submitted that Section 14 of the Electricity Act, 2003 empowers the Appropriate Commission to grant License.

24. **PRAYER**

It is respectfully prayed that the Hon'ble Commission may be pleased to:

a) Grant Transmission License to the Applicant to establish the Project as provided in the Transmission Service Agreement;

b) Condone any inadvertent errors ommissions / errors / shortcomings and permit the Applicant to add / change / modify / alter these filings and make further submissions as may be required at a future date; and

c) Pass such other order / orders, as may be deemed fit and proper in the facts & circumstances of the case

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Mohanlalganj Transmission Limited

Applicant

Represented by Rajiv Gandhi
Project Incharge, Mohanlalganj Transmission Limited

Place: Lucknow
Date: 06/06/2022

Annexure-1

Letter No. – 55 / PS / DIR(W&P) / PTCL / Mohanlalganj dated February 09, 2021 notifying PFC Consulting Limited (PFCCL) to be the Bid Process Coordinator (BPC)

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ATTESTED TRUE COPY
Attested from Pg 19 to 27
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

DIRECTOR (WORKS & PROJECT),
U.P. POWER TRANSMISSION CORPORATION LTD.
निदेशक (कार्य एवं परियोजना)
उ0 प्र0 पावर ट्रांसमिशन कारपोरेशन लि0,

7th Floor, Shakti Bhawan,
14-Ashok Marg, Lucknow-226 001 (U.P.)
E-mail: director_project@upptcl.org

7 वां तल, शक्ति भवन,
14–अशोक मार्ग, लखनऊ– 226 001 (उ0प्र0)
CIN No. : U40101UP2004SGC028687

No.55/PS/DIR (W&P)/PTCL/Mohanlalganj Dated: 09 February, 2021

M/s PFC Consulting Ltd.,
First Floor, "Urjanidhi",
1, Barakhamba Lane,
Connaught Place,
New Delhi-110001

Kind Attention: Sri Manoj Rana, CEO

Subject :- Letter of Intent (LOI) for providing services of Consultant & Bid Process Coordinator(BPC) for selection of Developer for implementation of Tariff Based Competitive Bidding for Construction of 400/220/132 kV GIS substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO(Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida.

Your reference 1. Original offer : 04/20-21/UPPTCL/BPC/01 Dated : 22.01.2021
2. Revised offer : 04/20-21/UPPTCL/BPC/02 Dated : 03.02.2021

Dear Sir,

In continuation of above mentioned references, a Letter of Intent is hereby placed on you for providing services as Consultant & Bid Process Coordinator (BPC) for selection of Transmission service provider through Tariff Based Competitive Bidding Process for the construction of following Transmission Package :

Construction of 400/220/132 kV GIS substation, Mohanlalganj (Lucknow U.P) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida

Sl. No.	Items	Capacity / Nos.	Estimated Cost (Rs. Cr.)
(A)	**400/220/132kV GIS substation, Mohanlalganj, (Lucknow U.P) with associated 400 kV Transmission lines**		
1.	Construction of 400/220/132kV GIS substation, Mohanlalganj, Lucknow U.P (including 125MVAR Bus Reactor) along with Construction of following main Bays at S/S :	2x500+2x200 MVA .	228.80

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	i 400kV, 500 MVA ICT Bay– 02 Nos. ii 220kV ,500 MVA ICT Bay – 02 Nos. iii 220kV,200 MVA ICT Bay – 02 Nos iv 132kV, 200 MVA ICT Bay – 02 Nos v 400kV, 125 MVAR Bus Reactor Bay – 01 No vi 400kV Feeder Bay – 4 Nos vii 220kV Feeder Bay –6 Nos viii 132kV Feeder Bay – 2 Nos Construction of following additional Bays at S/S for future use : i 400kV GIS Feeder Bay – 02 Nos. ii 220kV GIS Feeder Bay – 04 Nos. iii 132kV GIS Feeder Bay – 04 Nos		
2.	LILO of 400kV Sarojani Nagar-Unnao (765kV) S/C Line at 400kV GIS Substation Mohanlalganj, Lucknow (Twin Moose)	37 Km.	58.93
3.	LILO of 400kV Lucknow(PGCIL) – Sultanpur S/C Line at 400kV Substation Mohanlalganj, Lucknow (Twin Moose)	06 Km.	9.56
		Total-A	**297.29**
(B)	**Construction of LILO Lines**		
1.	LILO of under Construction 765kV Ghatampur-Hapur (WUPPTCL) Line at 765 kV GIS Substation Rampur (2xS/C on Quad Bersismis).	116 Km.	596.59
	LILO of one ckt. of 400kV Bareilly (PGCIL)-Moradabad D/C Line at 765 kV GIS S/S Rampur.	03 Km.	4.78
		Total-B	**601.37**
(C)	**Construction of LILO Line on Monopole (Quad Moose)**		
1.	LILO of one Ckt. Of 400kV Ataur (WUPPTCL) – Indirapuram(WUPPTCL) D/C Quad Moose line at 400 kV GIS S/S Sector 123 Noida on monopole (Quad Moose)	10 Km.	76.57
		Total-C	**76.57**
		Grand Total (A+B+C)	**975.23**

BPC services includes formation of Special Purpose Vehicle (SPV), appointing BoD of SPV, maintaining accounts including audits, coordination with related Govt. Agencies, formulating of competitive bidding process, preparation of bidding documents including Transmission Service Agreement (TSA), inviting bids, conduct and to carry out

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

evaluation of bids, getting approval of Govt. Agencies, award of work and other process till execution of TSA with selected developer, adoption of Tariff and issue of License as per description of services enclosed herewith in ANNEXURE-I. The Scope of Work shall include technical, financial and legal services for the entire duration of assignment for selection of Developer. The scope shall also include all such works which are not specifically mentioned in the description of services enclosed herewith in ANNEXURE-I but are required for selection of Developer for implementation of Tariff Based Competitive Bidding of Power Transmission Project. It shall also be the responsibility of the PFC Consulting Limited {hereinafter referred to as "Consultant & Bid Process Coordinator (BPC)"} to carry out such works without any extra cost. The terms and conditions are mentioned as below:

1.0 Contract Price :

Sl.No.	Item	Lump Sum Amount
1.	To provide services as Consultant & Bid Process Coordinator for above mentioned package	0.44% of the project cost. Rs. 4.29 Crores

NOTE :

(i) The above price is FIRM till completion of assignment.
(ii) The Lump-sum prices are inclusive of overhead/out of pocket expenses, travel, boarding, Lodging, visits to site, all taxes/ duties but exclusive of GST.
(iii) GST shall be extra as per prevailing rates.
(iv) Payments will be made by the successful bidder(s)

2.0 Work schedule :

The PFCCL shall provide his services as BPC to the satisfaction of UPPTCL/Govt. of UP till the signing of TSA with the successful bidder adoption of Tariff & issue of Transmission License by UPERC to Developer. The activity wise break up is given as below:

Sl. No.	Particulars	Important Date (from date of LOI) issued vide letter no.
1.	Issue of NIT for RFQ through ICB	Zero Date
2.	Preparation, submission and opening of RFQ documents	30 days (from zero date)
3.	Submission of Evaluation Report and Recommendations on RFQ and issuance of RFP documents	30 days (60 days from zero date)
4.	Participation in Pre-Bid Conference for RFP, final clarification and issue of revised RFP	25 days (85 days from zero date)
5.	Submission of RFP (Technical and Price Bid)	35 days (120 days from zero date)

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6.	Submission of Bid Evaluation Report and Recommendations based on RFP received from developers and issue of LOI to selected Developer	15 days (135days from zero date)
7.	Signing of Share Purchase Agreement	10 days (145 days from zero date)
8.	Signing of TSA	-----Do-----
9.	Adoption of Tariff by Uttar Pradesh Electricity Regulatory Commission (UPERC)	As per the decision of UPERC
10.	Issue of Transmission License by Uttar Pradesh Electricity Regulatory Commission(UPERC)	-----Do-----

Note :

(i) The PFCCL will submit fortnightly activity report indicating briefly main task carried out during the month under the review. He will also submit briefing and Position Papers on selected issues as requested from time to time. The dates mentioned against the above activities are indicative only and subject to change as required and to be confirmed later.

3.0 Terms & Conditions :

PFCCL shall extend the services to UPPTCL on the following terms and condition:

1. PFCCL shall incorporate special purpose vehicle for the identified transmission projects as its wholly owned subsidiary. The SPV shall be taken over by the successful bidder after issue of LOI and after paying the acquisition price to be determined by PFCCL towards purchase of the sale shares at par and for taking over all assets and liabilities of the SPV.
2. PFCCL shall charge acquisition price from successful bidder(s) consisting of all direct and indirect cost which Inter-alia shall include development expenses, survey charges, consultant charges, salaries & establishment expenses, interest, administrative expenses, NIT expenses, other incidental expenses and professional fee of 0.44% of the project cost. The acquisition price (professional fee and Cost incurred) payable by the successful bidder shall be subject to applicable goods &services tax.
3. All cost will be incurred by PFCCL from its own resources and allocated to SPV. The acquisition price including all costs as well as professional fee will be debited to the SPV by PFCCL and will be shown as liability payable to PFCCL in the books of SPV. The liability will be eventually discharge by the successful bidder on the date of takeover of SPV.
4. In case process of selection of developer is abandoned, for any reason whatever, all the expenses as detailed above (incurred/committed by PFCCL excluding professional fee) till such date of abandonment shall be paid/reimbursed by UPPTCL to PFCCL.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

5. PFCCL can also monitor the progress of work after issue of LOI/Award to the successful developer as a separate consultancy assignment on terms and conditions to be agreed mutually.
6. All other matter which has not specifically been mentioned or provided for in scope of work or terms and conditions shall be decided mutually by both the parties.

4.0 Performance Guarantee :

A Bank Guarantee from scheduled Bank as per Performa enclosed in ANNEXURE-II for an amount equivalent to 10% of Contract Price is to be submitted with in fifteen days of Letter of Intent(LOI). The Bank Guarantee shall be valid upto completion period for consultancy assignment plus 6 months claim period thereafter in the Proforma enclosed.

You are, therefore, requested to send your acceptance of above said LOI immediately. Further the performance Bank Guarantee (10% of Contract Price) may also be submitted to the undersigned so that the contract agreement may be signed by both parties within fifteen days of issue of this LOI.

Yours faithfully,

(Anil Jain)
Director (W&P)

Encl: As Above

No. /PS/DIR (W&P)/PTCL/Mohanlalganj Dated: February, 2021

Copy forwarded to the following for information and necessary action:

1. Additional Chief Secretary (Energy), Govt. of UP, Lucknow.
2. Chairman, UPPTCL, 7th floor, Shakti Bhawan, Lucknow.
3. MD, UPPCL, 7th floor, Shakti Bhawan, Lucknow.
4. MD, UPPTCL, 7th floor, Shakti Bhawan, Lucknow.
5. Director (Commercial), UPPCL, 6th Floor Shakti Bhawan, Lucknow.
6. Director (Operation), UPPTCL, 11th Floor Shakti Bhawan, Lucknow.
7. Director (Corporate Planning), UPPCL, 7th Floor Shakti Bhawan, Lucknow.
8. Director (Commercial & Planning), UPPTCL, 5th Floor Shakti Bhawan, Lucknow.
9. Chief Engineer (PPP), UPPTCL, Shakti Bhawan, Lucknow.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

(Anil Jain)
Director (W&P)

ANNEXURE-I

DESCRIPTION OF THE SERVICES OF CONSULTANT& BID PROCESS COORDINATOR

Objective

Uttar Pradesh Power Transmission Corporation Ltd. (UPPTCL) is facilitating the Construction of 400/220/132 kV GIS substation, Mohanlalganj, with associated 400kV lines and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO(Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida mentioned herein under through Tariff Based Competitive Bidding route.

The objective is to develop Transmission network through interested investors including private participants.

In order to ensure best possible response from prospective promoters, UPPTCL seeks to engage services of Consultant & Bid Process Coordinator (BPC) for formulating the competitive bidding process including preparation of all bidding documents, preparing evaluation of bids and other processes till selection of the developers and signing of TSA and Share Purchase Agreement.

The **scope of work** shall include providing technical, financial and legal services for the entire duration of the assignment for selection of developer.

The Consultant & Bid Process Coordinator (BPC) shall carry out the following tasks:

(a) Analysis of applicable laws, regulations and other statutory provisions applicable to Public Private Participation (PPP) in Transmission projects and development of a conceptual framework for PPP in Transmission for Uttar Pradesh Power sector.

(b) Defining and Drafting of technical specifications including Insulation parameters, type of conductors/length of lines and tower design (if available) for each transmission lines in line with the details furnished by UPPTCL.

(c) The formation of project specific Special Purpose Vehicle (SPV) for the identified project under the Companies Act, 2013 as a wholly owned subsidiary company under PFC Consulting Limited and Managing day-to-day affairs of the Company (SPV) and ensure the compliance of the Companies Act and other statutes as applicable on proposed SPV till it is acquired by selected bidder, Eventually, this project specific subsidiary (SPV) shall be taken over by the successful bidder on payment of the Acquisition Price to PFCCL.

(d) Appointment of Board of Directors of the Shell Company (SPV).

(e) Maintaining the financial accounts of the SPV and Company Secretarial records as per Companies Act including audit of accounts through statutory auditor duly appointed by CAG.

(f) Coordination with all related Governmental Instrumentalities/Agencies such as Govt. of Uttar Pradesh, UPPTCL, UPERC etc.

(g) Drafting of bidding documents for Technical, Financial/Legal Consultants, including bidding procedure, financial and technical specifications, formats etc. as may be considered appropriate for the project.

(h) Inviting Bids, Evaluation and Award of work.

(i) Drafting of project specific documents like Request for Qualification (RFQ), Request of Proposal (RFP), Transmission Services Agreement (TSA) based on guidelines/Standard Bidding Documents issued by Ministry of Power, Govt. of India.

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(j) Seeking approval of UPERC in case any deviation is required to be made with reference to SBD.

(k) Drafting of Project Specific Share Purchase Agreement.

(l) To formulate/prepare and finalize bidding documents such as RFQ, RFP, TSA, SPA and other documents for the Transmission projects and presentation before various committees like ETF, BEC, UPERC etc. as and when desired by owner (UPPTCL).

(m) Inviting Response to RFQ through Global Competitive Bidding route for short-listing of bidders, including release of advertisements in National/International Newspapers/Journals/Magazine etc. The bidding process will be in accordance with "Tariff Based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by Ministry of Power, Govt. of India.

(n) Organizing and Participation, as required, in all meetings, pre-bid conference, interactions at different stages e.g. RFQ, RFP, LOI's, Contract Signing, transfer of Shell Company to successful bidder etc.

(o) Preparing of replies/clarification to bidder's queries on the RFQ/RFP/TSA and any other documents.

(p) Pre-signing of Transmission Service Agreement by the beneficiaries.

(q) To prepare bid evaluation financial model to carry out analysis of Bids including sensitivity analysis and calculation of Bench Mark Prices etc.

(r) Evaluation of the response to the RFQ/RFP against the criteria as also the detailed scrutiny of the financial, commercial and legal aspects of the Responses and the Bids submitted by prospective developers/bidder to ascertain the acceptability of the Bid/Bidder.

(s) Presenting the evaluation of Responses/Bids before the Bid Evaluation Committee/Person(s) appointed by GoUP/UPPTCL for the purpose.

(t) Filling of documents, various applications/petitions to Appropriate Regulatory Commission or any other relevant authority.

(u) Interaction/Discussion with Empowered Committee, State Commission/ any other agency as intimated by GoUP/UPPTCL.

(v) Making application and obtaining approval of Government of Uttar Pradesh for laying of overhead Transmission Lines under Section 68 of Electricity Act, 2003.

(w) Initiate Process of seeking forest clearance, acquisition of land for location specific substations, if required.

(x) Finalization of the acquisition price payable by the selected bidder to PFCCL for the acquisition of 100% of the equity share holding of SPV along with all its related assets and liabilities.

(y) Preparation of petition for CERC/UPERC or any other legal forum and also assistance in the matters as and when required.

(z) Rebidding may have to be done in some circumstances. No extra payment shall be admissible to consultant& BPC on account of this.

(aa) Any other assistance required until award of the project or any work given by owner (UPPTCL) related to bidding processes or project.

(bb) BPC should make themselves available for meetings or discussions as and when required by UPPTCL/GoUP.

(cc) Representing UPPTCL before UPERC where UPPTCL is made Respondent/ Proforma Respondent relating to subject transmission projects for petitions filed by the selected bidder for grant of Transmission license/adoption of transmission charges etc.

MOHANGANJ TRANSMISSION LIMITED NEW DELHI

FORM OF 10% PERFORMANCE BANK GUARANTEE

THIS DEED OF GUARANTEE made on.....day of .....
200.....By the.....(here in after called 'the Guarantor') of the part IN FAVOUR of the U.P. Power Transmission Corporation Limited (hereinafter called "the Purchaser") of the other part.

WHERE AS In accordance with the contract agreement dated the.....day of 200.....(herein after called "the Said Contract") entered in to between the Purchaser & messrs..... a company within the meaning of the Companies Act and having its registered office at.....(hereinafter called "the Contractor") agreed to supply to the Purchaser the.....as provided in the said Contract.

AND WHEREAS the payment terms under the said contract provide that in order to take 100% payment of the Contract value the Contractor shall furnish to the Purchaser a bank Guarantee in the sum of 10% value of each consignment dispatched valid of.....

AND WHEREAS instead of furnishing separate guarantees as aforesaid the contractor wishes to furnish one guarantee in the sum of 10% value of the Contract valid for ..... and reckoned from the date.....

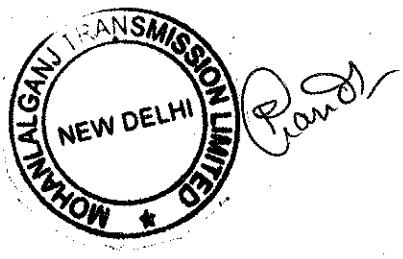
NOW THIS DEED WITNESSES AS FOLLOWS

1. In consideration of the premises the Guarantor hereby undertakes that the Contractor shall duly supply the aforesaid material of the correct quantity and strictly in accordance with the said contract failing which the Guarantor shall pay to the Purchaser on demand such amount or amount as the Guarantor may be called upon to the maximum aggregate of Rs.....being 10% of the Contract value.
2. The Guarantor shall pay to the purchaser on deemed the sum under Clause 1 above without demur and without requiring the purchaser to invoke any legal remedy that may be available to it to compel the Guarantor to pay the same or to compel such performance by the Contractor, provided that where the Guarantor considers the demand of the Purchaser unjustified, shall nevertheless pay the same through under protest to the Purchaser and shall not withhold payment on the account.
3. The guarantee shall come in to force from the date hereof and shall remain valid for ..... Calendar months from the date of the.....of the last consignment of goods dispatched which date, of dispatched according to contract is the .....day of.....
   If, however, the period of the Contract is for any reason extended thereby extending the said date, and upon such extension, if the Contractor fails to furnish a fresh or renewed Bank Guarantee for the extended period, Guarantor shall pay to the Purchaser the said sum of Rs.....or such lesser sum as the Purchaser may demand.
4. The guarantee herein contained shall not be affected by any change in the constitution of the Guarantor or the Contractor.
5. Any account settled between the Contractor and the Purchaser shall be conclusive evidence against the Guarantor of the amount due and shall not be questioned by the Guarantor.
6. The neglect or forbearance of the Purchase in enforcement of payment of any monies the payment whereof is intended to be hereby secured or the giving of time by the Purchaser for the payment thereof shall in no way relieve the Guarantor of its liability under this deed.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Annexure-2

Copy of Letter from BPC declaring POWERGRID as the Qualified bidder



PFC CONSULTING LTD.

15 YEARS OF CELEBRATING THE MAHATMA

पीएफसी कंसल्टिंग लिमिटेड
(पावर फाइनेंस कॉर्पोरेशन लिमिटेड की पूर्णतःस्वामित्वाधीन सहायक कम्पनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)
CIN U74140DL2008GOI175858

Ref. No. 04/ITP-45/21-22/RFP

May 27, 2021

To,
Sh. B. Vamsi Rama Mohan,
Chief General Manager,
Power Grid Corporation of India Limited,
"Saudamini', Plot No. 2, Sector – 29,
Gurugram – 122001, Haryana

Fax: 0124 - 2571802
Email: vamsi@powergrid.in

Subject: Independent Transmission Project "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"– Regarding issuance of RfP documents

Ref: 1. RfQ dated February 12, 2021
2. Your Response to RfQ submitted on March 15, 2021

Dear Sir,

This is with reference to your above referred Response to RFQ for "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida".

We are pleased to convey that based on RfQ Response, **"Power Grid Corporation of India Limited"** has been declared as qualified to participate in the next stage of bid process i.e. Request for Proposal (RfP) stage.

Further, it is to inform you that the RfP documents can be purchased from the office of undersigned on any working day from 1000 hrs (IST) to 1600 hrs (IST) from May 27, 2021 onwards on payment of Rs. 5,00,000/- (Rs. Five Lakh Only) or USD 7,000 (US Dollar Ten Thousand Only) plus applicable GST @18% by Demand Draft drawn in favour of "PFC Consulting Limited", payable at New Delhi or through electronic transfer in the following Bank Account:

Account No.	**: 000705036117**
Bank Name	**: ICICI Bank**
IFSC	**: ICIC0000007**
Branch	**: Connaught Place, New Delhi - 110 001**

The other important dates are as follows:

- Last date for Bidders to seek clarification : **June 07, 2021**
- Pre Bid Meeting : **June 14, 2021**
- Last date of submission of RfP Bid : **July 29, 2021** by 1500 hrs (IST)
- Opening of RfP (Non-Financial Bid) : **July 29, 2021** by 1530 hrs (IST)

We thank you for participating in the RfQ process and look forward to your participation in RfP stage.

Thanking you,

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

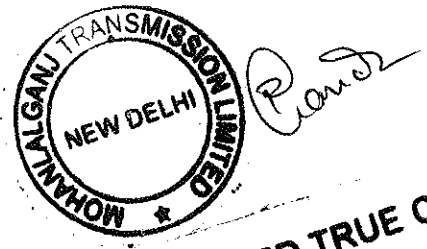
Yours faithfully,

(Sanjay Nayak)
General Manager

पंजीकृत कार्यालय : प्रथम तल"ऊर्जानिधि", 1, बाराखम्बा लेन, कनॉट प्लेस, नई दिल्ली–110001
Regd. Office : First Floor, "Urjanidhi", 1, Barakhamba Lane, Connaught Place, New Delhi-110001
कंपनी मुख्यालय: नौवॉ तल (ए विंग) स्टेट्समैन हाउस, कनॉट प्लेस, नई दिल्ली–110001 दूरभाष : 011-23443900 फैक्स : 011–23443990
Corporate Office :9th Floor (A Wing) Statesman House, Connaught Place, New Delhi-110001 Phone : 011-23443900 Fax : 011-2344 3990
ई–मेल/ E-mail : pfcconsulting@pfcindia.com वैबसाईट/Website : www.pfcclindia.com

Annexure-3

Copy of RFP Documents and Amendments / Clarifications furnished by BPC



ATTESTED TRUE COPY
Attested from Pg 30 to 271
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

REQUEST FOR PROPOSAL DOCUMENT

FOR

SELECTION OF TRANSMISSION SERVICE PROVIDER

THROUGH TARIFF BASED COMPETITIVE BIDDING PROCESS

TO

ESTABLISH TRANSMISSION SYSTEM

FOR

"CONSTRUCTION OF 400/220/132KV GIS SUBSTATION, MOHANLALGANJ (LUCKNOW) WITH ASSOCIATED 400KV LINES, AND OTHER 765KV & 400KV LILO LINES AT 765KV GIS SUBSTATION RAMPUR AND 400KV LILO (QUAD MOOSE ON MONOPOLE) AT 400KV GIS SUBSTATION SECTOR 123 NOIDA"

ISSUED BY

PFC CONSULTING LTD.
(A wholly owned subsidiary of Power Finance Corporation Ltd.)

Corporate Office:
9th Floor, A-Wing, Statesman House
Connaught Place,
New Delhi - 110 001

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

May 27, 2021

PFC Consulting Limited
(A wholly owned subsidiary of Power Finance Corporation Ltd.)
9th Floor, A-Wing, Statesman House,
Connaught Place, New Delhi - 110 001

This Request for Proposal document for selection of Transmission Service Provider (TSP) through tariff based competitive bidding process to establish Transmission System for **"Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** is issued by **PFC Consulting Limited** for the benefit of Long Term Transmission Customer(s) as named in Annexure 1.

This RFP document is issued to -

M/s.....
.....
.....
.....
.....

Along with following documents:

1. **Transmission Service Agreement**
2. **Share Purchase Agreement**

Signature: .....

General Manager
PFC Consulting Limited
9th Floor, A-Wing, Statesman House,
Connaught Place, New Delhi - 110 001
Tel.: +91 - 11 - 23443996
Fax: +91 - 11 - 23443990
Email: pfccl.itp@pfcindia.com

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

DISCLAIMER

1. This Request for Proposal (RFP) document is not an agreement or offer by the Bid Process Co-coordinator (BPC) to the prospective Bidders or any other party. The purpose of this RFP is to provide interested parties with information to assist the formulation of their Bid. This RFP is based on material and information available in public domain.

2. This RFP, along with its Annexures, is not transferable and will be issued only to the Bidding Company or the Lead Member of the Bidding Consortium who has been short listed by the BPC based on its Response to RFQ. The RFP and the information contained therein are to be used only by the person to whom it is issued. It may not be copied or distributed by the recipient to third parties (other than in confidence to the recipient's professional advisors). In the event that the recipient does not continue with its involvement in the Project in accordance with this RFP, this RFP must be kept confidential.

3. While this RFP has been prepared in good faith, neither the BPC nor its employees or advisors/ consultants make any representation or warranty express or implied as to the accuracy, reliability or completeness of the information contained in this RFP. The Bidders shall satisfy themselves, on receipt of the RFP document, that the RFP document is complete in all respects. Intimation of any discrepancy shall be given to this office immediately. If no intimation is received from any Bidder within ten (10) days from the date of issue of this RFP document, it shall be considered that the issued document, complete in all respects, has been received by the Bidders.

   This bidding process is in accordance with the Bidding Guidelines issued by Ministry of Power, Government of India under Section 63 of the Electricity Act, 2003. Revisions or amendments in these Bidding Guidelines may cause the BPC to modify, amend or supplement this RFP document, including the RFP Project Documents to be in conformance with the Bidding Guidelines.

4. Neither the BPC, its employees nor its consultants will have any liability to any Bidder or any other person under the law of contract, tort, the principles of restitution or unjust enrichment or otherwise for any loss, expense or damage which may arise from or be incurred or suffered in connection with anything contained in this RFP, any matter deemed to form part of this RFP, the award of the Project, the information supplied by or on behalf of BPC or its employees, any advisors/ consultants or otherwise arising in any way from the selection process for the said Project.

5. By purchasing the RFP, the purchaser of the RFP, which may be the Bidder or any Member of the Bidding Consortium and each of the Member of such Consortium, shall be deemed to have confirmed that the Bidders are fully satisfied with the process of evaluation of the Responses to RFQ and the BPC's decision regarding the qualification or

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NEW DELHI

disqualification or short listing of the Bidders for sale of the RFP. The Bidders hereby expressly waive any and all objections or claims in respect thereof.

6. This RFP may be withdrawn or cancelled by the BPC at any time without assigning any reasons thereof. BPC further reserves the right, at its complete discretion to reject any or all of the Bids without assigning any reasons whatsoever.



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NEW DELHI

DEFINITIONS

Any capitalized term, used but not defined in this RFP, shall have the meaning ascribed to such term in the RFP Project Documents, the RFQ, or the Bidding Guidelines, in that order. In absence of availability of definitions in the foregoing references, the capitalized terms shall be interpreted in accordance with the Electricity Act 2003, the CERC (Terms and Conditions of Tariff) Regulations 2014, UPERC (Terms and Conditions for determination of Transmission Tariff) Regulations, 2006/ Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations, 2014, UPERC (Grant of Connectivity to Intra-State Transmission System) Regulations 2010, UPERC (General condition of Transmission License) Regulations 2005, UPERC (Terms and Conditions for Open Access) Regulations, 2004, UP Electricity Grid Code 2007 or any other relevant electricity law, rule or regulation prevalent in UP/India, as amended or re-enacted from time to time, in that order.

"Acquisition Price" shall have the same meaning as defined in the Share Purchase Agreement;

"Affiliate" shall have the meaning as ascribed thereto in the RFQ;

"Allocated Project Capacity" shall mean, for each Long Term Transmission Customer, the sum of the generating capacities allocated to such Long Term Transmission Customer from the ISGS and the contracted power, if any, as adopted by UPERC from time to time in determining sharing of transmission charges between the Long Term Transmission Customers;

"Appropriate Commission" shall mean the Central Electricity Regulatory Commission referred to in sub-section (1) of Section 76 of the Electricity Act, or the State Regulatory Commission referred to in Section 82 of the Electricity Act 2003 or the Joint Commission referred to in section 83 of the Electricity Act, as the case may be; In this case, the Appropriate Commission is Uttar Pradesh Electricity Regulatory Commission;

"Appropriate Government" shall mean the Central Government in case of any Inter-State Transmission System and the appropriate state government in case of an Intra-State Transmission System; In this case, the Appropriate Government is Government of Uttar Pradesh;

"Bid" shall mean Non-Financial Bid and Financial Bid submitted by the Bidders, in response to this RFP, in accordance with the terms and conditions thereof;

"Bidder" for the purpose of the RFP, shall mean Bidding Company (including its permitted successors and legal assigns subject to fulfillment of conditions given in RFQ) or Bidding Consortium (including permitted successors and legal assigns of its Members subject to fulfillment of conditions given in RFQ) which meets the Qualification Requirements as specified in the RFQ and has been short-listed by BPC based on its Response to RFQ for submission of Bid and has duly purchased the RFP from the BPC;

"Bidding Company" for the purpose of the RFP, shall refer to such single company (including its permitted successors and legal assigns subject to fulfillment of conditions given in RFQ) which meets the Qualification Requirements as specified in the RFQ and has been short-listed by BPC

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based on its Response to RFQ for submission of Bid and has duly purchased the RFP from the BPC;

"Bidding Consortium" or **"Consortium"** for the purpose of the RFP, shall refer to such group of companies (including its permitted successors and legal assigns subject to fulfillment of conditions given in RFQ) which meets the Qualification Requirements as specified in the RFQ and has been short-listed by BPC based on its Response to RFQ for submission of Bid and has duly purchased the RFP from the BPC;

"Bidding Guidelines" shall mean the "Tariff Based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by Government of India, Ministry of Power dated 13th April 2006 under Section 63 of Electricity Act and as amended from time to time;

"Bid Bond" shall mean the unconditional and irrevocable bank guarantee to be submitted along with the Bid by the Bidder under Clause 2.20 of this RFP, as per the format prescribed in Annexure-2;

"Bid Deadline" shall mean the last date and time for submission of Bid in response to this RFP, specified in Clause 2.16.1;

"Bid Process Coordinator or BPC" shall mean a person or its authorized representative as notified by the Government of India/ concerned State Government, responsible for carrying out the process for selection of Transmission Service Provider;

"CEA" shall mean the Central Electricity Authority constituted under Section-70 of the Electricity Act;

"CERC" shall mean the Central Electricity Regulatory Commission of India constituted under Section 76 of the Electricity Act, 2003 or its successors;

"Change in Ownership" shall mean change of ownership of the Bidder/ Member in a Bidding Consortium by way of merger/ acquisition/ amalgamation/ reorganization/ consolidation/ demerger;

"Conflict of Interest": A Bidder shall be considered to be in a Conflict of Interest with one or more Bidders in the same bidding process if they have a relationship with each other, directly or through a common company, that puts them in a position to have access to information about or influence the Bid of another Bidder;

"Commercial Operation Date (COD)" shall mean the date of charging the Project or part thereof to its rated voltage level or seven days after the date on which it is declared ready for charging by the Transmission Licensee, but is not able to be charged for reasons not attributable to the Transmission Licensee, its suppliers or contractors;

Provided that the date of commercial operation shall not be a date prior to the Scheduled Date of Commercial Operation mentioned in the TSA, unless mutually agreed to by all parties;

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"Consents, Clearances, Permits" shall mean all authorizations, licenses, approvals, registrations, permits, waivers, privileges, acknowledgements, agreements, or concessions required to be obtained from or provided by any concerned authority for the development, execution and performance of Project including without any limitation on the construction, ownership, operation and maintenance of the transmission lines and/or sub-stations;

"Contract Performance Guarantee" shall have the meaning as per Clause 2.21 of this RFP;

"Contract Year" shall mean the period beginning on the Scheduled COD, and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that:

i) The last Contract Year shall end on the last day of the term of the TSA;

Provided that for the purpose of payment, the Contract Year shall be the applicable Contract Year as per Annexure-4 of this RFP;

"CTU/ Central Transmission Utility" shall mean the utility notified by the Central Government under Section-38 of the Electricity Act, 2003;

"Effective Date" shall have the meaning as ascribed thereto in the TSA;

"Element" shall mean each Transmission Line or each circuit of the Transmission Lines (where there are more than one circuit) or each bay of the Sub-station or switching station or HVDC terminal or inverter station of the Project, which has a separate scheduled COD as per Schedule 3 of the TSA and has a separate percentage for recovery of Transmission Charges on achieving COD as per Schedule 6 of the TSA;

"Final Offer" shall mean the Quoted Escalable Transmission Charges and Quoted Non-Escalable Transmission Charges, required to be submitted as part of the Financial Bid on the electronic bidding platform during the e-reverse bidding stage. In case, no Final Offer is received during the e-reverse bidding stage then the lowest "Initial Offer" shall be deemed to be the Final Offer;

"Financial Bid" shall mean the Initial Offer and Final Offer, containing the Bidder's Quoted Transmission Charges as per the format at Annexure-4 of this RFP;

"Financially Evaluated Entity" shall mean the company which has been evaluated for the satisfaction of the financial requirements set forth in the RFQ;

"Grid Code"/ "IEGC" or "State Grid Code" shall mean the Grid Code specified by the Central Commission under Clause (h) of sub-section (1) of Section 79 of the Electricity Act and/ or the State Grid Code as specified by the concerned State Commission, referred under Clause (h) of sub-section (1) of Section 86 of the Electricity Act, as applicable;

"Initial Offer" shall mean the Quoted Escalable Transmission Charges and Quoted Non-Escalable Transmission Charges, required to be submitted as part of the Financial Bid on the electronic bidding platform along with the Non-Financial Bid;

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"Inter State Generating Station" or "ISGS" shall mean a Central/ other generating station in which two or more states have shares and whose scheduling is to be coordinated by the Regional Load Dispatch Centre;

"Inter-State Transmission System" shall include:

i) Any system for the conveyance of electricity by means of main transmission line from the territory of one State to another State;
ii) The conveyance of electricity across the territory of an intervening State as well as conveyance within the State, which is incidental to such inter-State transmission of electricity;
iii) The transmission of electricity within the territory of a State on a system built, owned, operated, maintained or controlled by Central Transmission Utility;

"Intra-State Transmission System" shall mean any system for transmission of electricity other than an Inter-State Transmission System;

"Lead Member of the Bidding Consortium" or "Lead Member" shall have the meaning as ascribed thereto in the RFQ;

"Lead Long Term Transmission Customer" shall have the meaning as ascribed thereto in the TSA;

"Letter of Intent" shall mean the letter to be issued by the BPC to the Bidder, who has been identified as the Selected Bidder, for award of the Project to such Bidder;

"Levelised Transmission Charges" shall mean the Transmission Charges calculated in accordance with the provisions of Clause 3.3.2 in this RFP;

"Long Term Transmission Customer" shall mean a person availing or intending to avail access to the Intra-State Transmission System for a period up to twenty-five years (25) or more, and for the purposes of this Project, shall refer to entities listed in Annexure-1 of this RFP or any such other person who executes a supplementary agreement for availing transmission service as per the provisions of the TSA;

"MoP" shall mean the Ministry of Power, Government of India;

"MoEF" shall mean the Ministry of the Environment and Forests, Government of India;

"Non-Financial Bid" shall mean the scanned copy of the bid submitted online through the electronic bidding platform and hard copy of the Bid in one (1) original and one (1) copy, containing the documents as listed out in Clause 2.14.1.1 of this RFP;

"Parent Company" shall have the meaning as ascribed thereto in the RFQ;

"Quoted Transmission Charges" shall mean the sum of the Quoted Escalable Transmission Charges and Quoted Non-Escalable Transmission Charges submitted online through the electronic bidding platform by the Bidder as part of its Financial Bid as per the format in Annexure-4 of this RFP;

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"Quoted Escalable Transmission Charges" shall mean the column 5 of Financial Bid quoted online through the electronic bidding platform by the Bidder as per Annexure-4;

"Quoted Non-Escalable Transmission Charges" shall mean the column 4 of Financial Bid quoted online through the electronic bidding platform by the Bidder as per Annexure-4;

"RFP" shall mean this Request for Proposal document along with all schedules, annexures and RFP Project Documents attached hereto and shall include any modifications, amendments, alterations or clarifications thereto;

"RFQ" shall mean the Request for Qualification document issued by BPC for tariff based competitive bidding process for selection of TSP to execute the Project and shall include any modifications, amendments or alterations or clarifications thereto;

"RFP Project Documents" shall mean the following documents to be entered into in respect of the Project, by the parties to the respective agreements:

i) TSA,
ii) Share Purchase Agreement, and
iii) Any other agreement, as may be required;

"Scheduled COD" shall have the meaning as ascribed hereto in Clause 2.15 of this RFP;

"Share Purchase Agreement" shall mean the agreement amongst **PFC Consulting Limited, "SPV [under incorporation]"** and the Successful Bidder for the purchase of one hundred (100%) per cent of the shareholding of the **"SPV [under incorporation]"** for the Acquisition Price, by the Successful Bidder on the terms and conditions as contained therein;

"Short Term Transmission Customer(s)" shall mean a transmission customer other than the Long Term Transmission Customer;

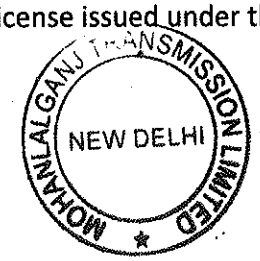
"Successful Bidder" or **"Selected Bidder"** shall mean the Bidder selected pursuant to this RFP to acquire one hundred percent (100%) equity shares of **"SPV [under incorporation]"**, along with all its related assets and liabilities, which will be responsible as the TSP to establish the Project on build, own, operate and maintain basis as per the terms of the TSA and other RFP Project Documents;

"Survey Report" shall mean the report containing initial information regarding the Project and other details provided as per the provisions of Clause 1.5 (a) of this RFP;

"Technically Evaluated Entity" shall mean the entity which has been evaluated for the satisfaction of the technical requirements set forth in the RFQ;

"Transmission Charges" shall mean the charges payable to TSP by the Long Term Transmission Customers pursuant to the TSA, as adopted by the Appropriate Commission;

"Transmission License" shall mean the license granted by the Appropriate Commission in terms of the relevant regulations for grant of such license issued under the Electricity Act, 2003;



"Transmission Licensee" shall mean a licensee authorized to establish and operate Transmission Lines by the Appropriate Commission;

"Transmission Lines" shall mean all high pressure cables and overhead lines (not being an essential part of the distribution system of a licensee) transmitting electricity from a generating station to another generating station or a sub-station, together with any step-up and step-down transformers, switch-gear and other works necessary to and used for the control of such cables or overhead lines, and such buildings or part thereof as may be required to accommodate such transformers, switchgear and other works;

"Transmission Service Agreement" or **"TSA"** shall mean the agreement entered into between Long Term Transmission Customer(s) and the TSP pursuant to which TSP shall build, own, operate and maintain the Project and make available the assets of the Project to Long Term Transmission Customer(s) on a commercial basis and a draft of which is attached hereto and marked as Format 1 of Annexure-3, including all its schedules, Annexures and all amendments or modifications;

"Transmission Service Provider" or **"TSP"** shall mean **"SPV [under incorporation]"**, which has executed the Transmission Service Agreement and has been/ shall be acquired by the Selected Bidder;

"Transmission System" shall mean a line with associated sub-stations or a group of lines inter-connected together along with associated sub-stations and the term includes equipment associated with transmission lines and sub-stations;

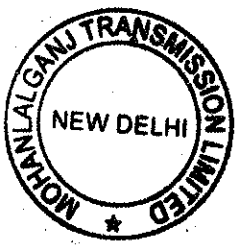
"Ultimate Parent Company" shall have the meaning as ascribed thereto in the RFQ.

"UPERC" shall mean the Uttar Pradesh Electricity Regulatory Commission or its successors;

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SECTION 1

INTRODUCTION



1. INTRODUCTION

1.1 U.P. Power Transmission Corporation Ltd. (UPPTCL) vide its letter no. 55/PS/DIR (W&P)/PTCL/Mohanlalganj dated February 09, 2021 appointed PFC Consulting Limited as Bid Process Coordinator (BPC) for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish transmission system for **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** through tariff based competitive bidding process.

1.2 The BPC now invites Bids for selection of Transmission Service Provider to establish the Transmission System as detailed below in the table for **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** (hereinafter referred to as 'Project') on build, own, operate and maintain basis, and to provide transmission service on a long term basis to the Long Term Transmission Customers, as listed out in Annexure-1 of this RFP. The BPC reserves the right to add, delete or replace any Long Term Transmission Customer(s) to the list.

S. No.	Name of the transmission element	Completion Target	Conductor per phase
A)	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-**		
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.	Last date of 18th month from the date of issuance of LoI	
2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor
3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S		Twin Moose ACSR

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S. No.	Name of the transmission element	Completion Target	Conductor per phase
	Mohanlalganj (on Twin Moose Conductor)		Conductor
B)	**Construction of LILO Line**		
1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	Last date of 15th month from the date of issuance of LoI	Quad Bersimis ACSR Conductor
2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	Last date of 9th month from the date of issuance of LoI	Twin Moose ACSR Conductor
C)	**Construction of LILO lines on Monopole**		
1.	LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	Last date of 9th month from the date of issuance of LoI	Quad Moose ACSR Conductor

Note:

i. UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.

1.3 The TSP shall ensure that design, construction and testing of all equipment, facilities, components and systems of the Project shall be in accordance with Indian Standards and Codes issued by Bureau of Indian Standards and only in case they are not available under certain conditions, the other equivalent internationally recognized Standards and Codes shall be followed, with prior approval of CEA.

1.4 The objective of the bidding process is to select a Successful Bidder pursuant to this RFP, who shall acquire one hundred percent (100%) of the equity shares of **"SPV [under incorporation]"** along with all its related assets and liabilities as per the provisions of the Share Purchase Agreement, at the Acquisition Price to be intimated by the BPC, 30 days prior to the Bid Deadline.

The **"SPV [under incorporation]"**, of which one hundred percent (100%) equity shares has been acquired by the Selected Bidder, shall be responsible as the TSP, for ensuring that it undertakes ownership, financing, development, design, engineering, procurement, construction, commissioning, operation and maintenance of the Project, and to provide Transmission Service on a long term basis to the Long Term Transmission Customers as per the terms of the RFP Project Documents.

1.5 The BPC has initiated development of the Project and shall be responsible for the tasks in this regard as specified hereunder:

a) Provide to the Bidders a Survey Report for the Project at least forty five (45) days prior to the Bid Deadline. The Survey Report will contain information regarding the

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transmission line, i.e. voltage level, line configuration (i.e., S/C or D/C), indicative route alignment, conductor type, conductor configuration and type of terrain likely to be encountered.

Provided that neither the BPC, its authorized representative, any of the Long Term Transmission Customer(s), nor their directors, employees or advisors/consultants make any representation or warranty, express or implied, or accept any responsibility or liability, whatsoever, in respect of any statements or omissions made in the Survey Report, or the accuracy, completeness or reliability of information contained therein, and shall incur no liability under any law, statute, rules or regulations as to the accuracy, reliability or completeness of such Survey Report, even if any loss or damage is caused to the Bidders by any act or omission on their part.

b) To obtain approval for laying of overhead transmission lines under Section 68 of Electricity Act, from Appropriate Government at least thirty (30) days prior to Bid Deadline.

c) To initiate acquisition of land for location specific substation, switching stations or HVDC terminal or inverter stations, if required.

d) To initiate process of seeking forest clearance, if required.

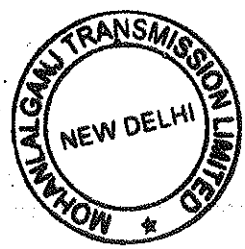
e) Intimate the Bidders at least thirty (30) days prior to the Bid Deadline, the name of the BPC for the purpose of issue of the Bid Bond and the place where the Bid Bond shall be payable by the Guarantor Bank.

f) Any addition, deletion or replacement to the list at Annexure-1, will be communicated at least 30 (thirty) days prior to the Bid Deadline. Further, the entities which are legally permitted to sign the TSA on behalf of the Long Term Transmission Customer(s) shall also be intimated to the Bidders at least thirty (30) days prior to the Bid Deadline.

g) The BPC shall intimate the Bidders, the Acquisition Price payable by the Selected Bidder to the **PFC Consulting Limited** for the acquisition of one hundred percent (100%) of the equity shareholding of **"SPV [under incorporation]"**, along with all its related assets and liabilities at least thirty (30) days prior to Bid Deadline.

h) The BPC shall ensure issuance of all finalized RFP Project Documents duly executed, except for the Share Purchase Agreement, at least seven (7) days prior to the Bid Deadline.

Provided that for any delay in meeting the above obligations of the BPC within the specified time period above, the Bid Deadline as per Clause 2.16 shall be extended on a day for day basis.



1.6 The Ministry of Power and the appropriate State Government(s) have agreed to provide their support to the TSP, on best endeavor basis, in enabling the TSP to develop the Project.

1.7 All Bidders are required to submit their Bids in accordance with the instructions set forth in this RFP.

1.8 Once the Successful Bidder is selected, the details and documents as may be obtained by the BPC in relation to the Project, shall be handed over to the Successful Bidder on as is where basis, so that it may take further actions to obtain all necessary Consents, Clearances and Permits and the TSP shall not be entitled for any extensions in the Scheduled COD of the Project except as provided for in the TSA.

1.9 The assets of the Project shall be made available on a commercial basis to the Long Term Transmission Customer(s) as per the terms and conditions of the TSA.



SECTION 2

INFORMATION AND INSTRUCTIONS TO BIDDERS



2. INFORMATION AND INSTRUCTIONS TO BIDDERS

2.1 Bidders shall familiarize themselves with the procedures and time frames required to obtain all Consents, Clearances and Permits.

2.2 All Bidders are required to ensure compliance with the standards and codes mentioned in Clause 1.3.

Bidder who agree and undertake to procure the products associated with the Transmission System as per provisions of Public Procurement (Preference to Make in India) orders issued by Ministry of Power vide orders No. 11/5/2018 - Coord. dated 28.07.2020 for transmission sector, as amended from time to time read with Department for Promotion of Industry and Internal Trade (DPIIT) orders in this regard, shall be eligible hereunder. Further, it is clarified that Procuring Entity as defined in orders shall deemed to have included Selected Bidder and/ or TSP.

Besides, Department of Expenditure, Ministry of Finance vide Order (Public Procurement No 1) bearing File No. 6/18/2019-PPD dated 23.07.2020, Order (Public Procurement No 2) bearing File No. 6/18/2019-PPD dated 23.07.2020 and Order (Public Procurement No. 3) bearing File No. 6/18/2019-PPD, dated 24.07.2020, as amended from time to time, have issued directions regarding public procurement from a bidder of a country, which shares land border with India are also applicable.

2.3 The drafts of the following RFP Project Documents have been attached to this RFP.

a) TSA as per Format-1 of Annexure-3.
b) Share Purchase Agreement as per Format-2 of Annexure-3

Upon finalization of the RFP Project Documents after incorporating the amendments as envisaged in Clause 2.13 of this RFP, all the RFP Project Documents, except for the Share Purchase Agreement, shall be duly executed by **"SPV [under incorporation]"** and the Long Term Transmission Customers, and copies delivered to the Bidders at least seven (7) days prior to the Bid Deadline.

The RFP Project Documents shall be signed in required number of originals so as to ensure that one original is retained by each party to the Agreement(s).

2.4 Within ten (10) days of the issue of the Letter of Intent, the Selected Bidder shall:

a) provide the Contract Performance Guarantee in favour of the Long Term Transmission Customers as per the provisions of Clause 2.21;

b) execute the Share Purchase Agreement and all other RFP Project Documents as listed in Annexure-3;

c) acquire, for the Acquisition Price, one hundred percent (100%) equity shareholding of **"SPV [under incorporation]"** from **PFC Consulting Limited**, who shall sell to the Selected Bidder, the equity shareholding of **"SPV [under incorporation]"**, along with all its related assets and liabilities;

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Stamp duties payable on purchase of one hundred percent (100%) of the equity shareholding of **"SPV [under incorporation]"**, along with all its related assets and liabilities, shall also be borne by the Selected Bidder.

d) make an application to the Appropriate Commission for the adoption of Transmission Charges, as required under section 63 of the Electricity Act 2003.

e) execute the RFP Project Documents in required number of originals so as to ensure that one original is retained by each party to the Agreement(s). All stamp duties payable for executing the RFP Project Documents shall be borne by the Successful Bidder.

Provided further that, if for any reason attributable to the BPC, the above activities are not completed by the Selected Bidder within the above period of ten (10) days as mentioned in this Clause, such period of 10 days shall be extended, on a day for day basis till the end of the Bid validity period.

2.5 After the date of acquisition of the equity shareholding of **"SPV [under incorporation]"**, along with all its related assets and liabilities, by the Selected Bidder,

i. the authority of the BPC in respect of this Bid Process shall forthwith cease and any actions to be taken thereafter will be undertaken by the Lead Long Term Transmission Customer,
ii. all rights and obligations of "SPV [under incorporation]", shall be of the TSP,
iii. any decisions taken by the BPC prior to the Effective Date shall continue to be binding on the Long Term Transmission Customers and
iv. contractual obligations undertaken by the BPC shall continue to be fulfilled by the TSP.

2.6 Within ten (10) days of the issue of the Letter of Intent, the TSP shall apply to the Appropriate Commission for grant of Transmission License.

2.7 If the Selected Bidder/ TSP fails or refuses to comply with any of its obligations under Clauses 2.4, 2.5 and 2.6, and provided that the Long Term Transmission Customer(s) and/or other parties to the respective RFP Project Documents are willing to execute the Share Purchase Agreement and **PFC Consulting Limited** is willing to sell the entire equity shareholding of **"SPV [under incorporation]"**, along with all its related assets and liabilities, to the Selected Bidder, such failure or refusal on the part of the Selected Bidder shall constitute sufficient grounds for cancellation of the Letter of Intent. In such cases, the BPC/ its authorized representative(s) shall be entitled to invoke the Bid Bond of the Selected Bidder.

2.8 If the TSP fails to obtain the Transmission License from the Appropriate Commission, it will constitute sufficient grounds for annulment of award of the Project.

2.9 The annulment of award, as provided in Clauses 2.7 and 2.8 of this RFP, will be done by the Empowered Committee after giving the Selected Bidder/ TSP an opportunity to be heard.

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2.10 Point of contact in case of Bidding Consortium

2.10.1 In case of Bid being submitted by a Consortium, the Lead Member of the Consortium will be the single point of contact for the purposes of the bid process before the date of signing of last of the RFP Project Documents. Settlement of any dispute amongst the Consortium Members shall not be the responsibility of the BPC and/or the Long Term Transmission Customer(s) and the BPC and/ or Long Term Transmission Customer(s) shall not bear any liability whatsoever on this account.

2.11 Transmission Charges

2.11.1 The Transmission Charges shall be as specified in the TSA and shall be payable to the TSP in Indian Rupees only. The Bidders shall quote Transmission Charges for each Contract Year during the term of the TSA as per the format at Annexure-4.

2.11.2 The Quoted Transmission Charges of the Selected Bidder shall be inserted in Schedule 6 of the TSA.

2.12 Clarifications and Pre-bid Meeting

2.12.1 The Bidders may seek clarifications or suggest amendments to the RFP by sending an e-mail to the BPC, at the email id pfccl.itp@pfcindia.com within the date and time mentioned in Clause 2.16.2. For any such clarifications or amendments the Bidders should adhere to the format as per Annexure-7.

2.12.2 The Bidders or their authorized representatives are invited to attend the pre-bid meeting(s), which will take place on date as specified in Clause 2.16.2, or any such other date as notified by the BPC. The time and address of this would be intimated later.

2.12.3 The purpose of the pre-bid meeting will be to clarify any issues regarding the RFP, including in particular, issues raised in writing by the Bidders as per the provisions of Clause 2.12.1.

2.12.4 Non-attendance at the pre-bid meeting will not be a cause for disqualification of a Bidder.

2.12.5 The BPC is not under any obligation to entertain/ respond to suggestions made or to incorporate modifications sought for.

2.12.6 In case, Bidders need any further clarifications not involving any amendments in respect of final RFP, they should ensure that written request for such clarification is delivered to the BPC at least fifteen (15) days prior to the Bid Deadline as mentioned in Clause 2.16.1. The BPC may issue clarifications only, as per its sole discretion, which is considered reasonable by it. Any such clarification issued shall be sent to all the Bidders to whom the RFP has been issued. Clarifications sought after this date shall not be considered in any manner and shall be deemed not to have been received. There shall be no extension in Bid Deadline on account of clarifications sought as per this clause 2.12.6.

2.13 Amendment of RFP

2.13.1 Any time before the timeline mentioned in Clause 2.16.1, the BPC may, for any reason,

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whether at its own initiative or in response to a clarification requested by any Bidder, modify or amend the RFP, including the timelines specified in Clause 2.16.2 in this RFP.

2.13.2 The amendment to the RFP shall be notified to all the Bidders through the electronic bidding platform and shall be binding on them.

2.13.3 In order to give Bidders reasonable time to take the above amendments into account in preparing their Bids, the BPC may, at its discretion, extend the Bid Deadline.

2.14 The Bidding Process

The entire bidding process shall be conducted on electronic bidding platform created by MSTC Limited. The Bid shall comprise of the Non-Financial Bid and the Financial Bid. The Bidders shall submit the scanned copy of Bid online through the electronic bidding platform. In addition to the online submission, the Bidders must make physical submission of the Non-Financial Bid in one (1) original and one (1) copy. There should be no physical submission of the Financial Bid.

The Financial Bid will comprise of two rounds. In the first round the Initial Offer (submitted online along with the Non-Financial Bids) of the responsive bids would be opened and Levelised Transmission Charges of Initial Offer shall be ranked on the basis of ascending order for determination of the Qualified Bidders as provided in Section-III of RFP. The Qualified Bidders, holding first fifty per cent of the ranks (with any fraction rounded off to higher integer) or four Qualified Bidders, whichever is higher, shall be considered to be the qualified for participating in the electronic reverse auction stage and submit their Final Offer.

Provided however, in case only one Bidder remains after the responsiveness check (Step I) under Clause 3.2, the Initial Offer of such Bidder shall not be opened and the matter shall be referred to the Government.

Provided that in the event the number of responsive Non-Financial Bids is between two and four, then each of the responsive Bidder shall be considered as Qualified Bidders.

Provided that in the event of identical Levelised Transmission Charges derived from the Initial Offer having been submitted by one or more Bidders, all such Bidders shall be assigned the same rank for the purposes of determination of Qualified Bidders. In such cases, the fifty per cent shall stand enhanced to fifty per cent (with any fraction rounded off to higher integer) or four Qualified Bidders, whichever is higher, plus the number of Qualified Bidders, whose Levelised Transmission Charges derived from Initial Offer are identical minus the number of such identical Initial Offer.

The applicable ceiling Levelised Transmission Charges for electronic reverse bidding shall be the lowest Levelised Transmission Charges derived from the Initial Offer received from the Qualified Bidders. The Qualified Bidders shall be permitted to place their Final Offer on the electronic bidding platform, which is lower than zero point twenty five (0.25) % of the prevailing lowest Levelised Transmission Charges.

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The initial period for conducting the e-reverse bidding should be at least 2 hours which will be extended by 30 minutes from the last received bid time, if the bid is received during the last 30 minutes of the scheduled or extended bid time. Subsequently, it will be extended again by 30 minutes from the latest received bid time.

The technical details with respect to access to such electronic platform are provided in Annexure-A (Technical Details with respect to electronic auction).

In case of any technical clarification regarding access to the electronic auction platform or conduct of the auction process, the Bidders may contact MSTC Limited directly at the address provided in Annexure-A.

2.14.1 Bid Formats

The Bids in response to this RFP will be submitted online through the electronic bidding platform by the Bidders in the manner provided in Clause 2.18. The Bids shall comprise of the following:

2.14.1.1 **Non- Financial Bid comprising of:**

1. Board resolutions, as per prescribed formats enclosed as Annexure-8, duly certified by the Company Secretary /Managing Director, as applicable to the Bidder and mentioned hereunder:
   a) Board resolution from the Bidding Company (and any investing Affiliate/ Parent Company/ Ultimate Parent Company) committing one hundred percent (100%) in aggregate of the equity requirement for the Project - Format-1 of Annexure-8;

   b) Board resolutions from each of the Consortium Member of the Bidding Consortium (and any investing Affiliate/ Parent Company/ Ultimate Parent Company) together committing to one hundred percent (100%) in aggregate of equity requirement for the Project, in case Bidder is a Bidding Consortium - Format-1 of Annexure-8;

   c) In either of the cases as in (a) or (b) above as applicable, Board resolutions as per Format 2 of Annexure-8 for total equity investment commitment from the Technically/ Financially Evaluated Entity(ies) whose technical/ financial credentials had been considered for the purpose of meeting Qualification Requirements as per the RFQ

OR

Board resolutions as per Format 2 of Annexure 8 from the Parent Company or the Ultimate Parent Company for total equity investment commitment.

Provided that such Board resolutions, as specified in (a) or (b) or (c) above, in case of a foreign entity, shall be supported by an unqualified opinion issued by the legal counsel of such foreign entity, stating that the Board resolutions are in compliance with the applicable laws of the respective jurisdictions of the issuing company and the authorizations granted therein are true and valid.

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For clarity sake, illustrations identifying which Board Resolution shall be applicable in typical cases are provided in Annexure 13-A.

2. Bid Security Declaration in lieu of Bid Bond, as per the prescribed format at Annexure-2;

3. Bidders Undertakings and details of equity investment in Project (as per prescribed Formats 1 and 2 of Annexure-6);

4. Covering Letter (as per prescribed format enclosed as Annexure-9);

5. Original power of attorney issued by the Bidding Company or the Lead Member of the Consortium, as the case may be, in favour of the person signing the Bid, in the form attached hereto as Format-1 of Annexure-10.

   Additionally, in case of a Bidding Consortium, the power of attorney in favour of the Lead Member issued by the other Members of the Consortium shall be provided in Original as per format attached hereto as Format-2 of Annexure-10.

   Provided that in the event, the Bidding Company or the Lead Member of the Consortium or any Member of the Bidding Consortium, as the case may be, is a foreign entity, it may issue Board resolutions in place of power of attorney for the purpose of fulfilling these requirements.

6. Undertaking from the Technically/ Financially Evaluated Entity(ies) **OR** Undertaking from the Ultimate Parent Company, for total equity investment commitment, in the prescribed format in Annexure-10A,to meet any shortfall in the equity investment by the Selected Bidder in the **"SPV [under incorporation]".**

   Note: The effective Equity holding of the Selected Bidder in the **"SPV [under incorporation]"**, as specified in Clause 2.14.4.1 shall be computed as per the provisions of Clause 2.14.4.3 of this RFP.

   Provided further, in case the Bidding Company or Member of a Consortium, (as the case may be) holds at least twenty-six percent (26%) equity in such Technically/ Financially Evaluated Entities, whose credentials have been considered for the purpose of meeting the Qualification Requirements as per the RFQ, no such Undertaking shall be required from the Technically/ Financially Evaluated Entities.

7. The Bidders shall submit a disclosure as per Annexure-14 regarding participation of any related companies in this bidding process.

8. Checklist for response to RFP submission requirements as per Annexure-15.

In addition to the online submission of above formats through the electronic platform, the bidder is also required to submit the Non-Financial Bid, in one (1) original plus one (1) copy, to the office of PFCCL by the date and time mentioned in this RFP.

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2.14.1.2 **Financial Bid (as per prescribed format at Annexure-4).**

Financial Bid shall comprise of: (i) the Initial Offer; and (ii) the Final Offer. The Initial Offer is required to be submitted along with the Non-Financial Bid. It is hereby clarified that the Financial Bid will comprise of two rounds. In first round, the Initial Offer of the responsive bids would be opened and Levelised Transmission Charges of Initial Offer shall be ranked on the basis of ascending order for determination of the Qualified Bidders as provided in Section-III of RFP.

In accordance with clause 2.14 of this RFP, the Qualified Bidders shall be eligible to participate in the electronic auction and submit their Final Offer.

The applicable ceiling Levelised Transmission Charges for electronic reverse bidding shall be the lowest Levelised Transmission Charges derived from the Initial Offer received from the Qualified Bidders. The Qualified Bidders shall be permitted to place their Final Offer on the electronic bidding platform, which is lower than zero point twenty five (0.25)% of the prevailing lowest Levelised Transmission Charges.

The initial period for conducting the e-reverse bidding should be at least 2 hours which will be extended by 30 minutes from the last received bid time, if the bid is received during the last 30 minutes of the scheduled or extended bid time. Subsequently, it will be extended again by 30 minutes from the latest received bid time.

The Bidders shall inter-alia take into account the following while preparing and submitting the Initial Offer and Final Offer of Financial Bid:-

a) The Bidders shall quote Transmission Charges having two components, namely:
   i) Quoted Escalable Transmission Charges, and
   ii) Quoted Non-Escalable Transmission Charges

b) In case of Quoted Escalable Transmission Charges, the Bidders shall quote charges only for the first Contract Year after Scheduled COD of the Project, subject to Sl. No. (f) below.

c) Ratio of minimum and maximum Quoted Transmission Charges during the term of TSA shall not be less than zero point seven (0.7) and this ratio shall be applied only at the Bid evaluation stage on the Quoted Transmission Charges after duly escalating the Quoted Escalable Transmission Charges on the basis of the escalation rates specified in Clause 3.3.1.3. In addition, the Escalable Transmission Charges (after duly escalating the Quoted Escalable Transmission Charges on the basis of the escalation rates specified in Clause 3.3.1.3) for any Contract Year should not exceed fifteen percent (15%) of the corresponding Quoted Non-Escalable Transmission Charges for that Contract Year, and this percentage shall be applied only at the Bid evaluation stage.

d) The Quoted Transmission Charges as per the format at Annexure-4 shall be inclusive of all charges and no exclusions shall be allowed. The Bidders shall take

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into account all costs including capital and operating, statutory taxes, duties, levies. Availability of the inputs necessary for operation and maintenance of the Project should be ensured by the TSP at the Project site and all costs involved in procuring the inputs (including statutory taxes, duties, levies thereof) at the Project site must be included in the Quoted Transmission Charges.

e) Bidders are required to quote Transmission Charges for the Contract Years, for a period of 35 years commencing from the Scheduled COD of the Project, as per the format at Annexure-4.

f) Bidders shall have the option to quote firm Quoted Transmission Charges for the period of 35 years commencing from the Scheduled COD of the Project, i.e., where the Quoted Escalable Transmission Charges shall be 'nil' for all the Contract Years.

g) Annexure-4 duly signed by authorized signatory.

2.14.1.3 Wherever information has been sought in specified formats, the Bidders shall fill in the details as per the prescribed formats and shall refrain from referring to any other document for providing any information required in the prescribed format.

2.14.1.4 The Bidders should note that:

a) If any Bidder conceals any material information or makes a wrong statement or misrepresents facts or makes a misleading statement in its Bid, in any manner whatsoever, the BPC reserves the right to reject such Bid or cancel the Letter of Intent, if issued. If such event is discovered after the Effective Date, consequences specified in TSA shall apply.

b) If for any reason the Bid of the Bidder with the lowest evaluated levelized Transmission Charges is rejected or Letter of Intent issued to such Selected Bidder is cancelled, the BPC may:-
   i) Invite best reduced financial bids from those Bidders whose Bids are responsive and valid; or
   ii) Annul the bid process; or
   iii) Take any such measure as may be deemed fit in the sole discretion of the BPC[1]

c) Bid submitted by the Bidders, within the Bid Deadline, shall become the property of the BPC and the Long Term Transmission Customer(s) and shall not be returned to the Bidders.

d) Language of the Bid shall be English only.

e) Bidders shall mention the name of the contact person and complete address of the Bidder in the covering letter as per Annexure-9.

[1] *BPC shall record reasons for the same.*

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f) The BPC may, at its sole discretion, ask for additional information/ document and/ or seek clarifications from a Bidder after the Bid Deadline, inter alia, for the purposes of removal of inconsistencies or infirmities in its Bid. However, no change in the substance of the Quoted Transmission Charges shall be sought or permitted by the BPC.

g) Non submission and/ or submission of incomplete data/ information required under the provisions of the RFQ and RFP shall not be construed as waiver on the part of the BPC of the obligation of the Bidders to furnish the said data/ information unless the waiver is in writing.

2.14.2 Bidders to inform themselves fully

2.14.2.1 The Bidders shall make independent enquiry and satisfy themselves with respect to all the required information, inputs, conditions and circumstances and factors that may have any effect on his Bid. Once the Bidders have submitted their Bids, the Bidders shall be deemed to have inspected and examined the site conditions (including but not limited to its surroundings, its geological condition and the adequacy of transport facilities to the site), the laws and regulations in force in India, the transportation facilities available in India, the grid conditions, the adequacy and conditions of roads, bridges, railway sidings, ports, etc. for unloading and/ or transporting heavy pieces of material and has based its design, equipment size and fixed its price taking into account all such relevant conditions and also the risks, contingencies and other circumstances which may influence or affect the transmission of power. Accordingly, each Bidder acknowledges that, on being selected as Successful Bidder and on acquisition of one hundred percent (100%) of the equity shares of the **"SPV [under incorporation]"**, the TSP shall not be relieved from any of its obligations under the RFP Project Documents nor shall the TSP be entitled to any extension in Scheduled COD mentioned in this RFP or financial compensation for any reason whatsoever.

2.14.2.2 In their own interest, the Bidders are requested to familiarize themselves with all relevant laws of India, including without limitation, the Electricity Act 2003, the Income Tax Act 1961, the Companies Act, 1956, Environment Protection Act 1986 and Forest (Conservation) Act, 1980, the Customs Act, the Foreign Exchange Management Act, Land Acquisition Act, 1894,the Indian Telegraph Act 1885, Labour & Employment Laws of India, [Insurance Act] the regulations/standards framed by Appropriate Commissions and CEA, all other related acts, laws, rules and regulations prevalent in India, as amended from time to time.

In addition to the above, the Bidders are required to familiarize themselves with all relevant technical codes and standards, including but not limited to the Grid Code/ State Grid Code, Central Electricity Authority (Installation and Operations of Meters) Regulations, 2006, Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007, Central Electricity Regulatory Commission (Open Access in Inter-State Transmission) Regulations, 2008, Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-state Transmission and related matters) Regulations, 2009, Uttar

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Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations 2004, Uttar Pradesh Electricity Regulatory Commission (Grant of Connectivity to Intra-State Transmission System) Regulations 2010, Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission License) Regulations 2005 etc. along with related amendments brought in from time to time. The BPC shall not entertain any request for clarifications from the Bidders regarding the above laws/ acts/ rules/ regulations/ standards. Non-awareness of the same shall not be a reason for the Bidder to request for extension in Bid Deadline. The Bidders undertake and agree that, before submission of their Bid, all such factors as generally brought out above, have been fully investigated and considered while submitting their Bids.

2.14.2.3 Bidders may visit the route of the Transmission Lines associated with the Project and the surrounding areas and obtain/ verify all information which they deem fit and necessary for the preparation of their Bid.

2.14.2.4 The BPC has carried out a survey of the Transmission Lines associated with the Project and shall provide each Bidder with its Survey Report of the Project. Bidders in their own interest should carry out required surveys and field investigation for submission of their Bid.

2.14.2.5 Failure to investigate the route of the Transmission Lines associated with the Project and to examine, inspect site or subsurface conditions fully shall not be grounds for a Bidder to alter its Bid after the Bid Deadline nor shall it relieve a Bidder from any responsibility for appropriately eliminating the difficulty or costs of successfully completing the Project.

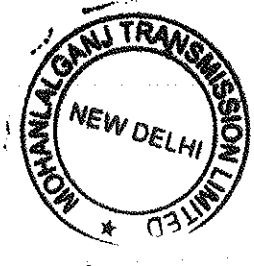
2.14.2.6 The Selected Bidder shall obtain all necessary Consents, Clearances and Permits as required. The Bidders shall familiarize itself with the procedures and time frame required to obtain such Consents, Clearances and Permits.

2.14.2.7 The technical requirements of integrated grid operation are specified in the Indian Electricity Grid Code (IEGC). The Bidders should particularly acquaint themselves with the requirements of connection conditions, operating code for regional grids, scheduling and dispatch instructions/ codes, etc. The Bidders are also advised to fully familiarize themselves with the real time grid conditions in the country. Information regarding grid parameters such as voltage and frequency is available on the websites of Regional/ State Load Dispatch Centre.

2.14.3 Change in the composition of the Bidder

2.14.3.1 If any Bidder makes a request for Change in Ownership or change in membership of a Bidding Consortium or change from Bidding Consortium to Bidding Company or change from Bidding Company to Bidding Consortium as per Clause 2.2.6 of the RFQ, the Bidder shall submit all information for fulfilling the Qualification Requirements, in the formats specified in the RFQ. All such information required to be submitted in support of meeting the Qualification Requirements should be as of the dates specified in the RFQ.

2.14.3.2 The BPC reserves the right to seek additional information from the Bidders, if found



necessary, during the course of examination of such request for change. In such a case, the BPC shall intimate the Bidders about its decision, at least fifteen (15) days prior to Bid Deadline.

2.14.3.3 In case of non-compliance with any of the conditions of Clause 2.2.6 of the RFQ, the BPC reserves the right to reject the Bid or cancel the Letter of Intent, if issued and the provisions of Clause 2.14.1.4 (b) shall apply.

2.14.4 Minimum Equity holding/ Equity Lock-In

2.14.4.1

(a) The aggregate equity share holding of the Selected Bidder, in the issued and paid up equity share capital of SPV [which is under incorporation], shall not be less than Fifty one percent (51%) up to a period of (1) one year after COD of the Project;

(b) In case the Selected Bidder is a Bidding Consortium, then any Member (other than the Lead Member) of such Bidding Consortium shall be allowed to divest its equity as long as the other remaining Members (which shall always include the Lead Member) hold the minimum equity specified in Clause no. 2.14.4.1 (a) above.

(c) If equity is held by the Affiliates, Parent Company or Ultimate Parent Company, then subject to the second provision of this Clause 2.14.4.1 (c), such Affiliate, Parent Company or Ultimate Parent Company shall be permitted to transfer its shareholding in **"SPV [under incorporation]"** to another Affiliate or to the Parent Company/ Ultimate Parent Company. If any such shareholding entity, qualifying as an Affiliate/ Parent Company/ Ultimate Parent Company, is likely to cease to meet the criteria to qualify as an Affiliate/ Parent Company/ Ultimate Parent Company, the shares held by such entity shall be transferred to another Affiliate/ Parent Company/ Ultimate Parent Company.

Provided that in case the Lead Member or Bidding Company is holding equity through Affiliate/s, Ultimate Parent Company or Parent Company, such restriction shall apply to such entities.

Provided further, that the aggregate equity share holding of the Bidding Consortium or a Bidding Company in the issued and paid up equity share capital of **"SPV [under incorporation]"** shall not be less than fifty one percent (51%) up to a period of one (1) year after COD of the Project and the lead Member of the Consortium shall have the equity share holding not less than twenty six percent (26%). The Lead Member shall continue to hold equity of at least twenty six percent (26%) up to a period of one (1) year after COD of the Project. In case, the Selected Bidder is a Bidding Consortium, then any Member (other than the Lead Member) of such Bidding Consortium shall be allowed to divest its equity as long as the other remaining Members (which shall always include the Lead Member) hold the minimum equity specified in Clause 2.14.4.1 (a) above.

(d) All transfer(s) of shareholding of **"SPV [under incorporation]"** by any of the entities referred to above, shall be after prior written permission from the Lead

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Long Term Transmission Customer.

2.14.4.2 The Selected Bidder may invest in the equity share capital of **"SPV [under incorporation]"** through its Affiliate(s) or Ultimate Parent Company or Parent Company. Details of such investment will have to be specified in the Non-Financial Bid as per Format 2 of Annexure 6 of the RFP. If the Selected Bidder so invests through any Affiliate(s) or Ultimate Parent Company or Parent Company, the Selected Bidder shall be liable to ensure that minimum equity holding/ lock-in limits specified in Clause 2.14.4.1 and as computed as per the provisions of Clause 2.14.4.3 are still maintained.

2.14.4.3 For computation of effective Equity holding, the Equity holding of the Selected Bidder or its Ultimate Parent Company in such Affiliate(s) or Parent Company and the equity holding of such Affiliate(s) or Ultimate Parent Company in **"SPV [under incorporation]"** shall be computed in accordance with the example given below:

If the Parent Company or the Ultimate Parent Company of the Selected Bidder A directly holds thirty percent (30%) of the equity in **"SPV [under incorporation]"**, then holding of Selected Bidder A in **"SPV [under incorporation]"** shall be thirty percent (30%);

If Selected Bidder A holds thirty percent (30%) equity of the Affiliate and the Affiliate holds fifty percent (50%) equity in **"SPV [under incorporation]"**, then, for the purposes of ascertaining the minimum equity/equity lock-in requirements specified above, the effective holding of Bidder A in **"SPV [under incorporation]"** shall be fifteen percent (15%), (i.e., 30%* 50%);

2.14.4.4 The provisions as contained in this Clause 2.14.4 and Article 18.10 of the TSA shall override the terms of the Consortium Agreement submitted by the Bidder as part of the RFQ.

2.15 Project Schedule

2.15.1 All Elements of the Project are required to be commissioned progressively as per the schedule given in the following table;

Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
A.	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines**			
1.	Construction of 400/220/132 kV GIS	Last date of 18th	30.49%	Elements at Sl.

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Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) ix. 400 kV 500 MVA ICT bay - 02 nos. x. 220 kV 500 MVA ICT bay - 02 nos. xi. 220 kV 200 MVA ICT bay - 02 nos. xii. 132 kV 200 MVA ICT bay - 02 nos. xiii. 400 kV 125 MVAR Bus Reactor bay - 01 no. xiv. 400 kV Feeder bay - 04 nos. xv. 220 kV Feeder bay - 06 nos. xvi. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension iv. 400 kV Feeder bay - 02 nos. v. 220 kV Feeder bay - 04 nos. vi. 132 kV Feeder bay - 04 nos.	month from the date of issuance of LoI		No. 1, 2 & 3 shall be required simultaneously
2.	LILO of Sarojani Nagar (400kV) - Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)			
3.	LILO of Lucknow (PG) 400 kV - Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)			
B.	**Construction of LILO Line**			
1.	LILO of 765 kV Ghatampur - Hapur (WUPPTCL) line on 765 kV GIS Rampur with River crossing	Last date of 15th month from the date of issuance of LoI	61.17%	-
2.	LILO of one circuit 400 kV Bareilly (PG) - Moradabad D/C line on 765 kV GIS S/S Rampur	Last date of 9th month from the date of issuance of LoI	0.49%	-
C.	**Construction of LILO lines on Monopole**			
1.	LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram	Last date of 9th month from the	7.85%	-

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Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	(WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	date of issuance of LoI		

Note:

(i) UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.

The payment of Transmission Charges for any Element irrespective of its successful commissioning on or before its Scheduled COD shall only be considered after successful commissioning of the Element(s) which are pre-required for declaring the commercial operation of such Element as mentioned in the above table.

Scheduled COD for overall Project: Last date of 18th month from the date of issuance of LoI.

2.16 Due dates

2.16.1 The Bidders should submit the Bids online through the electronic bidding platform before the Bid Deadline and submit the Non-Financial Bids, in one (1) original plus one (1) copy, so as to reach the address specified in Clause 2.18.4 by **1500 hrs (IST)** on **July 29, 2021**.

2.16.2 Important timelines are mentioned below:

Date	Event
27-May-21	Issuance of RFP
07-Jun-21	Submission of written clarifications/amendments, if any, on the RFP / RFP Project Documents by Bidders so as to reach BPC by 1700 hours. Such written clarifications/amendments shall be in the format provided in Annexure-7.
14-Jun-21	Pre-Bid meeting(s)
24-Jun-21	Issuance of written clarifications and revised RFP documents.
22-Jul-21	Issue of signed RFP Project Documents (except for the Share Purchase Agreement)
29-Jul-21	Submission of Bid (Online submission of Bid through electronic bidding portal and physical submission of Non-Financial Bid)
29-Jul-21	Opening of Non-Financial Bid
04-Aug-21	Opening of Financial Bid - Initial Offer and Announcement of the

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Date	Event
	Qualified Bidders
05-Aug-21	Electronic auction (Financial Bid - Final Offer) for the Qualified Bidders.
13-Aug-21	Selection of Successful Bidder and issue of LOI
23-Aug-21	Signing of Share Purchase Agreement and transfer of **"SPV [under incorporation]"**

2.17 Validity of the Bid

2.17.1 The Bidders shall submit the Bid which shall remain valid up to one hundred and eighty (180) days from the Bid Deadline. The BPC reserves the right to reject any Bid which does not meet the aforementioned validity requirement.

2.17.2 The BPC may solicit the Bidders' consent for an extension of the period of validity of the Bid. The request and the response, thereafter, shall be in writing. In the event any Bidder refuses to extend its Bid validity as requested by the BPC, the BPC shall not be entitled to invoke the Bid Bond. A Bidder accepting the BPC's request for validity extension shall not be permitted to modify its Bid and such Bidder shall, accordingly, extend the validity of the Bid Security Declaration as requested by the BPC within seven (7) days of such request, failing which the Bid shall not be considered as valid.

2.18 Method of submission

2.18.1 Both the Non-Financial and Financial Bids shall be submitted online through the electronic bidding platform in the manner specified in Annexure-A.

2.18.2 Envelope containing the hard copy of Non-Financial Bid in one (1) original plus one (1) copy to be submitted by Bidders, should be packed in a single closed envelope, with the following superscript:

"Non-Financial Bid for selection of Transmission Service Provider to establish Transmission System for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Due for opening at **1530 hrs (IST)** on **July 29, 2021**

PFC Consulting Limited
9th Floor, Wing-A, Statesman House,
Connaught Place, New Delhi - 110001
"Name of the Bidder ....."

2.18.3 The Bidders have the option of sending their **Non-Financial Bids** either by registered post; or speed post; or courier; or by hand delivery, so as to reach the BPC at the specified address by the Bid Deadline. Bids submitted by telex/ telegram/ fax/ e-mail shall not be considered under any circumstances. The BPC shall not be responsible for any delay in receipt of the Bids. Any Bid received by the BPC after the Bid Deadline shall be returned unopened.



2.18.4 Hard copies of **Non-Financial Bids** shall be submitted at the following address by the Bid Deadline specified in Clause 2.16.1. Non submission of the hard copies of Non-Financial Bid post uploading in the electronic biding platform or vice versa shall not be considered for evaluation purpose.

General Manager
PFC Consulting Limited,
9th Floor, Wing-A, Statesman House,
Connaught Place, New Delhi - 110001
Tel. + 91 11 23443996
Fax + 91 11 23443990
Email: pfccl.itp@pfcindia.com

2.18.5 It may be noted that Non-Financial Bid shall not contain any information/ document relating to Financial Bid. If Non-Financial Bid contains any such information/ documents, the BPC shall not be responsible for premature opening of the Financial Bid.

All pages of the Bid, except for the Bid Bond (Annexure 2) and any other document executed on non-judicial stamp paper, forming part of the Bid and corrections in the Bid, if any, must be signed by the authorized signatory on behalf of the Bidder. It is clarified that the same authorized signatory shall sign all pages of the Bid. However, any published document submitted in this regard shall be signed by the authorized signatory at least on the first and last page of such document.

2.18.6 Bidders shall submit the Non-Financial Bid in one (1) original plus one (1) copy, duly signed by the authorized signatory of the Bidder. The original Bid shall be clearly marked "ORIGINAL", and the other copy to be clearly marked "COPY OF BID". In the event of any discrepancy between the online submission, original and the accompanying copy, only the online submission shall prevail.

2.18.7 No change or supplemental information to a Bid will be accepted after the Bid Deadline, unless the same is requested for by the BPC as per Clause 2.14.1.4(f).

Provided that a Bidder shall always have the right to withdraw/ modify its Bid before the Bid Deadline. In cases where the Non-Financial Bid is withdrawn by the Bidder, then such Bid shall be returned unopened. No Non-Financial Bid or Initial Offer shall be modified, substituted or withdrawn by the Bidder on or after the Bid Due Date.

2.18.8 If the outer cover envelope (Non-Financial Bid) is not closed and not transcripted as per the specified requirement, the BPC will assume no responsibility for the Bid's misplacement or premature opening.

2.19 Preparation cost

2.19.1 The Bidders shall be responsible for all the costs associated with the preparation of the Bid and participation in discussions and attending pre-bid meetings, and finalization and execution of the Share Purchase Agreement, etc. The BPC shall not be responsible in any way for such costs, regardless of the conduct or outcome of this Bid process.

2.19.2 The cost of this RFP is Rupees Five Lakhs only **(Rs.5,00,000/-)** or U.S. Dollar Seven

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Thousand only (US$7,000/-) plus applicable GST @18% which shall be non-refundable. This amount shall be payable by a crossed demand draft or banker's cheque drawn in favour of **"PFC Consulting Limited"**, payable at New Delhi or through electronic transfer in the following Bank Account:

Account No.	**: 000705036117**
Bank Name	**: ICICI Bank**
IFSC	**: ICIC0000007**
Branch	**: Connaught Place, New Delhi - 110 001.**

2.20 Bid Bond

2.20.1 Each Bidder shall submit the Bid accompanied by Bid Security Declaration in lieu of Bid Bond as per the format at Annexure-2. The Bid Bond shall be valid for a period of thirty (30) days beyond the validity of the Bid.

2.20.2 Subject to the provisions of Clause 2.7, the Bid Bond may be invoked by the BPC or its authorized representative, without any notice, demure, or any other legal process upon occurrence of any of the following:

- Bidder withdraws during the period of Bid Validity as specified in this RFP or as extended by mutual consent of the respective Bidder(s) and the BPC;
- Failure to execute the Share Purchase Agreement as per the provisions of Clause 2.4; or
- Failure to furnish the Contract Performance Guarantee as per Clause 2.21; or
- Failure to acquire one hundred percent (100%) equity shares of **"SPV [under incorporation]"**, along with all its related assets and liabilities, in accordance with the provisions of Clause 2.4; or
- Failure to apply for grant of Transmission License as per Clause 2.6;
- Failure to comply with the provisions of Clause 2.7 and 2.8, leading to annulment of the award of the Project;
- Bidders submitting any wrong information or making any misrepresentation in their Bid as mentioned in Clause 2.14.1.4.

Intimation of the reasons of the invocation of the Bid Bond shall be given to the Selected Bidder by the BPC within three (3) working days after such invocation.

~~**2.20.3** The Bid Bond of the Selected Bidder shall be returned on submission of the Contract Performance Guarantee as per Clause 2.21and the relevant provisions of the TSA.~~

~~**2.20.4** The Bid Bond of all the Bidders, whose Bids are declared non-responsive, shall be returned within a period of thirty (30) days after the date on which the Financial Bids are opened.~~

~~**2.20.5** The Bid Bond of all unsuccessful Bidders shall be returned and released by the BPC on the same day on which the **"SPV [under incorporation]"** is transferred to the Selected Bidder. The Bid Bond of the Successful Bidder shall be returned on submission of Contract Performance Guarantee as per Clause 2.21 of this RFP and the provisions of the TSA.~~

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2.21 Contract Performance Guarantee

2.21.1 Within ten (10) days from the date of issue of the Letter of Intent, the Selected Bidder, on behalf of the TSP, will provide to the Long Term Transmission Customers the Contract Performance Guarantee for an aggregate amount of **Rs.15,33,00,000/- (Rupees Fifteen Crore Thirty Three Lakh only)**, which shall be provided separately to each of the Long Term Transmission Customers for the amount calculated pro-rata in the ratio of their Allocated Project Capacity, as on the date seven (7) days prior to the Bid Deadline (rounded off to the nearest Rupees one lakh (Rs.1,00,000/-) with the principle that amounts below Rupees Fifty Thousand (Rs.50,000/-) shall be rounded down and amounts of Rupees Fifty Thousand (Rs.50,000/-) and above shall be rounded up .The Contract Performance Guarantee shall be initially valid for a period up to three (3) months after the Scheduled COD of the Project and shall be extended from time to time to be valid for a period up to three (3) months after the COD of the Project and thereafter shall be dealt with in accordance with the provisions of the TSA. The Contract Performance Guarantee shall be issued by any of the banks listed in Annexure-12.

2.21.2 In case the Selected Bidder is unable to obtain the Contract Performance Guarantee for the total amount from any one bank specified in Annexure-12, the Selected Bidder may obtain the same from not more than three (3) banks specified in Annexure-12, subject however to the apportionment as provided in Clause2.21.1.

2.22 Opening of Bids

2.22.1 Non-Financial Bid will be opened as per the following time schedule and at the venue where the Bids are required to be submitted, as specified in Clause 2.18.4, in the presence of one representative from each of such Bidders who wish to be present:

Opening of Envelope (Non-Financial Bid): 1530 hrs (IST) on **July 29, 2021**

Opening of Initial Offer: Initial Offer shall be opened by the Bid Process Coordinator in presence of the Bid Evaluation Committee at **1530 hours** (IST) on **August 04, 2021** or such other dates as may be intimated by the BPC to the Bidders.

In the event of any of above dates falling on a day which is not a working day or which is a public holiday, then the bids shall be opened on the next working day at the same venue and time.

2.22.2 The following information from each Bid will be read out to all the Bidders at the time of opening of Non-Financial Bid:

- Name of the Bidding Company/ Consortium Members in case of Bidding Consortium only, from Format-2 of Annexure-6 (Non-Financial Bid)
- Details of Bid Security Declaration submitted in lieu of Bid Bond (Non-Financial Bid)

Information to be provided after opening of Initial Offer:

Only the lowest Initial Offer (s) shall be communicated to all the Qualified Bidders to participate in the e-reverse bidding process. During the e-reverse bidding process only the lowest prevailing levelised bid should be visible to all the bidders on the electronic platform.

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2.23 Enquiries

Written clarifications on the RFP and other RFP Project Documents as per Clause2.12and 2.13may be sought from:

PFC Consulting Limited
9th Floor, A-Wing
Statesman House,
Connaught Place,
New Delhi - 110 001

Telephone: +91 - 11- 23443996
Fax: +91 - 11 - 23443990
e-mail: pfccl.itp@pfcindia.com

2.24 Confidentiality

2.24.1 The parties undertake to hold in confidence this RFP and RFP Project Documents and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

a) to their professional advisors;
b) to their officers, contractors, employees, agents or representatives, financiers, who need to have access to such information for the proper performance of their activities;
c) disclosures required under Law,

without the prior written consent of the other parties of the concerned agreements.

Provided that the TSP agrees and acknowledges that any of the Long Term Transmission Customers may at any time, disclose the terms and conditions of the RFP and RFP Project Documents to any person, to the extent stipulated under the Law or the Bidding Guidelines.

2.25 Right of BPC to reject any Bid

BPC reserves the right to reject all or any of the Bids or cancel the RFP without assigning any reasons whatsoever and without any liability.

2.26 Fraudulent and Corrupt Practices

2.26.1 The Bidders and their respective officers, employees, agents and advisers shall observe the highest standard of ethics during the Bid process and subsequent to the issue of the LOI Notwithstanding anything to the contrary contained herein, or in the LOI, the BPC shall reject a Bid, withdraw the LOI, as the case may be, without being liable in any manner whatsoever to the Bidder, if it determines that the Bidder has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bid process. In such an event, the BPC shall forfeit the Bid Bond, without prejudice to any other right or remedy that may be available to the BPC hereunder or otherwise.

2.26.2 Without prejudice to the rights of the BPC under Clause 2.26.1 hereinabove and the rights and remedies which the BPC may have under the LOI, if a Bidder is found by the BPC to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bid process, or after the issue of the LOI, such Bidder shall

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not be eligible to participate in any tender or RFP issued by the BPC during a period of 2 (two) years from the date such Bidder is found by the BPC to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.

2.26.3 For the purposes of this Clause 2.26, the following terms shall have the meaning hereinafter respectively assigned to them:

(a) **"corrupt practice"** means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bid process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the BPC who is or has been associated or dealt in any manner, directly or indirectly with the Bid process or the LOI or has dealt with matters concerning the TSA or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the BPC, shall be deemed to constitute influencing the actions of a person connected with the Bid Process); or (ii) engaging in any manner whatsoever, whether during the Bid Process or after the issue of the LOI or after the execution of the TSA, as the case may be, any person in respect of any matter relating to the Project or the LOI or the TSA, who at any time has been or is a legal, financial or technical adviser of the BPC in relation to any matter concerning the Project;

(b) "**fraudulent practice**" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bid process;

(c) "**coercive practice**" means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bid process;

(d) "**undesirable practice**" means (i) establishing contact with any person connected with or employed or engaged by the BPC with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bid process; or (ii) having a Conflict of Interest; and

(e) "**restrictive practice**" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bid process.



SECTION 3

EVALUATION CRITERIA



3. EVALUATION CRITERIA

3.1 Bid Evaluation

3.1.1 The Bid evaluation process shall comprise of the following three steps:

1. Step I – Responsiveness check (Envelope I)
2. Step II – Evaluation of Financial Bids
3. Step III – Bidder selection

3.2 Step I - Responsiveness check

3.2.1 The Non-Financial Bids submitted by Bidders shall be scrutinized to establish "Responsiveness". Subject to Clause 2.14.1.4 f), any of the following may cause the Bid to be considered "Non-responsive", at the sole discretion of the BPC:

- Applicable Board resolutions, or any other document, as provided in Clause 2.14.1.1, not being submitted; or
- Bid not accompanied by a valid Bid Security Declaration in lieu of Bid Bond; or
- Bid not signed by authorized signatory in the manner and to the extent indicated in this RFP as per Clause 2.18.4; or
- Non submission of power of attorney, supported by a Board resolution as per Clause 2.14.1.1; or
- Bid validity being less than that required as per Clause 2.17 of this RFP; or
- Bid not containing Format-1 (Bidders' Undertakings) of Annexure-6; or
- Bid being conditional in nature; or
- Any request for change in membership of Bidding Consortium, Change in Ownership of Bidding Consortium, Change from Bidding Company to Consortium or Change from Bidding Consortium to Bidding Company has not been permitted by the BPC; or
- Bids having Conflict of Interest.

3.3 Step II - Evaluation of Financial Bids

3.3.1 General

3.3.1.1 The Initial Offer of Bids which have been found responsive by the BPC, based on the responsiveness check (Step I) as specified above in Clause 3.2, shall be opened and Levelised Transmission Charges of such Initial Offer shall be ranked on the basis of the ascending Initial Offer submitted by each responsive Bids.

Based on such ranking of the Qualified Bidders, holding first fifty per cent of the ranks (with any fraction rounded off to higher integer) or four Qualified Bidders, whichever is higher, shall be considered to be the qualified for participating in the electronic auction (the "Qualified Bidders").

Provided however, in case of only one Bidder remains after the responsiveness check (Step I) under Clause 3.2, the Initial Offer of such Bidder shall not be opened and the matter shall be referred to the Government.

Provided that in the event the number of responsive Non-Financial Bids is between two and four, then each of the responsive Bidder shall be considered as Qualified Bidders.

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Provided that in the event of identical Levelised Transmission Charges derived from the Initial Offer having been submitted by one or more Bidders, all such Bidders shall be assigned the same rank for the purposes of determination of Qualified Bidders. In such cases, the fifty per cent shall stand enhanced to fifty per cent (with any fraction rounded off to higher integer) or four Qualified Bidders, whichever is higher, plus the number of Qualified Bidders, whose Levelised Transmission Charges derived from Initial Offer are identical minus the number of such identical Initial Offer.

3.3.1.2 The Financial Bids submitted by the Bidders shall be scrutinized to ensure conformity with the provisions of Clause 2.14.1.2 of this RFP. Any Bid not meeting any of the requirements as per Clause 2.14.1.2 of this RFP may cause the Bid to be considered "Non-responsive", at the sole decision of the BPC. Financial Bid not in conformity with the requirement of Sl. No.(c)) and (g)) of Clause 2.14.1.2 of this RFP shall be rejected.

3.3.1.3 The Bidders shall quote the different components of Transmission Charges as specified in the format at Annexure-4. Based on the Quoted Transmission Charges provided by the Bidders, the Levelised Transmission Charges (only in Rupees per year) of each Bid shall be calculated for the term of the TSA as per the methodology mentioned below:

(a) For the purposes of comparison of the Financial Bids, the Quoted Escalable Transmission Charges of each Bidder shall be uniformly escalated as per the escalation rate mentioned below. However, for the purpose of actual payment of Transmission Charges, such escalation rate shall be applied as per the provisions of the TSA.

S.No.	Head	Value
1.	Annual escalation rate applicable to Quoted Escalable Transmission Charges	This shall be as per the rate notified by the CERC, applicable on the seventh day prior to the Bid Deadline
2.	Discount rate for computation of Levelised Transmission Charges	This shall be as per the rate notified by the CERC as applicable for generation projects, applicable on the seventh day prior to the Bid Deadline

(b) The factor at Sl. No. 1 in the above table shall be applied from the Scheduled COD of the Project, and shall be applied as at the mid point of each Contract Year.

3.3.2 Computation of Levelised Transmission Charges

3.3.2.1 The computed Quoted Transmission Charges (in Rupees per year) of each of the Bidders for each Contract Year for the term of TSA, calculated as per provisions of Clause3.3.1.3, shall then be discounted up to the Scheduled COD of the Project mentioned in Clause 2.15 of this RFP, by applying the discount factors (based on the discount rate as mentioned at sl. no. 2 of the table in Clause 3.3.1.3 above) and such aggregate discounted value for the term of the TSA shall be divided by the sum of such discount factors so as to calculate the Levelised Transmission Charge of each Bidder.

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3.3.2.2 The Levelised Transmission Charges shall be calculated by assuming uniformly the following for all the Bidders

- Grant of Transmission License within 6 months from the date of Letter of Intent to the Selected Bidder by the BPC as per the timelines in Clause2.16.2 above.
- Project to be commissioned on the date which is **18 months from issuance of LoI.**
- Transmission Charges shall be levelised over a period from the Scheduled COD of the Project, up to 35 years.

3.3.2.3 The methodology of computation of Levelised Transmission Charges is explained in the example provided in Annexure-13.

3.4 Step III - Bidder Selection

3.4.1.1 The prevailing lowest Levelised Transmission Charges derived from Final Offers calculated as per Clause 3.3.2 shall be displayed during the e-reverse bidding. The Bidder with the prevailing lowest Levelised Transmission Charges derived from Final Offer at the close of the scheduled or extended period of e-reverse bidding as mentioned in clause 2.14 shall be declared as the Successful Bidder and the Letter of Intent shall be issued to such Successful Bidder in two (2) copies.

However if no bid is received during the e-reverse bidding stage then the Bidder with lowest quoted initial Levelised transmission charges ("Initial Offer") during e-bidding stage shall be declared as the Successful Bidder.

3.4.1.2 The Selected Bidder shall unconditionally accept the LOI, and record on one (1) copy of the LOI, "Accepted unconditionally", under the signature of the authorized signatory of the Successful Bidder and return such copy to the BPC within seven (7) days of issue of LOI.

3.4.1.3 If the Successful Bidder, to whom the Letter of Intent has been issued, does not fulfill any of the conditions specified in Clauses 2.4, 2.5 and Clause 2.6, then subject to Clause 2.7, the BPC reserves the right to annul the award of the Project and cancel the Letter of Intent. Further, in such a case, the provisions of Clause 2.14.1.4 (b) shall apply.

3.4.1.4 The BPC, in its own discretion, has the right to reject all Bids if the Quoted Transmission Charges are not aligned to the prevailing market prices.



SECTION 4

FORMATS FOR ANNEXURES



ANNEXURE 1

List of Long Term Transmission Customers

Note to Bidders: The List provided below is subject to change

S. No.	Name of Long Term Transmission Customers	Allocated Capacity
1	Pashchimanchal Vidhut Vitran Nigam Ltd. (PaVVNL)	31%
2	Purvanchal Vidhut Vitran Nigam Ltd. (PuVVNL)	24%
3	Dashinanchal Vidhut Vitran Nigam Ltd. (DVVNL)	22%
4	Madhyanchal Vidhut Vitran Nigam Ltd. (MVVNL)	19%
5	Kanpur Electricity Supply Co. Ltd. (KESCO)	4%



ANNEXURE 2

FORMAT FOR BID SECURITY DECLARATION

[On the Letter Head of the Bidding Company/Lead Member of Bidding Consortium]

Date: .....

To

PFC Consulting Limited
9th Floor, A-Wing,
Statesman House
Connaught Place,
New Delhi-110001

Dear Sir,

Sub: Bidders' Declaration in lieu of Bid Bond in respect of Bid for selection of TSP to establish "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Being duly authorized to present and act on behalf of M/s ..... (insert name of Bidding Company/ Bidding Consortium) (hereinafter called the "Bidder") and having read and examined in detail the Request for Proposal (RFP) document, the undersigned hereby agree the following:

1. We, ...(insert name of Bidding Company / Bidding Consortium) are submitting the Bid for establishing the **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** on build, own, operate and maintain basis, in response to the RFP dated **May 27, 2021** issued by PFC Consulting Limited, as per the terms of the RFP.

2. We,..... (insert name of Bidding Company/ Bidding Consortium) are submitting this Bid Security Declaration in lieu of the Bid Bond.

3. We, ... (insert name of Bidding Company/ Bidding Consortium) have read the terms & conditions of RFP in particular regarding invocation/ forfeiting of the Bid Bond by the BPC under various circumstances.

4. We agree that, ... (insert name of Bidding Company/ Bidding Consortium) shall be suspended from participation in the bidding process for future Inter-State transmission projects of Ministry of Power, GoI to be developed through tariff based

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competitive bidding route for a period of two (02) years from the bid submission date upon occurrence of a situation that otherwise would have led to revocation/forfeiture of Bid Bond as per provisions of RFP.

For and on behalf of Bidding Company/ Consortium

M/s .....

.....

(Signature of Authorized Signatory)

Name: .....

Designation: .....

Date: .....

Place: .....



ANNEXURE 3

FORMATS FOR RFP PROJECT DOCUMENTS

ENCLOSURE 1:- Draft TRANSMISSION SERVICE AGREEMENT (Provided separately)

ENCLOSURE 2:- Draft SHARE PURCHASE AGREEMENT (Provided separately)

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NEW DELHI

ANNEXURE 4

FORMAT FOR FINANCIAL BID

[To be provided on the Letterhead of the Bidding Company/Lead Member of the Bidding Consortium]

Date: .....

Subject: Financial Bid in respect of Bid for selection of TSP for the "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Quoted Transmission Charges

[BPC to fill in the Scheduled COD for the Project and respective years in Columns 2 and 3]

Year (Term of License)	Commencement Date of Contract Year	End Date of Contract Year	Quoted Non-Escalable Transmission Charges (in Rupees Millions)	Quoted Escalable Transmission Charges (in Rupees Millions)
(1)	**(2)**	**(3)**	**(4)**	**(5)**
1.	Scheduled COD (Refer note 7 and 9)	31-March		
2.	1-April	31-March		Same as Above
3.	1-April	31-March		Same as Above
4.	1-April	31-March		Same as Above
5.	1-April	31-March		Same as Above
6.	1-April	31-March		Same as Above
7.	1-April	31-March		Same as Above
8.	1-April	31-March		Same as Above
9.	1-April	31-March		Same as Above
10.	1-April	31-March		Same as Above
11.	1-April	31-March		Same as Above
12.	1-April	31-March		Same as Above
13.	1-April	31-March		Same as Above
14.	1-April	31-March		Same as Above
15.	1-April	31-March		Same as Above
16.	1-April	31-March		Same as Above
17.	1-April	31-March		Same as Above
18.	1-April	31-March		Same as Above
19.	1-April	31-March		Same as Above

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Year (Term of License)	Commencement Date of Contract Year	End Date of Contract Year	Quoted Non-Escalable Transmission Charges (in Rupees Millions)	Quoted Escalable Transmission Charges (in Rupees Millions)
(1)	**(2)**	**(3)**	**(4)**	**(5)**
20.	1-April	31-March		Same as Above
21.	1-April	31-March		Same as Above
22.	1-April	31-March		Same as Above
23.	1-April	31-March		Same as Above
24.	1-April	31-March		Same as Above
25.	1-April	31-March		Same as Above
26.	1-April	31-March		Same as Above
27.	1-April	31-March		Same as Above
28.	1-April	31-March		Same as Above
29.	1-April	31-March		Same as Above
30.	1-April	31-March		Same as Above
31.	1-April	31-March		Same as Above
32.	1-April	31-March		Same as Above
33.	1-April	31-March		Same as Above
34.	1-April	31-March		Same as Above
35.	1-April	31-March		
36.	1-April	35th anniversary of the Scheduled COD (Refer note 8 and 9)		Same as Above

Notes:

1) The Bidders are required to ensure compliance with the provisions of Clause2.14.1.2 of this RFP.
2) Quotes to be in Rupees Millions and shall be up to two (2) decimal points.
3) The contents of this format shall be clearly typed.
4) All pages of this format shall be signed by the authorized person in whose name power of attorney as per Clause2.14.1.1 is issued.
5) Ensure **36** values of the Quoted Non-Escalable Transmission Charges and only 1 value for Quoted Escalable Transmission Charges, unless firm Transmission Charges are quoted.
6) In the likely situation of Bidders quoting firm Transmission Charges, the single value for the Quoted Escalable Transmission Charges should be filled as Nil.
7) Charges quoted for the first Contract Year would be the charges applicable for the period from the immediately preceding 1 April from the Scheduled COD till the immediately succeeding 31 March.
8) Charges quoted for the last Contract Year would be the charges applicable from immediately preceding 1 April to the date of thirty-fifth anniversary of the Schedule COD till the immediately succeeding 31 March.

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9) However, in cases of both (7) and (8) above, total Transmission Charges payable to the TSP will be computed proportionately for the total number of days in the first and the last Contract Year respectively.

Name and signature of authorized person in whose name power of attorney /Board resolution as per Clause 2.14.1.1 is issued

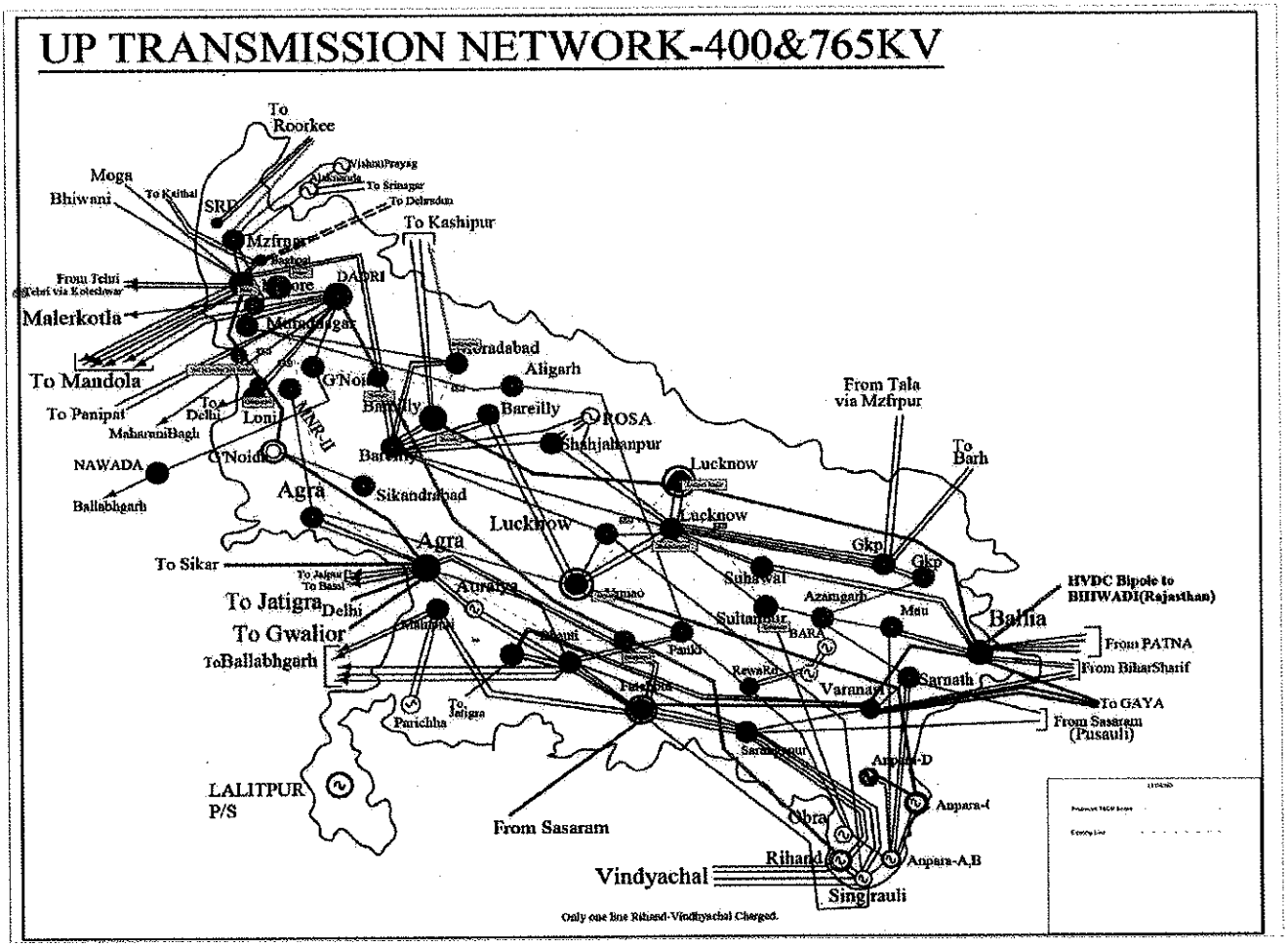
Signature of authorized person
Name: .....
Designation: .....
Date: .....

Company rubber stamp



ANNEXURE - 5

GRID MAP OF THE PROJECT



MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

ANNEXURE 6

UNDERTAKINGS AND PROJECT SCHEDULE

Format 1: Bidders' Undertakings

[On the Letter Head of the Bidding Company/Lead Member of Bidding Consortium]

Date: .....

To

PFC Consulting Limited
9th Floor, A-Wing,
Statesman House,
Connaught Place,
New Delhi - 110 001

Dear Sir,

Sub: Bidders' Undertakings in respect of Bid for selection of TSP for the "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

We hereby undertake on our own behalf and on behalf of the TSP, that if selected as the Successful Bidder for the Project:

1. The Project shall comply with all the relevant electricity laws, codes, regulations, standards and Prudent Utility Practices, environment laws and relevant technical, operational and safety standards, and we shall execute any agreements that may be required to be executed as per law in this regard.

2. We confirm that the Project shall also comply with the standards and codes as per Clause 0of the RFP and the TSP shall comply with the provisions contained in the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations 2004, UP Electricity Grid Code, 2007 and the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 made pursuant to Section 177(2) of the Electricity Act, 2003,as amended from time to time.

3. We hereby agree and undertake to procure the products associated with the Transmission System as per provisions of Public Procurement (Preference to Make in India) orders issued by Ministry of Power vide order No. 11/05/2018-Coord. dated 28.07.2020 for transmission sector, as amended from time to time read with Department for Promotion of Industry and Internal Trade (DPIIT) orders in this regard.

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We hereby also agree and undertake to comply with Department of Expenditure, Ministry of Finance vide Order (Public Procurement No 1) bearing File No. 6/18/2019-PPD dated 23.07.2020, Order (Public Procurement No 2) bearing File No. 6/18/2019-PPD dated 23.07.2020 and Order (Public Procurement No. 3) bearing File No. 6/18/2019-PPD dated 24.07.2020 regarding public procurement from a bidder of a country, which shares land border with India.

4. We give our unconditional acceptance to the RFP dated ..... issued by the BPC and the RFP Project Documents, as amended, and undertake to ensure that the TSP shall execute the Share Purchase Agreement as per the provisions of this RFP.

5. We have submitted the Bid on the terms and conditions contained in the RFP and the RFP Project Documents. Further, the Financial Bid submitted by us is strictly as per the format provided in Annexure-4 of the RFP, without mentioning any deviations, conditions, assumptions or notes in the said Annexure.

6. Our Bid is valid up to the period required under Clause 2.17 of the RFP.

7. Our Bid has been duly signed by authorized signatory and stamped in the manner and to the extent indicated in this RFP and the power of attorney/ Board resolution in requisite format as per RFP has been enclosed in original with this undertaking.

8. We have assumed that if we are selected as the Successful Bidder, the provisions of the Consortium Agreement submitted at the time of the RFQ, to the extent and only in relation to equity lock in and our liability thereof shall get modified to give effect to the provisions of Clause 2.14.4 of this RFP and Article 18.2 of the TSA ***(Note:** This is applicable only in case of a Bidding Consortium).*

9. We confirm that our Bid meets the Scheduled COD of each transmission Element and the Project as specified below:

Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
A.	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines**			
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos.	Last date of 18th month from the date of issuance of LoI	30.49%	Elements at Sl No. 1, 2 & 3 shall be required simultaneously

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Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.			
2.	LILO of Sarojani Nagar (400kV) - Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)			
3.	LILO of Lucknow (PG) 400 kV - Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)			
B. Construction of LILO Line				
1.	LILO of 765 kV Ghatampur - Hapur (WUPPTCL) line on 765 kV GIS Rampur with River crossing	Last date of 15th month from the date of issuance of LoI	61.17%	-
2.	LILO of one circuit 400 kV Bareilly (PG) - Moradabad D/C line on 765 kV GIS S/S Rampur	Last date of 9th month from the date of issuance of LoI	0.49%	-
C. Construction of LILO lines on Monopole				
1.	LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) - Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	Last date of 9th month from the date of issuance of LoI	7.85%	-

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We agree that the Element(s) mentioned in Sr.No.1-7 are critical to the operation of the Project and the actual COD of such Element(s) shall be no later than the Scheduled COD as mentioned in the above table.

We further agree that the payment of Transmission Charges for any Element irrespective of its successful commissioning on or before its Scheduled COD shall only be considered after the successful commissioning of such critical Element(s).

Scheduled COD for the Project: Last date of 18th month from issuance of LoI

10. We confirm that our Financial Bid conforms to all the conditions mentioned in this RFP, and in particular, we confirm that:
    a. Ratio of minimum and maximum Quoted Transmission Charges during the term of the TSA for which Transmission Charges have been quoted in the format at Annexure-4 of the Bid is not less than zero point seven (0.7) as provided in Clause2.14.1.2.
    b. Further, the Quoted Escalable Transmission Charges (after duly escalating the Quoted Escalable Transmission Charges on the basis of the escalation rates specified in Clause 3.3.1.3) for any Contract Year does not exceed fifteen percent (15%) of the corresponding Quoted Non-Escalable Transmission Charges for that Contract Year, for the entire term.
    c. Financial Bid in the prescribed format of Annexure-4 has been submitted duly signed by the authorized signatory.
    d. Financial Bid is unconditional.
    e. Only one Financial Bid has been submitted.

11. We have neither made any statement nor provided any information in this Bid, which to the best of our knowledge is materially inaccurate or misleading. Further, all the confirmations, declarations and representations made in our Bid are true and accurate. In case this is found to be incorrect after our acquisition of **"SPV [under incorporation]"** pursuant to our selection as Selected Bidder, we agree that the same would be treated as a TSP's Event of Default under TSA, and relevant provisions of TSA shall apply.

12. We confirm that there are no litigations or other disputes against us which materially affect our ability to fulfill our obligations with regard to the Project as per the terms of RFP Project Documents.

13. Original power of attorney/ Board resolution as per Clause 2.14.1.1 is enclosed.

Signature and stamp of Any Whole-Time Director/ Manager [refer Note 1 below] of Bidding Company or Lead Member of Consortium
(supported by a specific Board Resolution)

Please also affix common seal of Bidding Company/ Member in a Bidding Consortium

Common seal of ..... has been affixed in my/ our presence pursuant to Board of Director's Resolution dated .....

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

WITNESS

1. .....
(Signature)

Name .....
Designation.....

2. .....
(Signature)

Name .....
Designation.....

Note:

1) In case of Manager, the Company should confirm through a copy of Board Resolution attested by Company Secretary that the concerned person is appointed as Manager as defined under the Companies Act, 2013 for the purpose in question.

The Company Secretary also certifies that the Company does not have a Whole-Time Director.

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NEW DELHI

Format 2: Details of equity investment in Project

1.1.a Name of the Bidding Company/ Bidding Consortium:

1.1.b Name of the Lead Member in the case of a Bidding Consortium:

1.2 Investment details of the Bidding Company/Member of the Bidding Consortium investing in **"SPV [under incorporation]"** as per Clause 2.14.4.2.

Sl. No.	Name of the Bidding Company / Member in case of a Bidding Consortium	Name of the Company investing in the equity of the ..... [Insert Name of SPV]	Relationship with Bidding Company/Member of the Bidding Consortium*	% of equity participation in the .....[Insert Name of the SPV]
(1)	(2)	(3)	(4)	(5)
TOTAL				100%

* In case the Bidder proposes to invest through its Affiliate(s)/ Parent Company/ Ultimate Parent Company, the Bidder shall declare shareholding pattern of such Affiliate(s)/ Parent Company/ Ultimate Parent Company and **provide documentary evidence** to demonstrate relationship between the Bidder and the Affiliate(s)/Parent Company/ Ultimate Parent Company. **These documentary evidences could be, but not limited to, demat account statement(s)/ Registrar of Companies' (ROC) certification/ share registry book, etc duly certified by Company Secretary.**

Members of the Consortium or the Bidding Company making investment in the equity of the **"SPV [under incorporation]"** themselves to fill in their own names in the column (3)

Signature and Name of authorized person in whose name power of attorney has been issued

---

Signature of authorized person
Name: .....
Designation: .....
Date: .....
Company rubber stamp

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ANNEXURE 7

Format for Clarifications /Amendments on the RFP/RFP Project Documents

Sl. No.	Name of the Document	Clause No. and Existing provision	Clarification required	Suggested text for the amendment	Rationale for the Clarification or Amendment

Signature .....

Name: .....

.....

For

Bidder's Rubber Stamp and Full Address.

(**Note:** This format shall be used for submission of requests for clarifications/ amendments on the draft *RFP Project Documents* as per the provisions of Clause 2.12.1)

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ANNEXURE 8

FORMATS FOR BOARD RESOLUTIONS

Format 1

Format of the Board resolution for the Bidding Company/ each Member of the Consortium/ investing Affiliate/ Parent Company/ Ultimate Parent Company, where applicable

[Reference Clause 2.14.1.1 of the RFP and the illustrations in Annexure 13A]

[Note: The following resolution no.1 needs to be passed by the Boards of each of the entity/(ies) making equity investment]

The Board, after discussion, at the duly convened Meeting on ..... [Insert date], with the consent of all the Directors present and in compliance of the provisions of the Companies Act, 1956, passed the following Resolution:

1. RESOLVED THAT pursuant to the provisions of the Companies Act, 2013 and compliance thereof and as permitted under the Memorandum and Articles of Association of the company, approval of the Board be and is hereby accorded for investment of .....% (.....per cent) of the total equity share capital of **"SPV [under incorporation]"** representing the entire amount proposed to be invested by the company for the **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"**, partly by acquisition of the existing equity shares from **PFC Consulting Limited** and/ or partly by subscribing to the new equity shares, as per the terms of the RFP.

[**Note:** Equity investment obligations by the Bidding Company/ each Member of the Bidding Consortium/ investing Affiliate or Parent or Ultimate Parent should add up to 100%.]

[Note: In the event the Bidder is a Bidding Consortium, the following Board resolution no. 2 also needs to be passed by the Lead Member of the Bidding Consortium]

2. RESOLVED THAT approval of the Board be and is hereby accorded to contribute such further amount over and above the said percentage limit to the extent becoming necessary towards the total equity share in the **"SPV [under incorporation]"**, obligatory on the part of the company pursuant to the terms and conditions contained in the Consortium Agreement dated ..... executed by the company as per the provisions of the RFQ.

[Note: In the event, the investing entity is an Affiliate or Parent or Ultimate Parent of the Selected Bidder, the following Board resolution no. 3 shall also be passed by the Selected Bidder]

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3. FURTHER RESOLVED THAT the Board hereby acknowledges the Board Resolution(s) passed by the ..... [Name of the Affiliate(s)/ Parent/ Ultimate Parent] regarding the investment of ..... (.....%) of the equity share capital requirements of **"SPV [under incorporation]"**, which is to be invested by the ..... [Name of the Affiliate(s)/ Parent/ Ultimate Parent] for the **"SPV [under incorporation]"**, partly by acquisition of the existing equity shares from **PFC Consulting Limited** and partly by subscribing to the new equity shares, as per the terms of the RFP.

[Note: The following resolution no. 4 is to be provided by the Bidding Company/ Lead Member of the Consortium only]

4. FURTHER RESOLVED THAT Mr/Ms ....., be and is hereby authorized to take all the steps required to be taken by the Company for submission of the Bid, including in particular, signing of the Bid, making changes thereto and submitting amended Bid, all the documents related to the Bid, certified copy of this Board resolution or letter or undertakings etc., required to be submitted to **"SPV [under incorporation]"** as part of the Bid or such other documents as may be necessary in this regard.

Certified True Copy

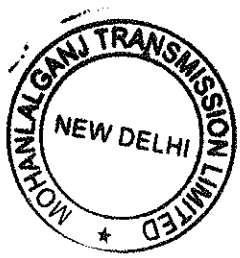
Company rubber stamp to be affixed

[Notes:

1) **This certified true copy should be submitted on the letterhead of the Company**, signed by the Company Secretary /Managing Director of the Bidding Company or the Lead Member of Consortium.

2) The contents of the format may be suitably re-worded indicating the identity of the entity passing the resolution, i.e., the Bidding Company, each Member of the Bidding Consortium.

3) This format may be modified only to the limited extent required to comply with the local regulations and laws applicable to a foreign entity submitting this resolution. For example, reference to Companies Act 1956 may be suitably modified to refer to the law applicable to the entity submitting the resolution. However, in such case, the foreign entity shall submit an unqualified opinion issued by the legal counsel of such foreign entity, stating that the Board resolutions are in compliance with the applicable laws of the respective jurisdictions of the issuing company and the authorizations granted therein are true and valid.]



Format 2

Format for the Board resolution of Technically/ Financially Evaluated Entity/ Ultimate Parent Company

The Board, after discussion, at the duly convened Meeting on .....[Insert date], with the consent of all the Directors present and in compliance of the provisions of the Companies Act, 2013, passed the following Resolution:

RESOLVED THAT pursuant to the provisions of the Companies Act, 2013 and compliance thereof and as permitted under the Memorandum and Articles of Association of the company, approval of the Board be and is hereby accorded for issuing an Undertaking to the BPC, in the format specified in the RFP issued by the BPC, draft of which is attached hereto and initialed by the Chairman whereby the company undertakes to invest .....percent (.... %) of the total equity share capital of **"SPV [under incorporation]"** representing the entire amount proposed to be invested by .....[insert the name of the Bidder or Member] for the said Project, in case of failure of .....[Insert the name of the Bidder or Member] to make such investment".

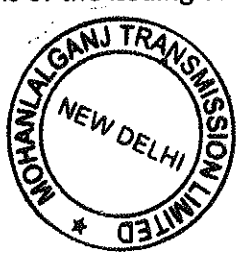
FURTHER RESOLVED THAT ....., be and is hereby authorized to take all the steps required to be taken by the Company, including in particular, signing the said Undertaking, submitting the same to the BPC through .....[Insert name of Bidding Company/Lead Member of the Consortium] of all the related documents, certified copy of this Board resolution or letter, undertakings etc, required to be submitted to BPC as part of the Bid or such other documents as may be necessary in this regard.

Certified True Copy

Company rubber stamp to be affixed

Notes:

1. **This certified true copy should be submitted on the letterhead of the Company**, signed by the Company Secretary/ Managing Director of Bidding Company or Lead Member of Consortium.
2. The contents of the format may be suitably re-worded indicating the identity of the entity passing the resolution.
3. This format may be modified only to the limited extent required to comply with the local regulations and laws applicable to a foreign entity submitting this resolution. For example, reference to Companies Act 1956/ Companies Act 2013 (as the case may be) may be suitably modified to refer to the law applicable to the entity submitting the resolution. However, in such case, the foreign entity shall submit an unqualified opinion issued by the legal counsel of such foreign entity, stating that the Board resolutions are in compliance with the applicable laws of the respective jurisdictions of the issuing company and the authorizations granted therein are true and valid.



ANNEXURE 9

FORMAT OF COVERING LETTER

[On the Letter Head of the Bidding Company/ Lead Member of the Bidding Consortium]

Bidder's Name: .....

Full Address: .....

Telephone No.: .....

E-mail address: .....

Fax / No.: .....

To

PFC Consulting Limited
9th Floor, A-Wing,
Statesman House,
Connaught Place,
New Delhi - 110 001

Sub: Bid for selection of a Transmission Service Provider to build, own, operate and maintain"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"under the Tariff Based Competitive Bidding Process

Dear Sir,

We, the undersigned Bidder having read and examined in detail the RFP for selection of a Transmission Service Provider to build, own, operate and maintain **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** through the Tariff Based Competitive Bidding Process, hereby submit our Bid comprising of Financial Bid and Non-Financial Bid.

1) Bid Bond

We have enclosed a Bid Security Declaration as per your proforma (Annexure-2) in terms of Clause 2.20 of the RFP.

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NEW DELHI

2) Acceptance

We hereby unconditionally and irrevocably agree and accept that the decision made by the BPC on any matter regarding or arising out of the RFP shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process.

3) Familiarity with Relevant Indian Laws & Regulations

We confirm that we have studied the provisions of relevant Indian laws and regulations as required to enable us to submit this Bid and execute the Share Purchase Agreement, in the event of our selection as the TSP. We further undertake and agree that all such factors as mentioned in Clause 2.14.2 of RFP have been fully examined and considered while submitting the Bid.

4) Contact Person

Details of contact person as required under Clause 2.14.1.4(e) are furnished as under:

Name : .....
Designation : .....
Company : .....
Address : .....
Phone Nos.: .....
Fax Nos.: .....
E-mail address: .....

We are enclosing herewith Envelope I (Non-Financial Bid) containing duly signed formats, **in one (1) original + one (1) copy(duly attested)** as desired by you in your RFP for your consideration.

It is confirmed that our Bid is consistent with all the requirements of submission as stated in the RFP and subsequent communications from BPC.

The information submitted in our Bid is complete, strictly as per the requirements stipulated in the RFP and is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our Bid.

We confirm that all the terms and conditions of the Bid are valid for acceptance for a period of one eighty (180) days from the Bid Deadline.

We confirm that we have not taken any deviation so as to be deemed non-responsive with respect to the provisions stipulated at Clause 2.14.1, of this RFP.

Dated this .....day of .....of ..... [Insert day, month and year]
Place: .....

Thanking you,
We remain,

Yours faithfully,

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NEW DELHI

Name and signature of authorized person in whose name power of attorney/ Board resolution as per Clause 2.14.1.1 is issued.

Signature of authorized person
Name: .....
Designation: .....
Date: .....



Company rubber stamp

ANNEXURE 10

FORMATS OF POWER OF ATTORNEY

[Referred to Clause 2.14.1.1 in RFP]

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution. The foreign Bidder to follow the applicable law in their country)

Format 1: Power of attorney to be provided by the Bidding Company/ Lead Member of the Bidding Consortium in favour of its representative

Know all men by these presents, we.....(name and address of the registered office of the Bidding Company/ Lead Member of the Bidding Consortium) do hereby constitute, appoint and authorize Mr./ Ms.....(name and residential address) as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for the Project **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** in response to the RFP dated .....issued by the BPC , including signing and submission of the Bid and all other documents related to the Bid, including, undertakings, letters, certificates, acceptances, clarifications, guarantees, etc, making representations to the BPC, and providing information/ responses to the BPC, representing us in all matters before the BPC, and generally dealing with the BPC in all matters in connection with our Bid for the said Project till the completion of the bidding process.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this power of attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the RFP.

Signed by the within named

_____[Insert the name of the executant company]
through the hand of
Mr. .....
Duly authorized by the Board to issue such Power of Attorney

Dated this ..... day of .....

Accepted

Signature of Attorney

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(Name, designation and address of the Attorney)

Attested

(Signature of the Executant)
(Name, designation and Address of the Executant)

Signature and stamp of Notary of the place of execution

Common seal of ..... has been affixed in my/our presence pursuant to Board of Director's Resolution dated.....

WITNESS

1. .....
(Signature)

Name .....
Designation.....

2. .....
(Signature)

Name .....
Designation.....

Note:

(1) The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and the same should be under common seal of the executant affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by the executant(s) in this regard.

(2) Also, wherever required, the executant(s) should submit for verification the extract of the chartered documents and documents such as a Board resolution/ power of attorney, in favour of the Person executing this power of attorney for delegation of power hereunder on behalf of the executant(s).

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Format 2: Power of attorney to be provided by each of the other Members of the Consortium in favour of the Lead Member

WHEREAS the BPC have issued Request for Qualification dated **February 12, 2021** ('RFQ') and Request for Proposal dated **May 27, 2021** ('RFP') for inviting the bids in respect of selection of a TSP to build, own, operate and maintain a Transmission System associated with **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** and to provide Transmission Services there from to the Long Term Transmission Customer(s) on the terms and contained in the RFP and the RFP Project Documents (as defined in RFP);

AND WHEREAS....., ..., ... and..... [Insert names of all Members of Consortium] the Members of the Consortium are desirous of submitting a Bid in response to the RFP, and if selected, set up the Project as per the terms of RFP and RFP Project Documents;

AND WHEREAS all the Members of the Consortium have agreed under the Joint Deed Agreement dated ..... [Insert Date of the Consortium Agreement] entered into between all the Members and submitted to the BPC in response to the RFQ, to appoint ..... [Insert name of the Lead Member] as Lead Member to represent all the other Member(s) of the Consortium for all matters regarding the Bid;

AND WHEREAS pursuant to the terms of the RFP, we, ... [Insert Name of the Consortium Member(s) hereby designate M/s _____ [Insert name of the Lead Member] as the Lead Member to represent us in all matters regarding the Bid and the RFP, in the manner stated below:-

Know all men by these presents, We..... (name and address of the registered office of the executant) do hereby constitute, appoint and authorize .....[name and registered office address of the Lead Member], which is one of the Members of the Consortium, to act as the Lead Member and our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of Consortium's Bid for the Project in response to the RFP dated ..... [Insert date of RFP] issued by the BPC, including signing and submission of the Bid and all documents related to the Bid, including, undertakings, letters, certificates, acceptances, clarifications, guarantees, etc, making representations to the BPC, and providing information/ responses to the BPC, representing us and the Consortium in all matters before the BPC, and generally dealing with the BPC in all matters in connection with our Bid for the said Project, till completion of the bidding process in accordance with the RFP and signing of the Share Purchase Agreement by all the parties thereto.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this power of attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

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All the terms used herein but not defined shall have the meaning ascribed to such terms under the RFP.

Signed by the within named:

.....[Insert the name of the executant company]
through the hand of
Mr.....
Duly authorized by the Board to issue such Power of Attorney

Dated this ..... day of .....

Accepted:

.....(signature of Attorney)
(Name, designation and Address of the Attorney)

Attested:

(Signature of executant)
(Name, designation and Address of the executant)

Signature and stamp of Notary of the place of execution

Common seal of ..... has been affixed in my/our presence pursuant to Board of Director's Resolution dated.....

WITNESS

1. .....
   (Signature)
   Name .....
   Designation.....

2. .....
   (Signature)
   Name .....
   Designation.....

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NEW DELHI

Note:

(1) The mode of execution of the power of attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and the same should be under common seal of the executant affixed in accordance with the applicable procedure. Further, the person whose signatures are to be provided on the power of attorney shall be duly authorized by the executant(s) in this regard.



ANNEXURE 10A

FORMAT OF UNDERTAKING

[On the Letter Head of the Technically/ Financially Evaluated Entity/ Ultimate Parent Company]

Date: _____

Name: .....

Full Address: .....

Telephone No.: .....

E-mail address: .....

Fax/ No.: .....

To

PFC Consulting Limited
9th Floor, A-Wing,
Statesman House,
Connaught Place,
New Delhi - 110 001

Sub: Undertaking for equity investment

Dear Sir,

We refer to the Request for Qualification dated **February 12, 2021** ('RFQ') and Request for Proposal dated **May 27, 2021** (RFP') issued by you regarding setting up of **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** Project on build, own, operate and maintain basis.

We have carefully read and examined in detail the RFQ and the RFP, including in particular, Clause 2.1.4 of the RFQ and Clauses 2.14.1.1 and 2.14.4 of the RFP, regarding submission of an undertaking regarding the investment in the equity share capital of **"SPV [under incorporation]"** and provisions for minimum equity holding and equity lock-in. We have also noted the amount of the equity investment required to be made in **"SPV [under incorporation]"** by the .....[Insert the name of the Bidder or the Consortium Member] for the Project.

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In view of the above, we hereby undertake to you and confirm that in the event of failure of .....[Insert the name of the Bidder or the Consortium Member] to invest in full or in part, in the equity share capital of **"SPV [under incorporation]"** as specified in the Bid, we shall invest the said amount not invested by .....[Insert the name of the Bidder or the Consortium Member] in **"SPV [under incorporation]"** by purchase of existing shares or subscribing to the new shares of **"SPV [under incorporation]"**, as stipulated by you.

We have attached hereto certified true copy of the Board resolution whereby the Board of Directors of our Company has approved issue of this Undertaking by the Company.

All the terms used herein but not defined, shall have the meaning as ascribed to the said terms under the RFP.

Certified as True

Signature of Any Whole-Time Director/ Manager (refer Note-1 below)
(supported by a specific Board Resolution)

The above undertaking should be signed and certified as true by Any Whole-Time Director/ Manager (refer Note-1 below) **of the Bidding Company or of the Member, in case of a Consortium (supported by a specific Board Resolution).**

Common seal of ..... has been affixed in my/ our presence pursuant to Board of Director's Resolution dated.....

WITNESS:

1. .....
   (Signature)
   Name .....
   Designation.....

2. .....
   (Signature)
   Name .....
   Designation.....

Note:

1. In case of Manager, the Company should confirm through a copy of Board Resolution attested by Company Secretary that the concerned person is appointed as Manager as defined under the Companies Act, 1956 for the purpose in question.
   The Company Secretary also certifies that the Company does not have a Managing Director or CEO.
2. Wherever required, extract of the chartered documents and documents such as a Board resolution should be submitted for verification.

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ANNEXURE 11

Format for Contract Performance Guarantee

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution. Foreign entities submitting Bids are required to follow the applicable law in their country. To be provided separately in the name of each of the Long Term Transmission Customer(s), in proportion to their Allocated Project Capacity as provided in Clause 2.21 of this document)

In consideration of the .....[Insert name of the Selected Bidder or Lead Member in case of the Consortium, with address] agreeing to undertake the obligations under the TSA dated .....and the other RFP Project Documents and .....[Insert the name of the Long Term Transmission Customer], agreeing to execute the Share Purchase Agreement with the Selected Bidder, regarding setting up the Project, the .....[Insert name and address of the bank issuing the guarantee and address of the head office](hereinafter referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to .....[Insert Name of the Long Term Transmission Customer]at .....[Insert the Place from the address of the Long Term Transmission Customer indicated in the TSA] forthwith on demand in writing from .....[Name of the Long Term Transmission Customer] *or* any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees ..... crore only [Insert the amount of the bank guarantee in respect of the Long Term Transmission Customer as per the terms of TSA separately to each Long Term Transmission Customer in the ratio of Allocated Project Capacities as on the date seven (7) days prior to the Bid Deadline]on behalf of M/s. ..... [Insert name of the Selected Bidder].

This guarantee shall be valid and binding on the Guarantor Bank up to and including .....and shall not be terminable by notice or any change in the constitution of the Bank or the term of the TSA or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to Rs..... crore (Rs. ..... crore only). Our Guarantee shall remain in force until ..... [Insert the date of validity of the Guarantee as per Clause 2.21.1 of the RFP]. The Long Term Transmission Customer shall be entitled to invoke this Guarantee up to one (01) year of the last date of the validity of this Guarantee.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from the Long Term Transmission Customer, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the Long Term Transmission Customer.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by **"SPV [under incorporation]"**,..... [Insert name of the Selected Bidder] and/ or any other person. The Guarantor Bank shall not

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require the Long Term Transmission Customer to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against the Long Term Transmission Customer in respect of any payment made hereunder.

This BANK GUARANTEE shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

This BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly the Long Term Transmission Customer shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against **"SPV [under incorporation]"** or the Selected Bidder, to make any claim against or any demand on **"SPV [under incorporation]"** or the Selected Bidder or to give any notice to **"SPV [under incorporation]"** or the Selected Bidder or to enforce any security held by the Long Term Transmission Customer or to exercise, levy or enforce any distress, diligence or other process against **"SPV [under incorporation]"** or the Selected Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to the Long Term Transmission Customer and may be assigned, in whole or in part, (whether absolutely or by way of security) by Long Term Transmission Customer to any entity to whom the Lead Long Term Transmission Customer is entitled to assign its rights and obligations under the TSA.

The Guarantor Bank hereby agrees and acknowledges that the Long Term Transmission Customer shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs. .....crore (Rs. ..... crore only) and it shall remain in force until .....[Date to be inserted on the basis of Article 3.1.2 of TSA], with an additional claim period of one (01) year thereafter. This BANK GUARANTEE shall be extended from time to time for such period, as may be desired by ..... [Insert name of the Selected Bidder or Lead Member in case of the Consortium]. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if the Long Term Transmission Customer serves upon us a written claim or demand.

In witness where of:

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Signature .....

Name: .....

Power of attorney No.: .....

For:

.....[Insert Name of the Bank]

Banker's Seal and Full Address, including mailing address of the Head Office

Notes:

1. The Stamp Paper should be in the name of the Executing Bank.



ANNEXURE 12

LIST OF BANKS

LIST OF BANKS

Nationalised Banks

1. Bank of Baroda
2. Bank of India
3. Bank of Maharashtra
4. Canara Bank
5. Central Bank of India
6. Indian Bank
7. Indian Overseas Bank
8. Punjab and Sind Bank
9. Punjab National Bank
10. State Bank of India
11. UCO Bank
12. Union Bank of India

2. Foreign Banks

1. Banks of America NA
2. Bank of Tokyo Mitsubishi Ltd.
3. BNP Paribas
4. Calyon Bank
5. Citi Bank N.A.
6. Deutsche Bank A.G.
7. The Hongkong and Shanghai Banking Corporation Ltd.
8. Standard Chartered Bank
9. Sumitomo Mitsui Banking Corporation
10. Societe Generale
11. Barclays Bank
12. ABN Amro Bank N.V.
13. Bank of Novascotia
14. Mizuho Bank Ltd.
15. DBS Bank Ltd.

3. Scheduled Private Banks

1. ING Vysya Bank Ltd.
2. ICICI Bank Ltd.
3. HDFC Bank Ltd.
4. IDBI Bank Ltd
5. Axis Bank
6. Kotak Mahindra Bank
7. IndusInd Bank
8. IDFC Bank

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Note:
The above list of banks is indicative and can be modified by the BPC as required and any such change shall not be construed as a deviation from this document.

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ANNEXURE 13

Illustration of the Bid Evaluation/Computation of Levelised Transmission Charges

PROVIDED AS EXCEL FILE IN CD ENCLOSED HEREWITH

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ANNEXURE 13A

Illustration for Applicable Board Resolution Requirements under Clause 2.14.1.1

Investor in the TSP	Entities (other than Bidder) whose credentials (financial and/or technical) used by the Bidder for meeting RFQ criteria	Applicable Board Resolutions	Requirement of Undertaking (Annexure 10A)
Bidder himself for 100% equity	None	a) Format 1 of Annexure 8 - Resolution* 1 and 4 from the Bidder	None
Bidder himself for 100% equity	Affiliate and/or Parent Company and/ or Ultimate Parent	a) Format 1 of Annexure 8 - Resolution* 1 and 4 from the Bidder b) Format 2 of Annexure 8 by either Technically/ Financially Evaluated Entity(ies) whose credentials have been used, or Ultimate Parent. Provided, if the Bidder himself is the Ultimate Parent, then Format 2 need not be provided.	Yes, by either Technically/ Financially Evaluated Entity(ies)/ Affiliate(s) whose credentials have been used, or Ultimate Parent. Provided, if the Bidder himself is the Ultimate Parent, then the undertaking need not be provided.
Bidder himself + others (Affiliate and/ or Parent Company and/ or Ultimate Parent) in aggregate holding 100% equity	None	a) Format 1 of Annexure 8 - Resolution* 1, 3 and 4 from the Bidder. b) Format 1 of Annexure 8 - Resolution* 1 from the Affiliate and/ or Parent and/ or Ultimate Parent	None

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Investor in the TSP	Entities (other than Bidder) whose credentials (financial and/or technical) used by the Bidder for meeting RFQ criteria	Applicable Board Resolutions	Requirement of Undertaking (Annexure 10A)
		investing in the equity	
Bidder himself + others (Affiliate and/or Parent Company and/or Ultimate Parent) in aggregate holding 100% equity	Affiliate and/or Parent Company and/or Ultimate Parent	a) Format 1 of Annexure 8 - Resolution* 1, 3 and 4 from the Bidder. b) Format 1 of Annexure 8 – Resolution* 1 from the Affiliate and/ or Parent and/ or Ultimate Parent investing in the equity c) Format 2 of Annexure 8 by either Parent/ Affiliate(s) whose credentials have been used and/ or Ultimate Parent investing in the equity	Yes, by either Parent/ Affiliate(s) whose credentials have been used, or Ultimate Parent

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ANNEXURE 14

Format for Disclosure

[On the letter head of Bidding Company/ Each Member in a Bidding Consortium]

Disclosure

We hereby declare that the following companies with which we/ have direct or indirect relationship are also separately participating in this Bid process as per following details

S.No.	Name of the Company	Relationship
1.		
2.		
3.		

In case there is no such company, in the column "Name of the Company" write "Nil"

Further we confirm that we don't have any Conflict of Interest with any other company participating in this bid process.

Signature of Any Whole-Time Director/ Manager
(Supported by a specific Board Resolution)

The above disclosure should be signed and certified as true by Any Whole-Time Director/ Manager **(refer Note below)** of the Bidding Company or of the Member, in case of a Consortium (supported by a specific Board Resolution).

Note:

1. In case of Manager, the Company should confirm through a copy of Board Resolution attested by Company Secretary that the concerned person is appointed as Manager as defined under the Companies Act, 1956 for the purpose in question.

   The Company Secretary also certifies that the Company does not have a Managing Director or CEO.

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ANNEXURE 15

Check List for response to RFP submission requirements

	Response to RFP Submission Requirements	Response Yes / No
A.	**Envelope – I (Non-Financial Bid)**	☐
1.	Bid Security Declaration in lieu of Bid Bond in the prescribed format at Annexure-2	☐
2.	Board resolutions as per the prescribed formats enclosed in Annexure 8 (and as per the illustrations in Annexure-13 of this RFP)	
	• From the Bidding Company (and from any investing Affiliate/ Parent/ Ultimate Parent committing 100% in aggregate of the equity requirement for the Project as per Format 1 of Annexure-8	☐
	• Board resolutions from each of the Consortium Member of the Bidding Consortium (and any investing Affiliate/ Parent/ Ultimate Parent) together committing to one hundred percent (100%) in aggregate of equity requirement for the Project, in case Bidder is a Bidding Consortium – Format 1 of Annexure-8	☐
	• Board resolutions as per Format 2 of Annexure-8 for total equity investment commitment from the Technically / Financially Evaluated Entity(ies) whose technical / financial credentials had been considered for the purpose of meeting Qualification Requirements as per the RFQ OR from the Parent Company or the Ultimate Parent Company (as applicable)	☐
3.	Bidder's Undertakings	
	• Bidder's undertaking as per Format 1 of Annexure-6	☐
	• Details of Equity Investment in the Project as per Format 2 of Annexure-6	☐
4.	Covering Letter as per the format at Annexure-9 of this RFP	☐
5.	Power of Attorney	
	• Format 1 of Annexure-10 by the Bidding Company/ Lead Member of the Bidding Consortium (as applicable) in favour of its representative	☐
	• Format 2 of Annexure-10 by each of the other Members of the Consortium (in case of the Bidding Company being a Consortium) in favour of the Lead Member	☐
6.	Format of Undertaking for Equity Investment	
	• by the Technically/ Financially Evaluated Entity/ Ultimate Parent Company (as applicable) for equity investment, in case of failure to invest in part or full, by the Bidder or the Consortium Member in case the Selected Bidder is a Consortium) in the prescribed format at Annexure-10A	☐
7.	Format for Disclosure by the Bidding Company or by each Member of the Consortium (as applicable)	☐

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Name and signature of authorized person in whose name power of attorney / Board resolution as per Clause 2.14.1.1 is issued.

Signature of authorized person
Name: .....
Designation: .....
Date: .....

Company rubber stamp

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APPENDIX

SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES & 400/220/132 KV GIS SUBSTATION & COMMUNICATION SYSTEM



A. SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES

1.0 The Tower shall be fully galvanized using mild steel or/ and high tensile steel sections. Bolts and nuts with spring washer are to be used for connection.

2.0 IS Steel section of tested quality in conformity with IS 2062:2011, grade E 250 (Designated Yield Strength 250 MPa) and/or grade E 350 (Designated Yield Strength 350 MPa) are to be used in towers, extensions, gantry structures and stub setting templates. However, use of steel grade having designated yield strength more than 350 MPa is not permitted. The steel used for fabrication of towers shall be manufactured by primary steel producers only.

3.0 Towers shall be designed as per IS-802:2015. However, drag coefficient of the tower shall be as follows:-

Sl No.	Solidity Radio ϕ	Force Coefficient, C_f		
		Flat Sided Members	Circular Sections	
			Sub-Critical Flow ($D\bar{V}_d < 6m^2/s$	Super Critical Flow ($D\bar{V}_d \geq 6\ m^2/s$)
(1)	(2)	(3)	(4)	(5)
i)	0.1	1.9	1.2	0.7
ii)	02	1.8	1.2	0.8
iii)	0.3	1.7	1.2	0.8
iv)	0.4	1.7	1.1	0.8
v)	0.5	1.6	1.1	0.8
vi)	0.75	1.6	1.5	1.4
vii)	1.00	2.0	2.0	2.0

As per Clause 12.1.2.1 b) 2) of IS 802:2015, Under security condition for tension and dead end towers, the transverse loads due to line deviation shall be the component of 100 percent mechanical tension of conductor and ground wire/ OPGW corresponding to 100% of design wind pressure at everyday temperature or 36% design wind pressure at minimum temperature after accounting for drag coefficient and gust response factor.

Transmission Service Provider (TSP) may adopt any additional loading/ design criteria for ensuring reliability of the line, if so desired and/ or deemed necessary.

Transmission line shall be designed considering wind zones as specified in wind map given in National Building Code 2016, Vol.1. The developer shall also make his own assessment of local wind conditions and frequent occurrences of high intensity winds (HIW) due to thunderstorms, dust-storms, downburst etc. along the line route and wherever required, higher wind zone than that given in wind map shall be considered for tower design for ensuring reliability of line.

765 kV towers, triple and quadruple circuit towers and towers with more than two sub-conductors per phase up to 400 kV shall be designed for reliability level 2.

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4.0 A) For power line crossing of 400kV or above voltage level, large angle & dead end towers (i.e. D/DD/QD) shall be used on either side of power line crossing (i.e D/DD/QD- D/DD/QD arrangement).

B) For power line crossing of 132kV and 220kV voltage level, angle towers (B/C/D/DB/DC/DD/QB/QC/QD) shall be used on either side of power line crossing depending upon the merit of the prevailing site condition and line deviation requirement.

C) For power line crossing of 66 kV and below voltage level, suspension/tension towers shall be provided on either side of power line crossing depending upon the merit of the prevailing site condition and line deviation requirement.

D) For crossing of railways, national highways and state highways, transmission line with large angle & dead end towers (i.e. D/DD/QD) shall be used on either side of crossing.

5.0 The conductor configuration shall be as follows:

5.1 **For transmission lines with ACSR conductor:**

Transmission line	ACSR Conductor specified	Sub-conductor Spacing
765kV S/C (Quad Bersimis) transmission lines	Bersimis: Stranding 42/4.57 mm-Al + 7/2.54 mm-Steel, 725sq mm, Total Sectional Area, 35.05 mm diameter	457 mm
400kV D/C (Quad Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	457 mm
400kV D/C (Twin Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	450 mm

Note: The transmission lines shall have to be designed for a maximum operating conductor temperature of 85 deg C for ACSR only.

6.0 The required phase to phase spacing and horizontal spacing for 765kV & 400 kV D/C line shall be governed by the tower design as well as minimum live metal clearances for 765kV and 400kV voltage level respectively under different insulator swing angles.

a) **For 765 kV transmission lines:**

The minimum live metal clearances for 765 kV line may be considered as follows:

(i) Under stationary conditions

From tower body:
For 765 kV S/C : 5.6 m

(ii) Under swing conditions for 'I' String for outer phases:

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A (0°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (0°)	5.6 m
b) Swing angle (25°)	4.4 m
c) Swing angle (55°)	1.3 m

B (0°-5°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (20°)	5.6 m
b) Swing angle (41°)	4.4 m
c) Swing angle (64°)	1.3 m

Under swing conditions for 'I' Pilot String for 4x50 Kg counter weight on outer phases:

C (0°-30°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (15°)	5.6 m
b) Swing angle (25°)	4.4 m
c) Swing angle (40°)	1.3 m

D (30°-60°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (20°)	5.6 m
b) Swing angle (30°)	4.4 m
c) Swing angle (40°)	1.3 m

'V' String (Tower type A & B) Central phase and Tower type 'C' (all phases) and V-Pilot for towers D (Central phase)

To boom frame steel 5.1 m
To window frame 5.6 m

However the phase to phase spacing for 765kV line shall not be less than 15m.

b) **<u>For 400 kV transmission lines:</u>**

The minimum live metal clearances for 400kV D/C transmission lines may be considered as follows:

(i) Under stationary conditions
From tower body:
For 400 kV D/C : 3.05 m

(ii) Under swing conditions:

Wind pressure Condition	Minimum electrical clearance
a) Nil	3.05 m
b) Swing angle (22°)	3.05 m

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c) Swing angle (44°)	1.86 m

However the phase to phase spacing for 400kV D/C line shall not be less than 8.0 m.

7.0 The minimum ground clearance for 765 kV transmission lines shall be 18 m, for 400 kV D/C transmission lines shall be 8.84 m so that maximum electric field does not exceed 10kV/m within the ROW and does not exceed 5kV/m at the edge of the ROW as per international guidelines.

8.0 The minimum mid span separation between earth wire and conductor shall be 9.0 m for 765 kV line & 9.0 m for 400 kV D/C transmission lines. Shielding angle shall not exceed 20 deg for 765 kV S/C line & 400 kV D/C line D/C transmission lines.

9.0 Transposition is to be done for all transmission lines whose length is greater than 100 Km.

10.0 The switching impulse withstands voltage (wet) for 765 kV line shall be 1550 kVp and 400 kV line shall be 1050 kVp. Lightning impulse withstand voltage (dry) for 765 kV line shall be 2400kVp & for 400kV line shall be 1550 kVp.

11.0 The Fault current for design of line shall be 50 kA for 1 sec for 765 kV, 63 kA for 1 sec for 400 kV.

12.0 The lines shall be designed for very heavy pollution level (creepage of 31mm/kV as per IEC-60815). Silicone rubber polymer insulators shall be used for the transmission lines.

13.0 Each tower shall be earthed such that tower footing resistance does not exceed 10 ohms. Pipe type or Counterpoise type earthing shall be provided in accordance with relevant IS. If the value (before stringing) has been recorded higher than 10 ohm, earthing shall be changed to Counterpoise type. Additional earthing shall be provided on every 7 to 8 kms distance at tension tower for direct earthing of both shield wires.

14.0 The required grade of concrete and mix design for foundation of transmission line tower shall be as per relevant IS.

15.0 Technical specification for 400kV line on Monopole

i) The monopoles/ lattice type towers are of the following types:
400 kV Double Circuit (PA, PB, PC & PD)
400 kV Double Circuit (DA, DB, DC & DD) with Quad Moose Conductor

Classification of Monopole/Towers

The Pole for 400 kV Lines are classified as given below:-

a) For Suspension Pole PA (0-2 deg.)

Normal Span	:	200m
Wind Span	:	200m
Weight Span	:	300m

b) For Tension Pole PB (2-15 deg.)

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Normal Span : 200m
Wind Span : 200m
Weight Span : 300m

c) For Tension Pole PC (15-30 deg.)
Normal Span : 200m
Wind Span : 200m
Weight Span : 300m

d) For Tension Pole PD (30-60 deg.)
Normal Span : 200m
Wind Span : 200m
Weight Span : 300m

ii) **Broken wire Conditions:**

For Suspension pole (PA)	:	One Earthwire or One Conductor broken at a time, whichever is more stringent for a particular section.
For Tension pole (PB)	:	One Earthwire and any One Conductor broken or any two conductor broken at a time on same side, whichever is more stringent for a particular section.
For Tension pole (PC)	:	One Earthwire and any One Conductor broken or any two conductor broken at a time on same side, whichever is more stringent for a particular section.
For Tension pole (PD)	:	One Earthwire and any Two Conductor broken or any Three conductor broken at a time on same side, whichever is more stringent for a particular section.

Code Reference

Load Calculation : IS 802

Sag & Clearance : IS: 5613 CBIP Manual

Deflection Criteria: 5% of height of pole @ ultimate load conditions and 1.5% of the height of pole @ everyday condition (safety normal)

iii) **Ground Clearance**

The minimum ground clearance from the bottom conductor shall not be less than 8840 mm for 400KV lines at the maximum sag conditions i.e. at 85° C and still air.

An allowance of 150mm shall be provided to account for errors in stringing.

Conductor creep shall be compensated by over tensioning the conductor at a temperature of 26°C lower than the stringing temperature for ACSR ,MOOSE conductor.

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iv) **Electrical System Data for 400 kV line:**

1.	Nominal Voltage	kV	400
2.	Maximum system voltage	kV	420
3.	BIL (Impulse)	kV (Peak)	1550
4.	Power frequency withstand voltage (Wet)	kV (rms)	680
5.	Switching surge withstand voltage (Wet)	kV (rms)	1050
6.	Minimum Corona extinction voltage at 50 Hz AC system under dry condition	kV (rms) phase to earth	320 (Min)
7.	Radio interference voltage at one MHz for phase to earth voltage of 305 KV under dry condition.	Micro Volts	1000 (Max)

v) **Details of line Material:**

Conductor, Earthwire & OPGW:

Sl. No.	Description	Conductor	Earthwire	OPGW (tentative)
1.	Type	ACSR 'MOOSE' conductor	7/3.66mm GS Earthwire	24 fibre OPGW
2.	Stranding and wire diameter			
	Aluminium	54/3.53	-	
	Steel	7/3.53	7/3.66	
3.	Conductor per phase	4	NA	NA
4.	Spacing between conductor of same phase(sub conductor spacing)(mm)	457mm for Quad bundle	NA	NA
5.	Configuration	Vertical (for D/C with 8000 mm min. inter phase spacing)	One continuously to run horizontally on top of the towers and conductors	One continuously to run on top of the towers and conductors
6.	Overall Diameter (mm)	31.77	10.98	≈ 0.98
7.	Unit mass (kg/km)	2004	583	≈ 583
8.	Min. UTS (kN)	161.6	68.4	Equivalent to earthwire

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Polymer Insulator:

S. No.	Type of String	*Size of Composite Insulator (Core dia x Nominal length) (mm)	Minimum Creepage Distance (mm) per unit	No. of individual Units per String (Nos.)	Electro-Mechanical Strength of Insulator Unit (kN)	Mechanical Strength of Insulator String along with Hardware Fittings (kN)
FOR 400kV AC TRANSMISSION LINES WITH QUAD MOOSE CONDUCTOR						
1.	Single 'I' Suspension	20x3335	13020	1x1	120	120
2.	Single Tension	20x3335	13020	4x1	120	4x120
3.	Quadruple Tension	24x3910	13020	4x1	160	4x160

vi) **Railway Crossings**

All the railway crossings coming en-route the transmission line shall be identified by the Contractor. At the time of detailed survey, the railway crossings shall be finalized as per the regulation laid down by the Railway Authorities. The following are the important features of the prevailing regulations (revised in 1987).

a) The crossings shall be supported on PD type pole or DD type tower on either side depending on the merits of each case.
b) The crossing shall normally be at right angle to the railway track.
c) The minimum distance of the crossing pole/tower shall be at least equal to the height of the pole/tower plus 6 meters away measured from the centre of the nearest railway track.
d) No crossing shall be located over a booster transformer, traction switching station, traction sub-station or a track cabin location in an electrified area.
e) Minimum ground clearance above rail level of the lowest portion of any conductor under condition of maximum sag shall be maintained at 22.00 m for 765 kV line and 17.90 m for 400KV/220 kV/132 kV transmission lines.
The crossing span will be limited to 300 meters.

vii) **Power line Crossings**

Where the line is to cross over another line of 132 kV or above voltage level, PD type pole or DD type tower with suitable extensions shall be used, depending upon merit of the prevailing site condition. For line crossing lower than 132 kV voltage level, suspension/tension pole, towers with suitable extension may be used depending upon the merit of the prevailing sire condition. Provisions to prevent the possibility of it coming into contact with other overhead lines shall be made in accordance with the Indian Electricity Rules, 1956 as amended up-to-date. In order to reduce the height of the crossing pole/tower, it may be advantageous to remove the ground-wire of the line to be crossed (if this is possible and permitted by the PURCHASER of the line to be crossed).

Minimum clearance in meters between lines when crossing each other:

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Sr. No.	Nominal System Voltage	110-132kV	220kV	400kV	765kV
1.	110-132KV	3.05	4.58	5.49	7.94
2.	220KV	4.58	4.58	5.49	7.94
3.	400KV	5.49	5.49	5.49	7.94
4.	765KV	7.94	7.94	7.94	7.94

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B. SPECIFIC TECHNICAL REQUIREMENTS FOR SUBSTATION

The proposed 400kV Mohanlalganj (2x500 + 2x200 MVA) sub-station shall be gas insulated type generally confirming to the requirement of CEA regulation for construction of sub-station.

1.0 Salient features of 400/220/132 KV GIS Substation Equipment and Facilities

The design and specification of substation equipment are to be governed by the following factors:

2.0 Insulation Coordination

400 KV System would be designed to limit the Switching overvoltage to 2.5 p.u. and is expected to decay to 1.5 p.u. in 5 to 6 cycles. Consistent with these values and protective levels provided by lightning arrestors, the following insulation levels are proposed to be adopted for 400kV, 220kV and 132kV systems:

S.No.	Particulars	400 KV	220kV	132kV
a.	Impulse withstand voltage for - Transformer and reactors - for Other Equipment	 1300 kVp 1425 kVp	 950 kVp 1050 kVp	 650 kVp 650 kVp
b.	Switching surge withstand voltage	1050 kVp	-	-
c.	Minimum creepage distance	13020 mm	7595 mm	4092 mm
d.	Max. fault current	50 kA	40 kA	40 kA
e.	Duration of fault	1 Sec	1 Sec	1 Sec
f.	Corona extinction voltage	320 kV rms	156 kV rms	105 kV rms

3.0 Switching Schemes

It is essential that the system should remain secured even under conditions of major equipment or bus-bar failure. Sub-stations being the main connection points have large influence on the security of the system as a whole. The selection of the bus switching scheme is governed by the various technical and other related factors. One & Half breaker bus scheme has been considered for 400kV substations and Double main bus scheme has been considered for 220kV & 132kV side due to their merits in terms of reliability, security, operational flexibility and ease of maintenance of equipment.

Substation	400kV side	220kV side	132kV side
400/220/132kV, 2X 500 MVA, 2X 200 MVA GIS Substation at Mohanlalganj	One & Half Breaker	Double Main	Double Main

4.0 Substation Equipment and Facilities

The switchgear shall be designed and specified to withstand operating conditions and duty requirements. All equipment shall be designed considering the transmission line capacity.

Current rating for various feeders & bus bar are as follows:-

S.No.	Description of bay	400 kV	220 kV	132 kV

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S.No.	Description of bay	400 kV	220 kV	132 kV
1	Bus Bar	4000A	3000A	2000A
2	Line bays	3150A	2000A	1600A
3	ICT bays	2000A	2000A	1600A
4	Bus Reactor bays	2000A	NA	NA
5	Bus coupler bays	4000A	3000A	2000A

4.1. 400/220/132kV GIS Substation Equipment

GIS (Gas Insulated Switchgear) shall be indoor type and in accordance to IEC: 62271-203. The switchgear shall be designed and specified to withstand operating conditions and duty requirements. All the switchgear such as Circuit Breaker, isolator, earth switch including CT, PT etc. shall be GIS type. Surge Arrestors used for transformer/Reactor connections will be AIS or GIS type. 400kV scheme shall be designed in such a way that it shall be possible to use line reactors (if provided) as bus reactors, in case of outage of line, to control bus voltage. Local control cabinets (LCC) shall be provided as per requirement. The alarm & annunciation of GIS equipment shall be wired to SCADA System.

4.1.1. Circuit Breakers

GIS Circuit breakers shall in general be of C2-M2 class and comply to IEC- 62271-100. The rated break time shall not exceed 40 ms for 420kV and 60 ms for 245kV and 145kV circuit breakers. 420 kV & 245 kV Circuit breakers shall be provided with single phase and three phase auto reclosing. The Circuit breakers controlling 420 KV lines wherever required shall be provided with pre insertion closing resistor of about 400 ohms with 8 ms insertion time or Controlled Switching Device (CSD) for lines longer than 100 km. The short line fault capacity shall be same as the rated capacity and this is proposed to be achieved without use of opening resistors. Control switching device shall be provided in Circuit breaker of switchable line reactor and in Main & Tie circuit breakers of Transformers, line with non-switchable line reactors, and Bus reactors. Further, it shall be possible to use line reactors as bus reactors, in case of outage of line.

4.1.2. Isolators

The isolators shall comply to IEC 62271-102 in general. Isolators shall be motor operated. Earth switches are provided at various locations to facilitate maintenance. Main blades and earth blades shall be interlocked and interlock shall be fail safe type. All earth switches shall be motor operated type.

4.1.3. Current Transformers

Current Transformers shall comply with IEC 60044-1 in general. All ratios shall be obtained by secondary taps. Generally, Current Transformers (CT) shall have five cores (four for protection and one for metering) whereas; CT in Tie bays shall have six cores (four for protections & two for metering) suitably distributed on both sides of CB. The burden and knee point voltage shall be in accordance with the requirements of the system including possible feeds for telemetry. Accuracy class for protection core shall be PS and for metering core it shall be 0.2S.

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4.1.4. Voltage Transformers

The voltage transformers shall conform to IEC-60044-2. Voltage transformers shall be of the electromagnetic type with SF6 gas insulation. The earth end of the high voltage winding and the ends of the secondary winding shall be brought out in the terminal box. The voltage transformers shall be located as a separate bay module and will be connected phase to ground and shall be used for protection, metering and synchronization. The voltage transformers shall be of inductive type, nonresistant and shall be contained in their own-SF6 compartment, separated from other parts of installation. The voltage transformers shall be effectively shielded against high frequency electromagnetic transients. The voltage transformers shall have three secondary windings. The voltage transformer should be thermally and dielectrically safe when the secondary terminals are loaded with the guaranteed thermal burdens. The accuracy class for core - I & II for 400 kV shall be 0.5/3P and for 220 kV shall be 3P. The accuracy of 0.2 on secondary III should be maintained throughout the entire burden range up to 50VA on all the three windings without any adjustments during operation.

4.1.5. SF6 to Air Bushing

Outdoor bushings, for the connection of conventional external conductors to the SF6 metal enclosed switchgear, shall be provided. Bushings shall generally be in accordance with the requirements of IEC -60137. The creepage distance over the external surface of outdoor bushings shall not be less than 31 mm/kV and in highly polluted area it shall not be less than 31mm/kV. SF6 to air Bushing shall be of Polymer/ composite type and shall be robust and designed for adequate cantilever strength to meet the requirement of seismic condition. The electrical and mechanical characteristics of bushings shall be in accordance with IEC:60137. Polymer/ composite insulator shall be seamless sheath of a silicone rubber compound. The housing & weather sheds should have silicon content of minimum 30% by weight. It should protect the bushing against environmental influences, external pollution and humidity. The hollow silicone composite insulators shall comply with the requirements of the IEC publications IEC 61462 and the relevant parts of IEC62217.

4.1.6. Capacitor Voltage Transformers

Voltage transformers shall comply to IEC 60044-2 & IEC-6044-5 in general. These shall have three secondaries out of which two shall be used for protection and one for metering. Accuracy class for protection core shall be 3 P and for metering core shall be 0.2S. The voltage transformers on lines shall be suitable for Carrier Coupling. The Capacitance of CVT shall be 4400/8800 pF depending on PLCC requirements.

4.1.7. Surge Arresters

Station class current limiting, heavy duty gapless type Surge arresters conforming to IEC 60099-4 in general shall be provided.

The rated voltage of Surge arrester and other characteristics are chosen in accordance with system requirements. Surge arresters shall be provided near line entrances, transformers so as to achieve proper insulation coordination. Surge arresters shall be providing with porcelain/polymer housing.

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4.1.8. Power Transformers

CODES AND STANDARDS

The latest revisions of the following Codes and Standards shall be applicable for the equipment/material covered in this Specification. In case of conflict, the manufacturer may propose equipment/material conforming to one group of Industry Codes and Standards quoted hereunder without jeopardizing the requirement of this specification:

IEC60044	Instruments transformers
IEC60076	Power transformers
IEC60137	Insulating bushing for alternating voltages above 1000 V
IEC60214	On-load tap-changers
IEC60273	Characteristics of indoor and outdoor post insulators for systems with nominal voltages greater than 1000V
IEC 60282-2	High-voltage fuses
IEC60289	Reactors
IEC60529	Degrees of protection provided by enclosures (IP Code)
IEC60815	Guide for the selection of insulators in respect of polluted conditions
IEC60947	Low-voltage switchgear and control gear

Design and Construction Requirements

Core

1. The core shall be assembled with oriented grain steel, cold rolled sheet, and treated with an insulating layer heat and oil resistant.
2. The core supports shall be designed to counter the effects of marine and overland transport under poor conditions. The air core reactance of the core shall be less than 20%.
3. The Contractor shall provide a description of construction details of the proposed core or shell design.

Over Fluxing

The transformer shall withstand without injurious heating combined voltage and frequency fluctuations which produce the following overfluxing conditions and give desired performance:

- 105% for 10minutes
- 125% for 1minute
- 140% for 5seconds
- Bidder shall provide the overvoltage withstand time for 150% and 170% over fluxing

(a) Transformer shall conform to IEC 60076 in general. The transformer and all its accessories including bushing/ built in CTs etc. shall be designed to withstand thermal and mechanical stresses caused by symmetrical or asymmetrical faults on any terminals. Mechanical strength of the transformer shall be such that it can withstand 3-phase and 1- phase through fault for transformer rated voltage applied to HV and/ or IV terminals of transformer. The short circuit shall alternatively be considered to be applied to each of the HV, IV and tertiary (LV) transformer terminals. Tertiary is not considered to be connected to source.

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Core shall be constructed from high grade, non-ageing cold rolled super grain oriented silicon steel laminations (HI-B or better grade). The maximum flux density in any part of the core and yoke at the rated MVA, voltage and frequency shall not exceed 1.9 Tesla at all tap positions during 10% continuous over voltage condition. Transformers shall withstand without damage and over-heating due to over fluxing conditions of 110% for continuous, 125% for 1 minute and 140% for 5seconds.
All the windings shall be capable of withstanding the Dielectric, mechanical and thermal stresses which may be caused by switching, dead short circuit on its terminals. Transfer surge at tertiary shall not exceed 250kVp during impulse and switching impulse from HV & IV Terminals. The tertiary windings shall be suitable for connection of reactors or capacitors which would be subjected to frequent switching and shall be suitable for connection to LT Transformer for auxiliary supply. The air core reactance of HV winding of transformer shall not be less than 20% for 400kV class Transformer. External or internal reactors shall not be used to achieve the specified HV/LV and IV/LV impedances.

Transformers shall be fitted with two cooler banks, each capable of dissipating 50 per cent of the loss at continuous maximum rating. Transformer shall be capable of operating at full load for 20 minutes in the event of failure of the oil circulating pump or blowers associated with one cooler bank and for at least ten (10) minutes in the event of total failure of power supply to cooling fans and oil pumps, without winding hot spot temperature exceeding 140 deg C. Transformer shall be designed so that tank hotspot shall not exceed 130 deg C, considering maximum ambient temperature of 50ºC.

The transformer shall be complete with all required accessories, Bushing CTs, Neutral CT (outdoor type), cooler control cabinet, individual and common marshalling box, RTCC etc. as required for satisfactory operations of transformer. The transformer shall be provided with IEC 61850 compliant digital RTCC relay having automatic voltage regulating features to operate OLTC including parallel operation of transformers. Neutral of the transformer shall be solidly grounded.

HV and IV bushing shall be RIP (Resin Impregnated Paper)/RIS (Resin Impregnated Synthetic) with composite insulator type. LV bushing shall be OIP/ RIP/ RIS. 36kV Neutral bushing shall be solid porcelain or oil communicating type.

The major technical particulars/ parameters of transformer are given below:

(A) 500MVA, 400/220/33kV, 3-Phase Auto transformer (applicable standard: IEC-60076)

Sl. No.	Description	Unit	Technical Parameters
1.	Rated Capacity: HV/IV/LV (Tertiary)	MVA	500/ 500/ 167 (Active loading of tertiary: 5 MVA)
2.	Voltage ratio (Line to Line)		400/220/33
3.	Frequency	Hz	50

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4.	No. of Phase	Nos	3
5.	Vector Group (unless specified differently elsewhere)		YNa0d11
6.	Cooling		ONAN/ ONAF/ (OFAF or ODAF) OR ONAN/ ONAF1/ONAF2
7.	Rating at different cooling above	%	60/80/100
8.	Type of Transformer		Constant Ohmic impedance type
9.	Impedance at 75 Deg C		
a)	HV – IV (with tolerance as per IEC)	%	At Max./ Principal/ Min. Voltage Tap: 10.3/12.5/15.4
b)	HV – LV	%	At Principal tap(minimum) : 60
c)	IV – LV	%	At Principal tap (minimum):
			45
10.	Losses		
a)	Maximum No-Load Loss at rated voltage and frequency	kW	90
b)	Maximum Load Loss at rated current and 75°C	kW	500
c)	Max I2R loss at rated current and frequency and at 75°C for HV and IV windings	kW	375
d)	Maximum Auxiliary Loss at rated voltage and frequency	kW	15
11.	Max. Temperature rise over 50 deg C ambient Temp	Deg. C	Top oil: 50 & Winding: 55
12.	Windings		
i)	Insulation Level (LI/SI/PF)		kVp/ kVp/ kVrms
	HV		1300/1050/570
	IV		950/-/395
	LV		250/-/95
	Neutral		95/-/38
ii)	Tan delta of winding	%	< 0.5
13.	Tap Changer & Tappings		OLTC with range ⍰ 10% for HV variation in the step of 1.25%, 17 steps, on 220kV side of series winding
14.	Maximum Partial discharge (PD) level at 1.58*Ur/√3	pC	100
15.	Noise level at rated voltage and at principal tap at no load and all cooling active	dB	< 80
16.	Bushing		

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i)	Rated voltage (HV/IV/LV/Neutral)	kV	420/245/52/36
ii)	Rated current(Min.) HV/IV/LV/Neutral	A	1250/2000/3150/2000
iii)	Insulation Level (LI/SI/PF)		kVp/ kVp/ kVrms
	HV		1425/ 1050/ 630
	IV		1050/ -/ 460
	LV		250/ -/ 95
	Neutral		170/ -/ 75
iv)	Tan delta of bushings HV/IV/LV	%	< 0.4
v)	Max. PD of bushings at level @ 1.5 pu	pC	100
17.	Insulating Oil		virgin high grade inhibited, conforming to IEC-60296

(B) MAIN PARAMETERS OF 200 MVA, 220/132/11KV TRANSFORMER

1.	Normal continuous ratings MVA	ONAN/ONAF/OFAF 120/160/200 MVA
2.	Maximum continuous capacity	200 MVA
3.	Phases	3(three)
4.	Other Parameters	
a)	Normal ratio of transformation	220/132/11 KV
b)	Rated Frequency	50 C/s ± 5%
c)	Rated Voltage of HV winding	220 KV
d)	Rated Voltage of IV winding	132 KV
e)	Rated voltage of tertiary winding	11 KV
5.	Rated Current :	
a)	Rated line current of HV winding	525 Amp
b)	Rated line current of IV winding	875 Amp
c)	Rated line current of tertiary winding	3150Amp (for 60MVA)
d)		
6.	Phase Connections	
a)	Series winding	Auto Star
b)	Common winding	Auto star
c)	Tertiary winding	Delta
d)	Vector group reference	YNa0d11
e)	Reference voltage group and terminal marking	HV/IV/Tertiary
f)	Polarity	Subtractive
g)	Type of cooling	ONAN/ONAF/OFAF
h)	D.C. Voltage for relays etc. (as required)	110V/220V D.C.
7	Maximum Temperature rise	

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a)	Of oil by thermometer	45ºC
b)	Of winding by resistance	50ºC. (ONAN/ONAF) 55ºC. (OFAF)
c)	By hot spot temperature indicator	66ºC
8	Limit for hot spot temperature for which the transformer is designed	140ºC
9	Temperature gradient between winding & Oil	20ºC average
10	Voltage to earth for which the star point will be insulated	95 kVp 38KV rms
11	Maximum flux density in iron at normal voltage, frequency and ration	
a)	Core	1.53 tesla
b)	Yoke	1.53 tesla
12	Over voltage operating capacity and duration	
a)	110% of rated voltage	Continuous
b)	125% of rated voltage	For 60 Sec
c)	140% of rated voltage	For 5 Sec
13	Positive Sequence impedance on rated MVA base at rated current & frequency at 75 deg.C.winding temperature at:	
a)	HV to IV % impedance at tap no.1 at 100% rating	11%
b)	HV to IV% impedance at tap no.13 (normal tap)	10%
c)	HV to IV% impedance at Tap no.17 at 100% rating	11%
d)	HV to tertiary	60%(min.)
e)	IV to tertiary	50%(min.)
	(Offers with lower% impedance will not be considered) Note: No reactor either inside or outside the tank shall be used to achieve above %age impedance value.	
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a)	Location of tap changer	IV side
b)	Voltage variation	-5% to+15%
c)	Step Voltage	1.25%
d)	Vector group	YNa0d11
15	Type of transformer	Core
16	Maximum Permissible Losses of Transformers	
a)	Max. No Load Loss at rated voltage and frequency	35 kW
b)	Max. Load Loss at rated current and frequency and at 75OC for HV and IV windings, at principal tap position	260 kW
c)	Max I2R loss at rated current and frequency and at 75OC	190 kW
d)	Max. Auxiliary Loss at rated voltage and frequency	8 kW
17	Rail Gauge	1676 mm

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		3048 mm
18	Core:	
a)	Material of core lamination	CRGO Silicon Steel
b)	Thickness of coal plate	0.27
c)	Whether core plates or grain oriented, cold rolled	Yes
19	KVA capacity of the auxiliary winding	60,000 KVA
20	System short circuit level and duration for which transformer shall be capable to withstand thermal & dynamic stress	40 KA for 3 sec
21	Percentage impedance	
a)	HV to IV % impedance at tap no.1 at 100%rating	11%(+/-ISTol)
b)	HVtoIV%impedanceattapno.13(normal tap) at 100% Rating	10%(+/-ISTol)
c)	HV to IV% impedance at Tap no. 17 at 100% rating	11%(+/-ISTol)
d)	HV to tertiary	60%(min.)
e)	IV to tertiary	50%(min.)

(Offers with lower% impedance will not be considered)

Note: No reactor either inside or outside the tank shall be used to achieve above %age impedance value.

4.1.9. 400kV 125, 3-Phase Shunt Reactors

Reactor shall conform to IEC 60076-6 in general. The reactor shall be designed to withstand the over-voltages repeatedly without risk of failure at 1.05 Ur continuously, 1.25 Ur for 1 minute and 1.50 Um for 5 seconds (where Ur is 420kV). The reactors shall be designed for switching surge overvoltage of 2.5 p.u. and temporary overvoltage of 2.3p.u. for few cycles followed by power frequency overvoltage up to 1.5 p.u. The reactor must withstand the stress due to above transient dynamic conditions which may cause additional current flow as a result of changed saturation characteristics/slope beyond 1.5 p.u. voltage.

The reactor shall be of either gapped core type or magnetically shielded air core type (shell type) construction. The impedance ratio (X0/X1) specified shall be achieved by adopting either single phase construction in separate tanks or three phase with 3 limb or 5 limb core construction. In case of coreless construction, a magnetic shield shall be provided around the coreless coils and non-magnetic material sheet shall form the central core to minimize the vibrations. Core shall be constructed from state of the art low loss electrical steel laminations of conventional grade (as per BIS)/ regular grade as per IEC) or better.

Shunt Reactors shall be capable of operating continuously at a voltage 5% higher than their rated voltage without exceeding winding and tank hot spot temperature 140 Deg and 130 Deg Celsius respectively, considering maximum ambient temperature as 50 Deg C.

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The reactor shall be complete with all required accessories, Bushing CTs, individual marshalling box etc. as required for satisfactory operations of reactor. HV and Neutral bushings shall be RIP (resin impregnated paper condenser) with composite insulator type.

The Technical Particulars/ Parameters of Shunt Reactor are given below:

The Technical Particulars/ Parameters of 420kV, 3-Phase Shunt Reactor			
Sl. No.	**Description**	**Unit**	**Parameters**
1.	Rated Voltage, Ur (1p.u)	kV	420
2.	Rated Capacity at 420 kV	MVAR	125
3.	Cooling System		ONAN
4.	Permissible current unbalance among different phases	%	±2
5.	Crest value of Third Harmonic content in phase current at rated voltage with sinusoidal waveform	%	≤ 3% of the crest value of fundamental
6.	Range of constant Impedance		Up to 1.5 p.u. voltage
7.	Tolerance on current	%	0 to +5%
8.	Ratio of zero sequence reactance to positive reactance (X0/X1)	Range	0.9 - 1.0
9.	Max. Temperature rise over 50 deg C Ambient Temp at rated voltage	Deg.C	Top oil: 40 & Winding: 45
10.	Losses for 420kV, 3-phase Reactor		
	Maximum Load Loss at rated voltage, frequency and 750C (for 125 MVAR)	kW	160
11.	Windings		
a)	Insulation level (LI/SI/PF)		kVp/ kVp / kVrms
i)	HV		1300/1050/-
ii)	Neutral		550/-/230
b)	Tan delta of windings	%	< 0.5
12.	Maximum partial discharge (PD) level at 1.58 Ur/ √3	pC	100
13.	Vibration at rated voltage and frequency		≤ 200 microns peak to peak
14.	Noise level at rated V &F	dB	<80
15.	Bushing		
a)	Rated voltage: HV / Neutral	kV	420/145
b)	Rated current (Min.) HV / Neutral	A	800/800
c)	Insulation level (LI/SI/PF)		kVp/ kVp/ kVrms
i)	HV		1425/1050/695
ii)	Neutral		650/-/305
d)	Tan delta of bushings : HV / Neutral (at ambient temperature)	%	< 0.4
e)	PD of bushings at level Um	pC	<10

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	(Um=420kV)		
16.	Insulating Oil		virgin high grade inhibited, conforming to IEC-60296

4.1.10. Protection and Control

The protective relaying system proposed to be provided for transmission lines, auto-transformers, reactors and bus bars to minimize the damage to the equipment in the events of faults and abnormal conditions, is dealt in this section. All main protective relays shall be numerical type with IEC 61850 communication interface. All numerical relays shall have built in disturbance recording feature.

a) Transmission Line Protection

400 kV, 220 kV and 132 kV lines shall have MAIN-I numerical three zone distance protection scheme with carrier aided inter-tripping feature. 400 kV, 220 kV and 132 kV lines shall also have MAIN-II numerical distance protection scheme like Main-I but from different make that of MAIN-I. Line Current Differential as Main–I & Main-II may be considered, for short lines (line length below 30 km) having Fibre Optic communication link. In case of loop in loop out of transmission lines, the existing protection scheme shall be studied and suitable up-gradation (if required) shall be carried out.

All 400 kV lines shall also be provided with two stages over voltage protection. Further, all 400, 220 & 132kV lines shall be provided with single and three phase auto-reclosing facility to allow reclosing of circuit breakers in case of transient faults. These lines shall also be provided with distance to fault locators to identify the location of fault on transmission lines.

b) These shall have the following protections:

i) Numerical Differential protection

ii) Numerical Restricted earth fault protection

iii) Numerical Over-current and earth fault protection on HV & MV side

iv) Numerical Over fluxing protection on HV & MV side

v) Numerical Overload alarm

Besides these, power transformers shall also be provided with BUCHOLZ relay, protection against high oil and winding temperature and pressure relief device etc.

c) 420kV Reactor Protection

Reactor shall be provided with the following protections:

i) Numerical Differential protection

ii) Numerical Restricted earth

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iii)	fault protection impedance protection	Numerical	Back-up

Besides these, reactors shall also be provided with Bucholz relay, protection against oil and winding temperatures & pressure relief device etc.

d) Numerical Bus Bar Protection

The high speed bus bar differential protection, which is essential to minimize the damage and maintain system stability at the time of bus bar faults, shall be provided for 400kV, 220kV and 132kV buses. Duplicated busbar protection is envisaged for 400kV bus-bar protection. Bus bar protection scheme shall be such that it operates selectively for each bus and incorporate necessary features required for ensuring security. The scheme shall have the provision for future expansion. For existing substations, the existing bus bar protection shall be augmented wherever required.

e) Numerical Local Breaker Back up Protection

This shall be provided for each 420 kV, 245 kV and 145 kV breakers and will be connected to de-energize the affected stuck breaker from both sides.

f) Substation Automation System

For all the new substations, state of art Substation Automation System (SAS) conforming to IEC-61850 shall be provided. The distributed architecture shall be used for Substation Automation system, where the controls shall be provided through Bay control units. The Bay control unit is to be provided bay wise for voltage level 132kV and above. All bay control units as well as protection units are normally connected through an Optic fiber high speed network. The control and monitoring of circuit breaker, dis-connector, re- setting of relays etc. can be done from Human Machine Interface (HMI) from the control room. SAS shall be equipped with the facility of remote operation and by providing remote HMI and suitable communication link, the substation can be controlled from a remote location. Necessary gateway & modems (as required) shall be provided to send data to RLDC/ SLDC.

The functions of control, annunciation, disturbance recording, event logging and measurement of electrical parameters shall be integrated in Substation Automation System. The Automation System shall be provided with the facility of communication and control for remote end operation. In existing Substations where Substation automation is not provided, control functions shall be done through control panels.

g) Time Synchronization Equipment

Time synchronization equipment complete in all respect including antenna, cable, processing equipment required to receive time signal through GPS or from National Physical Laboratory(NPL) through INSAT shall be provided. This equipment shall be used to synchronize SAS & IEDs etc.

4.1.11. Control Concept

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All the EHV breakers in substation/switching stations shall be controlled and synchronized from the switchyard control room and remote control centre. Each breaker would have two sets of trip circuits which would be connected to separately fused DC supplies for greater reliability. All the isolators shall have control from remote/local whereas the earth switches shall have local control only.

4.1.12. PLCC

Power line carrier communication (PLCC) equipment complete for speech transmission line, tele-protection commands and data channels shall be provided on each 400 KV, 220 kV and 132 kV transmission line. The protections for transmission line and the line compensating equipment shall have hundred percent back up communication channels. The PLCC equipment shall in brief include the following:-

Coupling device, line traps, carrier terminals, protection couplers, HF cables, PABX and maintenance and testing instruments.

A telephone exchange (PABX) of 24 lines shall be provided at new substations as means of effective communication among various buildings of the substation, remote end substations and with control centres (RLDC/SLDC) etc.

Coupling devices shall be suitable for 4400pF 400kV , 220 kV and 132 kV CVT. Phase to phase coupling for 400 kV line , 220 kV and 132 kV single circuit line shall be provided. For D/c line Inter circuit coupling can be provided. The pass band of coupling devices shall have sufficient margin for adding communication channel in future if required. Necessary protection devices for the safety of personnel and low voltage part against power frequency voltages and transient over voltage shall also be provided.

The line traps shall be broad band tuned suitable for blocking the complete range of carrier frequencies. Line Trap shall have the necessary protective devices such as lightning arresters for the protection of tuning device and shall be equipped with corona rings. Decoupling network consisting of line traps and coupling capacitors may also be required at certain substation in case of extreme frequency congestion.

The carrier terminals shall be of single side-band (SSB) amplitude modulation (AM) type and shall have 4 kHz band width. PLCC Carrier terminal & Protection coupler shall be considered at both ends of line.

Wherever Fiber Optic/ OPGW based telecommunication terminal equipment (i.e. SDH/MUX) are being provided; the same shall be utilized for Data, Voice and line protection applications. For protection purposes, both end Digital Protection Couplers (DPCs) shall be included at both ends. However, for line protection application, back up communication channel/ link may be considered as per requirement so as to take care of OPGW/Telecommunication equipment outage.

Addition/ Modification/ shifting/ re-commissioning etc. as required of PLCC due to LILO of transmission lines shall be covered under the scope according to element wise detailed given below:-

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S.No.	Detail of element (line)	Coverage under the scope
1	LILO of Sarojini Nagar (400KV)-Unnao (765KV) S/C line at 400KV Mohanlalganj S/S	Addition/ Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.
2	LILO of 400KV Lucknow (PGCIL)-Sultanpur 400KV S/C line at 400KV Mohanlalganj S/S.	Addition/ Modification/ shifting/ re-commissioning of PLCC shall be covered.
3	LILO of 765KV Ghatampur- Hapur (WUPPTCL) line at 765KV Rampur S/S.	PLCC panel shall be provided by respective S/S owner and Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.
4	LILO of 400KV Bareilly (PG)-Moradabad D/C lines at 765KV Rampur S/S.	PLCC panel shall be provided by respective S/S owner and Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.
5	LILO of 400KV Atour-Indirapuram (WUPPTCL) D/C line at 400KV GIS S/S sector 123 Noida.	PLCC panel shall be provided by respective S/S owner and Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.

PLCC equipment for the transmission lines at serial 01 & 02 covered under the package (Consisting of one set of analog PLCC channel along with circuit protection coupler and one set of Digital Protection Coupler for both ends of one line segment due to LILO of existing line) shall be provided by the bidder. All other associated equipment for ends cabling, coupling device and HF cable shall also be provided by the bidder. 48 V DC Power supply for PLCC panels shall be provided by the respective substation bay owner. The wave traps, CVT's required for communications from PLCC shall be provided by respective substation owner.

4.1.13. Substation Support Facilities

Certain facilities required for operation & maintenance of substations as described below shall be provided in new substation. In existing substation, these facilities have already been provided and would be extended/ augmented, wherever required.

4.1.14. AC & DC Power Supplies

For catering to the requirements of three phase & single phase AC supply and DC supply for various substation equipment, the following arrangement is envisaged:-

i) For LT Supply at each new Substation, two (2) nos. 630 kVA LT Transformers shall be provided out of which one shall be connected with SEB supply and other one shall be connected to tertiary of 400/220 kV transformer.

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ii) SEB supply at 33kV level shall be connected to 630kVA LT transformer through 33kV AIS equipment i.e. LA, CT, PT, Isolators and breaker whereas tertiary supply of 400/220kV transformer shall be connected to LT transformer through 72.5kV AIS equipment.

iii) 2 Nos. batteries of 220V for control & protection and 2 Nos. 48V batteries for PLCC/ Communication equipment shall be provided at each new Substation. Each battery bank would have a float-cum-boost charger. Battery shall be of VRLA type.

iv) Suitable AC & DC distribution boards and associated LT Switchgear would be provided at new Substations. For Substation Extensions, existing facilities shall be augmented as required. For new substations following switch boards with minimum rating as is specified here under shall be considered with duplicate supply
   a) 415V Main switch board – 1no.
   b) AC distribution board – 1no.
   c) Main lighting distribution board –1no.
   d) Emergency lighting distribution board –1no.
   e) 220 volt DC distribution board –2nos.
   f) 48 volt DC distribution board –2nos.

v) In new Substations, one No. 250 KVA DG set shall be provided for emergency applications Sizing of Auxiliary system (like battery, charger, LT switchgear) may be done considering future bay requirements to avoid replacement in future with higher sizes.

4.1.15. Fire Fighting System

Fire fighting system in general conforms to fire insurance regulations of India. The fire fighting system is proposed with both AC motor & diesel engine driven pumps housed in a fire fighting pump house building along with water storage tank of adequate capacity. Automatic heat actuated mulsifying system is proposed for transformers & reactors. In addition for alarm system based on heat/smoke detectors are proposed to be installed at sensitive points in a substation e.g. Cable Vault, Control Room building and other buildings etc. Further, adequate water hydrants and portable fire extinguishers shall be provided in the substations. At existing substations the fire fighting systems if already available, would be extended for meeting the additional requirements.

4.1.16. Oil evacuating, filtering, testing & filling apparatus

To monitor the quality of oil for satisfactory performance of transformers, shunt reactors and for periodical maintenance necessary oil evacuating, filtering, testing and filling apparatus would be provided at new substations. Oil tanks of adequate capacities for storage of transformer oil would be provided.

4.1.17. Illumination

Adequate normal & emergency AC & DC illumination shall be provided in the control room, GIS hall & other buildings of the substation. The switchyard shall also be provided with adequate illumination. The entire control room building, fire fighting pump house lighting shall be done by LED based low power consumption luminaries

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4.1.18. Control Room

Substation control room would be provided to house substation work station for station level control (SAS) along with its peripheral and recording equipment, AC & DC distribution boards, DC batteries & associated battery chargers, Fire Protection panels, Telecommunication panels & other panels as per requirements. Air conditioning will be provided in the building as functional requirements.

4.1.19. GIS Hall

The Gas Insulated Switchgear (GIS) of each voltage and other associated equipment shall be housed separately inside the GIS building. The panels i.e. Bay level units, bay mimic, relay and protection panels, RTCC panels, PLCC panels etc. are to be placed in a separate room in the GIS building. The size of the room shall be such that all the panels for the future bays/ diameters shall be accommodated in the above room. The panel room shall be air-conditioned. Further, the temperature of the room shall be monitored through substation automation system by providing necessary temperature transducers. Ventilation system of suitable capacity shall be provided for each GIS hall.

One EOT Crane, for each GIS hall, of suitable capacity shall be provided for erection & Maintenance of largest GIS component/ assembly and all plant installed in the GIS switchgear room. The crane shall be capable of fulfilling all special requirements for erection & maintenance of GIS equipment. The capacity of the crane shall be sized to lift the heaviest GIS switchgear component.

UHF sensors in GIS for PD (Partial Discharge) detection:

Adequate number of UHF sensors shall be provided in the offered GIS for detection of Partial discharge (of 5 pC and above as per IEC 60270). The number and location of these sensors shall be based on laboratory test on typical design of GIS as per recommendations of CIGRE Document No. 654 (Application Guide for sensitivity verification for UHF Partial discharge detection system for GIS).

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C. SPECIFIC TECHNICAL REQUIREMENT FOR COMMUNICATION

In order to meet the requirement for grid management and operation of substations, Transmission Service Provider (TSP) shall conform to the following requirements.

On 765 kV S/C and 400 kV D/C transmission lines one earth wire and one OPGW containing 24 fibers is to be installed by the TSP in place of conventional earth wire during the construction of line for grid management and substation operation purpose by STU/CTU and 48 fibers to be installed on LILO lines. The installation of OPGW shall be done from gantry of one substation up to gantry of another substation and shall be terminated in a joint box by the TSP at both ends.

On 220 kV and 132 kV D/C lines one OPGW containing 24 fibers is to be installed in place of conventional earth wire for grid management and substation operation purpose by STU/ CTU and 48 fibers to be installed on LILO lines.

765 kV, 400 kV & 220 kV System Parameters

S. No.	Description of parameters	765 kV System	400 kV System	220 kV System
1.	System operating voltage	765 kV	400 kV	220 kV
2.	Maximum operating voltage of the system	800 kV	420 kV	245 kV
3.	Rated frequency	50 HZ	50 HZ	50 HZ
4.	No. of phase	3	3	3
5.	Rated Insulation levels			
	i. Full wave impulse withstand voltage (1.2/50 micro sec.)	2100 kVp	1550 kVp	1050 kVp
	ii. Switching impulse withstand voltage (250/2500 micro sec.) dry and wet	1550 kVp	1050 kVp	-
	iii. One minute power frequency dry withstand voltage (rms)	830 kV	630 kV	-
	iv. One minute power frequency dry and wet withstand voltage (rms)	-	-	460 kV
6.	Corona extinction voltage	508 kV	320 kV	156 kV
7.	Max. radio interference voltage for frequency between 0.5 MHz and 2 MHz at 508 kV rms for 765 kV system, 266kV rms for 400kV system and156kV rms for 220 kV system	2500 micro-volts	1000 micro-volts	1000 micro-volts
8.	Minimum Creepage distance for switchyard equipment (25mm/kV)	20000 mm	10500 mm	6125 mm
9.	Min. Clearances			
	i. Phase to phase	7600mm	4000mm	

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S. No.	Description of parameters	765 kV System	400 kV System	220 kV System
		(for conductor - conductor configuration) 9400 mm (for rod- conductor configuration)	(for conductor - conductor configuration) 4200 mm (for rod - conductor configuration)	2100 mm
	ii. Phase to earth	4900mm (for conductor-structure) 6400mm (for rod-structure)	3500 mm	2100mm
	iii. Sectional clearances	10300mm	6500mm	5000mm
10.	Rated short circuit current for 1 sec. duration	40kA/ 50kA (as applicable)	40kA/ 50kA/ 63kA (as applicable)	40kA/ 50kA (as applicable)
11.	System neutral earthing	Effectively earthed	Effectively earthed	Effectively Earthed
12.	DC Voltage	220V	220V	110V

132 kV, 66 kV, 33 kV & 11 kV System

Sl. No.	Description of parameters	132 kV System	66 kV System	33 kV System	11kV System
1.	System operating voltage	132 kV	66 kV	33 kV	11 kV
2.	Maximum operating voltage of the system (rms)	145 kV	72.5 kV	36 kV	12 kV
3.	Rated frequency	50 Hz	50 Hz	50 Hz	50 Hz
4.	No. of phase	3	3	3	3
5.	Rated Insulation levels				
i)	Full wave impulse withstand voltage (1.2/50 micro sec.)	650 kVp	325 kVp	170 kVp	75 kVp
ii)	One minute power frequency dry and wet withstand voltage (rms)	275 kV	140 kV	70 kV	28 kV
6.	Corona extinction voltage	105 kV	-	-	-
7.	Max. radio interference voltage				
	for frequency between 0.5 MHz and 2 MHz at 92 kV rms for132 kV system	500 micro-volts	-	-	-
8.	Minimum creepage distance (25mm/kV)	3625mm	1813mm	900mm	300mm

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Sl. No.	Description of parameters	132 kV System	66 kV System	33 kV System	11kV System
9.	Min. Clearances				
i)	Phase to phase	1300mm	750mm	320mm	280mm
ii)	Phase to earth	1300mm	630mm	320mm	140mm
iii)	Sectional clearances	4000mm	3000mm	3000mm	3000mm
10.	Rated short circuit current for 1 sec. Duration	31.5 kA	31.5 kA	25 kA	25 kA
11.	System neutral earthing	Effectively earthed	Effectively earthed	Effectively earthed	Effectively earthed

Note:

1. The above parameters are applicable for installations up to an altitude of 1000m above mean sea level. For altitude exceeding 1000m, necessary altitude correction factor shall be applicable.
2. The insulation and RIV levels of the equipment shall be as per values given in the respective chapter of the equipment.



ANNEXURE A

TECHNICAL DETAILS WITH RESPECT TO ELECTRONIC BIDDING

Registration Methodology

In order to submit online bids in the e-bidding process for selection of Transmission Service Provider, interested Bidders are required to register themselves with the e-procurement website of MSTC Limited namely www.mstcecommerce.com/eprochome/tsp/index.jsp. To register with the website, the Bidder is required to fill up the online form available under the link Register as Vendor in the above website and fill up the same and click on Submit.

During this process, the Bidder shall create his user id and password and keep note of the same. The Bidder shall ensure that the secrecy of his user id and password is maintained at all time and he/she shall alone be responsible for any misuse of the user id and password.

The Bidder may check the details entered by it before final submission. On successful submission of the online registration Form, the Bidder shall receive a confirmation mail in the registered email address advising the Bidder to submit the following documents.

i. Self attested Income Tax PAN Card. In case of a registered Company or Firm, the Firm's PAN card and in case of a proprietorship firm, proprietor's personal PAN card is required. In case of partnership firm, PAN of the firm and that of the authorized partner are to be submitted.
ii. Copy of the confirmation email Letter received from MSTC after successful completion of on-line registration.
iii. A non-refundable registration fee of Rs.10,000/- plus GST as per applicable rate to be paid online. The account details will be available in the System generated email sent by MSTC post registration.

Please provide details of payment made like UTR No, remitting bank name, date of payment and amount in the covering letter.

The Bidder shall have to submit all the above documents to MSTC Limited for verification and activation of their login ids. The Bidders should send scanned copies of the above documents to the designated email id only which is given below.

tsp@mstcindia.co.in

It may be noted that Bidders need not visit any of the offices of MSTC Limited for submission of the documents.

Contact persons of MSTC Limited:

Mr. Chirag Sindhu - 9830336290
Mr. Setu Dutt Sharma - 7878055855

Once the complete set of documents and requisite registration fee are received from a Bidder, MSTC shall activate the Bidder's login after verification / scrutiny of the documents. MSTC

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Limited reserves the right to call for additional documents from the Bidder if needed and the Bidder shall be obliged to submit the same.

On completion of the above stated registration process, a Bidder shall be able to login to MSTC's website.

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Amendment No. 1

to

Request for Proposal (RfP) and Transmission Service Agreement (TSA) for selection of Transmission Service Provider through tariff based competitive bidding process to establish transmission system for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

<table>
<tr><th>S. No.</th><th>Existing Provision</th><th>Amended Provision</th></tr>
<tr><td>1.</td><td>

Clause 1.2 of RfP document and Schedule-2 of TSA

<table>
<tr><th>S. No</th><th>Name of the transmission element</th><th>Completion Target</th><th>Conductor per phase</th></tr>
<tr><td colspan="4">A) Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-</td></tr>
<tr><td>1.</td><td>Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor)

i. 400 kV 500 MVA ICT bay - 02 nos.
ii. 220 kV 500 MVA ICT bay - 02 nos.
iii. 220 kV 200 MVA ICT bay - 02 nos.
iv. 132 kV 200 MVA ICT bay - 02 nos.
v. 400 kV 125 MVAR Bus Reactor bay - 01 no.
vi. 400 kV Feeder bay - 04 nos.
vii. 220 kV Feeder bay - 06 nos.
viii. 132kV Feeder bay - 02 nos.

Construction of following extra bay for future extension

i. 400 kV Feeder bay - 02 nos.
ii. 220 kV Feeder bay - 04 nos.
iii. 132 kV Feeder bay - 04 nos.</td><td>Last date of 18th month from the date of issuance of LoI</td><td></td></tr>
<tr><td>2.</td><td>LILO of Sarojani Nagar (400kV) –</td><td></td><td>Twin Moose</td></tr>
</table>

</td><td>

Clause 1.2 of RfP document and Schedule-2 of TSA

<table>
<tr><th>S. No</th><th>Name of the transmission element</th><th>Scheduled COD from Effective Date</th><th>Conductor per phase</th></tr>
<tr><td colspan="4">A) Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-</td></tr>
<tr><td>1.</td><td>Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor)

i. 400 kV 500 MVA ICT bay - 02 nos.
ii. 220 kV 500 MVA ICT bay - 02 nos.
iii. 220 kV 200 MVA ICT bay - 02 nos.
iv. 132 kV 200 MVA ICT bay - 02 nos.
v. 400 kV 125 MVAR Bus Reactor bay - 01 no.
vi. 400 kV Feeder bay - 04 nos.
vii. 220 kV Feeder bay - 06 nos.
viii. 132kV Feeder bay - 02 nos.

Construction of following extra bay for future extension

i. 400 kV Feeder bay - 02 nos.
ii. 220 kV Feeder bay - 04 nos.</td><td>18 months</td><td></td></tr>
</table>

</td></tr>
</table>

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

S. No.	Existing Provision				Amended Provision			
		Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)		ACSR Conductor		iii. 132 kV Feeder bay - 04 nos.		
	3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor	2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor
					3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor
	B)	**Construction of LILO Line**			**B)**	**Construction of LILO Line**		
	1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	Last date of 15th month from the date of issuance of LoI	Quad Bersimis ACSR Conductor	1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	**15 months**	Quad Bersimis ACSR Conductor
	2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	Last date of 9th month from the date of issuance of LoI	Twin Moose ACSR Conductor	2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	**9 months**	Twin Moose ACSR Conductor
	C)	**Construction of LILO lines on Monopole**			**C)**	**Construction of LILO lines on Monopole**		
	1.	LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	Last date of 9th month from the date of issuance of LoI	Quad Moose ACSR conductor	1.	LILO of one circuit on monopole **or any other suitable lattice structure in compliance to related IS-802 of CEA guideline** of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	**9 months**	Quad Moose ACSR conductor

Note:

i. UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.

Note:

i. UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.

ii. GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.

In case of GIS substation where the bus scheme is One & Half breaker

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<table>
<tr><th>S. No.</th><th>Existing Provision</th><th>Amended Provision</th></tr>
<tr><td></td><td></td><td>scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably.</td></tr>
<tr><td>2.</td><td>Clause 2.15.1 of RfP document and Schedule-3 of TSA
<table>
<tr><th>S. No</th><th>Name of the transmission element</th><th>Scheduled COD from Effective Date</th><th>Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project</th><th>Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element</th></tr>
<tr><td colspan="5">A) Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-</td></tr>
<tr><td>1.</td><td>Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor)

i. 400 kV 500 MVA ICT bay - 02 nos.
ii. 220 kV 500 MVA ICT bay - 02 nos.
iii. 220 kV 200 MVA ICT bay - 02 nos.</td><td>Last date of 18th month from the date of issuance of LoI</td><td>30.49%</td><td>Elements at Sl No. 1, 2 & 3 shall be required simultaneously.</td></tr>
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<tr><th>S. No</th><th>Name of the transmission element</th><th>Scheduled COD from Effective Date</th><th>Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project</th><th>Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element</th></tr>
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<tr><td>1.</td><td>Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor)

i. 400 kV 500 MVA ICT bay - 02 nos.
ii. 220 kV 500 MVA ICT bay - 02 nos.
iii. 220 kV 200 MVA ICT bay - 02 nos.</td><td>18 months</td><td>30.49%</td><td>Elements at Sl No. 1, 2 & 3 shall be required simultaneously.</td></tr>
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</table>

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S. No.	Existing Provision				Amended Provision				
		iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.					iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.			
	2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)				2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)			
	3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)				3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)			
	B) Construction of LILO Line					**B) Construction of LILO Line**				
	1.	LILO of 765 kV	Last date of	61.17%	-	1.	LILO of 765 kV	**15 months**	61.17%	-

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S. No.	Existing Provision					Amended Provision				
		Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15th month from the date of issuance of LoI				Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing			
	2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	Last date of 9th month from the date of issuance of LoI	0.49%	-		2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	**9 months**	0.49%	-
	C)	**Construction of LILO lines on Monopole**					**C)**	**Construction of LILO lines on Monopole**			
	1.	LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	Last date of 9th month from the date of issuance of LoI	7.85%	-		1.	LILO of one circuit on monopole **or any other suitable lattice structure in compliance to related IS-802 of CEA guideline** of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	**9 months**	7.85%	-

Note:

i. UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.

The payment of Transmission Charges for any Element irrespective of its successful commissioning on or before its Scheduled COD shall only be considered after successful commissioning of the Element(s) which are pre-required for declaring the commercial operation of such Element as mentioned in the above table.

Scheduled COD for overall Project: Last date of 18th month from date of issuance of LoI.

Note:

i. UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.

ii. GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.

In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS

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<table>
<tr><th>S. No.</th><th>Existing Provision</th><th>Amended Provision</th></tr>
<tr><td></td><td></td><td>hall/building with extension/interface module suitably.

The payment of Transmission Charges for any Element irrespective of its successful commissioning on or before its Scheduled COD shall only be considered after successful commissioning of the Element(s) which are pre-required for declaring the commercial operation of such Element as mentioned in the above table.

Scheduled COD for overall Project: 18 months from Effective Date.</td></tr>
<tr><td>3.</td><td>S. No. 9 of Annexure-6 of RfP document
<table>
<tr><th>S. No</th><th>Name of the transmission element</th><th>Scheduled COD from Effective Date</th><th>Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project</th><th>Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element</th></tr>
<tr><td colspan="5">A) Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-</td></tr>
<tr><td>1.</td><td>Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor)

i. 400 kV 500 MVA ICT bay - 02 nos.
ii. 220 kV 500 MVA ICT</td><td>Last date of 18th month from the date of issuance of LoI</td><td>30.49%</td><td>Elements at Sl No. 1, 2 & 3 shall be required simultaneously.</td></tr>
</table></td><td>S. No. 9 of Annexure-6 of RfP document
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<tr><td>1.</td><td>Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor)

i. 400 kV 500 MVA ICT bay - 02 nos.
ii. 220 kV 500 MVA ICT</td><td>18 months</td><td>30.49%</td><td>Elements at Sl No. 1, 2 & 3 shall be required simultaneously.</td></tr>
</table></td></tr>
</table>

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S. No.	Existing Provision					Amended Provision				
		bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.					bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.			
	2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)				2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)			
	3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)				3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)			

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

S. No.	Existing Provision				Amended Provision				
	B)	**Construction of LILO Line**			**B)**	**Construction of LILO Line**			
	1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	Last date of 15th month from the date of issuance of LoI	61.17% -	1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	**15 months**	61.17%	-
	2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	Last date of 9th month from the date of issuance of LoI	0.49%	2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	**9 months**	0.49%	-
	C)	**Construction of LILO lines on Monopole**			**C)**	**Construction of LILO lines on Monopole**			
	1.	LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	Last date of 9th month from the date of issuance of LoI	7.85%	1.	LILO of one circuit on monopole **or any other suitable lattice structure in compliance to related IS-802 of CEA guideline** of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	**9 months**	7.85%	-
	Note:				**Note:**				
	i. UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.				*i. UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.*				
	We agree that the Element(s) mentioned in Sr.No.1-7 are critical to the operation of the Project and the actual COD of such Element(s) shall be no later than the Scheduled COD as mentioned in the above table.				***ii. GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.***				
	We further agree that the payment of Transmission Charges for any Element irrespective of its successful commissioning on or before its Scheduled COD shall only be considered after the successful commissioning of such critical Element(s).				***In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line***				

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<table>
<tr><th>S. No.</th><th>Existing Provision</th><th>Amended Provision</th></tr>
<tr><td></td><td>Scheduled COD for the Project: Last date of 18th month from issuance of LoI</td><td>side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably.

We agree that the Element(s) mentioned above are critical to the operation of the Project and the actual COD of such Element(s) shall be no later than the Scheduled COD as mentioned in the above table.

We further agree that the payment of Transmission Charges for any Element irrespective of its successful commissioning on or before its Scheduled COD shall only be considered after the successful commissioning of such critical Element(s).

Scheduled COD for the Project: 18 months from Effective Date.</td></tr>
<tr><td>4.</td><td>Annexure-B, Clause 15.v) of Specific Technical Requirement for Substation of RFP document and Schedule-2, Clause 15.v) of Specific Technical Requirement for Substation of TSA

Conductor, Earthwire & OPGW:<table><tr><th>Sl. No.</th><th>Description</th><th>Conductor</th><th>Earthwire</th><th>OPGW (tentative)</th></tr><tr><td>1.</td><td>...</td><td>...</td><td>...</td><td>...</td></tr><tr><td>...</td><td>...</td><td>...</td><td>...</td><td>...</td></tr><tr><td>6.</td><td>Overall Diameter (mm)</td><td>31.77</td><td>10.98</td><td>≈ 0.98</td></tr></table></td><td>Annexure-B, Clause 15.v) of Specific Technical Requirement for Substation of RFP document and Schedule-2, Clause 15.v) of Specific Technical Requirement for Substation of TSA

Conductor, Earthwire & OPGW:<table><tr><th>Sl. No.</th><th>Description</th><th>Conductor</th><th>Earthwire</th><th>OPGW (tentative)</th></tr><tr><td>1.</td><td>...</td><td>...</td><td>...</td><td>...</td></tr><tr><td>...</td><td>...</td><td>...</td><td>...</td><td>...</td></tr><tr><td>6.</td><td>Overall Diameter (mm)</td><td>31.77</td><td>11.5 (for both 24 and 48 fibres)</td><td>≈ 0.98</td></tr></table></td></tr>
<tr><td>5.</td><td>Annexure-6: Format 1: Bidder's Undertaking of RFP

2. We confirm that the Project shall also comply with the standards and codes as per Clause 0 of the RFP and the TSP shall comply with the provisions contained in the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations 2004, UP Electricity Grid Code, 2007 and the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 made pursuant to Section 177(2) of the Electricity Act, 2003,as amended</td><td>Annexure-6: Format 1: Bidder's Undertaking of RFP

2. We confirm that the Project shall also comply with the standards and codes as per Clause 1.3 of the RFP and the TSP shall comply with the provisions contained in the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations 2004, UP Electricity Grid Code, 2007 and the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 made pursuant to Section 177(2) of the Electricity Act, 2003,as</td></tr>
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S. No.	Existing Provision	Amended Provision
	from time to time.	amended from time to time.
6.	**RfP, TSA and SPA Documents** **"SPV [under incorporation]"**	**RfP, TSA and SPA Documents** **"SPV [under incorporation]"** in the RfP, TSA and SPA documents may be replaced with **"Mohanlalganj Transmission Limited"**



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Amendment No. 2

to

Request for Proposal (RfP) and Transmission Service Agreement (TSA) for selection of Transmission Service Provider through tariff based competitive bidding process to establish transmission system for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

<table>
<tr><th>S. No</th><th>Existing Provision</th><th>Amended Provision</th></tr>
<tr><td>1.</td><td>
Clause 1.2 of RfP document and Schedule-2 of TSA
<table>
<tr><th>S. No</th><th>Name of the transmission element</th><th>Scheduled COD from Effective Date</th><th>Conductor per phase</th></tr>
<tr><td colspan="4">A) Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-</td></tr>
<tr><td>1.</td><td>Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor)

i. 400 kV 500 MVA ICT bay - 02 nos.
ii. 220 kV 500 MVA ICT bay - 02 nos.
iii. 220 kV 200 MVA ICT bay - 02 nos.
iv. 132 kV 200 MVA ICT bay - 02 nos.
v. 400 kV 125 MVAR Bus Reactor bay - 01 no.
vi. 400 kV Feeder bay - 04 nos.
vii. 220 kV Feeder bay - 06 nos.
viii. 132kV Feeder bay - 02 nos.

Construction of following extra bay for future extension

i. 400 kV Feeder bay - 02 nos.
ii. 220 kV Feeder bay - 04 nos.</td><td>18 months</td><td></td></tr>
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Clause 1.2 of RfP document and Schedule-2 of TSA
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i. 400 kV 500 MVA ICT bay - 02 nos.
ii. 220 kV 500 MVA ICT bay - 02 nos.
iii. 220 kV 200 MVA ICT bay - 02 nos.
iv. 132 kV 200 MVA ICT bay - 02 nos.
v. 400 kV 125 MVAR Bus Reactor bay - 01 no.
vi. 400 kV Feeder bay - 04 nos.
vii. 220 kV Feeder bay - 06 nos.
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Construction of following extra bay for future extension

i. 400 kV Feeder bay - 02 nos.
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S. No	Existing Provision				Amended Provision			
		iii. 132 kV Feeder bay - 04 nos.				iii. 132 kV Feeder bay - 04 nos.		
	2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor	2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor
	3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor	3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor
	B)	**Construction of LILO Line**			**B)**	**Construction of LILO Line**		
	1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	Quad Bersimis ACSR Conductor	1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	Quad Bersimis ACSR Conductor
	2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months	Twin Moose ACSR Conductor	2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months	Twin Moose ACSR Conductor
	C)	**Construction of LILO lines on Monopole**			**C)**	**Construction of LILO lines on Monopole**		
	1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA guidelineof 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	9 months	Quad Moose ACSR Conductor	1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEAguidelineof 400 kV Ataur (WUPPTCL) – Indirapuram(WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	9 months	**Quad Moose ACSR or equivalent HTLS conductor**
	Note:				**Note:**			
	i. *UPPTCL to provide...*				*i. UPPTCL to provide...*			
	ii. GIS Bay (if any) for ...				***ii.*** *GIS Bay (if any) for ...*			
2.	**Annexure-B, Clause 5.1 of Specific Technical Requirement of Transmission Lines of RfP and Schedule 2, Clause 5.1 of Specific Technical Requirement of Transmission Lines of TSA**				**Annexure-B, Clause 5.1 of Specific Technical Requirement of Transmission Lines of RfP and Schedule 2, Clause 5.1 of Specific Technical Requirement of Transmission Lines of TSA**			
	Transmission	**ACSR**		**Sub-**	**Transmission**	**ACSR**		**Sub-**

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S. No	Existing Provision			Amended Provision		
	line	**Conductor specified**	**conductor Spacing**	**line**	**Conductor specified**	**conductor Spacing**
	765kV S/C (Quad Bersimis) transmission lines	Bersimis: Stranding 42/4.57 mm-Al + 7/2.54 mm-Steel, 725sq mm, Total Sectional Area, 35.05 mm diameter	457 mm	765kV S/C (Quad Bersimis) transmission lines	Bersimis: Stranding 42/4.57 mm-Al + 7/2.54 mm-Steel, 725sq mm, Total Sectional Area, 35.05 mm diameter	457 mm
	400kV D/C (Quad Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	457 mm	400kV D/C (Quad Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	457 mm
	400kV D/C (Twin Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	450 mm	400kV D/C (Twin Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	450 mm
				400kV D/C (Twin HTLS) Transmission lines	**HTLS: type- INVAR/ GAP/ Composite core/ ACSS or any other equivalent, 1596 Ampacity or higher, minimum 28.62 mm diameter, maximum 0.05552 (Ω/km) DC resistance at 20°C**	**450 mm**

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
1.	**RFP & TSA** **Definitions:** "Long Term Transmission Customer" shall mean a person availing or intending to avail access to the Intra-State Transmission System for a period up to **twenty-five (25) years or more**, and for the purposes of this Project, shall refer to entities listed in Annexure-1 of this RFP or any such other person who executes a supplementary agreement for availing transmission service as per the provisions of the TSA;	As per UPERC (Terms and Conditions for Open Access) Regulations, 2004; An open access customer availing or intending to avail intra state open access for a period of five years or more shall be the long-term intra state open access customer. This mismatch and implications may be clarified. Inconsistency in bidding document.	This is as per Standard Bidding Documents. No change is envisaged.
2.	**RFP** "Transmission Lines" shall mean all high pressure cables and overhead lines (not being an essential part of the distribution system of a licensee) transmitting electricity from a generating station to another generating station or a sub-station, together with any step-up and step-down transformers, switch-gear and other works necessary to and used for the control of such cables or overhead lines, and such buildings or part thereof as may be required to accommodate such transformers, switchgear and other works;	Definition of Transmission lines does not fit the description of the scope of Transmission line provided in the document. The definition of Transmission lines shall be construed and limited as per the scope of the bidding document. Mismatch in provisions of document. The mismatch is to be corrected since this may lead to unwarranted interpretations and litigations. The definition of Transmission lines shall be construed and limited as per the scope of the bidding document.	This is as per Standard Bidding Documents. No change is envisaged.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
3.	**RFP** **Clause 1.2** .... The BPC reserves the right to add, delete or replace any Long Term Transmission Customer(s) to the list	As per 2.21 of RFP, Contract Performance Guarantee has to be furnished to the Long Term Transmission Customers for an aggregate amount in a pre-determined proportion to each of the Long Term Transmission Customers. In case the list of LTTC is modified by the BPC, the allocation ratio for all the LTTCs undergoes a change. In such a situation should all the CPGs be modified. If yes, then for every change in the list of LTTCs the BGs will undergo a change and who will reimburse the additional charges.	Provisions of RFP Document are amply clear in this regard.
4.	**RFP** **Clause 1.2** .... The BPC reserves the right to add, delete or replace any Long Term Transmission Customer(s) to the list	After the SPV handed over to the successful bidder by BPC, who is the entity to inform the change in the list of LTTCs to the TSP/ Successful bidder. Clarity in the provisions of document	As per clause 18.1 of TSA, all the communications shall be made to the Lead LTTC.
5.	**RFP** **Table under Clause 1.2:** Completion target is mentioned as Last date of xxth month from the date of issuance of LoI for different elements	TSP's control and ownership of the project is only after acquisition of the SPV. Therefore, the completion schedule should start from effective date i.e. date of acquisition. On the date of LoI the SPV is not transferred to the successful bidder. Since, all approvals for the project are to be taken in the name of SPV the	Please refer Amendment no. 1.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		same cannot be taken until the SPV is in possession of the Successful Bidder. As such the Effective date cannot start from the date of LoI and should be on or after the date of acquisition / handing over of SPV. Impractical proposal of Bidding documents	
6.	**RFP** **Table under Clause 1.2:** Completion target is mentiond as Last date of xxth month from the date of issuance of LoI for different elements	As per Standard Bidding Documents (SBD), Construction period is to be specified in terms of months from the date of acquisition. The clause mentioned is in total contravention to provisions of SBD and as such approval of Commission shall be required. Kindly inform the status of approval of Commission regarding the above. On the date of LoI the SPV is not transferred to the successful bidder. Since, all approvals for the project are to be taken in the name of SPV the same cannot be taken until the SPV is in possession of the Successful Bidder. As such the Effective date cannot start from the date of LoI and should be on or after the date of acquisition / handing over of SPV.	Please refer Amendment no. 1.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		Impractical proposal of Bidding documents	
7.	**RFP** **Clause 1.5** The BPC has initiated development of the Project and shall be responsible for the tasks in this regard as specified hereunder: ... c) To initiate acquisition of land for location specific substation. d) To initiate process of seeking forest clearance, if required .... f) Any addition, deletion or replacement to the list at Annexure 1, will be communicated at least 30 (thirty) days prior to the Bid Deadline. Further, the entities which are legally permitted to sign the TSA on behalf of the Long Term Transmission Customer(s) shall also be intimated to the Bidders at least thirty (30) days prior to the Bid Deadline. h) The BPC shall ensure issuance of all	Status of actions taken on land acquisition and location of land may be furnished. Development of the project is largely dependent on obtaining the RoW through these forest stretches. Details of the status of the process initiated, the outcome and the feasibility of obtaining clearances without derailing the indicated project schedule may be furnished. Notwithstanding the information being proposed to be furnished by the BPC regarding the entities who are legally permitted to sign the TSA, it is to be noted that TSA is to be pre-signed document that has to be entered by the BPC/SPV and BPC is responsible to ensure that the TSA agreement is a valid document entered into with the entities. As per the RFP document, a copy of the signed TSA is to be furnished to all the bidders who have purchased the RFP document. However, it is observed from the past experience that, the signed TSA document is not being furnished before the RFP bid submission. The Finalized signed TSA documents may be furnished atleast 15 days prior to the Bid deadline.	BPC will complete its responsibilities as listed in the RFP documents. Please also refer Clause 2.1 & 2.14.2 of the RFP document. This is as per Standard Bidding Documents. No change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	finalized RFP Project Documents duly executed, except for the Share Purchase Agreement, at least seven (7) days prior to the Bid Deadline.	Alternatively, changes made, if any, to the proposed TSA should be highlighted and informed to all the Bidders. h) The BPC shall ensure issuance of all finalized RFP Project Documents duly executed, except for the Share Purchase Agreement, at least fifteen (15) days prior to the Bid Deadline. To estimate the feasibility of the project in the timeline and the quantum of activity to be discharged by the bidder. Notwithstanding the information being proposed to be furnished by the BPC regarding the entities who are legally permitted to sign the TSA, it is to be noted that TSA is to be pre-signed document that has to be entered by the BPC/SPV and BPC is responsible to ensure that the TSA agreement is a valid document entered into with the entities. The last seven (7) days shall involve activity related to bid preparation and adequate time for scrutiny of bid documents shall not be available and as such the RFP projects duly executed may be made available at least 15 days prior to bid deadline. Alternatively, changes made, if any, to the proposed TSA should be highlighted and informed	

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		to all the Bidders.	
8.	**RFP** **Clause 1.5** g) The BPC shall intimate the Bidders, the Acquisition Price payable by the Selected Bidder to the PFC Consulting Limited for the acquisition of one hundred percent (100%) of the equity shareholding of ....., along with all its related assets and liabilities at least thirty (30) days prior to Bid Deadline.	Based on the past experience, it is noted that the acquisition price claimed is higher than the amount informed prior to bidding. The variation may be avoided. Further, it also noted that mandatory 30 days is not being adhered to by the BPC after furnishing the acquisition price.	The estimated acquisition price will be intimated separately. Any adjustment in the acquisition price as per the final audited accounts of the Company after transfer of SPV will be settled without any delay.
9.	**RFP** **Clause 1.6** The Ministry of Power and the appropriate State Government(s) have agreed to provide their support to the TSP, on best endeavor basis, in enabling the TSP to develop the Project	The details/letter about the support that has been **agreed** to be provided by MoP and State Government may be furnished. It is observed that there is no such document existing for soliciting support from the State Governments. To assess the risk associated in the Project and the agreements associated with the Project.	The necessary support shall be provided on case to case basis.
10.	**RFP** **Clause 1.6.2.1** The BPC has initiated development of the Project and shall be responsible for the tasks in	It is the responsibility of the BPC to provide approval for laying of overhead transmission lines under section 68 of Electricity Act. However, it is noted that approval under section 68 is furnished without incorporating the	Approval U/S 68 of Electricity Act is under process and the same will be provided to the successful bidder.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	this regard as specified hereunder: ... ... b) To obtain approval for laying of overhead transmission lines under Section 68 of Electricity Act, from Appropriate Government at least thirty (30)) days prior to Bid Deadline.	amendments in scope of the project. It is requested to provide section 68 approval incorporating all the amendments.	
11.	**RFP** **Clause 2.4** Within ten (10) days of the issue of the Letter of Intent, the Selected Bidder shall: ... d) make an application to the appropriate commission for adoption of transmission charges, as required under section 63 of the Electricity Act 2003 ... **Clause 2.6** Within ten (10) days of the issue of the Letter of	Given the past experience, after the issuance of LoI, the clearance for signing the SPA by the BPC itself takes about one month (30 days). During this period approvals have to be obtained from the competent authority for furnishing inputs to signing of the SPA. The timeline of 10 days is unworkable and as such atleast 30 days have to be provided. Accordingly, the readiness of the BPC to sign the SPA after issuance of LoI shall have to be the date to govern the fulfillment of conditions by the selected bidder / TSP. Further, any shifting of the date of acquisition for which the TSP is not responsible, then notwithstanding any stated in the document, the scheduled COD have to be shifted under the fair	This is as per the Standard Bidding Documents. No Change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Intent, the TSP shall apply to the Appropriate Commission for grant of Transmission License	and equitable treatment. 2.6 Within thirty (30) days of the issue of the Letter of Intent or the written intimation by BPC regarding it's date of readiness to sign the SPA whichever is later, the TSP shall apply to the Appropriate Commission for grant of Transmission License The conditions to be fulfilled by the selected bidder / TSP within 30 days of Lolinteralia includes filing of application for grant of Transmission license and filing of application of adoption of transmission charges. The copy of SPA is to be referred and also enclosed as part of the applications for both grant of Transmission license and adoption of transmission charges. The selected bidder / TSP should be provided with adequate time to prepare the applications after signing of SPA and accordingly the days for fulfilling the conditions by the selected bidder / TSP shall have to be reckoned from the date of signing of the SPA.	
12.	**RFP** **Clause 2.4**	The application for adoption of transmission charges may be filed by the TSP since the TSP is to get paid for the services.	This is as per the Standard Bidding Documents.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Within ten (10) days of the issue of the Letter of Intent, the Selected Bidder shall: .... d) make an application to the appropriate commission for the adoption of transmission charges, as required under section 63 of the Electricity Act 2003	Delete provision d) The appropriate changes have been suggested in Sl. No 12 of this clarification document. This provision is required so as to align with the provision E) of TSA which states as under: E) The TSP has further agreed to make an application to the Appropriate Commission for the adoption of the Transmission Charges under Section 63 of the Electricity Act, 2003, along with a certification from the Bid Evaluation Committee in accordance with the Bidding Guidelines issued by Ministry of Power, Government of India.	Provision of RFP shall apply. No change is envisaged.
13.	**RFP** **Clause 2.5** After the date of acquisition of the equity shareholding of **".....(SPV)"**, along with all its related assets and liabilities, by the Selected Bidder, i. the authority of the BPC in respect of this Bid Process shall forthwith cease and any actions to be taken thereafter will be undertaken by the	Role of BPC has to be complete. i. the authority of the BPC in respect of this Bid Process shall forthwith cease and any actions to be taken thereafter will be undertaken by the Lead Long Term Transmission Customer, save for those which are related to and consequent to the bidding process adopted by the BPC The BPC shall not relinquish its role after the acquisition but shall have to undertake all activities including providing the certification from the Bid Evaluation Committee etc., and other	The role of BPC is as per the SBD and hence no change is envisaged. However, BPC shall fulfil its responsibility of providing the certification from the Bid Evaluation Committee to enable the TSP to obtain Transmission license and adoption of Transmission charges.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Lead Long Term Transmission Customer,	requirements to enable the Bidder to obtain Transmission license and adoption of Transmission charges. Furthermore, any activity which has an origin traced to the BPC activity/process has to be owned by BPC and the TSP / LTTC is neither aware nor can be made responsible.	
14.	**RFP** **Clause 2.5** iv. contractual obligations undertaken by the BPC shall continue to be fulfilled by the TSP.	What are the obligations that the BPC has undertaken which needs to be fulfilled by the TSP? 2.5 iv. contractual obligations undertaken by the BPC shall continue to be fulfilled by the TSP if only such contractual obligations have been made available to the bidders 15 days prior to the bid deadline. Nature of contractual obligations cannot be left open as the same is to be fulfilled by the TSP.	The details of the contractual obligations (if any) of BPC to be fulfilled by the TSP shall be provided along with the tentative Acquisition Price of the SPV.
15.	**RFP** **Clause 2.6** Within ten (10) days of the issue of the Letter of Intent, the TSP shall apply to the Appropriate Commission for grant of Transmission License.	The application for Grant of Transmission License and adoption of transmission charges also may be filed by the TSP since the TSP is to get paid for the services. 2.6 Within thirty (30) days of the issue of the Letter of Intent or the written intimation by the BPC regarding its date of readiness to sign the SPA, whichever is later, the TSP shall apply to the Appropriate Commission for grant of Transmission	This is as per the Standard Bidding Documents. Provision of RFP shall apply.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		License and make an application to the Appropriate Commission for the adoption of Transmission Charges, as required under section 63 of the Electricity Act 2003. This provision is required so as to align with the provision E) of TSA which states as under: E) The TSP has further agreed to make an application to the Appropriate Commission for the adoption of the Transmission Charges under Section 63 of the Electricity Act, 2003, along with a certification from the Bid Evaluation Committee in accordance with the Bidding Guidelines issued by Ministry of Power, Government of India.	
16.	**RFP** 2.8 If the TSP fails to obtain the Transmission License from the Appropriate Commission, it will constitute sufficient grounds for-annulment of award of the Project	In case TSP fails to obtain the Transmission License the reasons for the same have to be examined. 2.8 If the TSP fails to obtain the Transmission License from the Appropriate Commission, the treatment shall be as per provisions 3.3 of the TSA. Provisions of 3.3 of TSA provides for consequences for non-fulfillment of conditions subsequent. The provisions of RFP as such have to be reflective of TSA.	This is as per the Standard Bidding Documents. Provisions of RfP& TSA are amply clear and shall be applicable.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
17.	**RFP** **Clause 2.14** The Bidding Process ... The technical details with respect to access to such electronic platform are provided in Annexure-A (Technical Details with respect to electronic auction). In case of any technical clarification regarding access to the electronic auction platform or conduct of the auction process, the Bidders may contact MSTC Limited directly at the address provided in Annexure-A.	The Annexure-A provided in the RFP Bidding document is about Registration Methodology. The Annexure-A does not provide any details regarding submission of bid, details of the contact person etc. The same may be furnished as required. The issue has been brought to the notice of BPC in all previous documents and BPC is requested to ensure the same are addressed in all future documents. The Annexure-A provided in the RFP Bidding document is about Registration Methodology. The Annexure-A does not provide any details regarding submission of bid, details of the contact person etc. The same may be furnished as required. The issue has been brought to the notice of BPC in all previous documents and BPC is requested to ensure the same are addressed in all future documents.	The details of the process of the e-Bidding platform and the details of the concerned person has already been provided in the Annexure-A of the RFP document. If bidders face any difficulty during the bid submission they may contact at the helpdesk of MSTC Limited as detailed below: Phone number: 011-23215163, 011-23212357 & 011- 23217850. Email: mstcnro@mstcindia.co.in Vendor's Guide: http://www.mstcecommerce.com/auctionhome/RenderFileViewVideo.jsp?file=UserManual-Vendor.pdf The help desk will be available on all working days from 10 AM to 5:30 PM.
18.	**RFP** **Clause 2.21** ..... Performance Guarantee for an aggregate amount of Rs. 15,33,00,000 /- (Rupees Fifteen Crore Thirty Three Lakh only), which shall be	Please clarify whether the Contract Performance Guarantee has been stipulated based on recent notification of Ministry of Power for reduction of CPG in TBCB Transmission projects	CPG has been calculated as per the recent MoP letter dated 25.03.2021

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	provided separately to each of the Long Term Transmission		
19.	**RFP** **Clause 2.17.1** The Bidders shall submit the Bid which shall remain valid up to (180) days from the Bid Deadline	As per 2.16, the Share Purchase Agreement is scheduled to be signed by within 45 days. Therefore the validity of bids may be stipulated to be upto 2 months.	This is as per the Standard Bidding Documents. Provision of RFP shall apply. No change is envisaged.
20.	**RFP** **Clause 3.3.2.2** The Levelised Transmission Charges shall be calculated by assuming uniformly the following for all the Bidders ■ Grant of Transmission License within 6 months from the date of Letter of Intent to the Selected Bidder by the BPC as per the timelines in Clause 2.16.2 above. ■ Transmission Charges shall be levelised over a period from the Scheduled COD of the Project, up to 35 years.	Transmission charges are the charges to be paid after CoD. The first bullet is an activity prior to the CoD. The reason and the purpose of the first bullet for calculating the levelized transmission charges may be clarified. Clause 3.1.3 of the TSA states" "The TSP agrees and undertakes to duly perform and complete the following activities within six (6) months from the Effective date, unless ..... a. To obtain the Transmission License for the Project from the Appropriate Commission;" However, as per Clause 3.3.2.2 the Grant of Transmission License is 6 months from the date of Letter of Intent and not the Effective date of the	Clause 3.3.2.2 refers to assumptions and is self- explanatory. The evaluation of Bids shall be carried out in accordance with the tariff Illustration provided to the Bidders. The Bidder should note that the first two bullet points are not to be taken into account while calculating the Levelized Transmission Charges.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		TSA. Grant of Transmission License within xx months from the **Effective Date**; Rationale in incorporating the first bullet in the provision. The timeline for obtaining the Transmission License as per Clause 3.3.2.2 of the RFP and Article 3.1.3 a. of the TSA are in variance. BPC is requested to kindly rectify these interpretations in all future documents.	
21.	**RFP** **Clause 3.3.2.2** The Levelised Transmission Charges shall be calculated by assuming uniformly the following for all the Bidders ■ Grant of Transmission License within 6 months from the date of Letter of Intent to the Selected Bidder by the BPC as per the timelines in Clause 2.16.2 above.	Since some elements are required to be commissioned in 9 months period, it is imperative to speed up the process of grant of transmission license, authorization u/s 164 etc. accordingly. Therefore, it is requested to examine the timelines of statutory approvals (Grant of Transmission License and authorization u/s 164 etc.) due to shorter construction periods and ensure that the same are in alignment with the shorter time period being proposed for construction.	UPPTCL shall extend all help in getting the statuary clearance in time.
22.	**RFP**	SPA is executed between the Successful bidder, BPC and the TSP at which stage the TSP is the	This is as per the Standard Bidding

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Annexure-6 (Bidder's undertaking) 4. We give our unconditional acceptance to the RFP dated ..... issued by the BPC and the RFP Project Documents, as amended, and undertake to ensure that the TSP shall execute the Share Purchase Agreement as per the provisions of this RFP.	Subsidiary of the BPC. Only after signing of the SPA, the TSP becomes the subsidiary of the Successful Bidder. As such the unconditional acceptance undertaking to be given by the Bidder that TSP shall execute the Share Purchase Agreement may need to be examined.	Documents. No change is envisaged.
23.	**RFP** **Annexure -6**	Kindly confirm whether the project is generation linked or System Strengthening Scheme.	Project is System Strengthening scheme
24.	**RFP** **Annexure -6**	Kindly confirm : i) whether the Project/ Elements are eligible for early commissioning incentive as per MoP, GoI order dated 15.07.2015	No provision for early commissioning incentive. However Reduction in completion time will be acceptable only after mutual consent.
25.	**RFP** **Clause 2.14.1.2**	What if two or more bidders quote the same Initial offer which turns out to be prevailing lowest levellized tariff and no further discount is offered by any bidder during e-reverse auction event?	In e-Reverse Auction, two bidders cannot have same price bid as every bid has to be necessarily less than the previous bid. In case of initial price offer as bids are encrypted, so two bidders may quote the same initial price offer. But in e-Reverse Auction even if a single bid is received, two bidders cannot be at the same price offer. If the Initial Price Offer for two or more

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
			bidders is same and no bids are quoted in eReverse Auction, then one of the bidders will have to be selected as L-1 bidder. In various projects, a common practice is to take the bid that was submitted earlier in the system as L1.
26.	**RFP** "Final Offer" shall mean the Quoted Escalable Transmission Charges and Quoted Non-Escalable Transmission Charges, required to be submitted as part of the Financial Bid on the electronic bidding platform during the e-reverse bidding stage. In case, no Final Offer is received during the e-reverse bidding stage then the lowest "Initial Offer" shall be deemed to be the Final Offer;	If counter bids during eRA does not happen resulting in premature conclusion of eRA process. Presently, details of L-1 bidder are not displayed on conclusion of eRA irrespective of receipt of counterbids. Further, L-1 bidders holding the same rank need to be made aware of their position prior to eRA. It is requested to update the eRA platform accordingly to reflect the status of L1 bidder under the above scenario. For transparency of the competitive price discovery through eRA	Noted.
27.	**RFP** **Clause 1.5 h)** The BPC shall ensure issuance of all finalized RFP Project Documents duly executed, except for the Share Purchase Agreement, at least seven (7) days prior to the	As per the RFP document, a copy of the signed TSA is to be furnished to all the bidders who have purchased the RFP document. However, it is observed from the past experience that, the signed TSA document is not being	BPC will complete its responsibilities as listed in the RFP documents. Please also refer Clause 2.1 & 2.14.2 of the RFP document.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Bid Deadline.	furnished before the RFP bid submission. Given that the same is in contravention to the SBD document issued by MoP, approval from competent authority/appropriate commission is to be obtained as per para 4.1 of Tariff Based Competitive Bidding Guidelines for Transmission Service issued by MoP, GoI. Order of CERC 4/ADP/2016 dated 23.03.2016.	This is as per Standard Bidding Documents. No change is envisaged.
28.	**RFP bidding documents (RFP, TSA, SPA)**	Compliance with SBD Reference is drawn to the Order of CERC 4/ADP/2016 dated 23.03.2016. Relevant extract of the Order is reproduced hereunder: "Evidently BPC has not sought the approval of the Commission before inserting the Govt. Policy dated 15.7.2015 as part of the TSA. We direct the BPC to ensure that if any material deviation is made in the TSA, the approval of the Commission should be invariably sought before incorporating the same in the TSA." We understand that all approvals from the Competent Authorities/appropriate commission are being obtained for the Bidding documents being issued. Bidders shall not be responsible and	The RfP and TSA are as per the Standard Bidding Documents (SBD). There are no deviations in the RFP Documents from the SBD.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		accountable for any dispute arising out of non-compliance of the conditions/role by BPC. Bidders shall not be responsible and accountable for any dispute arising out of non-compliance of the conditions/role by BPC.	
29.	**RFP** Definitions ..... CERC (Terms and Conditions of Tariff) Regulations 2014, UPERC (Terms and Conditions for determination of Transmission Tariff) Regulations, 2006/ Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations, 2014, UPERC (Grant of Connectivity to Intra-State Transmission System) Regulations 2010, UPERC (General condition of Transmission License) Regulations 2005, UPERC (Terms and Conditions for Open Access) Regulations, 2004, UP Electricity Grid Code 2007	**A. CERC (Terms and Conditions of Tariff) Regulations ~~2014~~ 2019** 2. Scope and extent of application. (1) .. (2) <u>These regulations shall not apply</u> for determination of tariff in case of the following: (a) Generating stations or <u>inter-State transmission systems whose tariff has been discovered through tariff based competitive bidding in accordance with the guidelines issued by the Central Government and adopted by the Commission under Section 63 of the Act;</u> **B. UPERC (Terms and Conditions for Determination of Transmission Tariff), Regulations 2006** A3: SCOPE OF REGULATIONS AND EXTENT OF	Please refer Para 1 Definitions section of the RFP, which is amply clear. The applicability of the said Regulations have to be construed in conjunction with the above mentioned Para 1 of the Definition section of the RFP.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		APPLICATION 3.1 Subject to the provisions of the Act, Rules and Policies, these Regulations shall apply in all cases of determination of Transmission Tariff under Section 62 of the Act. It shall however, not apply in the case where tariff has been determined through a transparent process of bidding in accordance with the guidelines issued by the Central Government as per the provisions of Section 63 of the Act. From above provisions in both the Regulations, it may be observed that the referred Regulations are not applicable for Projects under Section 63, i.e., TBCB Projects. The same may be clarified.	
30.	**RFP and TSA** Transmissions License fee has to be paid during the entire validity of the Transmission Service Agreement	The Transmissions License fee which has to be paid during the entire validity of the Transmission Service Agreement is linked to quantum of power flow. The same is not possible to be ascertained. In view of above, it is requested to change the calculation for transmission license fees. It is mentioned that as per CERC regulations, it is linked to Revenue of the project.	Bidders are advised to ascertain themselves with prevailing UPSERC Regulations regarding Transmission License fees. Please also refer Clause 2.14.2 of the RFP.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		To assess the risk and cost of the Project.	
31.	**RFP** **Clause 2.14.2.2** ... **Central Electricity Regulatory Commission** (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-state Transmission and related matters) Regulations, 2009	Since the subject project is Intra State Transmission Project wherein the appropriate commission is defined as Uttar Pradesh Electricity Regulatory Commission (UPERC), the reference to CERC regulation is not understood. Kindly clarify which regulation shall prevail in case of different provisions notified by CERC and UPERC	Please note that as per Section 2, subsection 2.14.2.2 the prospective Bidders are required to familiarize themselves with the regulations and codes mentioned therein. As mentioned in the said provision, the reference of the said regulations/ rules and codes has been given in the own interest of the Bidders. Also, in terms of Section 2, sub-section 2.14.2.1, the Bidders shall make independent enquiry and satisfy themselves with respect to all the required information, inputs, conditions and circumstances and factors that may have any effect on his Bid.
32.	**RFP & TSA** **General**	We request you to clarify whether there are any deviations/addition in the RFP/TSA documents from the Standard Bidding documents (SBD) and if any, whether approval for the same has been taken or not. Please provide the list of the same, if any.	It is confirmed that there are no deviations in the RFP Documents from the SBD.
33.	**RFP** **General**	We request you to let us know the status of TSA signing. SPV Acquisition is linked to TSA Signing and it is very important to get the clearance before RFP	The copy of the signed TSA will be provided to the Bidders as per the time-line specified in the RfP document.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		Submission as this will impact the initiation of projects	
34.	**RFP** **Clause 1.5 (b):** To obtain approval for laying of overhead transmission lines under Section 68 of Electricity Act, from Appropriate Government at least twenty (20) days prior to Bid Deadline.	It is requested you to kindly provide present status of process initiated by BPC with regard to section 68 approval.	Approval U/S 68 of Electricity Act is under process and the same will be provided to the successful bidder.
35.	**RFP** **Clause 1.5 (d):** To initiate process of seeking forest clearance, if required.	It is requested you to kindly provide present status of Forest Clearances if any transmission line corridor area falling in wildlife forest / reserve forest/ mangroves.	BPC will complete its responsibilities as listed in the RFP documents. Please also refer Clause 2.1 & 2.14.2 of the RFP document. This is as per Standard Bidding Documents. No change is envisaged.
36.	**RFP** **Clause 1.6** The Ministry of Power and the appropriate State Government(s) have agreed to provide their support to the TSP, on best endeavor basis, in	We request you to share all such documents or correspondence happened with MOP and State Government, this will help the TSP is taking further approvals for the project.	The necessary support shall be provided on case to case basis.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	enabling the TSP to develop the Project.		
37.	**RFP** **Clause 1.8** Once the Successful Bidder is selected, the details and documents as may be obtained by the BPC in relation to the Project, shall be handed over to the Successful Bidder on as is where basis, so that it may take further actions to obtain all necessary Consents, Clearances and Permits and the TSP shall not be entitled for any extensions in the Scheduled COD of the Project except as provided for in the TSA.	BPC is requested to provide the list of details & documents to be handed over to the Successful Bidder.	BPC will provide all the requisite documents/ certification as required to be provided by the BPC under the Guidelines and the Bid Documents to the Successful Bidder after acquisition of the SPV.
38.	**RFP** **Clause 2.4** Within ten (10) days of the issue of the Letter of Intent, the Selected Bidder shall: a) provide the Contract Performance Guarantee in favour of the Long-Term Transmission Customers as per the provisions of Clause 2.12; b) execute the Share Purchase Agreement and	BPC will appreciated that the completion of said activities by the Selected Bidder within ten (10) days after issuance of LoI is very stringent. We request you to consider at least 30 days' time for completion of these activities.	This is as per Standard Bidding Documents. No change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	all other RFP Project Documents as listed in Annexure-3; c) acquire, for the Acquisition Price, one hundred percent (100%) equity shareholding of SPV [which is under incorporation] from PFC Consulting Limited, who shall sell to the Selected Bidder, the equity shareholding of SPV [which is under incorporation], along with all its related assets and liabilities; Stamp duties payable on purchase of one hundred percent (100%) of the equity shareholding of SPV [which is under incorporation], along with all its related assets and liabilities, shall also be borne by the Selected Bidder. d) make an application to the Appropriate Commission for the adoption of Transmission Charges, as required under section 63 of the Electricity Act 2003. e) execute the RFP Project documents in required number of originals so as to ensure that one original is retained by each party to		

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	the Agreement(s).		
39.	**RFP** **General**	Stamp duties payable for executing the RFP Project Documents shall be borne by the Successful Bidder We request you to provide Applicable Stamp Duty Charges and Amount of Stamp Paper for the following agreements : i. Transmission Service Agreement ii. Share Purchase Agreement iii. Power of Attorney iv. Share Transfer Form It will be helpful if you can specify the name of 1st party and 2nd party for purchase of stamp papers.	The value of stamp paper/stamp duty along with party for the following is given below; i) TSA – Rs. 100/- (1st Party : LTTCs 2nd Party : SPVs) ii) SPA – Rs. 100/- (1st Party : BPC, 2nd Party : SPV, 3rd Party, TSP) iii) PoA – Rs. 100/- iv) Share Transfer Form – 0.25% of Share Value at par of Rs. 1,00,000/-
40.	**RFP** Clause 2.15.4 Within ten (10) days of the issue of the Letter of Intent, the TSP shall apply to the Appropriate Commission for grant of Transmission License.	Clause 2.15.4 may be revised as mentioned below:- Within thirty (30) days of the acquiring 100% equity holding of "SPV" from PFC Consulting Limited, the TSP shall apply to the Appropriate Commission for grant of Transmission License. Application for grant of Transmission License is possible for successful bidder, only after completion of all the prerequisite activities such as	This is as per the Standard Bidding Documents. No change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		execution of RFP, signing of SPA and taking over of SPV. It may not be correct to link the application for grant of Transmission License from date of issuance of Letter of Intent. Once these activities are completed, the process for grant of transmission License can be initiated.	
41.	**RFP** **Clause 2.15.5** If the Selected Bidder / TSP fails or refuses to comply with any of its obligations under Clauses 2.15.2, 2.15.3 and 2.15.4, and provided that the Long Term Transmission Customer(s) and/or other parties to the respective RFP Project Documents are willing to execute the Share Purchase Agreement and PFC Consulting Limited is willing to sell the entire equity shareholding of SPV [which is under incorporation] , along with all its related assets and liabilities, to the Selected Bidder, such failure or refusal on the part of the Selected Bidder shall constitute sufficient grounds for cancellation of the Letter of Intent. In such cases, the BPC / its authorized representative(s) shall be entitled to invoke the	It is requested to kindly clarify as to what will be the consequences if the Selected Bidders fails to comply with any of its obligations under 2.15.2, 2.15.3 and 2.15.3 due to reasons beyond the control of or not attributable to Selected Bidder / TSP. As the consequences for failure to comply the obligations under 2.15.2, 2.15.3 and 2.15.3 is the cancellation of Letter of Intent (LOI). We request you to reconsider the same as it would be unfair if LOI of selected bidder is cancelled due to reasons beyond its control.	This is as per the Standard Bidding Documents. Provisions of RfP & TSA are amply clear and shall be applicable.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Bid Bond of the Selected Bidder.		
42.	**RFP** **Clause 2.13.2** The amendment to the RFP shall be notified to all the Bidders through the electronic bidding platform and shall be binding on them.	We understand that the BPC will also continue to share amendments / corrigendum through emails as per the current practice.	Provisions of RfP shall prevail.
43.	**RFP** **Clause 2.14** Provided that in the event of identical Levelised Transmission Charges derived from the Initial Offer having been submitted by one or more Bidders, all such Bidders shall be assigned the same rank for the purposes of determination of Qualified Bidders. In such cases, the fifty per cent shall stand enhanced to fifty per cent (with any fraction rounded off to higher integer) or four Qualified Bidders, whichever is higher, plus the number of Qualified Bidders, whose Levelised Transmission Charges derived from Initial Offer are identical minus the number of such identical Initial Offer.	We request you to clarify, if two or more bidders quote the same initial offer which turns out to be prevailing lowest levelized tariff and no further discount is offered by any bidder during e-reverse auction. In such case what will be the modility BPC will follow for award of project. BPC to confirm	In e-Reverse Auction, two bidders cannot have same price bid as every bid has to be necessarily less than the previous bid. In case of initial price offer as bids are encrypted, so two bidders may quote the same initial price offer. But in e-Reverse Auction even if a single bid is received, two bidders cannot be at the same price offer. If the Initial Price Offer for two or more bidders is same and no bid are quoted in e-Reverse Auction, then one of the bidders will have to be selected as L-1 bidder. In various projects, a common practice is to take the bid that was submitted earlier in the system as L1.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
44.	**RFP** Clause 3.3.2.2 The Levelized Transmission Charges shall be calculated by assuming uniformly the following for all the Bidders • Grant of Transmission License within 6 months from the date of Letter of Intent to the Selected Bidder by the BPC as per the timelines in Clause2.16.2 above. • Project to be commissioned on the date which is 18 months from issuance of LoI. Transmission Charges shall be levelised over a period from the Scheduled COD of the Project, up to 35 years.	Transmission charges are the charges to be paid after CoD. The first two bullets are activities prior to the CoD. The reason and the purpose of the first two bullets for calculating the levelized transmission charges may be clarified. The TSP agrees and undertakes to duly perform and complete the following activities within six (6) months from the Effective Date, unless such completion is affected due to the Long Term Transmission Customers' failure to comply with their obligations under Article 3.2 of this Agreement or by any Force Majeure Event, ... However, as per RFP Clause 3.3.2.2 the Grant of Transmission License is 6 months from the date of Letter of Intent and not the Effective date of the TSA. It is understood that the conditions of TSA would prevail over RFP. Further, TSP to obtain the transmission license within 6 months from effective date rather than from LOI date. Please confirm.	Clause 3.3.2.2 refers to assumptions and is self- explanatory. The evaluation of Bids shall be carried out in accordance with the tariff Illustration provided to the Bidders. The Bidder should note that the first two bullet points are not to be taken into account while calculating the Levelized Transmission Charges.
45.	**RFP**	We request you to kindly accept the Board resolutions passed by Management Committees formed by the Board of Directors of Bidding	The Board resolutions passed by the Management Committee with duly authorization from the Board of Directors to

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	General	Company and TEE / affiliate respectively and duly authorized by the Board of Directors for participation in various tenders issued by Govt. authorities in response to the RFP submission. The board meeting of Bidding Company & TEE / affiliate was conducted in May 2021 and the next board meeting may not be scheduled till RFP submission. Thus, we request you to kindly consider the board resolution passed by the management committee formed by the board of directors' w.r.t. Authorization from Bidding Company and TEE.	pass such resolution may be considered as per the provisions of RfP.
46.	**RFP Document** **SECTION 1 & SECTION 2** **Clause: 1.2, Note (i) & 2.15.1. Note (i)** "UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent."	Coordinates and plot plan of Land is required. Please specify area of land. To access the soil properties for estimation of civil works, approach road etc Estimation of boundary wall, internal roads, levelling etc	Land is in possession of UPPTCL and shall be handed over for construction to Successful developer after transfer of SPV. The land will be handed over to successful bidder free of cost on as is where is basis. Regarding condition of land bidders are advised to visit the site and ascertain themselves. Revised Tentative coordinates provided by UPPTCL for the proposed S/s at Mohanlalganj

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

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<tr><th>Sl. No.</th><th>Clause No. and Existing provision</th><th>Clarification Required</th><th>Clarifications</th></tr>
<tr><td></td><td></td><td></td><td>are as under:
<table><tr><th>Corners</th><th>Latitude</th><th>Longitude</th></tr><tr><td>Corner-1</td><td>26.678404</td><td>81.043200</td></tr><tr><td>Corner-2</td><td>26.679662</td><td>81.044283</td></tr><tr><td>Corner-3</td><td>26.679550</td><td>81.045654</td></tr><tr><td>Corner-4</td><td>26.679972</td><td>81.046940</td></tr><tr><td>Corner-5</td><td>26.677885</td><td>81.048038</td></tr></table>
However, it may be noted that the coordinates are tentative and bidders are advised to coordinate with UPPTCL for exact identification of the land.

Further, the revised survey report will be issued separately.</td></tr>
<tr><td>47.</td><td>RFP Document

SECTION 1 & SECTION 2

Clause: 1.2, Sl No (A)(1) & 2.15.1 (A)(1)

Construction of 400/220/132kV GIS substation,</td><td>1. Since the 400kV switching Scheme is One& half breaker, one additional circuit breaker bay is to be considered to complete the diameter of 400kV GIS scheme to accommodate the future 400kV feeder bay (1no.). Please confirm our understanding. Alternatively, if complete 400kV</td><td>GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.

In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit</td></tr>
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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Mohanlalganj, Lucknow, U.P. (including 125MVAR Bus Reactor) along with construction of following main bays at S/s: i. 400kV, 500 MVA ICT Bay - 2 nos. ii. 220kV, 500 MVA ICT Bay - 2 nos. iii. 220kV, 200 MVA ICT Bay - 2 nos. iv. 132kV, 200 MVA ICT Bay - 2 nos. v. 400kV, 125 MVAR Bus Reactor Bay - 1 no. vi. 400kV Feeder Bay - 4 nos. vii. 220kV Feeder Bay - 6 nos. viii. 132kV Feeder Bay - 2 nos. Construction of following additional Bays at S/s for future use: i. 400kV Feeder Bay - 2 nos. ii. 220kV Feeder Bay - 4 nos. 132kV Feeder Bay - 4 nos.	GIS diameter (Main-Tie-Main) is not mandatory, kindly confirm that only Main & Tie bay in a 400kV GIS Diameter shall also be acceptable. 2. Further, we have considered "400kV line bay with PIR" as additional main CB bay in 400kV GIS to complete the diameter. Please confirm. 3. Since total 220kV feeders at Mohanlalganj S/s is 10 nos (including future) which is greater than 8, one no. • Bus-sectionaliser bay and 2nos. bus-coupler bay (one for each section of bus) shall be considered. Please confirm our understanding. Further, in case bus sectionaliser is required, please indicate the feeder distribution as well. 2. Add: 220kV Bus Section bay – 02 nos. 1. & 2. Confirmation is required to consider additional CB bay to complete the 400kV GIS diameter. 3. In line with provisions of Manual on Transmission System Planning Criteria issued by	breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably. Bus-sectionaliser bay shall not be considered. In future 400 kV line Bay, PIR is required.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

<table>
<tr><th>Sl. No.</th><th>Clause No. and Existing provision</th><th>Clarification Required</th><th>Clarifications</th></tr>
<tr><td></td><td></td><td>CEA.</td><td></td></tr>
<tr><td>48.</td><td>RFP Document

APPENDIX

SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISISON LINES & 400/220/132 KV GIS SUBSTATION & COMMUNICATION SYSTEM

B. SPECIFIC TECHNICAL REQUIREMENTS FOR SUBSTATION

Clause 2.0 (C),

Insulation coordination

<table>
<tr><td></td><td></td><td>400kV</td><td>220kV</td><td>132kV</td></tr>
<tr><td>c.</td><td>Minimum creepage distance</td><td>13020 mm</td><td>7595 mm</td><td>4092 mm</td></tr>
<tr><td>d</td><td>Max. fault current</td><td>50 kA

For 1 sec</td><td>40 kA

For 1 sec</td><td>40 kA

For 1 sec</td></tr>
</table>
</td><td>1. As per insulation coordination, minimum creepage is 31mm/kV and as per system parameter minimum creepage of 25mm/kV for switchyard equipment is to be considered. We have considered minimum 31mm/kV for all outdoor bushings & insulator strings and minimum 25mm/kV for all other switchyard equipment. Please confirm

2. We have considered fault current or short circuit for 132kV system as 40kA for 1 sec. Please confirm.</td><td>1. Confirmed

2. Fault current or short circuit current for 132 kV system as 40kA for 3 sec will be considered.

Equipment short circuit current will be for 3 sec.

For 400 kV short circuit current is 63kA for 1 sec.</td></tr>
</table>

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	B. SPECIFIC TECHNICAL REQUIREMENTS FOR COMMUNICATION 765kV,400 kV & 220 kV system Parameters (Sl no: 8) Minimum Creepage distance for switchyard equipment (25mm/kV) Description of Parameter: 132kV system Rated short circuit current for 1 sec. Duration: 31.5 kA		
49.	**RFP Document** **APPENDIX** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISISON LINES & 400/220/132 KV GIS SUBSTATION & COMMUNICATION SYSTEM** B. SPECIFIC TECHNICAL REQUIREMENTS FOR SUBSTATION Clause : 4.1.1, Circuit Breaker ".....The Circuit breakers controlling 420 KV lines wherever required shall be provided with	Please specify the PIR requirement for 400 kV Circuit Breakers controlling future line feeders. As line length of future lines is not mentioned, requirement of PIR for 400 kV Circuit Breakers controlling future line feeders is to be finalized.	PIR is required for 400 kV circuit breaker controlling future line feeders.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	pre insertion closing resistor of about 400 ohms with 8 ms insertion time or Controlled Switching Device (CSD) for lines longer than 100 km....."		
50.	**RFP Document** **APPENDIX** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISISON LINES & 400/220/132 KV GIS SUBSTATION & COMMUNICATION SYSTEM** B. SPECIFIC TECHNICAL REQUIREMENTS FOR SUBSTATION Clause 4.1.10, Protection & Control: Transmission line protection "...400 kV, 220 kV and 132 kV lines shall have MAIN-I numerical three zone distance protection scheme with carrier aided inter-tripping feature. 400 kV, 220 kV and 132 kV lines shall also have MAIN-II numerical distance protection scheme like Main-I but from different make that of MAIN-I. Line Current Differential as Main–I & Main-II may be considered, for short lines (line length below 30 km) having Fibre Optic communication link. In case of loop in	1. Please provide line length of 220kV & 132kV lines to decide the protection scheme (Distance / Line differential) of above lines. In case line current differential relay is to be provided, we understand that matching relay (as loose item) is to be provided for remote end also. Please confirm. 2. For PLCC coupling methodology, please inform whether 220kV and 132kV lines are S/C or D/C lines. As per normal practice, we propose phase to ground coupling for 132 kV S/C lines. Please confirm. To decide line protection philosophy and PLCC coupling for 220kV and 132kV system.	LILO of 220 kV Chinhat-CG City – 31.7 km LILO of 220 kV Barabanki-Satrikh Road – 20 km 220 kV Mohanlalganj-Bijnor (D/C) – 20 km 132 kV Interconnection line (D/C) – 0.15 km Current differential relay is to be provided for 132kV lines. Interconnectors and relays to be provided for both ends of the lines. Phase to phase and inter-circuit coupling to be considered. 132 kV PLCC not required. CEA's guidelines will be complied where RFP is not there.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	loop out of transmission lines, the existing protection scheme shall be studied and suitable up-gradation (if required) shall be carried out. ...." Clause 4.1.12 PLCC "Coupling devices shall be suitable for 4400pF 400kV, 220 kV and 132 kV CVT. Phase to phase coupling for 400 kV line, 220 kV and 132 kV single circuit line shall be provided. For D/c line Inter circuit coupling can be provided...."		
51.	**General**	Please confirm the requirement of dedicated CT/CVT for dedicated tariff metering for 400kV, 220kV & 132kV lines. Further, we understood that requisite Energy meters would be provided & installed by STU/CTU free of cost to TSP in standalone metering panel. BPC to confirm our understanding.	Confirmed
52.	**RFP Document** **APPENDIX** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISISON LINES & 400/220/132 KV GIS**	Clarify the type of PD Monitoring system to be considered for 400kV, 220kV & 132kV System at Lucknow (Mohanlalganj) 400kV & 220kV System:	Online/offline PD Monitoring System may be decided by successful bidder as per its own practice as the project is being developed on BOOM basis.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	SUBSTATION & COMMUNICATION SYSTEM **B. SPECIFIC TECHNICAL REQUIREMENTS FOR SUBSTATION** **Clause 4.1.19**	Portable PD Monitoring System To Clarify the requirement of Online or off line PD Monitoring system	
53.	**RFP Document** **APPENDIX** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISISON LINES & 400/220/132 KV GIS SUBSTATION & COMMUNICATION SYSTEM** **B. SPECIFIC TECHNICAL REQUIREMENTS FOR SUBSTATION** **Clause 4.1.19** 400 kV , 125, 3-Phase Shunt Reactor	Please specify the separate I^2R losses for 125MVAR Bus Reactor for Mohanlalganj (Lucknow) GIS S/S. To clarify the I^2R losses requirement	I^2R losses for 125MVAR Bus Reactor is 90 KW.
54.	**General** **Conductor of 220kV and 132kV Transmission lines**	Please specify the type and configuration of Conductor for 220kV and 132kV lines. Design of takeoff gantry.	For 220kV Lines Zebra conductor and for 132kV lines Panther conductor.
55.	**RFP Document**	We understand that Feeder protection panel and associated PLCC equipment (Except Wave trap) are not to be considered in present scope for Future	Confirmed

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	SECTION 1 & SECTION 2 Construction of following additional Bays at S/s for future use: 400kV Feeder Bay - 2 nos. 220kV Feeder Bay - 4 nos. 132kV Feeder Bay - 4 nos.	use 400 kV, 220 kV & 132kV feeder bays. For proper estimation of Protection and PLCC equipment.	
56.	**RFP** **Clause 1.2** ... Note "UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent."	It is requested to provide the timeline for providing land. Possession of land is essential for the execution of the project and as such there should be clarity on the timelines for providing land to TSP. Any delay beyond the stipulated time line shall be construed as Force Majeure event for the TSP.	Land is in possession of UPPTCL and shall be handed over for construction to successful developer after transfer of SPV.
57.	**RFP** **Clause 1.2**	It is requested to inform the condition of land. Whether any levelling, tree-cutting etc. is to be taken up by TSP?	Bidders are encouraged to visit the substation site and access themselves.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	... Note "UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent."		
58.	**RFP** **Clause 1.2** ... Note "UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent."	Please provide the status of approach road for the land.	Approach road is available however bidders are advised to visit the substation site and access themselves.
59.	**RFP** **Clause 1.2** ...	Please inform whether any upfront / premium to be paid? What will be duration of lease agreement? What will be charges to be paid? What is the	No upfront/ premium required to be paid. No sub-lease/ lease agreement of land will be executed.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Note "UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent."	frequency (monthly / quarterly / yearly etc.) of payment	
60.	**RFP** **Clause 1.2** ... Note "UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent."	Whether sub lease / lease agreement of land from the UPPTCL to TSP will be executed?	No sub-lease/ lease agreement of land will be executed.
61.	**RFP** **Introduction, Clause No. 1.2, Page. No.** **12 & 13,** (A-2) LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS	Location of Tapping point of all proposed LILO lines and location of gantry required. For Route alignment	The tentative location of Tapping point and their termination have already been shared with bidders who have purchased the RfP documents. However, Bidders may note that the coordinates provided in the Survey Report

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	substation Mohanlalganj (on Twin Moose Conductor). (A-3) LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)" (B-1) LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing. (B-2) LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur. (C-1) LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida.		are to facilitate the Bidders to locate the Sub Station/ Switchyard and this coordinates should not be consider as the point of termination/ emanation of transmission line. The Bidder shall coordinate with the agency providing inter Connection facility for exact point of termination/ emanation of transmission line.
62.	**RFP** **Introduction, Clause No. 1.2, Page No.13** LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	We suggest of using D/C Line Instead of using two S/C Line to reduce any ROW issues. Kindly confirm	2 nos. S/C lines are to be constructed, however only for the river crossing span and forest area D/C line can be considered.
63.	**RFP** **Introduction, Clause No. 1.2, Scope of Work,**	Please inform, if bays for LILO line required to be constructed by TSP at respective locations of	As per scope of RfP, construction of bays at Rampur and Noida are not in the scope of

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Page No.13 B. Construction of LILO line: 1. LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing. 2. LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur C. Construction of LILO Line on Monopole: 1. LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	Rampur (765 kV and 400 kV) and Noida (400 kV). Please confirm if TSP is to connect the LILO lines at respective bays at Rampur and Noida. We assume that, bays gantries are available and TSP to consider only consider up to gantries with line side insulators and hardwares in present scope. For proper cost estimation	TSP. However, connection of lines on gantries is in the scope of TSP.
64.	**RFP** **Introduction, Clause No. 1.2, Scope of Work, Page No.13** B. Construction of LILO line: 1. LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing. 2. LILO of one circuit 400 kV Bareilly (PGCIL) -	With respect to above clarification, if respective bays are in the scope of TSP, kindly inform: 1. If space will be provided free of cost. 2. Layout of existing substations. 3. CRP/SAS of existing substation. 4. Provision of AC/DC feeders for present bays in existing ACDB/DCDB.	As per scope of RfP, construction of bays at Rampur and Noida are not in the scope of TSP. However, connection of lines on gantries is in the scope of TSP.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Moradabad D/C line on 765 kV GIS S/S Rampur C. Construction Of LILO Line on Monopole 1. LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	5. If PEB is to be extended by TSP for present bays or space is available inside PEB building. For proper cost estimation	
65.	**RFP** **Introduction, Clause No. 1.2, Page no. 13** (C-1) LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	Since this line comes in Ghaziabad & Noida, please clarify that required permission from local authority to lay the monopole line in whose scope. If it is in bidder scope than local authority allow us to installed monopole tower? For proper cost estimation	Obtaining permissions from various authorities for laying off Transmission Lines are in the scope of TSP. Wherever required TSP shall be apply for the same. UPPTCL shall provide necessary help if required.
66.	**RFP** **Introduction, Clause No. 1.2, Page no.13** LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	Continuation with previous clarification, We suggest of using D/C Line Instead of using two S/C Line at least at river crossing location (Ganga&Ramganga). Kindly confirm For proper cost estimation	Kindly refer reply at Sl. No. 62 above.
67.	**RFP** **Introduction, Clause No. 1.2, Note i, Page. No.**	Please provide details of Lease basis (i.e., Lease rent, lease period etc.)	Kindly refer reply at Sl. No. 56, 57, 58 and 59 above.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	13, "UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent."	Also clarify that, 1. Can TSP select their own viable location within 5 Kms Radius of proposed GIS substation at Mohanlalganj (Lucknow). 2. If TSP is free to select their own location of proposed GIS substation at Mohanlalganj (Lucknow), then provide range of selection of location	2. Not Applicable
68.	**RFP** **Appendix A: Specific Technical Requirements for Transmission Lines (Page No. 83)** **Clause 5.0 & 5.1, Conductor Configuration**	Please mention types of Conductor and Status of OPGW/earthwire configuration on all Existing lines	765 kV Ghatampur-Hapur line - Quad Bersimis, OPGW – 1 no. and Earthwire – 1 no. Bareilly-Moradabad line – Twin Moose, OPGW – 1 no. and Earthwire – 1 no. Ataur-Indirapuram line – Quad Moose, OPGW – 1 no. and Earthwire – 1 no.
69.	**RFP** **Appendix A: Specific Technical Requirements for Transmission Lines, Clause no. 6.0, Page No.83** **The required phase to phase spacing and horizontal spacing for 765kV & 400 kV D/C line shall be governed by the tower design as well**	As per CBIP publication: 323 July 2014 Page -87 & 89 Swing Angles & Electrical clearances for "I" Suspension String & Jumper are as follows.	Confirmed

"I" Suspension Insulator / Jumper Without Pilot		
765 kV	Clearance in meter	Swing angle in Degree
	1.3	55°
	4.4	25°

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<table>
<tr><th>Sl. No.</th><th>Clause No. and Existing provision</th><th>Clarification Required</th><th>Clarifications</th></tr>
<tr><td></td><td>as minimum live metal clearances for 765kV and 400kV voltage level respectively under different insulator swing angles.

(a) For 765 kV transmission lines:

The minimum live metal clearances for 765 kV line may be considered as follows:

(i) Under stationary conditions

From tower body:

For 765 kV S/C : 5.6 m

(ii) Under swing conditions for 'I' String

for outer phases

A (0°) Type tower</td><td><table><tr><td></td><td>5.6(S/C)
6.1(D/C)</td><td>0°</td></tr></table>
The different values of swing angle for different towers furnished in RFP and the deviation angle of towers furnished are non-standard. Kindly confirm the above values of swings & clearance to be considered for this project.</td><td></td></tr>
<tr><td>70.</td><td>RFP

Appendix A: Specific Technical Requirements for Transmission Lines, Clause no. 8, Page no.85

"..... Shielding angle shall not exceed 20 deg for 765 kV S/C line & 400 kV D/C line D/C transmission lines."</td><td>For 765 KV / 400KV D/C lines, shielding angle is not clear.

As per CBIP publication: 323 July 2014 Page -79

<table><tr><td>Sr No.</td><td>AC Voltage</td><td>Angle of shield of EW</td></tr></table></td><td>As per CBIP</td></tr>
</table>

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		1 | 400/420 | 20° 2 | 765/800 | 20° for S/C, 10° for D/C Kindly confirm.	
71.	**Appendix B. Specific Technical Requirements for Substation.** **Clause No. 4.1.8 and 4.1.9, Page no.91 to 98** **Specification for power transformer and shunt reactor.**	Please inform, if TSP to follow the specification provided or the standard specifications issued by CEA recently. For proper cost estimation	Yes Bidders are to meet the technical requirements mentioned in the RFP documents. However where information not available in RFP, specification issued by CEA shall be adhered to.
72.	**RFP** **Appendix C: Specific Technical Requirements for Communication, Page No. 106, Clause given is:** "On 765 kV S/C and 400 kV D/C transmission lines one earth wire and one OPGW containing 24 fibers is to be installed by the TSP in place of conventional earth wire during the construction of line for grid management and substation operation purpose by STU/CTU and 48 fibers to be installed on LILO lines. The installation of	From given clause, it is not clear that which gantry should be considered for termination of OPGW. Please specify termination point both side of OPGW for all LILO lines with core size. For proper cost estimation	Terminations by approaching cable inside S/s premises where FOTE is installed. FODP shall be provided for the same.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	OPGW shall be done from gantry of one substation up to gantry of another substation and shall be terminated in a joint box by the TSP at both ends.		
73.	**RFP** **General Scope of work** **RFP - INTRODUCTION**	It is also understood that incumbrance free land will be provided by UPPTCL.	Land is in possession of UPPTCL and shall be handed over for construction to Successful developer after transfer of SPV.
74.	**RFP** **Specific Technical Requirement for Substation** **4.1.8 Power Transformer**	Transformer and Reactor specification mentioned in Cl 4.1.8 and 4.1.9. BPC to confirm the same is to be follow by TSP or the latest CEA guideline for ICT & Reactor.	Bidders are advised to follow the specification mentioned in Clause 4.1.8 and 4.1.9 of the RfP document for specification of Transformer and Reactor.
75.	**RFP** **Specific Technical Requirement for Substation** **2.0 Insulation Coordination**	Minimum Creepage distance for 132kV is 4092. BPC to confirm the same as it should be 4495.	Minimum Creepage distance for 132 kV of 4495 is confirmed.
76.	**RFP** **General Scope of work** **INTRODUCTION**	We understood that only line termination work is in scope, Line bay with equipment is not in the scope. BPC to confirm the same. If Line Bay with equipment is in scope of work,	Confirmed

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	B) Construction of Lilo Line: 1. Lilo of 765kv Ghatampur- Hapur (WUPPTCL) line on 765kv GIS SS Rampur with River crossing 2. Lilo of one circuit 400kV Bareilly (PGCIL)-Moradabad D/C line on 765kv GIS SS Rampur	please clarify the following requirements: 1. GIS building extension required or not. 2. Existing GIS module make and model. 3. Existing SS drawing (SLD, Layout and Earthing) for 765kV Rampur GIS indicating Line bay under present scope of work. 4. Whether spare feeder is available in ACDB/DCDB for bay extension works or not. BPC to clarify. Also BPC to confirm whether existing auxiliary systems are designed considering the load for present scope of works. 5. We understand that existing equipment such as DG Set, LT Transformer ,Battery & Battery charger have sufficient capacity to cater the requirements of bay under present scope of work, hence no need to consider new DG Set, LT Transformer, Battery & Battery charger in the existing substations. BPC to confirm the same. 6. We understand that in existing substation, for adjacent future bay, gantry/towers shall be	Not Applicable

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		suitable for gantry extension. BPC to confirm. Since it's a bay extension works within existing premises, BPC to provide the scope of boundary wall & development of other infrastructures if any within plot.	
77.	**RFP** **General Scope of work** **INTRODUCTION** C) Construction of Lilo Line: Lilo of one circuit on monopole of 400kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400kV GIS SS Sector-123, Noida.	We understood that only line termination work is in scope, Line bay with equipment is not in the scope. BPC to confirm the same. If Line Bay with equipment is in scope of work, please clarify the following requirements: 1. GIS building extension required or not. 2. Existing GIS module make and model. 3. Existing SS drawing (SLD, Layout and Earthing) for 400kV Sector -123, Noida GIS indicating Line bay under present scope of work. 4. Whether spare feeder is available in ACDB/DCDB for bay extension works or not. BPC to clarify. Also BPC to confirm whether existing auxiliary systems are designed	Confirmed Not Applicable

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		considering the load for present scope of works. 5. We understand that existing equipment such as DG Set, LT Transformer ,Battery & Battery charger have sufficient capacity to cater the requirements of bay under present scope of work, hence no need to consider new DG Set, LT Transformer, Battery & Battery charger in the existing substations. BPC to confirm the same. 6. We understand that in existing substation, for adjacent future bay, gantry/towers shall be suitable for gantry extension. BPC to confirm. Since it's a bay extension works within existing premises, BPC to provide the scope of boundary wall & development of other infrastructures if any within plot.	
78.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** **Clause 3.0**	Considering reliability level 2 as per cl 3.0 of RfP, the pole structures for LILO of 400kV Atuar-Indrapuram at Noida Sec-123, shall become very heavy and line construction will be difficult in an already congested area as mentioned in Sl. No. 1. Accordingly, reliability level-1 may be considered	Reliability level 2 as per CEA guideline and relevant IS802 is to be considered.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	765kV towers, triple and quadruple circuit towers and towers with more than two sub conductors per phase upto 400kV shall be designed for reliability level 2.	for this line. The pole diameter will be very large for Reliability level 2, which may be difficult to manufacture. Also, there are very limited vendors for such high diameter poles	
79.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** **Clause 3.0** Towers shall be designed as per IS-802:2015. However, drag coefficient of the tower shall be as follows:- ...	Drag co-efficient indicated in IS-802:2015 is for Single Frame Structures, as also clarified in Table 31 of IS 875(Part 3):2015. However, for transmission line towers wherein Multiple frames are involved, shielding factors as per Table 32 of IS-875(Part 3) shall also be required to be considered. After considering, the Shielding factor, the final values of Drag coefficient for Towers has been illustrated in Table 33 of IS-875 (Part3)-2015, which is same as that adopted in IS-802: 1995. Therefore, presently also, the drag coefficients as per earlier IS-802 -1995 is being considered for tower designs and the same is also specified in RfP of all previous ISTS/ Intra-state systems including Meerut-Simbhavali Project. Towers shall be designed as per IS-802:2015, however the drag coefficient of the tower shall be as follows:- **Solidity Ratio** | **Drag Coefficient** Upto 0.05 | 3.6	Bidders are to follow the drag co-efficient table mentioned in the RfP document.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		0.1 | 3.4 0.2 | 2.9 0.3 | 2.5 0.4 | 2.2 0.5 and above | 2.0 Modifications proposed as per technical requirements & prevailing practice	
80.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** **Clause 6.0 a) (ii)** ..... 'V' String (Tower type A & B) Central phase and Tower type 'C' (all phases) and V-Pilot for towers D (Central phase	At C towers, V Suspension Strings are stipulated for all phase, however only tension string can be used on these large angle towers (0-30deg). BPC may accordingly confirm Cl. 6.0 a) (ii)..... 'V' String (Tower type A & B) Central phase ~~and Tower type 'C' (all phases)~~ and V-Pilot (for tower **types C** & D) Central phase For clarity	Bidders are to follow the specifications as mentioned in the RfP document.
81.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** **Clause 4.0 A)** For power line crossing of 400kV or above	Cl 4.0 and Cl 15.0 vii) seem contradictory. Cl 15.0 vii) may be modified in line with Cl 4.0 For clarity	Clause 4.0 is applicable for transmission line towers and Clause 15.0 vii) is applicable for Monopole.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	voltage level, large angle & dead end towers (i.e. D/DD/QD) shall be used on either side of power line crossing (i.e D/DD/QD- D/DD/QD arrangement). **Clause 4.0 B)** For power line crossing of 132kV and 220kV voltage level, angle towers (B/C/D/DB/DC/DD/QB/QC/QD) shall be used on either side of power line crossing depending upon the merit of the prevailing site condition and line deviation requirement. **Clause 15.0 vii) Power Line Crossings** Where the line is to cross over another line of 132 kV or above voltage level, PD type pole or DD type tower with suitable extensions shall be used, depending upon merit of the prevailing site condition.....		
82.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES**	Under Clause 15.0 v) Details of Line Material, the Mechanical strength of Single Tension Insulator string is indicated as 4X120kN and no. of individual units per string is indicated as 4X1. Mechanical strength of Single Tension Insulator	Bidders are to follow the specifications as mentioned in the RfP document.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		string may be revised. Under Clause 15.0 v) Details of Line Material, the Mechanical strength of Single Tension Insulator string may be indicated as 1X120kN and no. of individual units per string is indicated as 1X1. Modifications proposed as per technical requirements & prevailing practice.	
83.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** **Sl. 6 of table at Clause 15 v)** OPGW overall dia(mm) given as 0.98	Since, OPGW size is not standard and its diameter may vary for different voltage levels & wind zones, the minimum diameter may be only specified. Minimum OPGW overall dia (mm) ~10.98. Modifications proposed as per technical requirements & prevailing practice	Kindly refer Amendment no. 1.
84.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** **Clause 2.0-** IS steel section of tested quality in conformity with IS 2062:2011, grade E250 (Designated yield strength 250 MPa) and/or grade E-350 Designated yield strength 350 MPa) are to be	In case of pole structures, higher steel grade (having yield strength upto 450 MPa) may also be permitted. Clause 2.0- IS steel section of tested quality in conformity with IS 2062:2011, grade E250 (Designated yield strength 250 MPa) and/or grade E-350 Designated yield strength 350 MPa) are to be used in towers, extensions, gantry structures and stub setting templates. However, use of steel grade	Bidders are to follow the specifications as mentioned in the RfP document.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	used in towers, extensions, gantry structures and stub setting templates. However, use of steel grade having designated yield strength more than 350 MPa is not permitted	having designated yield strength more than 350 MPa is not permitted. In case of pole structures, use of steel grade having designated yield strength of IS:2062 grade E450 BR/ EN 10025 grade S450 JO / ASTM 572 grade 65 (designated yield strength 450 MPa) may also be used. However, for Pole Structures higher steel grade (having yield strength more than 450 MPa) shall not be permitted. Modifications proposed as per technical requirements & prevailing practice	
85.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** **Clause 15.0 ii)** For Tension Pole (PD): One earthwire or any two conductor broken or any three conductor broken at a time on same side, whichever is more stringent for a particular section.	Please clarify, whether the PD pole has to be designed for Dead condition also?	Confirmed
86.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR**	As per CBIP Manual, deflection upto 2% is permissible under everyday condition.	Bidders are to follow the specifications as mentioned in the RfP document.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	TRANSMISSION LINES **Clause 15.0 ii)** **Deflection Criteria:** 5% of height of pole @ultimate load conditions and 1.5% of the height of pole @ everyday condition (safety normal)	Clause 15.0 ii) **Deflection Criteria:** 5% of height of pole @ultimate load conditions and **2%** of the height of pole @ everyday condition (safety normal) Modifications proposed as per technical requirements	
87.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** **Clause 15.0 vi) Railway Crossings** ....The following are the important features of the prevailing regulations (revised in 1987) e) Minimum ground clearance above rail level of the lowest portion of any conductor under condition of maximum sag shall be maintained at 22.0 m for 765kV line and 17.90 m for 400kV/220kV/132kV transmission lines.	For railway crossings, the latest amendment of revised Indian Railways Schedule of Dimensions, 2004. Accordingly, Minimum ground clearance requirements may also be modified. Clause 15.0 **vi) Railway Crossings** All the railway crossings coming enroute the transmission line shall be identified by the Contractor. At the time of detailed survey, the railway crossings shall be finalized as per the regulation laid down by Railway Authorities and the **latest amendment of revised Indian Railways Schedule of Dimensions, 2004** **Presently**, following are the important features of the **latest amendment of revised Indian Railways Schedule of Dimensions, 2004 (as per Addendum**	Bidders are to follow the specifications as mentioned in the RfP document.

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<table>
<tr><th>Sl. No.</th><th>Clause No. and Existing provision</th><th>Clarification Required</th><th>Clarifications</th></tr>
<tr><td></td><td></td><td>
& Corrigendum Slip (ACS) No.20 (dated 17.07.2017) & 21 (dated 27.09.2017))

.....

....

e) The crossing span will be limited to 300 meters or 80 % of the normal span for which the structure are designed whichever is less.

f) Minimum ground clearance between crossing conductor under condition of maximum sag and railway line shall maximum of following:

i) Vertical Clearance for OHE (other than high rise OHE):
<table>
<tr><th rowspan="2">Sl.</th><th rowspan="2">Transmission line voltage level</th><th>Minimum Clearances From Rail Level</th></tr>
<tr><th>New Power Line Crossing or Crossing Planned for Alteration</th></tr>
<tr><td>1</td><td>Above 66kV & up to 132 kV</td><td>15.56m</td></tr>
<tr><td>2</td><td>Above 132kV & up to 220 kV</td><td>16.46m</td></tr>
<tr><td>3</td><td>Above 220kV & up to 400 kV</td><td>18.26m</td></tr>
</table>
</td><td></td></tr>
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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications

4	Above 400kV & up to 500 kV	19.16m
5	Above 500kV & up to 800 kV	21.86m

ii) Vertical Clearance for high rise OHE*:

Sl.	Transmission line voltage level	Minimum Clearances From Rail Level
		New Power Line Crossing or Crossing Planned for Alteration
1	Above 66kV & up to 132 kV	17.56m
2	Above 132kV & up to 220 kV	18.46m
3	Above 220kV & up to 400 kV	20.26m
4	Above 400kV & up to 500 kV	21.16m
5	Above 500kV & up to 800 kV	23.86m

* Applicable only for electrification of routes where double stack container having maximum height of 6809mm is plying.

iii) Minimum Clearances between Highest Traction Conductor& Lowest Crossing conductor:

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		1 Above 66kV & up to 132 kV — 3.05m **2 Above 132kV & up to 220 kV — 4.58m** **3 Above 220kV & up to 400 kV — 5.49m** **4 Above 400kV & up to 500 kV — 7.94m** **5 Above 500kV & up to 800 kV — 7.94m**	
88.	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES**	Please allow common Ganga River crossing stretch as well as forest stretches for LOOP IN portion as well as LOOP OUT portion of 765kV D/C Ghatampur-Hapur can be constructed on 765kV D/C towers. This is line with prudent utility practices. In order to conserve right-of-the way, economy & construction time. To get timely forest clearance.	Kindly refer reply at S. No. 62 above.
89.	**RFP**	Tower schedule and kmz of existing lines for which LILO is to be done, may be provided. So as to ascertain the number of transposition towers. For correct estimation	The tentative location of Tapping point and their termination have already been shared with bidders who have purchased the RfP documents. However, Bidders may note that the coordinates provided in the Survey Report are to facilitate the Bidders to locate the Sub

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
			Station/ Switchyard and this coordinates should not be consider as the point of termination/ emanation of transmission line. The Bidder shall coordinate with the agency providing inter Connection facility for exact point of termination/ emanation of transmission line.
90.	**RFP** **Clause 2.14.2.4** The BPC has carried out a survey of the Transmission Lines associated with the Project and shall provide each Bidder with its Survey Report of the Project ...	Survey report may be provided	Survey report has already been issued to the bidders who have purchased the RfP documents. However, Bidders may note that the coordinates provided in the Survey Report are to facilitate the Bidders to locate the Sub Station/ Switchyard and this coordinates should not be consider as the point of termination/ emanation of transmission line. The Bidder shall coordinate with the agency providing inter Connection facility for exact point of termination/ emanation of transmission line.
91.	**RFP** **Note i. of Cl. 1.2** UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation	The coordinates and layout of land may be provided. Further amount of payment against lease rent and modalities of transfer of land to the TSP along with present status may also be stipulated	Kindly refer reply at Sl. No. 46 above.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent		
92.	**RFP** **Clause 1.2** Construction of following extra bay for future extension i. 400kV Feeder Bays – 2 nos. ii. 220kV Feeder Bays – 4 nos. iii. 132kV Feeder Bays – 4 nos.	We understood that GIS hall to be consider for only present bays and Space for future bays not considered present GIS building. Kindly confirm.	The scope mentioned in the clause 1.2 is amply clear. Bidders are required to construct extra bays for future extension as per the scope.
93.	**RFP** **Specific Technical Requirement for Substation** **Clause 4.1.12 PLCC** **For LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400kV S/c line on 400kV GIS Substation Mohanlalganj (on Twin Moose Conductor)**	Please confirm OPGW spare cores are available in existing line or not. And using tele-protection and communication by PLCC only.	Available
94.	**RFP** **Note i. of Cl. 1.2** UPPTCL to provide adequate land for	As per note it is mentioned that land will be issued free of cost or at a nominal lease rent. Please confirm whether the land is acquired or not. If UPPTCL will give on lease basis please confirm the	Kindly refer reply at S. No. 46 above.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent	lease rent.	
95.	**RFP**	The Coordinates and layout/orientation of bay at 400kV GIS at Noida Sec-123 may be provided for finalizing entry of LILO of 400kV Indirapuram-Ataur Line.	Bidders are advised to visit site and ascertain themselves.
96.	**RFP** **Annexure-6: Format 1: Bidder's Undertaking** 2. We confirm that the Project shall also comply with the standards and codes as per **Clause 0** of the RFP and the TSP shall comply with the provisions contained in the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations 2004, UP Electricity Grid Code, 2007 and the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 made pursuant to Section 177(2) of the Electricity Act, 2003,as amended from time to time.	It appears a typographical error as "Clause 0", kindly clarify and suggest relevant clause. For clarity purpose	Please refer Amendment No.1.
97.	**RFP Document**	It is observed that layout of 400/220/132kV GIS Mohanlalganj substation will not accommodate	Adequate land for construction of 400kV GIS

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	SECTION 1 & SECTION 2 **Clause 1.2, Note(i) & Clause 2.15.1. Note (i)** *"UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent."*	effectively on the plot plan which comes from coordinates provided by UPPTCL/BPC due to its trapezoidal shape and low width corners may not be utilized effectively. Please provide adequate area and shape of land to accommodate 400/220/132kV GIS Mohanlalganj substation layout more effectively. Required to accommodate 400/220/132kV GIS Mohanlalganj substation layout	Substation will be provided by UPPTCL.
98.	**General** **Construction of Boundary wall**	It is understood that land provided by the BPC shall be the part of another land owned by UPPTCL. Please confirm about availability of boundary wall and approach road. To decide the civil works.	Boundary wall on two sides and approach are available. However, Bidders are advised to visit the site and ascertain themselves.
99.	**RFP** **Section-1, Clause 1.2** Completion Target for transmission element at Sr.No B(1)- LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing- mentioned as "Last date of 15th month from the date of issuance of LoI"	It is to inform that there are two Ganga River and Ramganga River crossings respectively for each line (2XS/C) and which will attract multiple pile foundations. For construction of the pile foundations itself, minimum time required is 12-14 months. The route length of this line is also 2X 118km, with multiple power line crossings, NH & SH crossings and Railway Crossings which will also require another 12-14 months to complete. Considering the reasons above other challenges	Completion period will remain same as mentioned in the RfP document. Further, please refer Amendment no. 1.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		like RoW & others and construction feasibility, BPC is hereby requested to increase the completion target of minimum "24th month from the date of issuance of LoI".	
100.	**RFP and Survey Report** **Section-1, Clause 1.2** Completion Target for transmission element at Sr.No C(1)- LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida - mentioned as "Last date of 9th month from the date of issuance of LoI"	It is to inform that the line is to be drawn from the metropolitan city of Noida and Ghaziabad and needs NH-24 crossings and other wider road crossings in Noida. As per the BPC survey report, the line is proposed to be drawn along the road from AP-2 to AP-25 of Alt -1. As we understand that to construct the line along the road as shown in BPC survey report will require various approvals from different authorities, before taking up the construction work in hand. Also we understand that there is constraint of RoW LILO point to 400kV GIS S/s Sector-123 Noida as all round there are high rise buildings and getting clear RoW of 46M is a challenge. Entire line is extremely high RoW Prone and will be difficult to access of land for construction and not practical to estimate fair value of RoW compensation for this entire alignment. Additionally, it will not be practical to construct the line in 9 months, being limited space along the alignment and to construct the Foundation, Erection and Stringing works, it will require various	The route proposed in the survey report is tentative and only for the reference. However, it is the responsibility of TSP for securing ROW encountered in the route for construction of the line. Bidders are advised to ascertain themselves fully the RoW problems, ROW compensation as per prevailing rules and regulations of respective State and should take necessary actions as may be required as per Clause 2.14.2 of RfP before submitting their bid.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		support and permission various authority to carryout the construction works without disturbing traffics and others. It might be that some works needs to be done in night also based on the permission and local conditions. BPC is requested to freeze the corridor for the route, which will be easy for TSP to construct the line in the given corridor by BPC and to avoid other challenges of RoW issues etc. and give the minimum construction timeline of 18 months from the date of issuance of LOI.	
101.	**RFP & Survey Report** **LILO IN 765KV Ghatampur - Hapur (WUPPTCL) Line at Rampur Ss**	In the given Survey report kml file is in .DWG form and in Survey Reports various inputs are blank. BPC is requested to give us the route in kml format along with complete survey report.	Survey report along with kmz file has already been issued to the bidders.
102.	**RFP** **Clause 2.15: Project Schedule** The payment of Transmission Charges for any Element irrespective of its successful commissioning on or before its Scheduled COD shall only be considered after successful commissioning of the Element(s) which are pre-required for declaring the commercial operation	1. The Elements commissioned from 9 months and 15 months from date of issuance of LoI, Will such Elements be eligible for 35 Contract years from commissioning on individual basis or for 35 Contract years from Scheduled SCOD of the Project? 2. Please clarify which Contract year tariff would be applicable for Billing of Transmission Charges for elements commissioned before Project SCOD, as Bidders are required to quote	Please refer Amendments regarding effective date for CoD of the project. The provisions of RfP regarding payment of transmission charges before scheduled COD of the project is amply clear and shall be applicable. It may be noted that bidders are required to quote transmission charges for a period of 35 years as per tariff illustration sheet considering Scheduled CoD for overall project

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	of such Element....	Transmission Tariff for a period of 35 Contract years commencing from the Scheduled COD of the Project. Clarity is required since it has impact on finacial bid.	of 18 months from effective date. The elements which are commissioned earlier than Scheduled CoD of overall project, transmission charges shall be payable proportionately as per quoted tariff till over all CoD is achieved.
103.	**RFP** **Specific Technical Requirements for Transmission Lines** **Clause No. 3.0, Page no. 82** Towers shall be designed as per IS-802:2015.	Drag Coefficient required to be considered as per IS-802:1995. For designing of tower.	Bidders are to follow the drag co-efficient table mentioned in the RfP document.
104.	**RFP** **General Scope of work**	In One and Half breaker scheme, the diameter shall be complete with feeder/line side isolator to be used for any future bay and GIS duct of the future bay shall be brought outside the GIS hall/Building with extension/interface module suitably. BPC to confirm the same.	Confirmed.
105.	**RFP** **Specific Technical Requirement for Substation**	BPC to confirm following requirement. 1. RFP is silent about Optical communication. BPC to confirm the requirement.	1. Online/offline PD Monitoring System may be decided by successful bidder as per its own practice as the project is being developed on BOOM basis.

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<table>
<tr><th>Sl. No.</th><th>Clause No. and Existing provision</th><th>Clarification Required</th><th>Clarifications</th></tr>
<tr><td></td><td></td><td>2. It is understood that Online PD measuring device and PMU is not required. Hence, TSP does not consider in present scope of supply.</td><td>2. PMU requirement need to analyzed as per Grid Operating Standards/ POSOCO guidelines.</td></tr>
<tr><td>106.</td><td>RFP

Specific Technical Requirement for Substation</td><td>As 220kV & 132kV line is not in TSP scope, It is understood that, PLCC equipment with associated line is not considering under present scope.

BPC to confirm the same.</td><td>Confirmed</td></tr>
<tr><td>107.</td><td>RFP

Appendix – A

Clause 3.0 on Page 82

Towers shall be designed as per IS-802:2015. However, drag coefficient of the tower shall be as follows: -</td><td>Tower to be designed for correct drag coefficient.

Towers shall be designed as per IS-802:2015. However, drag coefficient of the tower shall be as follows: -

<table><tr><th>Solidity Ratio</th><th>Drag Coefficient</th></tr><tr><td>Up to 0.05</td><td>3.6</td></tr><tr><td>0.1</td><td>3.4</td></tr><tr><td>0.2</td><td>2.9</td></tr><tr><td>0.3</td><td>2.5</td></tr><tr><td>0.4</td><td>2.2</td></tr><tr><td>0.5 and above</td><td>2.0</td></tr></table>
To have clarity of requirements for Transmission Line</td><td>Bidders are to follow the drag co-efficient table mentioned in the RfP document.</td></tr>
</table>

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	<table><tr><th rowspan="3">Sl No.</th><th rowspan="3">Solidity Radio Φ</th><th colspan="3">Force Coefficient, C_f</th></tr><tr><th rowspan="2">Flat Sided Members</th><th colspan="2">Circular Sections</th></tr><tr><th>Sub-Critical Flow ($DV_d < 6m^2/s$</th><th>Super Critical Flow ($DV_d \geq 6\ m^2/s$)</th></tr><tr><td>(1)</td><td>(2)</td><td>(3)</td><td>(4)</td><td>(5)</td></tr><tr><td>i)</td><td>0.1</td><td>1.9</td><td>1.2</td><td>0.7</td></tr><tr><td>ii)</td><td>02</td><td>1.8</td><td>1.2</td><td>0.8</td></tr><tr><td>iii)</td><td>0.3</td><td>1.7</td><td>1.2</td><td>0.8</td></tr><tr><td>iv)</td><td>0.4</td><td>1.7</td><td>1.1</td><td>0.8</td></tr><tr><td>v)</td><td>0.5</td><td>1.6</td><td>1.1</td><td>0.8</td></tr><tr><td>vi)</td><td>0.75</td><td>1.6</td><td>1.5</td><td>1.4</td></tr><tr><td>vii)</td><td>1.00</td><td>2.0</td><td>2.0</td><td>2.0</td></tr></table>		
108.	**RFP** **Appendix – A** **Clause 4.0 d) on Page 83** For crossing of railways, national highways and state highways, transmission line with large angle & dead-end towers (i.e. D/DD/QD) shall be used on either side of crossing.	For Highways Tension Tower as per deviation angle shall be used. For crossing of railways, transmission line with large angle & dead-end towers (i.e. D/DD/QD) shall be used on either side of crossing. For national highways and state highways, transmission line with angle towers (i.e. B/C/D/DB/DC/DD/QB/QC/QD) shall be used on either side of crossing.	Bidders are to follow the specification as mentioned in the RFP document.
109.	**RFP** **Appendix – B** **Clause 6.0 a) on Page 83** **a) <u>For 765 kV transmission lines:</u>**	1) Electrical Clearance requirement cannot be different for each Tower type. It is common for Kindly confirm. 2) Tower Type A (0°), B (0°-5°), C (0°-30°), D (30°-60°) defined, but selection of deviation angles should be left to TSP.	Bidders are to follow the specification as mentioned in the RFP documents and relevant Indian standards.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	The minimum live metal clearances for 765 kV line may be considered as follows: (i) Under stationary conditions From tower body: For 765 kV S/C : 5.6 m (ii) Under swing conditions for 'I' String for outer phases: A (0°) Type tower **Wind pressure Condition** / **Minimum electrical clearance** a) Swing angle (0°) — 5.6 m b) Swing angle (25°) — 4.4 m c) Swing angle (55°) — 1.3 m B (0°-5°) Type tower **Wind pressure Condition** / **Minimum electrical clearance**	3) Leave choice to TSP whether, use "V" String and/ or "I" string. The minimum live metal clearances for 765 kV S/C line may be considered as follows: (i) Under stationary conditions From tower body: 5.6 m (ii) Under swing conditions Wind pressure Condition Wind pressure Condition / Minimum electrical clearance a) Swing Angle 25º — 4.4 mtrs b) Swing Angle 55º — 1.3 mtrs However, the phase to phase spacing for 765kV line shall not be less than 15m. As per IS 5613 and recent practices followed under TBCB projects.	

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications

a) Swing angle (20°)	5.6 m
b) Swing angle (41°)	4.4 m
c) Swing angle (64°)	1.3 m

Under swing conditions for 'I' Pilot String for 4x50 Kg counterweight on outer phases:

C (0°-30°) Type tower

Wind pressure Condition	**Minimum electrical clearance**
a) Swing angle (15°)	5.6 m
b) Swing angle (25°)	4.4 m
c) Swing angle (40°)	1.3 m

D (30°-60°) Type tower

Wind pressure Condition	**Minimum electrical clearance**
a) Swing angle (20°)	5.6 m

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	b) Swing angle (30°) 4.4 m c) Swing angle (40°) 1.3 m 'V' String (Tower type A & B) Central phase and Tower type 'C' (all phases) and V-Pilot for towers D (Central phase) To boom frame steel 5.1 m To window frame 5.6 m However, the phase to phase spacing for 765kV line shall not be less than 15m.		
110.	**RFP** **Clause No 1.2 -A-1 under Section 1 of RFP,** Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.	Kindly confirm whether future bays to be totally equipped with GIS and AIS equipments or only space to be kept for future extention. In continuation, if only space to be kept whether GIS building need to be sized considering future bays or provision of open space would be sufficient. If the future bays to be equipped then whether secondary items related to those bays (Like CRP, Lt Cable, PLCC etc) need to be supplied or not.	The scope mentioned in the clause 1.2 is amply clear. Bidders are required to construct extra bays for future extension as per the scope.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
111.	**RFP** **Clause No. 4.1.1 under Appendix B, Specific Technical Requirements for Substation,** The Circuit breakers controlling 420 KV lines wherever required shall be provided with pre insertion closing resistor of about 400 ohms with 8 ms insertion time or Controlled Switching Device (CSD) for lines longer than 100 km.	Kindly confirm the following Proposed Line Length. 1. 400 kV Sarojani Nagar-Mohanlalganj 2. 400 kV Unnao - Mohanlalganj 3. 400 kV Lucknow PGCIL - Mohanlalganj 4. 400 kV Sultanpur – Mohanlalganj In continuation, if future bays to be equipped, please confirm if any future 400 kV Feeder Bays need to be considered over 100 kM.	The tentative location of Tapping point and their termination have already been shared with bidders who have purchased the RfP documents. However, Bidders may note that the coordinates provided in the Survey Report are to facilitate the Bidders to locate the Sub Station/ Switchyard and this coordinates should not be consider as the point of termination/ emanation of transmission line. The Bidder shall coordinate with the agency providing inter Connection facility for exact point of termination/ emanation of transmission line.
112.	**RFP** **General**	Mandatory Spare Whether mandatory spare need to be considered, if yes, whether the same shall be vendor specific or any list to be shared.	It is the responsibility of the TSP to establish the Project on build, own, operate and maintain basis as per the terms of the TSA and other RFP Project Documents;
113.	**TSA** A) In accordance with the Bidding Guidelines, the Bid Process Coordinator (hereinafter referred to as BPC) had initiated a competitive e-reverse bidding process through issue of RFQ and RFP for selecting a Successful Bidder to	Role of selected bidder and TSP needs to be clear. A) In accordance with the Bidding Guidelines, the Bid Process Coordinator (hereinafter referred to as BPC) had initiated a competitive e-reverse bidding process through issue of RFQ and RFP for selecting a Successful Bidder who shall acquire the TSP. The	Recital of the TSA is to be read with the definitions and Articles of the TSA. Also read Recital B of the TSA in this regard. It is explicitly understood that the execution of the project shall be by the TSP.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	build, own, operate and maintain the Project comprising of the Elements mentioned in Schedule 2 (hereinafter referred to as the Project)	TSP shall build, own, operate and maintain the Project comprising of the Elements mentioned in Schedule 2 (hereinafter referred to as the Project) TSP is the entity to build, own, operate and maintain the project and not the selected 'Successful Bidder'. The anomaly is to be corrected / redrafted. Provisions have to be properly aligned to reflect the desired course of action.	No change is envisaged.
114.	**TSA** B) Pursuant to the said e-reverse bidding process, the BPC shall identify the Selected Bidder as the TSP, who will be responsible to set up the Project on build, own, operate and maintain basis and to provide Transmission Service on long term basis to the Long Term Transmission Customers on the terms and conditions contained in this Agreement and the Transmission License.	Role of selected bidder and TSP needs to be clear. B) Pursuant to the said e-reverse bidding process, the BPC shall identify the Selected Bidder who shall acquire the TSP. The TSP will be responsible to set up the Project on build, own, operate and maintain basis and to provide Transmission Service on long term basis to the Long Term Transmission Customers on the terms and conditions contained in this Agreement and the Transmission License. TSP is the entity to build, own, operate and maintain the project and not the selected 'Successful Bidder'. The anomaly is to be corrected / redrafted. Provisions have to be properly aligned to reflect	Recital of the TSA is to be read with the definitions and Articles of the TSA. Also read Recital B of the TSA in this regard. It is explicitly understood that the execution of the project shall be by the TSP. No change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		the desired course of action.	
115.	**TSA** Definitions: "Commercial Operation Date" or "COD" shall mean the date as per Article 6.2; Article 6.2: Commercial Operation: 6.2.1 An Element of the Project shall be declared to have achieved COD seventy two (72) hours following the connection of the Element with the Interconnection Facilities or seven (7) days after the date on which it is declared by the TSP to be ready for charging but is not able to be charged for reasons not attributable to the TSP or seven (7) days after the date of deferment, if any, pursuant to Article 6.1.2. Provided that an Element shall be declared to have achieved COD only after all the Element(s), if any, which are pre-required to have achieved COD as defined in Schedule 3 of this Agreement, have been declared to have achieved their respective COD.	The definition of Commercial Operation Date in the TSA may be aligned to the definition furnished in the RFP. Further, as per Grid Code notified by CERC, the CoD is different. Keeping in view the multiple definitions of CoD, it is requested to provide a clear and unambiguous definition of CoD which is to be considered for the Project. COD has been defined in the RFP and uniformity needs to be maintained.	This is as per the Standard Bidding Documents. No change is envisaged. However, definition of COD in the TSA shall prevail.
116.	**TSA**	A draft copy of the Connection Agreement may be furnished.	Connection Agreement is provided after processing of CON4 submitted by the TSP as

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Connection Agreement	Alternatively, the webpage link may be provided.	per the UPSERC regulations.
117.	**TSA** **Schedule 5** 1.3 Recovery from Short Term Transmission Customers The Transmission Charges to be paid by the Long Term Transmission Customers to the TSP shall stand reduced in proportion to their then existing Allocated Project Capacity at the end of the relevant month, to the extent of adjustable revenues from Short Term Transmission Customers. The charges payable by the Short Term Transmission Customers shall be calculated on the basis of the provisions of the Central Electricity Regulatory Commission (Open Access in Inter-state Transmission) Regulations, 2008 , Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 (as the case may be) or as amended from time to time	Reduction of Transmission charges to be paid by the LTTCs to the extent of Short Term Transmission charges revenues is not clear. Why should the LTTCs pay less Transmission charges to the TSP to the extent of Short Terms Transmission charges ? This shall unpredictably reduce the revenue of the TSP. In such case, the Short Term Charges shall be payable to TSP. Reduction in Adopted charges of TSA which is dependent on Short Terms Charges. In such case, the Short Term Charges shall be payable to TSP. Uncertainty in revenue to the TSP.	This is as per the Standard Bidding Documents. No change is envisaged.
118.	**TSA**	There should be a provision in the TSA to cover the revenue loss that may be incurred by the TSP, in	The Provisions of the TSA are amply clear and

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Clause no 2.3: Conditions prior to the expiry of the Transmission License 2.3.1 In order to continue the Project beyond the expiry of the Transmission License, the TSP shall be obligated to make an application to the Appropriate Commission at least two years before the date of expiry of the Transmission License, seeking the Appropriate Commission's approval for extension of the term of Transmission License upto the Expiry Date. 2.3.2 The TSP shall timely comply with all the requirements as may be laid down by the Appropriate Commission for extension of the term of the Transmission License beyond the initial term of 25 years and the TSP shall keep the Long Term Transmission Customers fully informed about progress on its application for extension of the term of Transmission License.	the case of the Appropriate Commission not granting extension of the Transmission License beyond the period of 25 years. The Transmission Charges to be quoted by the bidders would be based on the cash flow generated from the Project for 35 years and if, for any reason not attributable to the TSP (including any change in law), the Transmission License is not extended by the Appropriate Commission beyond 25 years the TSP will suffer significant losses. The RFP / TSA should be suitably modified to provide security of continuation of the transmission business for at least 35 years.	shall apply. This is as per the Standard Bidding Documents. No change is envisaged.
119.	**TSA** **Clause 3.1.1** Within ten (10) days from the date of issue of Letter of Intent , the Selected Bidder, on behalf of the TSP shall provide the Contract Performance Guarantee, acquire for the	Given the past experience, after the issuance of LoI, the clearance for signing the SPA by the BPC itself takes about one month (30 days). During this period approvals have to be obtained from the competent authority for furnishing inputs to signing of the SPA. The timeline of 10 days is unworkable and as such atleast 30 days have to be	This is as per the Standard Bidding Documents. The provisions of the TSA shall apply.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Acquisition Price, one hundred percent (100%) equity shareholding of ..... along with all its related assets and liabilities, and apply to the Appropriate Commission for grant of Transmission License.	provided. A copy of the signed SPA and its reference has to be made in the Application for grant of Transmission License and Application for adoption of Transmission charges. The date as such for fulfilling the conditions for filing application before appropriate commission has to be reckoned from the readiness of BPC to sign the SPA. 3.1.1 Within thirty (30) days from the date of issue of Letter of Intent , the Selected Bidder, on behalf of the TSP shall provide the Contract Performance Guarantee, acquire for the Acquisition Price, one hundred percent (100%) equity shareholding of ..... along with all its related assets and liabilities, and apply to the Appropriate Commission for grant of Transmission License within 30 days from the date of LoI or the written communication from BPC regarding the date of its readiness to sign the SPA, whichever is later. Non fulfilling of the conditions have ramifications on the selected bidder as per the TSA and accordingly, the time period has to be realistic.	
120.	**TSA**	Suggested text to be added at the end of this Article :	The provisions of the TSA are amply clear and shall apply.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Clause 3.3.1: If any of the conditions specified in Article 3.1.3 is not duly fulfilled by the TSP even within three (3) Months..... in accordance with the provisions of this Agreement	"..... The additional Contract Performance Guarantee, if any provided by the TSP for delay in fulfilment of condition subsequent, shall be returned by the LTTC(s) on fulfilment of conditions subsequent by the TSP" The additional CPG is for specific default(s) and once such default(s) cease to exist, this additional amount of CPG should be returned. Additional CPG cannot be held back by the LTTC till COD of the Project.	This is as per the Standard Bidding Documents. No change is envisaged.
121.	**TSA** **Clause 3.3.4:** In case of inability of the TSP to fulfil the conditions specified in Article 3.1.3 due to any Force Majeure Event, the time period for fulfilment of the condition subsequent as mentioned in Article 3.1.3, shall be extended for a period of such Force Majeure Event, subject to a maximum extension period of three (3) Months, continuous or non-continuous in aggregate. Thereafter, this Agreement may be terminated by the Majority Long Term Transmission Customers or the TSP on mutually agreeable basis by giving a notice of at least	The terms and conditions for termination of the TSA under this Article, including the termination payment and status of the SPV, need to be provided in the TSA. The maximum extension for fulfilling conditions subsequent on account of Force Majeure Event is permitted up to 3 months. In case the Force majeure event continues for more than 3 months, the TSA will be terminated and the CPG will be returned. Other expenses that would have been incurred till the date of termination of the TSA including the Acquisition Price paid for Acquiring the SPV and	This is as per the Standard Bidding Documents. No change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	seven (7) days, in writing to the other Party, with a copy to the Appropriate Commission and the Lenders' Representative and the Contract Performance Guarantee shall be returned as per the provisions of Article 6.5.2.	other incurred costs shall also be explicitly stated. There should be a explicit provision for refund of the Acquisition Price, along with the other expenses incurred by the TSP / Selected Bidder till such date of termination.	
122.	**TSA** **Clause 6.3** Liquidated Damages for delay due to Long Term Transmission Customer Event of Default or Direct Non Natural Force Majeure Events or Indirect Non Natural Force Majeure Events or Natural Force Majeure Event (affecting the Long Term Transmission Customer)	Non-escalable and Escalable charges together make the Transmission charges. Why should the charges payable limited to non-escalable charges only? Escalable charges also should be included. It is worthy to note that LD in case of TSP delay (Clause 6.4 of TSA) in achieving COD is governed by Transmission charges and not limited to Non-escalable charges. A) The provisions of TSA reproduced below call for payment of Transmission charges and does not discriminate between Non-escalable and Escalable charges: 6.2.1 An Element of the Project shall be declared to have achieved COD seventy two (72) hours following the connection of the Element with the Interconnection Facilities or seven (7) days after the date on which it is declared by the TSP to be ready for charging but is not able to be charged	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents. No change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		for reasons not attributable to the TSP or seven (7) days after the date of deferment, if any, pursuant to Article 6.1.2. 6.2.2 Once any Element of the Project has been declared to have achieved deemed COD as per Article 6.2.1 above, such Element of the Project shall be deemed to have Availability equal to the Target Availability till the actual charging of the Element and to this extent, shall be eligible for payment of the Monthly Tr. Charges applicable for such Element. B) Revised Standard Bid document (Case-II), PPA (As revised on 12.03.2010) as accessed from Ministry of Power website on 21.03.2013; http://powermin.nic.in/JSP_SERVLETS/internal.jsp **Name of the document:** Power Purchase Agreement for Tariff Based Bidding Process for Procurement of Power on Long Term Basis from Power Stations to be setup at Specified Location. As per the aforementioned document : ▪ Quoted **Capacity Charge** Shall mean the sum total of Quoted Non Escalable Capacity	

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		Charge and Quoted Escalable Capacity Charge; Quoted Energy Charge Shall mean [the sum total of Quoted Non Escalable Energy Charge and Quoted Escalable Energy Charge] (as applicable); ▪ Further as per provision 4.7 of the aforementioned document, Liquidated damages for delay due to Procurer Event of Default and Non Natural Force Majeure Events and Natural Force Majeure Event (affecting the Procurer) is governed by the total **Capacity charges** and not limited to the Non-escalable capacity charges. As is understood Energy charges are not applicable in case of Transmission whereas, **Capacity charges** (Non-escalable + Escalable charges) are synonymous with the **Transmission charges** (Non-escalable + Escalable charges) and the treatment has to be similar. In view of above, the provisions in the TSA of the RFP bidding document may be suitably modified to reflect the provisions adopted under Competitive bidding.	

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
123.	**TSA** **Clause 10.1:** Subject to provisions of this Article 10, the Long Term Transmission Customers shall pay to the TSP, in Indian Rupees, on monthly basis, the Monthly Transmission Charges from the date on which an Element(s) has achieved COD until the Expiry Date of this Agreement, unless terminated earlier, in line with the provisions of Schedule 5 of this Agreement.	Subject to provisions of this Article 10, the Long Term Transmission Customers shall pay to the TSP, in Indian Rupees, on monthly basis, the Monthly Transmission Charges from the date on which an Element(s) has achieved COD **or deemed to have achieved COD** until the Expiry Date of this Agreement, unless terminated earlier, in line with the provisions of Schedule 5 of this Agreement. As per clause 6.2 of the TSA, the TSP is eligible for payment of Transmission charges from the date of deemed COD.	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents. No change is envisaged.
124.	**TSA** **Clause 10.6.2** b. an amount payable by the TSP to Long Term Transmission Customer pursuant to a Long Term Transmission Customer's Invoice as per provisions of this Agreement,	May kindly clarify under what circumstances will an amount be payable by TSP to Long Term Transmission Customer. To assess the risk associated in the Project.	Please refer clause 2.14.2 of RFP.
125.	**TSA** **Surcharge** **Clause 10.8.1** Any amount due from one Party to the other,	It is understood that the Payment Surcharge shall be calculated on simple rate basis from the Due Date i.e., from the 30th date of the invoice until the amount due is actually received by the payee. To confirm our understanding.	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	pursuant to this Agreement and remaining unpaid for thirty (30) days after the Due Date, shall bear Late Payment Surcharge @ 1.25% per month on the unpaid amount. Such Late Payment Surcharge shall be calculated on simple rate basis and shall accrue from the Due Date until the amount due is actually received by the payee. Due date definition "Due Date" in relation to any Invoice shall mean the thirtieth (30th) day after the date on which any Invoice is received and duly acknowledged by the Long Term Transmission Customer (or, if that day is not a Business Day, the immediately following Business Day), and by such date, the Invoice is payable by the Long Term Transmission Customer;	To assess the risk associated in the Project.	
126.	**TSA** **Clause 10.11.1 (i) (ii)** ... If such Long Term Transmission Customer still fails to pay such amount within a period of thirty (30) days after the issue of notice by TSP as mentioned in (i) above, the TSP shall approach the RLDC / SLDC (as the case may be) requesting for the alteration of the schedule of dispatch of the	The following may be clarified : a) Is there any agreement / direction for the RLDC/SLDC to comply in case the TSP approaches the RLDC/SLDC under the stated provisions. b) Is there any agreement / direction for the Central Generating Stations/State Generating	This is as per the Standard Bidding Documents. The provisions of the TSA are amply clear and shall apply. Also please refer to clause 2.14.2 of the RFP.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	lowest cost power of such Long Term Transmission Customer(s) from the Central Generating Stations/ State Generating Stations (as the case may be), and the RLDC / SLDC shall continue to reschedule the lowest cost power till all the dues of the TSP are recovered; - Provided that in this case, the quantum of electricity and the corresponding period in which it would be rescheduled for dispatch shall be corresponding to the amount of default. This electricity will then be dispatched to other utilities by the concerned RLDC/SLDC, as the case may be, during the peak hours, i.e., 7pm to 10 pm. The price of this electricity will be determined as per the UI rate; - Provided further that the revenue from such diverted power would be used to pay the dues first of the generating company (which would include the capacity charges as well as the energy charges) and the remainder would be available for covering the default amount and the balance (if any), after recovering both the charges, would be paid to the defaulting Long Term Transmission Customer.	Stations to comply in case the TSP approaches the RLDC/SLDC under the stated provisions. c) Why should the Central Generating Stations/State Generating Stations comply to a direction owing to non-payment of Intra State Transmission Charges by a State Utility. d) Why should another 30 days be provided to start the regulation when already adequate time and notice is provided. The same may be reduced to 7 days. e) The provisions shall be allowed to be invoked not only in case of default of payable but also in case LC is not established as per the requirement of the TSA. f) As per the provision it is stated that Capacity Charges also shall be paid to the Generating Company. May kindly confirm. For queries sought at a), b) and c) in case no specific clarification is given it shall be presumed that BPC has ensured that all such provisions are agreed by the entities for scheduling / rescheduling of power.	

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		To estimate the risk in the project. For queries sought at a), b) and c) in case no specific clarification is given it shall be presumed that BPC has ensured that all such provisions are agreed by the entities identified for scheduling/ rescheduling of power.	
127.	**TSA** **Clause 11.7 Available Relief for a Force Majeure Event** (b) every Party shall be entitled to claim relief for a Force Majeure Event affecting its performance in relation to its obligations under this Agreement.	The heading states Available relief for a Force Majeure event. What is the available relief for a Force Majeure event is not mentioned although the entitlement is stated. The same has also been pointed out CERC in one of its Order. Accordingly, the nature of available relief has to be stipulated. All type of relief including time and cost shall be available as per the provisions of the bidding document.	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents. No change is envisaged.
128.	**TSA** **Clause 12.1.2** Notwithstanding anything contained in this Agreement, Change in Law shall not cover any	Kindly enumerate the various regulatory measures covered under Clause 12.1.2 a of the TSA. Any tax applied on the income or profits of the TSP need to be covered under change in law.	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	change: a. on account of regulatory measures by the Appropriate Commission including calculation of Availability; and b. in any tax applied on the income or profits of the TSP.	To estimate the regulatory risks. Tax is an element beyond the control of the TSP.. Change in tax or introduction of any tax is covered under change in law. Tax rate applicable on the income or profits of the TSP is beyond the control of the TSP and to assume the same for 35 years shall be a risk which is best assumed by the LTTCs accordingly this is to be reviewed.	No change is envisaged.
129.	**TSA** **Clause 12.2.1 During Construction Period:** During the Construction Period, the impact of increase/decrease in the cost of the Project in the Transmission Charges shall be governed by the formula given below: - For every cumulative increase/decrease of each ....in the cost of the Project up to the Scheduled COD of the Project, the increase/decrease in non-escalable Transmission Charges shall be an amount equal to ..... of the Non-Escalable Transmission	A. Why should the applicable charges be governed according to the Non-escalable charges only.	This is as per the Standard Bidding Documents. No change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Charges.		
130.	**TSA** **Schedule: 5** Computation of Transmission Charges Clause 1.2.1	Please provide an illustrative calculation for Monthly Transmission Charges as per the formula given in the relevant clause	The computation of transmission charges as mentioned in clause 1.2.1 of Schedule 5 of TSA is self-explanatory.
131.	**RFP & TSA** Definitions & Schedule-3,5,6 "Element" shall mean each Transmission Line or each circuit of the Transmission Lines (where there are more than one circuit) or each bay of Sub-station or switching station or HVDC terminal or inverter station of the Project, which has a separate Scheduled COD as per Schedule 3 of this Agreement and has a separate percentage for recovery of Transmission Charges on achieving COD as per Schedule 6 of this Agreement; "Contract Year", for the purpose of payment of Transmission Charges, shall mean the period beginning on the COD, and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning	Transmission charges are to be quoted - For the Project as a whole - For 35 years Transmission charges are quoted for 35 years as per the format provided in Annexure-4 of the RFP /Schedule-6 of TSA Whereas, as per the table provided in the Schedule-3, more than one element sets constitute the subject project with an identified schedule and percentage share of the quoted yearly transmission charges. Scheduled COD for the Project is defined as 18 months from the date of Issuance of LoI. In order to understand the methodology of entitled payment of transmission charges, the following may kindly be clarified: **1. <u>Whether the Project COD shall be achieved</u>**	The provisions of the RfP are amply clear and shall prevail. This is as per the Standard Bidding Documents. Transmission charges shall be payable as per provisions of TSA.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	on April 1 and ending on March 31 provided that the last Contract Year shall end on the last day of the term of the TSA; "Expiry Date"shall be the date which is 35 (thirty five) years from the Scheduled COD of the Project; "Monthly Transmission Charges" for any Element of the Project, after COD of the Element till COD of the Project, and for the Project after COD of the Project, shall mean the amount of Transmission Charges for the relevant Contract Year as specified in Schedule 5 of this Agreement; "Operating Period" for any Element of the Project shall mean the period from (and including) the COD of such Element of the Project, up to (and including) the Expiry Date and for the Project, shall mean the period from (and including) the COD of the Project, up to (and including) the Expiry Date;	**only on achieving COD for all the elements identified in the Project scheme?** **If yes, then in case the one set of elements achieves COD in one financial year and the other set of elements achieve COD in next financial year then :** i. **What will the Transmission charges (applicable contract years) payable for one set of elements and the other set of elements** ii. **Will the Transmission charges for the Project be reset from the date of COD of Project and continue for 35 years as quoted?** As a BPC, it is obligatory to clarify the issues with an example so as to make it clear to both the bidders and the LTTCs (UP). In case no clarity is provided, then billing by TSP has to be accepted by LTTCs without disputes.	
132.	**RFP & TSA** S. No. 9, Annexure-6 of RFP	The table provides aggregate percentage of transmission charges for multiple elements. Although, the elements are required to be commissioned simultaneously, it is requested to	Provisions of RfP are amply clear. No change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		provide percentage of transmission charges for individual element.	
133.	**TSA** **6.1 Connection with the Inter-connection Facilities:** 6.1.1 The TSP shall give the RLDC(s), CTU/ STU, as the case may be, the Long Term Transmission Customers and any other agencies as required at least sixty (60) days advance written notice of the date on which it intends to connect an Element of the Project, which date shall be not earlier than its Scheduled COD or Schedule COD extended as per Article 4.4.1 of this Agreement, unless the Lead Long Term Transmission Customer otherwise agrees. 6.2.1 An Element of the Project shall be declared to have achieved COD seventy two (72) hours following the connection of the Element with the Interconnection Facilities or seven (7) days after the date on which it is declared by the TSP to be ready for charging but is not able to be charged for reasons not attributable to the TSP or seven (7) days after the date of deferment, if any, pursuant to	Reference is drawn to the Order of CERC 4/ADP/2016 dated 23.03.2016. Relevant extract of the Order is reproduced hereunder: "In the event the inter-connection facilities are not ready by SCOD or by revised SCOD (as may be revised by the petitioner and the LTTCs for the purpose of availing incentive as per MOP Policy) on account of non-readiness of the upstream or downstream transmission assets while the petitioner`s transmission system is ready for commissioning, the COD of the transmission assets of the petitioner may be declared in accordance with the provisions of Article 6.2 of the TSA (to be known as "deemed COD") and the LTTCs/developers of the upstream and downstream assets shall be liable to pay the transmission charges from the deemed COD till the transmission assets are put into actual use." From above, it is seen that even in case of SCOD when the systems are declared deemed COD as per Article 6.2 of TSA, till the transmission assets are put into actual use, the transmission charges are liable to be paid by LTTCs/developers of the	This is as per the Standard Bidding Documents. At present there is no standard implementation agreement are available to be executed with upstream/downstream stake holders, however, the successful bidder may execute the implementation agreement (if necessary) with various stake holders on mutually agreed terms and conditions.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Article 6.1.2. Provided that an Element shall be declared to have achieved COD only after all the Element(s), if any, which are pre-required to have achieved COD as defined in Schedule 3 of this Agreement, have been declared to have achieved their respective COD. 6.2.2 Once any Element of the Project has been declared to have achieved deemed COD as per Article 6.2.1 above, such Element of the Project shall be deemed to have Availability equal to the Target Availability till the actual charging of the Element and to this extent, shall be eligible for payment of the Monthly Transmission Charges applicable for such Element.	upstream and downstream assets. In view of above, it is requested to clarify /confirm the following: a) Given that a new set of entities " Upstream and Downstream developers" has been stated in the Order of CERC, the definition of 'Upstream and Downstream developers" may be incorporated in the RFP documents b) Further, the list of Upstream and Downstream developers are required to be identified in the bidding document and consent from them to pay the transmission charges in deemed COD conditions is to be furnished. Whilst on the subject reference is also drawn to a recent Supreme Court Order CIVIL APPEAL NO. 9193 OF 2012 with CIVIL APPEAL NO. 9302 of 2012 dated 03.03.3016 that beneficiaries could not have been made liable to pay the tariff before transmission line was operational. Keeping in view above, the BPC is requested to take a holistic view and provide a clear understanding in the bidding conditions regarding the CoD after taking approval of CERC in terms of para 4.1 of Tariff Based Competitive Bidding	

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		Guidelines for Transmission Service issued by MoP, GoI. This aspect has been particularly also pointed in the aforesaid Order of CERC. (Refer para 33, Page 19 of 22 of CERC Order wherein it is stated that "We direct the BPC to ensure that if any material deviation is made in the TSA, the approval of the Commission should be invariably sought before incorporating the same in the TSA.").	
134.	**TSA**	Following are the observations of CERC in their recent Orders : "to submit the information with regard to quality control mechanism available or to be put in place by to ensure the compliance of the requirements stipulated in Article 5.1.1 and Article 5.4 of the TSA." "We consider it necessary to request CEA to devise a mechanism for random inspection of the project every three months to ensure that the project is not only being executed as per the schedule, but the equipment and workmanship of the project conforms to the Technical Standards and Grid Standards notified by CEA and IS Specifications." Given the aforesaid observations of CERC the same may incorporated in the bidding document and not	Observations of CERC shall be binding on TSP.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		be treated as a post bid development. To ensure that new risks are not bestowed on the developer at a later stage.	
135.	**TSA**	In case the Transmission project / elements achieve completion, who shall be liable to pay the transmission charges in case : a) Interconnection facilities are not ready. To understand the certainty of revenue and risk associated in the provisions of the documents.	The provision of the TSA shall prevail.
136.	**TSA** **Clause 18.1.5** Any decision taken by Long Term Transmission Customers, who taken together constitute sixty five percent (65%) of the Allocated Project Capacity and constitute in number at least fifty percent (50%) of the total number of Long Term Transmission Customers (hereinafter referred to as "Majority Long Term Transmission Customers"), shall be binding on the Lead Long Term Transmission Customer and all other Long Term Transmission Customers. Majority Long Term Transmission Customers shall also have	As per Schedule 8, B) Rights and Obligations of the Long Term Transmission Customers required to be undertaken by the Majority Long Term Transmission Customers have been specified. Further, as per the clause, Majority Long Term Transmission Customers have been identified as those who should : i) constitute sixty five percent (65%) of the Allocated Project Capacity **<u>and</u>** ii) constitute in number at least fifty percent (50%) of the total number of Long Term	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents. No change is stipulated.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	the right to replace the Lead Long Term Transmission Customer by any other Long Term Transmission Customer of their choice. All decisions taken by the Majority Long Term Transmission Customers in this Agreement shall be conveyed by the Lead Long Term Transmission Customer.	Transmission Customers. As per the List of LTTCs and allocation capacity identified at Schedule-1, there could be a situation wherein Majority LTTCs cannot be constituted thereby the obligations cannot be discharged and remain undecided. Eg. A set of LTTCs with more than 65% allocation capacity may be together for a decision, however, may not meet the 50% of LTTCs requirement. The other set of LTTCs would obviously have atleast 50% of LTTCs but would not meet the 65% allocated capacity condition. In such situations there is an impasse. The LTTCs would be unable to discharge their obligations leading to a situation wherein the TSP is denied a decision envisaged in the documents. The issue as such may be examined and clarified. To understand the risk of the project	
137.	**General**	Appellate Order	Provisions of TSA shall be applicable.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		Dated 14.09.2020 Appeal No 17 of 2019 Payment of Transmission Charges and Liquidated Damages in case project is not commissioned on SCoD. The following is mentioned in the Appellate Order dated 14.09.2020 on Appeal No 17 of 2019: ... *"....the licensee whose assets have been delayed may end up paying transmission **charges more than its project cost**. Clearly, the levy of transmission charges of the Appellant on the Respondent No 2 would not have been justified when there is **no contract between the parties**...."* ... *"...The Commission in the impugned order and order dated 29.03.2019 has decided that even if the COD of the transmission licensee has been extended on account of Force Majeure event, the licensee has to pay transmission charges for upstream/downstream assets for the period of delay. **Therefore, the bidder has to mandatorily***	

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		consider this scenario while submitting the bid. We fail to understand rationale behind this as to how a transmission licensee can submit a reasonable bid when it is not aware of the liability pertaining to anticipated duration of such delay and the cost of the upstream/down-stream assets before submitting the bid. *The same is equally applicable for the delay on achievement of COD on account of force majeure events by the projects implemented/being implemented through Regulated Tariff Mechanism (RTM). The infrastructure projects involving huge investments must not be part to such regulatory uncertainities that too, without remedy"* ... *"...Therefore, such transmission charges in absence of a contract, are more in the nature of 'damages' for delay in commissioning of assets and cannot be qualified as sharing of transmission charges. However, breach of contract is a pre-condition to claim 'damages' under Section 73 and Section 74 of the Indian Contract Act, 1872. In this context, it is undisputed that there exists no contract between the licensees implementing the interlinked transmission systems in such cases. Therefore, it is not prudent on part of the Commission to impose*	

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		such liability on the transmission licensees without entering into a contract/IA... " *"...In light of the above, we feel that it would be just and proper for the commission to take a fresh view in this regard considering all the aspects. The Commission is further directed to develop a mechanism in line with the observations made by this Tribunal in the forgoing paragraph after due stakeholder consultation. We opine that the Regulations framed/principles adopted by the Commission while undertaking its functions must be reasonable, consistent and in accordance with prevailing laws ..."* .... From the above, it is evident that there is requirement of developing a fresh mechanism to deal with the scenarios of payment of transmission charges in case inter-linked transmission system / upstream / downstream being developed by other license is not ready. Further, from the bidding point of view, as per Appellate Order, all liabilities and quantum of liability should be known to bidders before bidding to submit rational bidding. Therefore, it is requested to inform all the liabilities for bidders in	

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		case the project is not commissioned on time. As per the Appellate order, the Regulations should : ▪ Not lead to levy of **DISPROPORTIONATE** penalties on the developer in comparison to the scope of the developer ▪ Not lead to **UNCERTAIN** liabilities on the developer ▪ The Actual liabilities to be known **UPFRONT** to the developer before bidding ▪ Ensure that penalties are not levied on parties (Tr. Licensee and Upstream / downstream) **IN CASE THERE IS NO CONTRACT AGREEMENT** ▪ Ensure that in case **DELAY** of the Developer is **CONDONED**, then - No additional liability/ penalty should be imposed - Actual COD becomes the Scheduled CoD and the charges would be payable for 35 years from the Actual COD. In view of above regulatory uncertainty and non-clarity of all the liabilities in case project is not	

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		commissioned on time, a holistic view may be taken by the BPC in consultation with stakeholders for necessary incorporation of provisions in the bidding documents to avoid litigation / confusion.	
138.	**TSA** **Article-1 Definitions & Interpretations** Expiry Date shall be the date which is 35 (thirty five) years from the Scheduled COD of the Project; Operating Period for any Element of the Project shall mean the period from (and including) the COD of such Element of the Project, up to (and including) the Expiry Date and for the Project, shall mean the period from (and including) the COD of the Project, up to (and including) the Expiry Date;	As Operating Period defined under Transmission Service Agreement for the project is 35 years, request you to clarify the status of project after 35 years. Please also clarify, who will operate and maintain the asset after 35 years and how the tariff will be decided for operation of asset after 35 years.	This is as per the Standard Bidding Documents.
139.	**TSA** **Article 3.3** **Consequences of non-fulfilment of conditions subsequent** If any of the conditions specified in Article 3.1.3	In view of the rationale provided here, it is requested to amend the provision regarding refund of additional CPG on fulfillment of Conditions Subsequent. Additional CPG shall be recovered for the non-fulfillment of Conditions Subsequent. However, this additional CPG is then forming part of CPG and	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents. No change is envisaged.

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	is not duly fulfilled by the TSP even within three (3) Months after the time specified therein, then on and from the expiry of such period and until the TSP has satisfied all the conditions specified in Article 3.1.3, the TSP shall, on a weekly basis, be liable to furnish to the Long Term Transmission Customers additional Contract Performance Guarantee of Rs.77,00,000/- (Rupees Seventy Seven Lakh only) within two (2) Business Days of expiry of every such Week. Such additional Contract Performance Guarantee shall be provided to each Long Term Transmission Customer in the manner provided in Article 3.1.1 and shall become part of the Contract Performance Guarantee and all the provisions of this Agreement shall be construed accordingly. The Long Term Transmission Customers shall be entitled to hold and/or invoke the Contract Performance Guarantee, including such additional Contract Performance Guarantee, in accordance with the provisions of this Agreement.	is being retained by LTTC. Considering the fact that additional CPG is consequential guarantee for performance related to condition subsequent, it is requested to review the provision and amend the provision to refund the additional CPG on fulfillment of Conditions Subsequent.	
140.	**TSA** **Clause 4.1** a. for procuring and maintaining in full force	It is requested you to kindly clarify whether process of obtaining authorization U/s 164 of Electricity Act, 2003 would be initiated by BPC. It is suggested that BPC may initiate the process for	Approval U/s 164 of Electricity Act will be granted by Appropriate Government i.e., Department of Energy, Government of Uttar Pradesh.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	and effect all Consents, Clearances and Permits, required in accordance with Law for development of the Project;	obtaining approval U/s 164 based on the survey undertaken by BPC. It may be appreciated that obtaining approval U/s 164 takes considerable time. In the interest of timely completion of project, it is suggested that BPC may initiate the process U/s 164.	
141.	**TSA** **Article 4.4 Extension of Time**	TSP is required to obtain certain clearances/ approval such as authorization u/s 164, Forest clearance, Grant of Transmission License and approval for adoption of tariff etc. In case if there is any delay in these approvals beyond stipulated time, such delay shall be considered for extension of SCOD of the project and any consequential increase in cost shall be allowed through appropriate adjustment in the tariff. Clearances/ approval such as authorization u/s 164, Forest clearance, Grant of Transmission License and approval for adoption of tariff are not within the control of TSP once it has been applied after fulfilling all the necessary compliance, any consequential delay is required to be allowed.	This is as per the Standard Bidding Documents. No change is envisaged. The provisions of the TSA are amply clear and shall apply.
142.	**TSA** **Article 5.1.2**	TSP cannot be burdened with impact of unsuitability of the site or transmission line route due to reasons beyond control. Therefore, suitable	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	The TSP acknowledges and agrees that it shall not be relieved from any of its obligations under this Agreement or be entitled to any extension of time by reason of the unsuitability of the Site or Transmission Line route(s) for whatever reasons. The TSP further acknowledges and agrees that it shall not be entitled to any financial compensation in this regard	revision may be carried out in clause 5.1.2. There may be number of reasons for unsuitability of the site or transmission line route which are beyond control of the TSP. For such instances, suitable extension of time and appropriate adjustment in tariff shall be provided.	Documents. No change is envisaged.
143.	**TSA** **Article 5.6** **Site regulations and Construction Documents** The TSP shall abide by the Safety Rules and Procedures as mentioned in Schedule 4 of this Agreement The TSP shall retain at the Site and make available for inspection to the Lead Long Term Transmission Customer at all reasonable times copies of the Consents, Clearances and Permits, construction drawings and other documents related to construction.	Inspection of Construction drawings and other documents related to construction may be deleted from clause no. 5.6. Construction drawings and few specific documents may be proprietary/ confidential and sharing of the same with lead LTTC is against commercial interest of TSP.	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents. No change is envisaged.
144.	**TSA**	Article 6.3 pertains to Liquidated Damages (LD) under the case of LTTCs' Event of Default & Force Majeure Events. Article 6.4 pertains to LD in case of	The provisions of the TSA are amply clear and shall apply.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Article. 6.3.1 Liquidated Damages for delay due to Long Term Transmission Customer Event of Default or Direct Non Natural Force Majeure Events or Indirect Non Natural Force Majeure Events or Natural Force Majeure Event (affecting the Long Term Transmission Customer)	TSP's Event of Default. Following discrepancies in LD may be corrected: 1. It is observed that LD for LTTC event of default is limited to payment of only Non-escalable Transmission Charges as against payment of total Monthly Transmission Charges (Escalable + Non Escalable) for TSPs failure to achieve CoD. 2. For delay by LTTC due to Force Majeure event, TSP would get LDs only for period in excess of 3 continuous or non-continuous months from the date of such event. It is suggested that LD in case of point no. (1) above be made equal to **TotalMonthly Transmission Charges** in both the cases. Also, in case of point (2), LD may be made applicable from the date of event of Force Majeure. Since Transmission projects are capital intensive and non-recovery / partial recovery during initial period of the project would severely affect the financial situation of the TSP.	This is as per the Standard Bidding Documents. No change is envisaged.
145.	**TSA** **Article. 6.4.1**	If the TSP fails to achieve COD for any Element of the Project or for the Project by SCOD, then the TSP is required to pay liquidated damages to the LTTCs. It is noted that, Clause 6.4.1 of the TSA does	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding

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Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Liquidated Damages for Delay in achieving COD of Project by TSP.	not exclude delays caused due to a Force Majeure or LTTC Default. This may well be a drafting oversight and may be clarified. The TSP should also not be liable to pay liquidated damages in the event the delay is not attributable to the TSP. Accordingly, it may be clarified that no damages will be payable in the event the delay is on account of Force Majeure or LTTC Default.	Documents. No change is envisaged.
146.	**TSA** **Article 11.3 Force Majeure** A "Force Majeure" means any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:	Underlined text may be added under Article 11.3 : A "Force Majeure" means any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays or **makes performance of obligation commercially unviable or** an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents. No change is envisaged.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
147.	**TSA** **Article 11.7(c) Available Relief for a Force Majeure Event** (a)..... (b)..... (c) For the avoidance of doubt, it is clarified that the computation of Availability of the Element(s) under outage due to Force Majeure Event, as per Article 11.3 affecting the TSP shall be as per Appendix- II to the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019, as amended from time to time, as on seven (7) days prior to the Bid Deadline. For the event(s) for which the Element(s) is/are deemed to be available as per Appendix -II to the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019, then only the Non Escalable Transmission Charges, as applicable to such Element(s) in the relevant Contract Year, shall be paid by the Long Term Transmission Customers as per Schedule 5, for the duration of such event(s).	Provision related to payment of non escalable transmission charges under article 11. 7(c) may be changed and total monthly transmission charges may be considered for the payment. All expenditures during operational period are mainly fixed in nature and do not vary much whether the system is under operation or not.	The provisions of the TSA are amply clear and shall apply. This is as per the Standard Bidding Documents. No change is envisaged.

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Clarifications on RfP & TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Sl. No.	Clause No. and Existing provision	Clarification Required	Clarifications
148.	**SPA** Clause 3.5 The Selected Bidder hereby acknowledges and agrees that after the date of acquisition of one hundred percent (100%) of the equity shareholding of the Company, by the Selected Bidder as per Clause 3.3, (a) the authority, rights and obligations of the PFCCL/Company in respect of the Bid Process shall forthwith cease and any actions to be taken thereafter regarding the Bid Process will be undertaken by the Long Term Transmission Customer(s) themselves or through their any other authorized representative(s), (b) all rights and obligations of the PFCCL/Company shall be of the Selected Bidder and (d) any decisions taken by the PFCCL/Company prior to the date of its acquisition by the Selected Bidder shall continue to be binding on the Selected Bidder. The Parties hereby agree that this provision shall survive the termination of this Agreement.	We understand that acquisition price towards acquisition of one hundred percent (100%) of the equity shareholding of the Company, communicated to bidder would include all liabilities pertaining to SPV prior to closing date. Please confirm	All the liability will be included in the Acquisition Price and the details of the same will be made available to the Successful Bidder prior to transfer of SPV.

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S. No.	Clause No. and Existing provision	Clarification Required	Clarifications
1)	**RFP** **Annexure-I(Consolidation Clarification)** **Annexure-II (Amendment-1)** **General Scope of work** **Notes** Construction of Extra bay for future extension: 400kV Feeder bay :02 Nos 220kV Feeder bay:04 Nos 132kV Feeder bay:04 Nos. GIS bay diameter shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/ Building with extension/Interface module suitably.	In regards to construction of future bays for 400kV, 220kV & 132kV, it is understood that a) TSP to carry out the bus duct outside the GIS building only. b) Associated Line equipment like LA, CVT, Wave Trap & Line Gantries and extension of bus duct up to line gantry shall be carried out by future developer. c) TSP to consider the Control Panel only for future bays. Protection panel shall be provided by future developer as per feeder application. BPC to confirm.	Please refer reply at S. No. 47 & 55 of the clarifications issued on 08.07.2021 which is amply clear.
2)	**RFP** **Annexure-I(Consolidation Clarification)** **Annexure-II (Amendment-1)** **General Scope of work**	Since Switchable Line Reactor is not under present scope, it is understood that switching equipment (Circuit Breaker & Isolator) for Reactor shall be provided by future developer and same shall be outdoor AIS type. TSP to ensure the necessary space provision for outdoor AIS equipment & Line	TSP shall provide complete GIS type 400kV line with switched Reactor bay module for completion of diameter. The bus ducts for above said future line with switchable line reactor bay shall be brought outside the GIS hall/building with extension/interface

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Additional Clarifications on RfP& TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

S. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	Notes *ii.GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP. In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably*	Reactor. BPC to clarify.	module suitably.
3)	**RFP** **Annexure-I(Consolidation Clarification)** **Annexure-II (Amendment-1)** **General Scope of work** **Notes** *ii.GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP. In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with*	TSP to consider the Control Panel only for future GIS bay and switchable Line Reactor bay. Protection panel shall be in scope of future developer of Line/Reactor. BPC to confirm.	Confirmed.

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Additional Clarifications on RfP& TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

S. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably		
4)	**RFP** **Annexure-I(Consolidation Clarification)** **Annexure-II (Amendment-1)** **RFP clause 4.1.1 Circuit Breakers** Clarification Sr. No 47 PIR for 400kV Future bays	As per RFP, PIR or CSD for lines longer than 100kM can be used. However as per clarification, only PIR is asked for future line bays. It is understood that TSP can use CSD or PIR in circuit breaker controlling the lines longer than 100kM and in future bays. BPC to confirm.	For Transformer and reactor bay CSD is required while PIR is required for line bays.
5)	**RFP** **Annexure-I(Consolidation Clarification)** **Annexure-II (Amendment-1)** Clarification Sr.No. 51 Dedicated Metering CT & CVT	1. It is understood that dedicated Metering CT (MCT) & Metering CVT (MCVT) is not required. BPC to confirm our understanding. 2. In case, MCT & MCVT is required, same shall be outdoor AIS type. BPC to clarify.	1. & 3. Please refer reply at S. No. 51 of the clarifications issued on 08.07.2021. 2. In line with provisions of RfP document, the CT shall be GIS type and CVT shall be AIS type.

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S. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		3. Further, requisite Energy Meter shall be provided & installed by CTU/STU free of cost to TSP. BPC to confirm.	
6)	**RFP** **Annexure-I(Consolidation Clarification)** **Annexure-II (Amendment-1)** **Clause 2.0, Insulation Coordination** Fault Current	In line with RFP & Clarification, we have considered following fault current for respective voltage level: 400kV : 63kA, 1 Sec 220kV : 40kA ,1 sec 132kV : 40kA, 3 Sec BPC to confirm.	Fault levels are confirmed.
7)	**RFP** **Clause 4.1.12, PLCC** LILO of Sarojini Nagar (400KV)-Unnao (765KV) S/C line at 400KV Mohanlalganj S/S LILO of 400KV Lucknow (PGCIL)- Sultanpur 400KV S/C line at 400KV Mohanlalganj S/S	Since Digital Protection Coupler for both ends for line segment after LILO shall be provided by TSP, it is understood that necessary FOTE equipment shall be available at respective remote ends (i.e. Sarojini Nagar, Unnao, Sultanpur & Lucknow) for integration of DPCs. BPC to confirm.	Confirmed
8)	**RFP** **Clause 4.1.12, PLCC**	TSP scope is limited to Modification/ shifting/ recommissioning of PLCC panels provided by respective Substation Owner. It is understood that existing Substation	Provision for PLCC as per Clause 4.1.12 of RFP shall be applicable.

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Additional Clarifications on RfP& TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

S. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	LILO of 765KV Ghatampur- Hapur (WUPPTCL) line at 765KV Rampur S/S. LILO of 400KV Bareilly (PG)- Moradabad D/C lines at 765KV Rampur S/S LILO of 400KV Ataur-Indirapuram (WUPPTCL) D/C line at 400KV GIS S/S sector 123 Noida	Owner shall also provide new set of PLCC panel for one line segment after LILO. Further, Digital Protection Coupler if required shall also be provided by existing Substation owner and same shall be integrated with existing FOTE equipment. TSP need not to consider new FOTE/DPCs for said LILO arrangement. BPC to confirm.	
9)	**RFP** **Specific Technical Requirement for Substation**	BPC to clarify the requirement of FOTE system as RFP & clarification does not call for same.	FOTE requirement for S/s shall be provided by TSP as per scope of RFP.
10)	**RFP** **Land for Substation**	Land for400/220/132kV Mohanlalganj SS BPC to provide the exact plot boundary with dimensions of proposed substation for arrangement of Layout considering the scope and also estimation of Boundary wall.	Please refer clarifications at S. No. 46 issued on 08.07.2021.
11)	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** Clause 3.0	**Clarification Requested:** It was requested to consider drag co-efficient as per IS 802-1995 as tabulated below instead of drag co-efficient indicated in RfP (same as IS802:2015).	The drag co-efficient for design of tower may be considered as per IS 802-1995.

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Additional Clarifications on RfP& TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

S. No.	Clause No. and Existing provision	Clarification Required	Clarifications

Towers shall be designed as per IS-802:2015. However, drag coefficient of the tower shall be as follows:-

Sl No.	Solidity Radio ϕ	Force Coefficient, C_t		
		Flat Sided Members	Circular Sections	
			Sub-Critical Flow ($D\bar{V}_d$< 6m^2/s	Super Critical Flow ($D\bar{V}_d \geq 6$ m^2/s)
(1)	(2)	(3)	(4)	(5)
i)	0.1	1.9	1.2	0.7
ii)	02	1.8	1.2	0.8
iii)	0.3	1.7	1.2	0.8
iv)	0.4	1.7	1.1	0.8
v)	0.5	1.6	1.1	0.8
vi)	0.75	1.6	1.5	1.4
vii)	1.00	2.0	2.0	2.0

Solidity Ratio	Drag Coefficient
Upto 0.05	3.6
0.1	3.4
0.2	2.9
0.3	2.5
0.4	2.2
0.5 and above	2.0

Response by BPC: - Drag Coefficient as per RfP document is to be followed.

The values of drag co-efficient (flat sided members) given in RfP are not used for design of lattice tower structures as these are for single frame structures only. If these values are used then the tower design loads shall be less than that will come under actual wind condition leading into tower failure.

For example

Solidity Ratio	Drag as per RfP (IS802:2015)	Drag as per IS 802:1995
0.1	1.9	3.6

It may be, mentioned that the drag coefficients in IS 802:2015 are under revision as agreed to by BIS. Further, drag

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<table>
<tr><th>S. No.</th><th>Clause No. and Existing provision</th><th>Clarification Required</th><th>Clarifications</th></tr>
<tr><td></td><td></td><td>co-efficient as per IS802:1995 are currently being followed in the transmission line industry. The same has also been specified in RfPs of previous ISTS / Intra-State systems including Meerut-Simbhavali Project.

Towers shall be designed as per IS-802:2015. However, drag coefficient of the tower shall be as follows in line with IS802:1995: -

<table><tr><th>Solidity Ratio</th><th>Drag Coefficient</th></tr><tr><td>Upto 0.05</td><td>3.6</td></tr><tr><td>0.1</td><td>3.4</td></tr><tr><td>0.2</td><td>2.9</td></tr><tr><td>0.3</td><td>2.5</td></tr><tr><td>0.4</td><td>2.2</td></tr><tr><td>0.5 and above</td><td>2.0</td></tr></table></td><td></td></tr>
<tr><td>12)</td><td>RFP & TSA

SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES

Cl. 6.0 a) (ii).....

'V' String (Tower type A & B) Central phase and Tower type 'C' (all phases) and V-Pilot for towers D (Central phase</td><td>Clarification Requested:

It was requested to remove V suspension insulator strings for C type towers since these are tension towers.

Response by BPC: - Bidders to follow the specifications as mentioned in the RfP document.

Since, C Type Tower is a Tension tower with</td><td>'V' suspension insulator strings for C type towers is not required.</td></tr>
</table>

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Additional Clarifications on RfP& TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

S. No.	Clause No. and Existing provision	Clarification Required	Clarifications
		up to 30° deviation angle, use of V string are not technically possible ..... 'V' String (Tower type A & B) Central phase ~~and Tower type 'C' (all phases)~~ and V-Pilot (for tower **types C**& D) Central phase	
13)	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** Under Clause 15.0 v) Details of Line Material, the Mechanical strength of Single Tension Insulator string is indicated as 4X120kN and no. of individual units per string is indicated as 4X1.	**Clarification Requested:** It was requested to modify mechanical strength of single tension string from 4x120kN to 1x120KN. Further requested to modify no. of individual units for single tension strings from 4x1 to 1x1. **Response by BPC:-** Bidders to follow the specifications as mentioned in the RfP document This seems an inadvertent error. BPC may accordingly modify. Mechanical strength of Single Tension Insulator string; 1X120kN No. of individual units per string 1X1.	Mechanical strength of single tension string may be considered as 1x120kN instead of 4x120kN. No. of individual units for single tension strings may be considered as 1x1 instead of 4x1.
14)	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR**	**Clarification Requested:** It was requested to confirm minimum	The following minimum overall diameter for Earthwire/OPGW shall be considered:

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Additional Clarifications on RfP& TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

<table>
<tr><th>S. No.</th><th>Clause No. and Existing provision</th><th>Clarification Required</th><th>Clarifications</th></tr>
<tr><td></td><td>TRANSMISSION LINES

Sl. 6 of table at cl. 15 v)

OPGW overall dia (mm) given as 0.98</td><td>OPGW overall dia(mm)

Response by BPC: - As per Amendment, modified provisions are as follows:-
<table><tr><th>Earthwire</th><th>OPGW</th></tr><tr><td>11.5 (for both 24 & 48 fibres)</td><td>0.98</td></tr></table>
There seems to be a typographical error in the amendment
<table><tr><th>Earthwire</th><th>OPGW</th></tr><tr><td>10.98</td><td>11.5 (for both 24 & 48 fibres)</td></tr></table></td><td><table><tr><th>Earthwire</th><th>OPGW</th></tr><tr><td>10.98</td><td>11.5 (for both 24 & 48 fibres)</td></tr></table></td></tr>
<tr><td>15)</td><td>RFP & TSA

SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES

Clause 2.0-

IS steel section of tested quality in conformity with IS 2062:2011, grade E250 (Designated yield strength 250 MPa) and/or grade E-350 Designated yield strength 350 MPa) are to be used in towers, extensions, gantry structures and stub setting templates. However, use of steel grade having</td><td>Clarification Requested:

It was requested to permit the use of higher steel grade (having yield strength upto 450 MPa) for Pole structures only

Response by BPC: Bidders to follow the specifications as mentioned in the RfP document

For pole structures, steel grade of higher yield strength viz. E450 grade shall be required to arrive at workable dimensions</td><td>In case of pole structure, steel of maximum yield strength up to 450 MPa can be used while for lattice structure, steel of maximum yield strength up to 350 MPa can be used.</td></tr>
</table>

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S. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	designated yield strength more than 350 MPa is not permitted	of Pole Structures. This is also as per the prevailing utility practices. Further manufacturers may not be able to fabricate requisite size Pole Structures with E-350MPa grade steel. For lattice structure maximum yield strength of 350MPA given in RfP is in order. **In case of pole structures, use of steel grade having designated yield strength of IS:2062 grade E450 BR/ EN 10025 grade S450 JO / ASTM 572 grade 65 (designated yield strength 450 MPa) may also be used. However, for Pole Structures higher steel grade (having yield strength more than 450 MPa) shall not be permitted.**	
16)	**RFP & TSA** **SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES** **Clause 15.0vi) Railway Crossings** ....The following are the important features of the prevailing regulations (revised in 1987) e) Minimum ground clearance above rail level of the lowest portion of any conductor under condition of	**Clarification Requested:** It was proposed to follow latest railways regulations for electrical clearances over railway crossing. **Response by BPC:** Bidders to follow the specifications as mentioned in the RfP document As Railways regulations as been modified in 2004. Accordingly, the same may be	Minimum ground clearance for crossing railways shall be as per latest Railway guidelines/ Regulation.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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Additional Clarifications on RfP& TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

<table>
<tr><th>S. No.</th><th>Clause No. and Existing provision</th><th>Clarification Required</th><th>Clarifications</th></tr>
<tr><td></td><td>maximum sag shall be maintained at 22.0 m for 765kV line and 17.90 m for 400kV/220kV/132kV transmission lines.</td><td>stipulated in RfP.

....The following are the important features of the prevailing regulations (revised in 1987)

e) Minimum ground clearance above rail level of the lowest portion of any conductor under condition of maximum sag shall be as per latest Railway guidelines/ Regulation</td><td></td></tr>
<tr><td>17)</td><td>RFP & TSA

SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES

RFP Clause 1.2:

<table><tr><th>S.No.</th><th>Name of the transmission element</th><th>Conductor per phase</th></tr><tr><td>1.</td><td>LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida</td><td>Quad Moose ACSR Conductor</td></tr></table></td><td>Clarification Requested:

It was requested to consider twin HTLS instead of quad Moose for Pole structures considering construction and manufacturing constraints

Response by BPC: Yet to be received

Clarification Requested:

It was requested to consider reliability level 1 for Pole structures.

Response by BPC: Reliability level 2 as per CEA guidelines and IS802 is to be considered

It is requested to consider Twin HTLS conductor for Pole Structures due to major</td><td>Equivalent Twin HTLS Conductor can be considered having ampacity equivalent to Quad Moose (1596A) or higher, minimum 28.62 mm diameter, maximum 0.05552 (Ω/km) DC resistance at 20° C.

Further, please refer Amendment no. 2.

Reliability level 2 as per CEA guidelines and IS802 shall be applicable for lattice type structure with Quad Moose conductor.

Reliability level 1 as per IS 802 and CEA guidelines shall be applicable for pole structure with HTLS conductor.</td></tr>
</table>

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

<table>
<tr><th>S. No.</th><th>Clause No. and Existing provision</th><th>Clarification Required</th><th>Clarifications</th></tr>
<tr><td></td><td></td><td>constraints in manufacturing and construction of Pole structure with Quad Moose. Accordingly, reliability level 1 as per IS 802 and CEA guidelines shall be applicable

<table><tr><th>S. No.</th><th>Name of the transmission element</th><th>Conductor per phase</th></tr><tr><td>1.</td><td>LILO of one circuit on monopole of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Twin HTLS on 400 kV GIS S/S Sector-123, Noida</td><td>Twin HTLS</td></tr></table></td><td></td></tr>
<tr><td>18)</td><td>Amendment I to RFP

Note:

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.</td><td>Since the 400kV switching Scheme is One& half breaker, as per clarification received from BPC we have considered one additional circuit breaker bay (description as per Clarification) to complete the diameter of 400kV GIS scheme to accommodate the any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the</td><td>Please refer reply at S. No. 47 & 55 of the clarifications issued on 08.07.2021 which is amply clear.

Also refer clarification at S. No. 2 above.</td></tr>
</table>

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Additional Clarifications on RfP& TSA Queries- "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

S. No.	Clause No. and Existing provision	Clarification Required	Clarifications
	ii) GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP. ***In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably.***	GIS hall/building with extension/interface module suitably. In above, we have considered GIS type switchable line reactor bay. Please confirm our understanding.	

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Annexure-4

Copy of Letter of Intent (LoI)

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ATTESTED TRUE COPY
Attested from pg 272 to 281
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

PFC CONSULTING LTD.

पीएफसी कंसल्टिंग लिमिटेड
(पावर फाइनेंस कॉर्पोरेशन लिमिटेड की पूर्णतःस्वामित्वाधीन सहायक कंपनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)
CIN : U74140DL2008GOI175858

Ref. No. 04/ITP-45/20-21/MTL/LoI **May 12, 2022**

To
Sh. B. Vamsi Rama Mohan,
Chief General Manager,
Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2, Sector - 29,
Gurgaon – 122001, Haryana

FAX: 0124 - 2571802;
E-mail: vamsi@powergrid.in

Kind Attn.: Sh. B. Vamsi Rama Mohan, Chief General Manager

Sub.: Transmission System for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" - Letter of Intent

Dear Sir,

We refer to:

1) The Request for Proposal document dated May 27, 2021 issued to 'M/s Power Grid Corporation of India Limited' as regards participation in the international competitive bidding process for Transmission Scheme for "**Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida**", and as amended till the Bid Deadline including all correspondence / clarifications / amendments exchanged between 'M/s Power Grid Corporation of India Limited' and PFC Consulting Limited in regard thereto (hereinafter collectively referred to as the "**Final RfP**");

2) 'M/s Power Grid Corporation of India Limited' offer by way of a Non-Financial Bid pursuant to Sl. No. (1) above submitted on August 12, 2021 in response to the Final RfP.

3) 'M/s Power Grid Corporation of India Limited' offer by way of a Financial Bid during e-Reverse Auction conducted on September 03, 2021 in response to the Final RfP.

4) The Non-Financial Bid as in Sl. No. (2) above and the Financial Bid as in Sl. No. (3) above, hereinafter collectively referred to as the "Bid".

This is to inform you that the process of evaluating bids received pursuant to the Final RfP, including the Bid, had been concluded. We are pleased to inform you that your proposal and offer received by way of the "Bid" had been accepted and 'M/s Power Grid Corporation of India Limited' is hereby declared as the Successful Bidder as per clause 3.4.1.1 of the Final RfP for the above project and consequently, this Letter of Intent (hereinafter referred to as the "LoI") is being issued.

This LoI is based on the Final RfP and you are requested to please comply with the following:

a) Acknowledging its issuance and unconditionally accepting its contents and recording "Accepted unconditionally" under the signature of your authorized signatory on each page of the duplicate copy of this letter attached herewith at the place indicated for the same, and returning the same to PFC Consulting Limited within seven (7) days of the date of issuance of LoI. This LoI is issued to you in duplicate.

पंजीकृत कार्यालय : प्रथम तल, "ऊर्जानिधि", 1 बाराखंबा लेन, कनॉट प्लेस, नई दिल्ली–110001
Regd. Office : First Floor, "Urjanidhi", 1, Barakhamba Lane, Connaught Place, New Delhi-110001
कंपनी मुख्यालय : नौवॉं तल (ए विंग), स्टैट्समैन हाउस, कनॉट प्लेस, नई दिल्ली–110001 दूरभाष : 011–23443900 फैक्स : 011–23443990
Corporate Office : 9th Floor (A Wing), Statesman House, Connaught Place, New Delhi-110001 Phone : 011-23443900 Fax : 011-23443990
ई–मेल/E-mail : pfcconsulting@pfcindia.com वैबसाईट/Website : www.pfcclindia.com

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

b) Completion of various activities as stipulated in the Final RfP including in particular Clause 2.4, Clause 2.5 and Clause 2.6 of the Final RfP, within the timelines as prescribed therein.

It may be noted that PFC Consulting Limited has the rights available to them under the Final RfP, including rights under clause 3.4.1.3 thereof, upon your failure to comply with the aforementioned conditions.

As you are aware, the issuance and contents of this LoI are based on the Bid submitted by you as per the Final RfP including the Transmission charges and other details regarding the Scheduled COD as contained therein. The Quoted Transmission Charges as submitted by you and the Scheduled COD of each transmission Element and the Project as agreed by you in your Bid, as per Annexure 4 and Format-1 of Annexure 6 respectively of the Final RfP is annexed herewith as Schedule A and incorporated herein by way of reference.

Thanking you,

Yours sincerely,

For PFC Consulting Limited

(Sanjay Nayak)
General Manager

Enclosures:

- *Schedule A - Quoted Transmission Charges and the Scheduled COD of each Transmission Element of the Project submitted in your Bid, as per Annexure 4 and Format-1 of Annexure 6 respectively of the Final RFP.*

Copy to:

(1) **Chairman and Managing Director, Power Finance Corporation Limited,** "Urjanidhi", 1, Barakhamba Lane, Connaught Lane, New Delhi – 110 001

(2) **Chairman, UPPTCL,** 7th Floor, Shakti Bhawan, 14, Ashok Marg, Lucknow - 226001

(3) **Managing Director, UPPTCL,** 7th Floor, Shakti Bhawan, 14, Ashok Marg, Lucknow - 226001

(4) **Managing Director, Dakshinanchal Vidyut Vitran Nigam Ltd.,** Urja Bhawan, NH-2 (Agra-Delhi bypass Road) Sikandra, Agra - 282002

(5) **Managing Director, Purvanchal Vidyut Vitran Nigam Ltd.,** Vidyut Nagar, Bhikharipur, P.O.DLW, Varanasi - 221010

(6) **Managing Director, Madhyanchal Vidyut Vitran Nigam Ltd.,** 4A Ghokle Marg, Lucknow - 226001

(7) **Managing Director, Paschimanchal Vidyut Vitran Nigam Ltd.,** Hydel Colony, Victoria Park, Meerut - 250001

(8) **Managing Director, Kanpur Electricity Supply Co. Ltd.,** Kesa House, 14/17 Civil Lines, Kanpur-208001

(9) **Director (Works & Project), UPPTCL,** 7th Floor, Shakti Bhawan Extension, 14, Ashok Marg, Lucknow - 226001

(10) **Chief Engineer, 765 kV Design Unit, UPPTCL,** 15th Floor, Shakti Bhawan Extension, 14 Ashoka Marg, Lucknow - 226001

(11) **CEO, PFC Consulting Limited,** 9th Floor, A-Wing, Statesman House, Connaught Place, New Delhi - 110001

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

1. Quoted Annual Transmission Charges as per Annexure-4 of the RfP

Power Grid Corporation of India Limited

Year (Term of License)	Commencement Date of Contract Year	End Date of Contract Year	Non-Escalable Transmission Charges (Rs.in Millions)	Escalable Transmission Charges (Rs.in Millions)
1	10-Mar-23	31-Mar-23	1007.95	0.00
2	01-Apr-23	31-Mar-24	1434.81	Same as Above
3	01-Apr-24	31-Mar-25	1434.81	Same as Above
4	01-Apr-25	31-Mar-26	1434.81	Same as Above
5	01-Apr-26	31-Mar-27	1434.81	Same as Above
6	01-Apr-27	31-Mar-28	1434.81	Same as Above
7	01-Apr-28	31-Mar-29	1434.81	Same as Above
8	01-Apr-29	31-Mar-30	1434.81	Same as Above
9	01-Apr-30	31-Mar-31	1434.81	Same as Above
10	01-Apr-31	31-Mar-32	1434.81	Same as Above
11	01-Apr-32	31-Mar-33	1007.95	Same as Above
12	01-Apr-33	31-Mar-34	1007.95	Same as Above
13	01-Apr-34	31-Mar-35	1007.95	Same as Above
14	01-Apr-35	31-Mar-36	1007.95	Same as Above
15	01-Apr-36	31-Mar-37	1007.95	Same as Above
16	01-Apr-37	31-Mar-38	1007.95	Same as Above
17	01-Apr-38	31-Mar-39	1007.95	Same as Above
18	01-Apr-39	31-Mar-40	1007.95	Same as Above
19	01-Apr-40	31-Mar-41	1007.95	Same as Above
20	01-Apr-41	31-Mar-42	1007.95	Same as Above
21	01-Apr-42	31-Mar-43	1007.95	Same as Above
22	01-Apr-43	31-Mar-44	1007.95	Same as Above
23	01-Apr-44	31-Mar-45	1007.95	Same as Above
24	01-Apr-45	31-Mar-46	1007.95	Same as Above
25	01-Apr-46	31-Mar-47	1007.95	Same as Above
26	01-Apr-47	31-Mar-48	1007.95	Same as Above
27	01-Apr-48	31-Mar-49	1007.95	Same as Above
28	01-Apr-49	31-Mar-50	1007.95	Same as Above
29	01-Apr-50	31-Mar-51	1007.95	Same as Above
30	01-Apr-51	31-Mar-52	1007.95	Same as Above
31	01-Apr-52	31-Mar-53	1007.95	Same as Above
32	01-Apr-53	31-Mar-54	1007.95	Same as Above
33	01-Apr-54	31-Mar-55	1007.95	Same as Above
34	01-Apr-55	31-Mar-56	1007.95	Same as Above
35	01-Apr-56	31-Mar-57	1007.95	Same as Above
36	01-Apr-57	35th anniversary of the Schedule COD	1007.95	Same as Above

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

2. **Scheduled COD of each transmission Element and the Project as per Annexure 6 Format 1 of RfP**

S. No	Name of the transmission element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
A)	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-**			
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.	18 months	30.49%	Elements at Sl No. 1, 2 & 3 shall be required simultaneously.
2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)			
3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)			
B)	**Construction of LILO Line**			
1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	61.17%	-
2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months	0.49%	-
C)	**Construction of LILO lines on Monopole**			
1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA	9 months	7.85%	

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

S. No	Name of the transmission element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	guideline of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida			

Note:

i. *UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.*

ii. *GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.*

In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/ line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/ building with extension/ interface module suitably.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

पावरग्रिड
POWERGRID

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

Ref.: TBCB/ Mohanlalganj/LoI

Date: 13th May 2022

To,
Chief General Manager
PFC Consulting Limited,
9th Floor, A-Wing, Statesman House,
Connaught Place, New Delhi - 110001, India

Subject: LoI issued for "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" through tariff based competitive bidding process..

This has reference to the LoI dated 12 May 2022 issued to us by PFCCL for the subject project.

As per the bidding documents, the schedule dates of activities are :

LoI to be placed by PFCCL	: 31 August 2021
Effective date (handing over of SPV by PFCCL)	: 10 September 2021
Schedule CoD in months from effective date	: 18 months
Commencement of Date of Contract year	: 10 March 2023

However, as against the above dates, the LoI has been placed on 12 May 2022 and assuming that the SPV would be handed over by 25 May 2022, the Commencement Date of Contract year should be 25 November 2023 i.e., 18 months after the date of handing over of the SPV as per the bidding documents.

In view of foregoing and as per the provisions of bidding documents, the Commencement of Date of Contract year in Schedule-A of the LoI is to be stated as 18 months from the actual effective date.

In order to avoid any misinterpretation and unwarranted litigation it is requested to expedite the same so as to reflect in the LoI.

Kindly acknowledge the same.

Thanking you,

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Yours sincerely,

(B Vamsi Rama Mohan)
Chief General Manager

PFC CONSULTING LTD.

15 YEARS OF CELEBRATING THE MAHATMA

पीएफसी कंसल्टिंग लिमिटेड
(पावर फाइनेंस कॉर्पोरेशन लिमिटेड की पूर्णतःस्वामित्वाधीन सहायक कंपनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)
CIN : U74140DL2008GOI175858

Ref. No.: 04/ITP-45/20-21/MTL

May 17, 2022

To,
Mr. B. Vamsi Rama Mohan,
Chief General Manager,
Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2, Sector – 29,
Gurgaon – 122001, Haryana

FAX : 0124 – 2571802
E-mail: vamsi@powergrid.in

Sub.: Independent Transmission Project (ITP) "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" – Regarding Commencement Date of Contract Year

Dear Sir,

This has reference to PGCIL letter dated 13.05.2022 regarding commencement date of contract year of the subject transmission project. In this regard, the following is clarified:

i. The bidding timelines mentioned in the RfP document are indicative considering the transfer of SPV as a pre-schedule date. As the bidding timelines were extended from time to time, these dates were extended accordingly.
ii. As per Annexure-6, Format-1 of the RfP document, the overall scheduled COD of the project is 18 months from effective date. Further, as per Clause 2.1 of Transmission Service Agreement (TSA), the effective date is defined as the date of transfer of SPV to the Successful Bidder.

In view of above, considering the date of transfer of SPV as effective date, the overall COD of the project shall be 18 months from the effective date and the date of commencement of contract year shall be read accordingly.

Thanking You,

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Yours sincerely,

(Sanjay Nayak)
General Manager

Copy to:

1. **Sh. Neeraj Swaroop, Superintendent Engineer,** U.P. Power Transmission Corporation Limited, 11th Floor, Shakti Bhawan Ext., 14 Ashok Marg, Lucknow, Uttar Pradesh - 226001

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

पंजीकृत कार्यालय : प्रथम तल, "ऊर्जानिधि", 1 बाराखंबा लेन, कनॉट प्लेस, नई दिल्ली–110001
Regd. Office : First Floor, "Urjanidhi", 1, Barakhamba Lane, Connaught Place, New Delhi-110001
कंपनी मुख्यालय : नौवॉ तल (ए विंग), स्टैट्समैन हाउस, कनॉट प्लेस, नई दिल्ली–110001 दूरभाष : 011–23443900 फैक्स : 011–23443990
Corporate Office : 9th Floor (A Wing), Statesman House, Connaught Place, New Delhi-110001 Phone : 011-23443900 Fax : 011-23443990
ई–मेल/E-mail : pfcconsulting@pfcindia.com वैबसाईट/Website : www.pfcclindia.com

Ref.: TBCB/ Mohanlalganj/LoI

Date: 17th May 2022

To,
Chief General Manager
PFC Consulting Limited,
9th Floor, A-Wing, Statesman House,
Connaught Place, New Delhi - 110001, India

Subject: LoI issued for "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" through tariff based competitive bidding process..

This has reference to
1) LoI dated 12 May 2022 issued to us by PFCCL for the subject project.
2) Our letter dated 13 May 2022 wrt the LoI
3) PFCCL response dated 17.05.2022

Dear Sir

We are thankful for the letter dated 17.05.2022.

With reference to the aforementioned letter dated 17.05.2022 from PFCCL, it is requested to confirm the following:

a) The letter dated 17 May 2022 of PFCCL shall form an integral part of the bidding documents and the LoI
b) Schedule CoD for the project shall be 18 months from the Actual Effective date
c) 36 year Transmission charges as quoted shall be payable from the Scheduled COD as mentioned at b) above.

Thanking you,

Yours sincerely,

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

(B Vamsi Rama Mohan)
Chief General Manager

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

Ref.: TBCB/ Mohanlalganj/LoI

Date: 18th May 2022

To,
Chief General Manager
PFC Consulting Limited,
9th Floor, A-Wing, Statesman House,
Connaught Place, New Delhi - 110001, India

Subject: LoI issued for "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" through tariff based competitive bidding process..

Reference :
1) LoI dated 12 May 2022 issued to us by PFCCL for the subject project.
2) Our letter dated 13 May 2022 wrt the LoI
3) PFCCL response dated 17.05.2022
4) Out letter dated 17.05.2022

Dear Sir

This has reference to the aforementioned LoI and subsequent correspondence with respect to the LoI. Having received no objection to our letter dated 17.05.2022 it is construed that our understanding in the matter is correct and we are therefore proceeding with accepting the LoI unconditionally. Readiness for transfer of the SPV may be communicated to enable us to expedite the works.

Thanking you,

POWER GRID CORPORATION OF INDIA LTD. पावरग्रिड Powergrid

Yours sincerely,

(B Vamsi Rama Mohan)
Chief General Manager

Encl.: Sl.2),3) and 4) letters as stated in the reference

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Annexure-5

Copy of the relevant extract of Request for Proposal (RFP) along with letter from BPC

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ATTESTED TRUE COPY
Attested from Pg 282 to 285
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

2. INFORMATION AND INSTRUCTIONS TO BIDDERS

2.1 Bidders shall familiarize themselves with the procedures and time frames required to obtain all Consents, Clearances and Permits.

2.2 All Bidders are required to ensure compliance with the standards and codes mentioned in Clause 1.3.

Bidder who agree and undertake to procure the products associated with the Transmission System as per provisions of Public Procurement (Preference to Make in India) orders issued by Ministry of Power vide orders No. 11/5/2018 - Coord. dated 28.07.2020 for transmission sector, as amended from time to time read with Department for Promotion of Industry and Internal Trade (DPIIT) orders in this regard, shall be eligible hereunder. Further, it is clarified that Procuring Entity as defined in orders shall deemed to have included Selected Bidder and/ or TSP.

Besides, Department of Expenditure, Ministry of Finance vide Order (Public Procurement No 1) bearing File No. 6/18/2019-PPD dated 23.07.2020, Order (Public Procurement No 2) bearing File No. 6/18/2019-PPD dated 23.07.2020 and Order (Public Procurement No. 3) bearing File No. 6/18/2019-PPD, dated 24.07.2020, as amended from time to time, have issued directions regarding public procurement from a bidder of a country, which shares land border with India are also applicable.

2.3 The drafts of the following RFP Project Documents have been attached to this RFP.

a) TSA as per Format-1 of Annexure-3.
b) Share Purchase Agreement as per Format-2 of Annexure-3

Upon finalization of the RFP Project Documents after incorporating the amendments as envisaged in Clause 2.13 of this RFP, all the RFP Project Documents, except for the Share Purchase Agreement, shall be duly executed by **"SPV [under incorporation]"** and the Long Term Transmission Customers, and copies delivered to the Bidders at least seven (7) days prior to the Bid Deadline.

The RFP Project Documents shall be signed in required number of originals so as to ensure that one original is retained by each party to the Agreement(s).

2.4 Within ten (10) days of the issue of the Letter of Intent, the Selected Bidder shall:

a) provide the Contract Performance Guarantee in favour of the Long Term Transmission Customers as per the provisions of Clause 2.21;

b) execute the Share Purchase Agreement and all other RFP Project Documents as listed in Annexure-3;

c) acquire, for the Acquisition Price, one hundred percent (100%) equity shareholding of **"SPV [under incorporation]"** from **PFC Consulting Limited**, who shall sell to the Selected Bidder, the equity shareholding of **"SPV [under incorporation]"**, along with all its related assets and liabilities;

MOHNALGANJ TRANSMISSION LIMITED NEW DELHI

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Stamp duties payable on purchase of one hundred percent (100%) of the equity shareholding of **"SPV [under incorporation]"**, along with all its related assets and liabilities, shall also be borne by the Selected Bidder.

d) make an application to the Appropriate Commission for the adoption of Transmission Charges, as required under section 63 of the Electricity Act 2003.

e) execute the RFP Project Documents in required number of originals so as to ensure that one original is retained by each party to the Agreement(s). All stamp duties payable for executing the RFP Project Documents shall be borne by the Successful Bidder.

Provided further that, if for any reason attributable to the BPC, the above activities are not completed by the Selected Bidder within the above period of ten (10) days as mentioned in this Clause, such period of 10 days shall be extended, on a day for day basis till the end of the Bid validity period.

2.5 After the date of acquisition of the equity shareholding of **"SPV [under incorporation]"**, along with all its related assets and liabilities, by the Selected Bidder,

i. the authority of the BPC in respect of this Bid Process shall forthwith cease and any actions to be taken thereafter will be undertaken by the Lead Long Term Transmission Customer,
ii. all rights and obligations of "SPV [under incorporation]", shall be of the TSP,
iii. any decisions taken by the BPC prior to the Effective Date shall continue to be binding on the Long Term Transmission Customers and
iv. contractual obligations undertaken by the BPC shall continue to be fulfilled by the TSP.

2.6 Within ten (10) days of the issue of the Letter of Intent, the TSP shall apply to the Appropriate Commission for grant of Transmission License.

2.7 If the Selected Bidder/ TSP fails or refuses to comply with any of its obligations under Clauses 2.4, 2.5 and 2.6, and provided that the Long Term Transmission Customer(s) and/or other parties to the respective RFP Project Documents are willing to execute the Share Purchase Agreement and **PFC Consulting Limited** is willing to sell the entire equity shareholding of **"SPV [under incorporation]"**, along with all its related assets and liabilities, to the Selected Bidder, such failure or refusal on the part of the Selected Bidder shall constitute sufficient grounds for cancellation of the Letter of Intent. In such cases, the BPC/ its authorized representative(s) shall be entitled to invoke the Bid Bond of the Selected Bidder.

2.8 If the TSP fails to obtain the Transmission License from the Appropriate Commission, it will constitute sufficient grounds for annulment of award of the Project.

2.9 The annulment of award, as provided in Clauses 2.7 and 2.8 of this RFP, will be done by the Empowered Committee after giving the Selected Bidder/ TSP an opportunity to be heard.

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

PFC CONSULTING LTD.

पीएफसी कंसल्टिंग लिमिटेड
(पावर फाइनेंस कॉर्पोरेशन लिमिटेड की पूर्णतःस्वामित्वाधीन सहायक कंपनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)
CIN : U74140DL2008GOI175858

Ref. No. 04/ITP-45/20-21/MTL **May 30, 2022**

To,
Mr. B. Vamsi Rama Mohan,
Chief General Manager,
Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2, Sector – 29,
Gurgaon – 122001, Haryana

FAX: 0124 – 2571802
E-mail: vamsi@powergrid.in;

Sub: Independent Transmission Project (ITP) "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"– Regarding Extension of Letter of Intent

Dear Sir,

This is with reference to Letter of Intent (LoI) issued on 12.05.2022 to Power Grid Corporation of India Limited (PGCIL) for establishment of the subject transmission project.

As per Clauses 2.4, 2.5 & 2.6 of the RfP document, within 10 days of the issue of LoI the selected bidder shall complete all the activities including the acquisition of SPV.

As the SPV is proposed to be transferred on 30.05.2022, the last date for completion of various activities under Clause 2.4, 2.5 and 2.6 of the RfP document is extended from 27.05.2022 (10 days from issuance of LoI) to 13.06.2022.

Thanking you,

Yours faithfully,

(Sanjay Nayak)
General Manager

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

पंजीकृत कार्यालय : प्रथम तल, "ऊर्जानिधि", 1 बाराखंबा लेन, कनॉट प्लेस, नई दिल्ली–110001
Regd. Office : First Floor, "Urjanidhi", 1, Barakhamba Lane, Connaught Place, New Delhi-110001
कंपनी मुख्यालय : नौवॉं तल (ए विंग), स्टैट्समैन हाउस, कनॉट प्लेस, नई दिल्ली–110001 दूरभाष : 011–23443900 फैक्स : 011–23443990
Corporate Office : 9th Floor (A Wing), Statesman House, Connaught Place, New Delhi-110001 Phone : 011-23443900 Fax : 011-23443990
ई–मेल/E-mail : pfcconsulting@pfcindia.com वैबसाईट/Website : www.pfcclindia.com

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Annexure-6

Copy of CPG furnished to LTTCs

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

ATTESTED TRUE COPY
Attested from Pg 286 to 306
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

Sr. No. 1403100

AXIS BANK LIMITED

AXIS BANK LIMITED
CBB NEW DELHI
CBB NEW DELHI
3RD FLOOR, PLOT NO. 25
PUSA ROAD
NEW DELHI-110001

Ref. No :16090100017532
Date:30-05-2022

To,

PASCHIMANCHAL VIDYUT VITRAN NIGAM LTD
HYDEL COLONY, VICTORIA PARK
MEERUT

Dear Sirs,

BG No.	: 16090100017532
Date of Issue	: 30-05-2022
Amount of BG	: Rs. 4,75,23,000.00 (RUPEES FOUR CRORES SEVENTY FIVE LAKHS TWENTY THREE THOUSAND ONLY)
Expiry Date	: 29-02-2024
Claim Expiry Date	: 28-02-2025
Name and Address of the Applicant	: MS. POWER GRID CORPORATION OF INDIA LIMITED : B-9,QUTUB INSTITUTIONAL AREA : KATWARIA SARAI

Utility Forms Pvt. Ltd. LBB/Mumbai/CTS-2010 23 - 05 - 2022

We forward herewith the above Inland Bank Guarantee in original issued by us in your favour.

1. The above Guarantee is issued subject to the condition that the Bank's liability is restricted to the amount mentioned above and in the said Guarantee. Our Guarantee shall remain in force till the expiry date. Unless a demand or claim under the guarantee is made on the Bank in writing and delivered to the bank on or before the Expiry date/Claim Expiry Date, the Bank shall be discharged from all liability under the said guarantee thereafter.

Please Note:

2. The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank in writing.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (TelFax: 022-71315803)

3. BG confirmation can also be sought by sending email to ibg.confirmation@axisbank.com .

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: AMIT KUMAR SHARMA
SS No. SS No. 19120

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: BALKISHAN UPADHYAY
SS No. SS No. 21781

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Encl: Bank Guarantee Number 16090100017532

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सत्यमेव जयते

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

₹100

e-Stamp

Certificate No.	:	IN-DL34202978089343U
Certificate Issued Date	:	19-May-2022 11:21 AM
Account Reference	:	IMPACC (IV)/ dl736003/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL73600353885395365056U
Purchased by	:	AXIS BANK LTD
Description of Document	:	Article Bank Guarantee
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	AXIS BANK LTD
Second Party	:	Not Applicable
Stamp Duty Paid By	:	AXIS BANK LTD
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

सत्यमेव जयते

₹100 ₹100 ₹100 ₹100

Please write or type below this line IN-DL34202978089343U

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

CONTRACT PERFORMANCE GUARANTEE

Bank Guarantee No: 16090100017532 Dated 30-05-2022

TO,
PASCHIMANCHAL VIDYUT VITRAN NIGAM LTD
HYDEL COLONY, VICTORIA PARK
MEERUT - 250001

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

AXIS BANK Corporate Banking Branch Pusa Road, Karol Bagh

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

BALKISHAN UPADHYAY
SS No. 21781

SS No. 19120

Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at www.shcilestamp.com or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

AXIS BANK LTD AXIS BANK LTD AXIS BANK LTD

Bank Guarantee No: 16090100017532
Date of Issue: 30-05-2022
Bank Guarantee Amount: Rs.4,75,23,000/-
Expiry Date: 29-02-2024
Claim Expiry Date: 28-02-2025

In consideration of **the Power Grid Corporation of India Limited having its registered office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016** (hereinafter called the "Selected Bidder") agreeing to undertake the obligations under the TSA dated **27th May 2021** and the other RFP Project Documents and **Paschimanchal Vidyut Vitran Nigam Ltd (hereinafter refered to as** Long Term Transmission Customer**)**, agreeing to execute the Share Purchase Agreement with the Selected Bidder, regarding setting up the Project, the We **AXIS BANK LIMITED** a banking company incorporated under the Companies Act, 1956 and carrying on Banking Business under The Banking Regulation Act, 1949 and having its Registered Office at 'Trishul', 3rd Floor, Opposite Samartheshwar Temple, Law Garden, Ellis Bridge, Ahmedabad- 380 006, Gujarat and its Corporate office at Bombay Dyeing Mills Compound, Pandurang Budhkar Marg, Worli, Mumbai-400 025 and one of its branch at **AXIS BANK LIMITED CBB NEW DELHI 3RD FLOOR, PLOT NO. 25 PUSA ROAD NEW DELHI -110005 NEW DELHI – 110001 DELHI INDIA** (hereinafter referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to **Paschimanchal Vidyut Vitran Nigam Ltd** at **Hydel Colony, Victoria Park, Meerut-250001** forthwith on demand in willing from Paschimanchal Vidyut Vitran Nigam Ltd or any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees Four Crore Seventy Five Lakh Twenty Three Thousand Only (Rs. 47523000/-) only on behalf of M/s. Power Grid Corporation of India Limited.

This guarantee shall be valid and binding on the Guarantor Bank up to and including **29-02-2024** and shall not be terminable by notice or any change in the constitution of the Bank or the term of the TSA or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to **Rs.4,75,23,000/-Rupees Four Crore Seventy Five Lakh Twenty Three Thousand Only)**. Our Guarantee shall remain in force until **29-02-2024**. The Long Term Transmission Customer shall be entitled to invoke this Guarantee up to **one (01) year** of the last date of the validity of this Guarantee.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from the Long Term Transmission Customer, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the Long Term Transmission Customer.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by **Mohantalganj Transmission Limited, Power Grid Corporation of India Limited** and/or any other person. The Guarantor Bank shall not require the Long Term Transmission Customer to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against the Long Term Transmission Customer in respect of any payment made hereunder

THIS BANK GUARANTEE shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

THIS BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

THIS BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly the Long Term Transmission Customer shall not be obliged before enforcing this BANK GUARANTEE to make any.

MOHANTALGANJ TRANSMISSION LIMITED NEW DELHI
AMIT KUMAR SHARMA
SS No. 19120

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

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AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N.D.-5

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
BALKISHAN UPADHYAY
SS No. 21781

action in any court or arbitral proceedings against Mohanlalganj Transmission Limited or the Selected Bidder, to make any claim against or any demand on Mohanlalganj Transmission Limited or the Selected Bidder or to give any notice to Mohanlalganj Transmission Limited or the Selected Bidder or to enforce any security held by the Long Term Transmission Customer or to exercise, levy or enforce any distress, diligence or other process against Mohanlalganj Transmission Limited or the Selected Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to the Long Term Transmission Customer and may be assigned in whole (whether absolutely or by way of security) by Long Term Transmission Customer to any entity to whom the Long Term Transmission Customer is entitled to assign its rights and obligations under the TSA.

The Guarantor Bank hereby agrees and acknowledges that the Long Term Transmission Customer shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to **Rs.4,75,23,000/-Rupees Four Crore Seventy Five Lakh Twenty Three Thousand Only)** and it shall remain in force until **29-02-2024** with an additional claim period of **one (01) year** thereafter i.e. **28-02-2025** This BANK GUARANTEE shall be extended from time to time for such period, as may be desired by Power Grid Corporation of India Limited. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if the Long Term Transmission Customer serves upon us a written claim or demand on or before **28-02-2025** (claim expiry date).

DATE: 30-05-2022
PLACE: NEW DELHI

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
AMIT KUMAR SHARMA
SS No. 19120

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N.D.-5

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
BALKISHAN UPADHYAY
SS No. 21781

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Sr. No. 1403101

AXIS BANK LIMITED

AXIS BANK LIMITED
CBB NEW DELHI
CBB NEW DELHI
3RD FLOOR, PLOT NO. 25
PUSA ROAD
NEW DELHI-110001

Ref. No :16090100017530
Date:30-05-2022

To,

PURVANCHAL VIDYUT VITRAN NIGAM LTD
VIDYUT NAGAR, BHIKHARIPUR,
P.O. DLW
VARANASI

Dear Sirs,

BG No.	: 16090100017530
Date of Issue	: 30-05-2022
Amount of BG	: Rs. 3,67,92,000.00 (RUPEES THREE CRORES SIXTY SEVEN LAKHS NINETY TWO THOUSAND ONLY)
Expiry Date	: 29-02-2024
Claim Expiry Date	: 28-02-2025
Name and Address of the Applicant	: MS. POWER GRID CORPORATION OF INDIA LIMITED : B-9,QUTUB INSTITUTIONAL AREA : KATWARIA SARAI

We forward herewith the above Inland Bank Guarantee in original issued by us in your favour.

1. The above Guarantee is issued subject to the condition that the Bank's liability is restricted to the amount mentioned above and in the said Guarantee. Our Guarantee shall remain in force till the expiry date. Unless a demand or claim under the guarantee is made on the Bank in writing and delivered to the bank on or before the Expiry date/Claim Expiry Date, the Bank shall be discharged from all liability under the said guarantee thereafter.

Please Note:

2. The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank in writing.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (TelFax: 022-71315803)

3. BG confirmation can also be sought by sending email to ibg.confirmation@axisbank.com .

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME:
SS No. KUNTAL GHOSH
SS No. 20434

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME:
SS No. BALKISHAN UPADHYAY
SS No. 21781

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Encl: Bank Guarantee Number 16090100017530

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Utility Forms Pvt. Ltd.Mumbai\CTS-2010 23 - 03 - 2222
UTILITY FORMS PVT.LTD

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

₹100

e-Stamp

Certificate No.	:	IN-DL34203131265362U
Certificate Issued Date	:	19-May-2022 11:21 AM
Account Reference	:	IMPACC (IV)/ dl736003/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL73600353885341764610U
Purchased by	:	AXIS BANK LTD
Description of Document	:	Article Bank Guarantee
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	AXIS BANK LTD
Second Party	:	Not Applicable
Stamp Duty Paid By	:	AXIS BANK LTD
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

₹100 ₹100 ₹100 ₹100

Please write or type below this line IN-DL34203131265362U

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

CONTRACT PERFORMANCE GUARANTEE

Bank Guarantee No: 16090100017530 Dated 30-05-2022

TO,
PURVANCHAL VIDYUT VITRAN NIGAM LTD
VIDYUT NAGAR, BHIKHARIPUR,
P.O. DLW VARANASI - 221010

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

AXIS BANK LTD. Corporate Banking Branch Pusa Road Karol Bagh N.D.-5

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

BALKISHAN UPADHYAY
SS No. 2178

Statutory Alert:
1. The authenticity of this Stamp certificate should be verified at www.shcilestamp.com or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

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Bank Guarantee No: 16090100017530
Date of Issue: 30-05-2022
Bank Guarantee Amount: Rs.3,67,92,000/-
Expiry Date: 29-02-2024
Claim Expiry Date: 28-02-2025

In consideration of **the Power Grid Corporation of India Limited having its registered office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016** (hereinafter called the "Selected Bidder") agreeing to undertake the obligations under the TSA dated **27th May 2021** and the other RFP Project Documents and **PURVANCHAL VIDYUT VITRAN NIGAM LTD** agreeing to execute the Share Purchase Agreement with the Selected Bidder, regarding setting up the Project, the We **AXIS BANK LIMITED** a banking company incorporated under the Companies Act, 1956 and carrying on Banking Business under The Banking Regulation Act, 1949 and having its Registered Office at 'Trishul', 3rd Floor, Opposite Samartheshwar Temple, Law Garden, Ellis Bridge, Ahmedabad- 380 006, Gujarat and its Corporate office at Bombay Dyeing Mills Compound, Pandurang Budhkar Marg, Worli, Mumbai-400 025 and one of its branch at **AXIS BANK LIMITED CBB NEW DELHI 3RD FLOOR, PLOT NO. 25 PUSA ROAD NEW DELHI -110005 NEW DELHI – 110001 DELHI INDIA** (hereinafter referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to **PURVANCHAL VIDYUT VITRAN NIGAM LTD** at **Vidyut Nagar, Bhikharipur, P.O. DLW, Varanasi-221010** forthwith on demand in writing from Purvanchal Vidyut Vitran Nigam Ltd or any Officer authorized by it in this behalf, any amount up to and not exceeding **Rs.3,67,92,000/-(Rupees Three Crore Sixty Seven Lakh Ninety Two Thousand Only)** on behalf of M/s. Power Grid Corporation of India Limited.

This guarantee shall be valid and binding on the Guarantor Bank up to and including **29-02-2024** and shall not be terminable by notice or any change in the constitution of the Bank or the term of the TSA or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to **Rs.3,67,92,000/-(Rupees Three Crore Sixty Seven Lakh Ninety Two Thousand Only).** Our Guarantee shall remain in force until **29-02-2024.** The Long Term Transmission Customer shall be entitled to invoke this Guarantee up to **one (01) year** of the last date of the validity of this Guarantee.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from the Long Term Transmission Customer, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the Long Term Transmission Customer.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by **Mohanlalganj Transmission Limited, Power Grid Corporation of India Limited** and/or any other person. The Guarantor Bank shall not require the Long Term Transmission Customer to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against the Long Term Transmission Customer in respect of any payment made hereunder

THIS BANK GUARANTEE shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

THIS BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

THIS BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly the Long Term Transmission Customer shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against Mohanlalganj Transmission Limited or the Selected

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

KUNTAL GHOSH
SS No. 20634

293

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

BALKISHAN UPADHYAY
SS No. 21781

Bidder, to make any claim against or any demand on Mohanlalganj Transmission Limited or the Selected Bidder or to give any notice to Mohanlalganj Transmission Limited or the Selected Bidder or to enforce any security held by the Long Term Transmission Customer or to exercise, levy or enforce any distress, diligence or other process against Mohanlalganj Transmission Limited or the Selected Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to the Long Term Transmission Customer and may be assigned in whole (whether absolutely or by way of security) by Long Term Transmission Customer to any entity to whom the Long Term Transmission Customer is entitled to assign its rights and obligations under the TSA.

The Guarantor Bank hereby agrees and acknowledges that the Long Term Transmission Customer shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to **Rs.3,67,92,000/-(Rupees Three Crore Sixty Seven Lakh Ninety Two Thousand Only)** and it shall remain in force until **29-02-2024** with an additional claim period of **one (01) year** thereafter i.e. **28-02-2025** This BANK GUARANTEE shall be extended from time to time for such period, as may be desired by Power Grid Corporation of India Limited. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if the Long Term Transmission Customer serves upon us a written claim or demand on or before **28-02-2025** (claim expiry date).

DATE: 30-05-2022
PLACE: NEW DELHI

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

KUNTAL GHOSH
SS No. 20634

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N. Delhi-5

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

BALKISHAN UPADHYAY
SS No. 21781

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Sr. No. 1403097

AXIS BANK LIMITED

AXIS BANK LIMITED
CBB NEW DELHI
CBB NEW DELHI
3RD FLOOR, PLOT NO. 25
PUSA ROAD
NEW DELHI-110001

Ref. No :16090100017529
Date:30-05-2022

To,

DAKSHINANCHAL VIDYUT VITRAN NIGAM LTD
URJA BHAWAN, NH-29
(AGRA-DELHI BYPASS ROAD)
SIKANDRA, AGRA

Dear Sirs,

BG No.	: 16090100017529
Date of Issue	: 30-05-2022
Amount of BG	: Rs. 3,37,26,000.00 (RUPEES THREE CRORES THIRTY SEVEN LAKHS TWENTY SIX THOUSAND ONLY)
Expiry Date	: 29-02-2024
Claim Expiry Date	: 28-02-2025
Name and Address of the Applicant	: MS. POWER GRID CORPORATION OF INDIA LIMITED : B-9,QUTUB INSTITUTIONAL AREA : KATWARIA SARAI

We forward herewith the above Inland Bank Guarantee in original issued by us in your favour.

1. The above Guarantee is issued subject to the condition that the Bank's liability is restricted to the amount mentioned above and in the said Guarantee. Our Guarantee shall remain in force till the expiry date. Unless a demand or claim under the guarantee is made on the Bank in writing and delivered to the bank on or before the Expiry date/Claim Expiry Date, the Bank shall be discharged from all liability under the said guarantee thereafter.

Please Note:

2. The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank in writing.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (Telfax: 022-71315803)

3. BG confirmation can also be sought by sending email to ibg.confirmation@axisbank.com .

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: BALKISHAN UPADHYAY
SS No. SS No. 21781

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: KUNTAL GHOSH
SS No. SS No. 20634

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Encl: Bank Guarantee Number 16090100017529

295

Utility Forms Pvt Ltd LDR/Jumbo/CTS-2319.23 - 05 - 2022
UTILITY FORMS PVT.LTD

सत्यमेव जयते

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

₹100

e-Stamp

Certificate No.	:	IN-DL34202466509792U
Certificate Issued Date	:	19-May-2022 11:20 AM
Account Reference	:	IMPACC (IV)/ dl736003/ DELHI/DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL73600353886310852101U
Purchased by	:	AXIS BANK LTD
Description of Document	:	Article Bank Guarantee
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	AXIS BANK LTD
Second Party	:	Not Applicable
Stamp Duty Paid By	:	AXIS BANK LTD
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

सत्यमेव जयते

₹100 ₹100 ₹100 ₹100

₹100

Please write or type below this line IN-DL34202466509792U

BANK GUARANTEE NO: 160901000017529 DATED 30TH MAY 2022

CONTRACT PERFORMANCE GUARANTEE

TO,

DAKSHINANCHAL VIDYUT VITRAN NIGAM LTD,

URJA BHAWAN, NH-29, (AGRA-DELHI BYPASS ROAD),

SIKANDRA, AGRA – 282007.

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

KUNTAL GHOSH
SS No. 20634

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

BALKISHAN UPADHYAY

SS No. 21781

296

Statutory Alert:
1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

AXIS BANK LTD AXIS BANK LTD AXIS BANK LTD

BANK GUARANTEE NO: 16090100017529 DATED 30TH MAY 2022

In consideration of the Power Grid Corporation of India Limited having its registered office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016 agreeing to undertake the obligations under the TSA dated **27th May 2021** and the other RFP Project Documents and **Dakshinanchal Vidyut Vitran Nigam Ltd**, agreeing to execute the Share Purchase Agreement with the Selected Bidder, regarding setting up the Project, the **Axis Bank Limited,** a banking company incorporated under the Companies Act, 1956 and carrying on Banking Business under The Banking Regulation Act, 1949 and having its Registered Office at 'Trishul', 3rd Floor, Opposite Samartheshwar Temple, Law Garden, Ellis Bridge, Ahmedabad- 380 006, Gujarat and its Corporate office at Bombay Dyeing Mills Compound, Pandurang Budhkar Marg, Worli, Mumbai- 400 025 and one of its branch office at **3RD FLOOR, PLOT NO. 25 PUSA ROAD NEW DELHI - 110001** (hereinafter referred to as the "Bank" which expression shall unless repugnant to context or meaning thereof, include its successors or assigns in business) hereby agrees unequivocally, irrevocably and unconditionally to pay to **Dakshinanchal Vidyut Vitran Nigam Ltd** at **Urja Bhawan, NH-29 (Agra-Delhi bypass Road) Sikandra, Agra 282007** forthwith on demand in writing from Dakshinanchal Vidyut Vitran Nigam Ltd or any Officer authorized by it in this behalf, any amount up to and not exceeding **Rs.3,37,26,000/-(Rupees Three Crore Thirty Seven Lakh Twenty Six Thousand Only)** on behalf of M/s. Power Grid Corporation of India Limited.

This guarantee shall be valid and binding on the Guarantor Bank up to and including **29/02/2024** and shall not be terminable by notice or any change in the constitution of the Bank or the term of the TSA or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to **Rs.3,37,26,000/-(Rupees Three Crore Thirty Seven Lakh Twenty Six Thousand Only)**. Our Guarantee shall remain in force until **29/02/2024**. The Long Term Transmission Customer shall be entitled to invoke this Guarantee up to one (01) year of the last date of the validity of this Guarantee.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from the Long Term Transmission Customer, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the Long Term Transmission Customer.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by **Mohanlalganj Transmission Limited**, Power Grid Corporation of India Limited and/or any other person. The Guarantor Bank shall not require the Long Term Transmission Customer to justify the invocation of this BANK GUARANTEE nor shall the Guarantor Bank have any recourse against the Long Term Transmission Customer in respect of any payment made hereunder

THIS BANK GUARANTEE shall be interpreted in accordance with the laws of India.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
BALKISHAN UPADHYAY
SS No. 21781

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N. Delhi-5

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
KUNTAL GHOSH
SS No. 20634

BANK GUARANTEE NO: 16090100017529 DATED 30TH MAY 2022

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

THIS BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly the Long Term Transmission Customer shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against Mohanlalganj Transmission Limited or the Selected Bidder, to make any claim against or any demand on Mohanlalganj Transmission Limited or the Selected Bidder or to give any notice to Mohanlalganj Transmission Limited or the Selected Bidder or to enforce any security held by the Long Term Transmission Customer or to exercise, levy or enforce any distress, diligence or other process against Mohanlalganj Transmission Limited or the Selected Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to the Long Term Transmission Customer and may be assigned in whole or in part (whether absolutely or by way of security) by Long Term Transmission Customer to any entity to whom the Lead Long Term Transmission Customer is entitled to assign its rights and obligations under the TSA

The Guarantor Bank hereby agrees and acknowledges that the Long Term Transmission Customer shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to **Rs.3,37,26,000/-(Rupees Three Crore Thirty Seven Lakh Twenty Six Thousand Only)** and it shall remain in force until **29/02/2024,** with an additional claim period of one (01) year thereafter i.e. **28/02/2025.** This BANK GUARANTEE shall be extended from time to time for such period, as may be desired by Power Grid Corporation of India Limited. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if the Long Term Transmission Customer serves upon us a written claim or demand.

Date: 30/05/2022
Place: NEW DELHI

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
BALKISHAN UPADHYAY
SS No. 21781

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N.D.-5

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
KUNTAL GHOSH
SS No. 20624

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Sr. No. 1403098

AXIS BANK LIMITED

AXIS BANK LIMITED
CBB NEW DELHI
CBB NEW DELHI
3RD FLOOR, PLOT NO. 25
PUSA ROAD
NEW DELHI-110001

Ref. No :16090100017527
Date:30-05-2022

To,

MADHYANCHAL VIDYUT VITRAN NIGAM LTD
4A GHOKLE MARG
LUCKNOW

Dear Sirs,

BG No.	: 16090100017527
Date of Issue	: 30-05-2022
Amount of BG	: Rs. 2,91,27,000.00 (RUPEES TWO CRORES NINETY ONE LAKHS TWENTY SEVEN THOUSAND ONLY)
Expiry Date	: 29-02-2024
Claim Expiry Date	: 28-02-2025
Name and Address of the Applicant	: MS. POWER GRID CORPORATION OF INDIA LIMITED : B-9,QUTUB INSTITUTIONAL AREA : KATWARIA SARAI

We forward herewith the above Inland Bank Guarantee in original issued by us in your favour.

1. The above Guarantee is issued subject to the condition that the Bank's liability is restricted to the amount mentioned above and in the said Guarantee. Our Guarantee shall remain in force till the expiry date. Unless a demand or claim under the guarantee is made on the Bank in writing and delivered to the bank on or before the Expiry date/Claim Expiry Date, the Bank shall be discharged from all liability under the said guarantee thereafter.

Please Note:

2. The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank in writing.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (TelFax: 022-71315803)

3. BG confirmation can also be sought by sending email to ibg.confirmation@axisbank.com .

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: BALKISHAN UPADHYAY
SS No. SS No. 21781

AXIS BANK LTD. State Banking Branch Connaught Place Road, Karol Bagh, N.D.-5

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: KUNTAL GHOSH
SS No. SS No. 20634

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Encl: Bank Guarantee Number 16090100017527

Utility Forms Pvt. Ltd. Ltd/Mumbai/CTS-2010 23 - 05 - 2022

सत्यमेव जयते

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

₹100

e-Stamp

Certificate No.	:	IN-DL34202854256462U
Certificate Issued Date	:	19-May-2022 11:20 AM
Account Reference	:	IMPACC (IV)/ dl736003/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL73600353886068244061U
Purchased by	:	AXIS BANK LTD
Description of Document	:	Article Bank Guarantee
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	AXIS BANK LTD
Second Party	:	Not Applicable
Stamp Duty Paid By	:	AXIS BANK LTD
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

सत्यमेव जयते

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Please write or type below this line IN-DL34202854256462U

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Bank Guarantee No.16090100017527 Dated 30th May 2022

TO,
MADHYANCHAL VIDYUT VITRAN NIGAM LTD
4A GHOKLE MARG LUCKNOW 226001

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
BALKISHAN UPADHYAY
SS No. 21781

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N. Delhi-5

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
KUNTAL GHOSH
SS No. 20634

Statutory Alert:
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2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

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AXIS BANK LTD AXIS BANK LTD AXIS BANK LTD

BG AMOUNT: Rs.2,91,27,000/- (Rupees Two Crore Ninety One Lakh Twenty Seven Thousand only)
BG EXPIRY DATE: 29.02.2024
BG CLAIM EXPIRY DATE: 28.02.2025

In consideration of the Power Grid Corporation of India Limited having its registered office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016 agreeing to undertake the obligations under the TSA dated **27th May 2021** and the other RFP Project Documents and **Madhyanchal Vidyut Vitran Nigam Ltd**, agreeing to execute the Share Purchase Agreement with the Selected Bidder, regarding setting up the Project, the **Axis Bank Limited**, A Company Incorporated Under The Companies Act, 1956 And Carrying On The Business Of Banking Under The Banking Regulation Act, 1949 And Having Its Registered Office At Axis Bank Limited, Trishul, Opposite Samartheshwar Temple, Law Garden, Ellis Bridge Ahmedabad - 380006, Gujarat And Branch Office At **Axis Bank Limited 3RD FLOOR, PLOT NO. 25 PUSA ROAD NEW DELHI -110005** [Insert name and address of the bank issuing the guarantee and address of the head office] (hereinafter referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to **Madhyanchal Vidyut Vitran Nigam Ltd** at **4A Ghokle Marg, Lucknow -226001** forthwith on demand in writing from Madhyanchal Vidyut Vitran Nigam Ltd or any Officer authorized by it in this behalf, any amount up to and not exceeding **Rs.2,91,27,000/- (Rupees Two Crore Ninety One Lakh Twenty Seven Thousand only)** on behalf of **M/s. Power Grid Corporation of India Limited.**

This guarantee shall be valid and binding on the Guarantor Bank up to and including **29.02.2024** and shall not be terminable by notice or any change in the constitution of the Bank or the term of the TSA or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to **Rs.2,91,27,000/- (Rupees Two Crore Ninety One Lakh Twenty Seven Thousand only)** . Our Guarantee shall remain in force until **29.02.2024**. The Long Term Transmission Customer shall be entitled to invoke this Guarantee up to one (01) year of the last date of the validity of this Guarantee.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from the Long Term Transmission Customer, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the Long Term Transmission Customer.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by **Mohanlalganj Transmission Limited**, Power Grid Corporation of India Limited and/or any other person. The Guarantor Bank shall not require the Long Term Transmission Customer to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against the Long Term Transmission Customer in respect of any payment made hereunder

THIS BANK GUARANTEE shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

THIS BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly the Long Term Transmission Customer shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against Mohanlalganj Transmission Limited or the Selected

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
BALKISHAN UPADHYA
SS No. 21781

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N. Delhi-5

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
SUSHANTAL GHOSH
SS No. 20634

30)

Bidder, to make any claim against or any demand on Mohanlalganj Transmission Limited or the Selected Bidder or to give any notice to Mohanlalganj Transmission Limited or the Selected Bidder or to enforce any security held by the Long Term Transmission Customer or to exercise, levy or enforce any distress, diligence or other process against Mohanlalganj Transmission Limited or the Selected Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to the Long Term Transmission Customer and may be assigned in whole or in part (whether absolutely or by way of security) by Long Term Transmission Customer to any entity to whom the Lead Long Term Transmission Customer is entitled to assign its rights and obligations under the TSA

The Guarantor Bank hereby agrees and acknowledges that the Long Term Transmission Customer shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to **Rs.2,91,27,000/- (Rupees Two Crore Ninety One Lakh Twenty Seven Thousand only)** and it shall remain in force until **29.02.2024**, with an additional claim period of one (01) year thereafter i.e. **28.02.2025**. This BANK GUARANTEE shall be extended from time to time for such period, as may be desired by Power Grid Corporation of India Limited. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if the Long Term Transmission Customer serves upon us a written claim or demand.

Date: 30.05.2022
Place: NEW DELHI

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N.D.

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

KUNTAL GHOSH
SS No. 20684

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

BALKISHAN UPADHYAY
SS No. 21781

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Sr. No. 1403099

AXIS BANK LIMITED

AXIS BANK LIMITED
CBB NEW DELHI
CBB NEW DELHI
3RD FLOOR, PLOT NO. 25
PUSA ROAD
NEW DELHI-110001

Ref. No :16090100017531
Date:30-05-2022

To,

KANPUR ELECTRICITY SUPPLY CO. LTD
KESA HOUSE, 14/17 CIVIL LINES
KANPUR

Dear Sirs,

BG No.	: 16090100017531
Date of Issue	: 30-05-2022
Amount of BG	: Rs. 61,32,000.00 (RUPEES SIXTY ONE LAKHS THIRTY TWO THOUSAND ONLY)
Expiry Date	: 29-02-2024
Claim Expiry Date	: 28-02-2025
Name and Address of the Applicant	: MS. POWER GRID CORPORATION OF INDIA LIMITED : B-9,QUTUB INSTITUTIONAL AREA : KATWARIA SARAI

We forward herewith the above Inland Bank Guarantee in original issued by us in your favour.

1. The above Guarantee is issued subject to the condition that the Bank's liability is restricted to the amount mentioned above and in the said Guarantee. Our Guarantee shall remain in force till the expiry date. Unless a demand or claim under the guarantee is made on the Bank in writing and delivered to the bank on or before the Expiry date/Claim Expiry Date, the Bank shall be discharged from all liability under the said guarantee thereafter.

Please Note:

2. The beneficiary in their own interest should verify the genuineness of this guarantee from following office of the Bank in writing.

AXIS BANK LIMITED
BG Confirmation Desk,Transaction Banking Operations
5th floor, Gigaplex, Building No 1,Plot No I.T.5,
MIDC,Airoli Knowledge Park, Airoli,
Navi Mumbai 400708 (Tel/Fax: 022-71315803)

3. BG confirmation can also be sought by sending email to ibg.confirmation@axisbank.com .

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: AMIT KUMAR SHARMA
SS No. SS No. 19120

FOR AXIS BANK LIMITED

AUTHORISED SIGNATORY
NAME: BALKISHAN UPADHYAY
SS No. SS No. 21781

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Encl: Bank Guarantee Number 16090100017531

Registered Office: "TRISHUL", Opp. Samartheswar Temple, Near Law Garden, Ellisbridge, Ahmedabad - 380006.

IBG

UTILITY FORMS PVT.LTD

Utility Forms Pvt. Ltd. Ltd/Mumbai/CTS-2010 23 - 03 - 2022

सत्यमेव जयते

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

₹100

e-Stamp

Certificate No.	:	IN-DL34202583232000U
Certificate Issued Date	:	19-May-2022 11:21 AM
Account Reference	:	IMPACC (IV)/ dl736003/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL73600353885904270467U
Purchased by	:	AXIS BANK LTD
Description of Document	:	Article Bank Guarantee
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	AXIS BANK LTD
Second Party	:	Not Applicable
Stamp Duty Paid By	:	AXIS BANK LTD
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

सत्यमेव जयते

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₹100

Please write or type below this line IN-DL34202583232000U

BANK GUARANTEE NO: 16090100017531 DATED 30TH MAY 2022

CONTRACT PERFORMANCE GUARANTEE

TO,

KANPUR ELECTRICITY SUPPLY CO. LTD,
KESA HOUSE, 14/17 CIVIL LINES,
KANPUR – 208001.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
AMIT KUMAR SHARMA
SS No. 19120

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N. Delhi-5

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5
BALKISHAN UPADHYAY
SS No. 21781

Statutory Alert:
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2 The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

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BANK GUARANTEE NO: 16090100017531 DATED 30TH MAY 2022

In consideration of the Power Grid Corporation of India Limited having its registered office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016 agreeing to undertake the obligations under the TSA dated **27th May 2021** and the other RFP Project Documents and **Kanpur Electricity Supply Co. Ltd.**, agreeing to execute the Share Purchase Agreement with the Selected Bidder, regarding setting up the Project, the **Axis Bank Limited,** a banking company incorporated under the Companies Act, 1956 and carrying on Banking Business under The Banking Regulation Act, 1949 and having its Registered Office at 'Trishul', 3rd Floor, Opposite Samartheshwar Temple, Law Garden, Ellis Bridge, Ahmedabad- 380 006, Gujarat and its Corporate office at Bombay Dyeing Mills Compound, Pandurang Budhkar Marg, Worli, Mumbai- 400 025 and one of its branch office at **3RD FLOOR, PLOT NO. 25 PUSA ROAD NEW DELHI - 110001** (hereinafter referred to as the "Bank" which expression shall unless repugnant to context or meaning thereof, include its successors or assigns in business) hereby agrees unequivocally, irrevocably and unconditionally to pay to **Kanpur Electricity Supply Co. Ltd.** at **Kesa House, 14/17 Civil Lines, Kanpur – 208001** forthwith on demand in writing from Kanpur Electricity Supply Co. Ltd. or any Officer authorized by it in this behalf, any amount up to and not exceeding **Rs.61,32,000/-(Rupees Sixty One Lakh Thirty Two Thousand Only)** on behalf of M/s. Power Grid Corporation of India Limited.

This guarantee shall be valid and binding on the Guarantor Bank up to and including **29/02/2024** and shall not be terminable by notice or any change in the constitution of the Bank or the term of the TSA or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to **Rs.61,32,000/-(Rupees Sixty One Lakh Thirty Two Thousand Only).** Our Guarantee shall remain in force until **29/02/2024.** The Long Term Transmission Customer shall be entitled to invoke this Guarantee up to one (01) year of the last date of the validity of this Guarantee.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from the Long Term Transmission Customer, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the Long Term Transmission Customer.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by **Mohanlalganj Transmission Limited**, Power Grid Corporation of India Limited and/or any other person. The Guarantor Bank shall not require the Long Term Transmission Customer to justify the invocation of this BANK GUARANTEE nor shall the Guarantor Bank have any recourse against the Long Term Transmission Customer in respect of any payment made hereunder

THIS BANK GUARANTEE shall be interpreted in accordance with the laws of India.

For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Karol Bagh, N. Delhi-5

AMIT KUMAR SHARMA
SS No. 19120

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N. Delhi-5

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For AXIS BANK LTD.

Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

BALKISHAN UPADHYAY
SS No. 21781

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

THIS BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly the Long Term Transmission Customer shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against Mohanlalganj Transmission Limited or the Selected Bidder, to make any claim against or any demand on Mohanlalganj Transmission Limited or the Selected Bidder or to give any notice to Mohanlalganj Transmission Limited or the Selected Bidder or to enforce any security held by the Long Term Transmission Customer or to exercise, levy or enforce any distress, diligence or other process against Mohanlalganj Transmission Limited or the Selected Bidder.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to the Long Term Transmission Customer and may be assigned in whole or in part (whether absolutely or by way of security) by Long Term Transmission Customer to any entity to whom the Lead Long Term Transmission Customer is entitled to assign its rights and obligations under the TSA

The Guarantor Bank hereby agrees and acknowledges that the Long Term Transmission Customer shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to **Rs.61,32,000/-(Rupees Sixty One Lakh Thirty Two Thousand Only)** and it shall remain in force until **29/02/2024,** with an additional claim period of one (01) year thereafter i.e. **28/02/2025.** This BANK GUARANTEE shall be extended from time to time for such period, as may be desired by Power Grid Corporation of India Limited. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if the Long Term Transmission Customer serves upon us a written claim or demand.

Date: 30/05/2022
Place: NEW DELHI

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

AMIT KUMAR SHARMA
SS No. 19130

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

AXIS BANK LTD. Corporate Banking Branch Pusa Road, Karol Bagh, N. Delhi-5

For AXIS BANK LTD.
Authorised Signatory
Corporate Banking Branch
Pusa Road, Karol Bagh, N. Delhi-5

BALKISHAN UPADHYAY
SS No. 21781

BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION LUCKNOW

Application under Section 14, 15, 86 (1) (d) of the Electricity Act, 2003 read with Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulation No. UPERC / Secy.- 05-931 with respect to Grant of Transmission License to Mohanlalganj Transmission Limited

APPLICATION NO :.....

Mohanlalganj Transmission Limited
(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

Volume II of II

Page 307 to 735

Registered office:
B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016

Address for Correspondence:
C/o ED (TBCB), Power Grid Corporation of India Limited
Saudamini, Plot no.2, Sector -29, Gurgaon 122001

Annexure-7

Copy of Transmission Service Agreement (TSA)

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ATTESTED TRUE COPY
Attested from Pg 307 to 507
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

TRANSMISSION SERVICE AGREEMENT

FOR

PROCUREMENT OF TRANSMISSION SERVICES

FOR

TRANSMISSION OF ELECTRICITY THROUGH TARIFF BASED COMPETITIVE BIDDING

FOR

"CONSTRUCTION OF 400/220/132KV GIS SUBSTATION, MOHANLALGANJ (LUCKNOW) WITH ASSOCIATED 400KV LINES, AND OTHER 765KV & 400KV LILO LINES AT 765KV GIS SUBSTATION RAMPUR AND 400KV LILO (QUAD MOOSE ON MONOPOLE) AT 400KV GIS SUBSTATION SECTOR 123 NOIDA"

BETWEEN

PASHCHIMANCHAL VIDYUT VITRAN NIGAM LIMITED

AND

PURVANCHAL VIDYUT VITARAN NIGAM LIMITED

AND

DAKSHINANCHAL VIDHYUT VITARAN NIGAM LIMITED

AND

MADHYANCHAL VIDYUT VITARAN NIGAM LIMITED

AND

KANPUR ELECTRICITY SUPPLY COMPANY LIMITED

AND

MOHANLALGANJ TRANSMISSION LIMITED

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

e-Stamp

सत्यमेव जयते

Certificate No.	:	IN-DL94530276946191T
Certificate Issued Date	:	07-Jul-2021 04:18 PM
Account Reference	:	IMPACC (IV)/ dl960303/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL96030387443438654234T
Purchased by	:	MOHANLALGANJ TRANSMISSION LIMITED
Description of Document	:	Article 5 General Agreement
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	MOHANLALGANJ TRANSMISSION LIMITED
Second Party	:	Not Applicable
Stamp Duty Paid By	:	MOHANLALGANJ TRANSMISSION LIMITED
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

Please write or type below this line

THIS TRANSMISSION SERVICE AGREEMENT (hereinafter referred to as "TSA" or "Agreement" or "the Agreement" or "this Agreement") is made on the 9th day of July month of Two Thousand and Twenty One.

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Mohanlalganj Transmission Limited

Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

Between:

Persons whose names, addresses and other details are provided in Schedule 1 of this Agreement (collectively referred to as the "Long Term Transmission Customers" and individually referred to as the "Long Term Transmission Customer" respectively), which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the one part;

And

Mohanlalganj Transmission Limited, incorporated under the Companies Act, 2013, having its corporate office at 9th Floor, A-Wing, Statesman House, Barakhamba Lane, Connaught Place, New Delhi – 110 001 (herein after referred to as Transmission Service Provider or "TSP" which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the other part;

(Each of the "Long Term Transmission Customer" or "Long Term Transmission Customers" and "TSP" are individually referred to as "Party" and collectively as the "Parties")

AND WHEREAS:

A) In accordance with the Bidding Guidelines, the Bid Process Coordinator (hereinafter referred to as BPC) had initiated a competitive e-reverse bidding process through issue of RFQ and RFP for selecting a Successful Bidder to build, own, operate and maintain the Project comprising of the Elements mentioned in Schedule 2 (hereinafter referred to as the Project)

B) Pursuant to the said e-reverse bidding process, the BPC shall identify the Successful Bidder as the TSP, who will be responsible to set up the Project on build, own, operate and maintain basis and to provide Transmission Service on long term basis to the Long Term Transmission Customers on the terms and conditions contained in this Agreement and the Transmission License.

C) The Selected Bidder will acquire one hundred percent (100%) of the equity shareholding of **Mohanlalganj Transmission Limited** along with all its related assets and liabilities in terms of the provisions of the Share Purchase Agreement.

D) The TSP has agreed to make an application for a Transmission License to the Appropriate Commission for setting up the Project on build, own, operate and maintain basis.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Paschimanchal Vidyut Vitaran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

E) The TSP has further agreed to make an application to the Appropriate Commission for the adoption of the Transmission Charges under Section 63 of the Electricity Act, 2003, along with a certification from the Bid Evaluation Committee in accordance with the Bidding Guidelines issued by Ministry of Power, Government of India.

F) The Long Term Transmission Customers agree, on the terms and subject to the conditions of this Agreement, to use the available transmission capacity of the Project and pay TSP the Transmission Charges as determined in accordance with the terms of this Agreement.

G) The terms and conditions stipulated in the Transmission License issued by the Appropriate Commission to the TSP shall be applicable to this Agreement and the TSP agrees to comply with these terms and conditions. In case of inconsistency between the License terms & conditions and the conditions of this Agreement, the conditions stipulated in the License granted by the Appropriate Commission shall prevail.

NOW, THEREFORE, IN CONSIDERATION OF THE PREMISES AND MUTUAL AGREEMENTS, COVENANTS AND CONDITIONS SETFORTH HEREIN, IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

ARTICLE: 1

1 DEFINITIONS AND INTERPRETATIONS

1.1 Definitions:

1.1.1 The words/expressions used in this Agreement, unless as defined below or repugnant to the context, shall have the same meaning as assigned to them by the Electricity Act, 2003 and the rules or regulations framed there under including those issued/framed by the Appropriate Commission (as defined hereunder), as amended or re-enacted from time to time or the General Clauses Act, failing which it shall bear its ordinary English meaning.

The words/expressions when used in this Agreement shall have the respective meanings as specified below:

"Acquisition Price" shall have the same meaning as defined in the Share Purchase Agreement;

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

"Act" or **"Electricity Act"** or **"Electricity Act 2003"** shall mean the Electricity Act, 2003 and any amendments made to the same or any succeeding enactment thereof;

"Affiliate" shall mean a company that either directly or indirectly

i. controls or

ii. is controlled by or

iii. is under common control with

a Bidding Company (in the case of a single company) or a Member (in the case of a Consortium) and **"control"** means ownership by one company of at least twenty six percent (26%) of the voting rights of the other company;

"Agreed Form" in relation to any document shall mean the form of the document most recently agreed to by the Parties and initialled by them for identification;

"Allocated Project Capacity" shall mean, for each Long Term Transmission Customer, the sum of the generating capacities allocated to such Long Term Transmission Customer from the ISGS and the contracted power, if any, as adopted by UPERC from time to time in determining sharing of transmission charges between the Long Term Transmission Customers;

"Appropriate Commission" shall mean the Central Regulatory Commission referred to in sub-section (1) of Section 76 of the Electricity Act, or the State Regulatory Commission referred to in Section 82 of the Electricity Act or the Joint Commission referred to in Section 83 of the Electricity Act, as the case may be. In this case the Appropriate Commission is Uttar Pradesh Electricity Regulatory Commission;

"Arbitration Tribunal" shall mean the tribunal constituted under Article 16 of this Agreement;

"Availability" in relation to the Project or in relation to any Element of the Project, for a given period shall mean the time in hours during that period the Project is capable to transmit electricity at its Rated Voltage and shall be expressed in percentage of total hours in the given period and shall be calculated as per the procedure contained in Annexure B to Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations, 2014 attached herewith in Schedule 9;

Pashchimanchal Vidyut Vitran Nigam Limited | Madhyanchal Vidyut Vitaran Nigam Limited | Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited | Kanpur Electricity Supply Company Limited | Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

"Bid" shall mean non-financial bid and financial bid submitted by the Bidder, in response to the RFP, in accordance with the terms and conditions of the RFP;

"Bid Deadline" shall mean the last date and time for submission of the Bid in response to RFP, as specified in the RFP;

"Bidding Company" shall refer to such single company that has made a Response to RFQ for the Project;

"Bidding Consortium/ Consortium" shall refer to a group of companies that has collectively made a Response to RFQ for the Project;

"Bid Documents" or **"Bidding Documents"** shall mean the RFQ and RFP, along with all attachments thereto or clarifications thereof;

"Bidding Guidelines" shall mean the "Tariff Based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by Government of India, Ministry of Power dated 13th April 2006 under Section – 63 of the Electricity Act and as amended from time to time;

"Bid Process Coordinator" or **"BPC"** shall mean a person or its authorized representative as notified by the Government of India / concerned State Government, responsible for carrying out the process for selection of Transmission Service Provider;

"Business Day" shall mean a day other than Sunday or a statutory holiday, on which the banks remain open for business in the State in which the concerned Long Term Transmission Customers' registered office is located;

"CEA" shall mean the Central Electricity Authority constituted under Section -70 of the Electricity Act;

"CERC" shall mean the Central Electricity Regulatory Commission of India constituted under Section-76 of the Electricity Act, 2003 or its successors;

"Change in law" shall have the meaning ascribed thereto in Article 12;

"Commercial Operation Date" or "COD" shall mean the date as per Article 6.2 ;

Provided that the COD shall not be a date prior to the Scheduled COD mentioned in the TSA, unless mutually agreed to by all Parties;

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

"Competent Court of Law" shall mean the Supreme Court or any High Court, or any tribunal or any similar judicial or quasi-judicial body in India that has jurisdiction to adjudicate upon issues relating to the Project;

"Connection Agreement" shall mean the agreement between the CTU/STU and the TSP, setting out the terms relating to the connection of the Project to the Inter-connection Facilities and use of the Inter State Transmission System as per the provisions of the IEGC / State Grid Code, as the case may be;

"Consultation Period" shall mean the period of sixty (60) days or such longer period as the Parties may agree, commencing from the date of issue of a TSP's Preliminary Termination Notice or a Long Term Transmission Customer's Preliminary Termination Notice as provided in Article 13 of this Agreement, for consultation between the Parties to mitigate the consequence of the relevant event having regard to all the circumstances;

"Consents, Clearances and Permits" shall mean all authorizations, licenses, approvals, registrations, permits, waivers, privileges, acknowledgements, agreements, or concessions required to be obtained from or provided by any Indian Governmental Instrumentality for the development, execution and operation of Project including without any limitation for the construction, ownership, operation and maintenance of the Transmission Lines and/or sub-stations;

"Construction Period" shall mean the period from (and including) the Effective Date of the TSA up to (but not including) the COD of the Element of the Project in relation to an Element and up to (but not including) the COD of the Project in relation to the Project;

"Contractors" shall mean the engineering, procurement, construction, operation & maintenance contractors, surveyors, advisors, consultants, designers, suppliers to the TSP and each of their respective sub-contractors (and each of their respective successors and permitted assigns) in their respective capacities as such;

"Contract Performance Guarantee" shall mean the irrevocable unconditional bank guarantee, submitted and to be submitted by the TSP or by the Selected Bidder on behalf of the TSP to the Long Term Transmission Customers from a bank mentioned in Annexure 12 of the RFP, in the form attached here to as Schedule 11, in accordance with Article 3 of this Agreement and which shall include the additional bank guarantee furnished by the TSP under this Agreement;

Pashchimanchal Vidyut Vitran Nigam Limited | Madhyanchal Vidyut Vitaran Nigam Limited | Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited | Kanpur Electricity Supply Company Limited | Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

"Contract Year", for the purpose of payment of Transmission Charges, shall mean the period beginning on the COD, and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that the last Contract Year shall end on the last day of the term of the TSA;

"CTU" or **"Central Transmission Utility"** shall mean the utility notified by the Central Government under Section-38 of the Electricity Act, 2003;

"Day" shall mean a day starting at 0000 hours and ending at 2400 hours;

"D/C" shall mean Double Circuit;

"Dispute" shall mean any dispute or difference of any kind between a Long Term Transmission Customer and the TSP or between the Long Term Transmission Customers (jointly) and the TSP, in connection with or arising out of this Agreement including any issue on the interpretation and scope of the terms of this Agreement as provided in Article 16;

"Due Date" in relation to any Invoice shall mean the thirtieth day after the date on which any Invoice is received and duly acknowledged by the Long Term Transmission Customer (or, if that day is not a Business Day, the immediately following Business Day), and by such date, the Invoice is payable by the Long Term Transmission Customer;

"Effective Date" for the purposes of this Agreement, shall have the same meaning as per Article 2.1 of this Agreement;

"Electrical Inspector" shall mean a person appointed as such by the Appropriate Government under sub-section (1) of Section 162 of the Electricity Act 2003 and also includes Chief Electrical Inspector;

"Electricity Rules 2005" shall mean the rules framed pursuant to the Electricity Act 2003 and as amended from time to time;

"Element" shall mean each Transmission Line or each circuit of the Transmission Lines (where there are more than one circuit) or each bay of Sub-station or switching station or HVDC terminal or inverter station of the Project, which has a separate Scheduled COD as per Schedule 3 of this Agreement and has a separate percentage for recovery of Transmission Charges on achieving COD as per Schedule 6 of this Agreement;

Pashchimanchal Vidyut Vitran Nigam Limited | Madhyanchal Vidyut Vitaran Nigam Limited | Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited | Kanpur Electricity Supply Company Limited | Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

"Escalable Transmission Charges" shall mean the charges as specified in Schedule 6 of this Agreement;

"Event of Default" shall mean the events as defined in Article 13 of this Agreement;

"Expiry Date" shall be the date which is 35 (thirty five) years from the Scheduled COD of the Project;

"Financial Closure" shall mean the first Business Day on which funds are made available to the TSP pursuant to the Financing Agreements;

Financially Evaluated Entity" shall mean the company which has been evaluated for the satisfaction of the financial requirement set forth in the RFQ;

"Financing Agreements" shall mean the agreements pursuant to which the TSP is to finance the Project including the loan agreements, security documents, notes, indentures, security agreements, letters of credit and other documents, as may be amended, modified, or replaced from time to time, but without in anyway increasing the liabilities of the Long Term Transmission Customers ;

"Financial Year" shall mean a period of twelve months at midnight Indian Standard Time (IST) between 1st April & 31st March;

"Force Majeure" and **"Force Majeure Event"** shall have the meaning assigned thereto in Article 11;

"GOI" shall mean Government of India;

"Grid Code" / "IEGC" or **"State Grid Code"** shall mean the Grid Code specified by the Central Commission under Clause (h) of sub-section (1) of Section 79 of the Electricity Act and/or the State Grid Code as specified by the concerned State Commission, referred under Clause (h) of sub-section (1) of Section 86 of the Electricity Act 2003, as applicable;

"Indian Governmental Instrumentality" shall mean Government of India, Government of any State in India or any ministry, department, board, authority, agency, corporation, commission under the direct or indirect control of Government of India or any State Government or both, any political sub-division of any of them including any court or Appropriate Commission or tribunal or judicial or quasi-judicial body in India but excluding TSP and Long Term Transmission Customers;

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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"Insurances" shall mean the insurance cover to be obtained and maintained by the TSP in accordance with Article 9 of this Agreement;

"Interconnection Facilities" shall mean the facilities as may be set up for transmission of electricity through the use of the Project, on either one or both side of generating station's / CTU's / STU's / Long Term Transmission Customer's substations (as the case may be) which shall include, without limitation, all other transmission lines, gantries, sub-stations and associated equipment not forming part of the Project;

"Invoice" shall mean a Monthly Transmission Charges Invoice, a Supplementary Invoice or any other Invoice or Bill raised by any of the Parties;

"Invoice Dispute Notice" shall have the same meaning as defined in Article 10.9.2 of this Agreement;

"Late Payment Surcharge" shall have the meaning ascribed thereto in Article 10.8;

"Law" or "Laws" in relation to this Agreement, shall mean all laws including electricity laws in force in India and any statute, ordinance, rule, regulation, notification, order or code, or any interpretation of any of them by an Indian Governmental Instrumentality having force of law and shall include all rules, regulations, decisions and orders of the Appropriate Commission;

"Lead Long Term Transmission Customer" shall have the meaning as ascribed hereto in Article 18.1.1 of this Agreement;

"Lead Member of the Bidding Consortium" or "Lead Member" shall mean a company who commits at least 26% equity stake in the Project, meets the technical requirement as specified in the RFQ and so designated by other Member(s) in Bidding Consortium;

"Letter of Credit" or "LC" shall mean an unconditional, irrevocable, revolving Letter of Credit opened by the Long Term Transmission Customer in favour of the TSP with any scheduled bank;

"Lenders" means the banks, financial institutions, multilateral funding agencies, non-banking financial companies registered with the Reserve Bank of India (RBI), mutual funds, etc., including their successors and assigns, who have agreed on or before COD of the Project to provide the TSP with the debt financing described in the capital structure schedule, and any successor banks or financial institutions to whom their interests under the Financing Agreements may be transferred or assigned;

Pashchimanchal Vidyut Vitran Nigam Limited | Madhyanchal Vidyut Vitaran Nigam Limited | Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited | Kanpur Electricity Supply Company Limited | Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Provided that, such assignment or transfer shall not relieve the TSP of its obligations to the Long Term Transmission Customers under this Agreement in any manner and shall also does not lead to an increase in the liability of any of the Long Term Transmission Customers;

"Lenders Representative" shall mean the person notified by the Lenders in writing as being the representative of the Lenders and such person may from time to time be replaced by the Lenders pursuant to the Financing Agreements by written notice to the TSP;

"Long Term Transmission Customer(s)" shall mean a person availing or intending to avail access to the Inter-State Transmission System/ Intra-State Transmission System for a period up to twenty-five years or more, and for the purposes of this Project, shall refer to entities listed in Schedule 1 of this Agreement or any such other person who executes a Supplementary Agreement for availing Transmission Service as per the provisions of the TSA;

"Member in a Bidding Consortium/Member" shall mean each company in the Bidding Consortium;

"Month" shall mean a period of thirty (30) days from (and excluding) the date of the event;

"Monthly Transmission Charges" for any Element of the Project, after COD of the Element till COD of the Project, and for the Project after COD of the Project, shall mean the amount of Transmission Charges for the relevant Contract Year as specified in Schedule 5 of this Agreement;

"Monthly Transmission Charges Invoice" or **"Monthly Bill"** shall mean a monthly invoice comprising the Monthly Transmission Charges, as per Schedule 5 hereof;

"National Load Despatch Centre" shall mean the centre established as per sub-section (1) of Section 26 of the Electricity Act 2003;

"Non-Escalable Transmission Charges" shall mean the charges as specified in column (4) of Schedule 6 of this Agreement;

"Notification" shall mean any notification, issued in the Gazette of India;

"O & M Contractor" shall mean the entity appointed from time to time by the TSP to operate, maintain & repair any of the Element(s) of the Project;

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

"Open Access Customer" shall mean a consumer permitted by the State Commission to receive supply of electricity from a person other than distribution licensee of his area of supply or a generating company (including captive generating plant) or a licensee, who has availed of or intends to avail of open access;

"Operating Period" for any Element of the Project shall mean the period from (and including) the COD of such Element of the Project, up to (and including) the Expiry Date and for the Project, shall mean the period from (and including) the COD of the Project, up to (and including) the Expiry Date;

"Parent Company" shall mean a Company that holds at least twenty six percent (26%) of the paid - up equity capital directly or indirectly in the Bidding Company or in the Member in a Bidding Consortium, as the case may be;

"Preliminary Termination Notice" shall mean a Long Term Transmission Customers' Preliminary Termination Notice or TSP's Preliminary Termination Notice, as the case may be, as defined in Article 13 of this Agreement;

"Project" shall mean **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"**, as detailed in Schedule 2 of this Agreement;

"Project Execution Plan" shall mean the plan referred to in Article 3.1.3(c) hereof;

"Prudent Utility Practices" shall mean the practices, methods and standards that are generally accepted internationally from time to time by electric transmission utilities for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation, repair and maintenance of the Project and which practices, methods and standards shall be adjusted as necessary, to take account of:

(i) operation, repair and maintenance guidelines given by the manufacturers to be incorporated in the Project,
(ii) the requirements of Law, and
(iii) the physical conditions at the Site;

"RFP" shall mean Request for Proposal dated **May 27, 2021** along with all schedules, annexures and RFP Project Documents attached thereto, issued by the BPC, including any modifications, amendments or alterations thereto;

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"RFP Project Documents" shall mean the following documents to be entered into in respect of the Project, by the Parties to the respective agreements:

a. TSA,
b. Share Purchase Agreement and,
c. Any other agreement as may be required;

"RFQ" shall mean the Request for Qualification document issued by **PFC Consulting Limited** for Tariff Based Competitive-bidding process for procurement of Transmission Services for the Project. Including any modifications, amendments or alterations thereto and clarifications issued regarding the same;

"RLDC" shall mean the relevant Regional Load Dispatch Centre as defined in the Electricity Act, 2003, in the region(s) in which the Project is located;

"RPC" shall mean the relevant Regional Power Committee established by the Government of India for the specific Region(s) in accordance with the Electricity Act, 2003 for facilitating integrated operation of the Power System in that Region;

"Rated Voltage" shall mean the manufacturers design voltage at which the Transmission System is designed to operate or such lower voltage at which the line is charged, for the time being, in consultation with Long Term Transmission Customers;

"Rebate" shall have the meaning as ascribed to in Article 10.7 of this Agreement;

"Scheduled COD" in relation to an Element(s) shall mean the date(s) as mentioned in Schedule 3 as against such Element(s) and in relation to the Project, shall mean the date as mentioned in Schedule 3 as against such Project, subject to the provisions of Article 4.4 of this Agreement, or such date as may be mutually agreed among the Parties;

"Scheduled Outage" shall mean the final outage plan as approved by the RPC as per the provisions of the Grid Code;

"Selected Bid" shall mean the Non-Financial Bid and the Final Offer of the Selected Bidder submitted during e-reverse bidding, which shall be downloaded and attached in Schedule 10 on or prior to the Effective Date;

"Share Purchase Agreement" shall mean the agreement amongst '**PFC Consulting Limited**', '**Mohanlalganj Transmission Limited** ' and the Successful Bidder for the purchase of one hundred (100%) per cent of the shareholding of the

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'**Mohanlalganj Transmission Limited** ' for the Acquisition Price, by the Successful Bidder on the terms and conditions as contained therein;

"Short Term Transmission Customer(s)" shall mean a transmission customer other than the Long Term Transmission Customer;

"Site" in relation to a substation, switching station or HVDC terminal or inverter station, shall mean the land and other places upon which such station / terminal is to be established;

"SLDC" shall mean the State Load Despatch Centre established as per sub-section (1) of Section 31 of the Electricity Act 2003;

"STU" or **"State Transmission Utility"** shall be the Board or the Government Company specified as such by the State Government under sub-section (1) of Section 39 of the Electricity Act 2003;

"Successful Bidder" or **"Selected Bidder"** shall mean the Bidder selected pursuant to the RFP to acquire one hundred percent (100%) equity shares of '**Mohanlalganj Transmission Limited** ', along with all its related assets and liabilities, which will be responsible as the TSP to establish the Project on build, own, operate and maintain basis as per the terms of the TSA and other RFP Project Documents;

"Supplementary Agreement" shall mean the agreement as annexed hereto in Schedule 12 of this Agreement;

"Supplementary Bill" or **"Supplementary Invoice"** shall mean a bill other than a Monthly Bill raised by any of the Parties in accordance with Article 10.10;

"Target Availability" shall have the meaning as ascribed hereto in Article 8.2 of this Agreement;

"Technically Evaluated Entity" shall mean the company which has been evaluated for the satisfaction of the technical requirement set forth in RFQ;

"Termination Notice" shall mean a Long Term Transmission Customer Termination Notice or TSP Termination Notice, as the case may be given by Parties pursuant to the provisions of Articles 3.3.2, 3.3.4, 13.3 and 13.4 of this Agreement for the termination of this Agreement;

"Term of Agreement" for the purposes of this Agreement shall have the meaning ascribed thereto in Article 2.2 of this Agreement;

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"Transmission Charges" shall mean the Final Offer of the Selected Bidder during the e-reverse bidding and adopted by the Commission, payable to the TSP by the Long Term Transmission Customers as per provisions of TSA;

"Transmission Customer(s)" shall mean any person using the Project, including the Open Access Customers;

"Transmission License" shall mean the license granted by the Appropriate Commission in terms of the relevant regulations for grant of such license issued under the Electricity Act;

"Transmission Licensee" shall mean a licensee authorized to establish and operate Transmission Lines by the Appropriate Commission;

"Transmission Lines" shall mean all high pressure cables and overhead lines (not being an essential part of the distribution system of a licensee) transmitting electricity from a generating station to another generating station or a sub-station, together with any step-up and step-down transformers, switch-gear and other works necessary to and used for the control of such cables or overhead lines, and such buildings or part thereof as may be required to accommodate such transformers, switchgear and other works;

"Transmission Service" shall mean making the Project available for use by the Transmission Customers as per the terms and conditions of this Agreement;

"Transmission Service Provider" or **"TSP"** shall mean the **"Mohanlalganj Transmission Limited"**, which has executed this Transmission Service Agreement and has been / shall be acquired by the Selected Bidder;

"Transmission System" shall mean a line with associated sub-stations or a group of lines inter-connected together along with associated sub-stations and the term includes equipment associated with transmission lines and sub-stations;

"Unscheduled Interchange" shall have the meaning ascribed thereto in Rule 24 of the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2019 as amended from time to time;

"Unscheduled Outage" shall mean an interruption resulting in reduction of the Availability of the Element(s) / Project (as the case may be) that is not a result of a Scheduled Outage or a Force Majeure Event.

"Ultimate Parent Company" shall mean a company which owns at least twenty six percent (26%) equity in the Bidding Company or Member of a Consortium, (as the

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case may be) and in the Technically Evaluated Entity and/or Financially Evaluated Entity (as the case may be) and such Bidding Company or Member of a Consortium, (as the case may be) and the Technically Evaluated Entity and/or Financially Evaluated Entity (as the case may be) shall be under the direct control or indirectly under the common control of such company;

"UPERC" shall mean Uttar Pradesh Electricity Regulatory Commission or its successors;

"Week" means a calendar week commencing from 00:00 hours of Monday, and ending at 24:00 hours of the following Sunday;

1.2 Interpretation:

Save where the contrary is indicated, any reference in this Agreement to:

"Agreement" shall be construed as including a reference to its Schedules, Appendices and Annexures;

"Rupee", "Rupees" and "Rs." shall denote lawful currency of India;

"crore" shall mean a reference to ten million (10,000,000) and a **"lakh"** shall mean a reference to one tenth of a million (1,00,000);

"encumbrance" shall be construed as a reference to a mortgage, charge, pledge, lien or other encumbrance securing any obligation of any person or any other type of preferential arrangement (including, without limitation, title transfer and retention arrangements) having a similar effect;

"holding company" of a company or corporation shall be construed as a reference to any company or corporation of which the other company or corporation is a subsidiary;

"Indebtedness" shall be construed so as to include any obligation (whether incurred as principal or surety) for the payment or repayment of money, whether present or future, actual or contingent;

"person" shall be construed as a reference to any person, firm, company, corporation, society, trust, government, state or agency of a state or any association or partnership (whether or not having separate legal personality) of two or more of the above and a person shall be construed as including a reference to its successors, permitted transferees and permitted assigns in accordance with their respective interests;

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"Subsidiary" of a company or corporation (the holding company) shall be construed as a reference to any company or corporation:

(i) which is controlled, directly or indirectly, by the holding company, or

(ii) more than half of the issued share capital of which is beneficially owned, directly or indirectly, by the holding company, or

(iii) which is a subsidiary of another subsidiary of the holding company,

for these purposes, a company or corporation shall be treated as being controlled by another if that other company or corporation is able to direct its affairs and/or to control the composition of its board of directors or equivalent body;

"winding-up", **"dissolution"**, **"insolvency"**, or **"reorganization"** of a company or corporation shall be construed so as to include any equivalent or analogous proceedings under the Law of the jurisdiction in which such company or corporation is incorporated or any jurisdiction in which such company or corporation carries on business including the seeking of liquidation, winding-up, re-organization, dissolution, arrangement, protection or relief of debtors.

1.2.1 Words importing the singular shall include the plural and vice versa.

1.2.2 This Agreement itself or any other agreement or document shall be construed as a reference to this or to such other agreement or document as it may have been, or may from time to time be, amended, varied, novated, replaced or supplemented.

1.2.3 A Law shall be construed as a reference to such Law including its amendments or re-enactments from time to time.

1.2.4 A time of day shall, save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.

1.2.5 Different parts of this Agreement are to be taken as mutually explanatory and supplementary to each other and if there is any inconsistency between or among the parts of this Agreement, they shall be interpreted in a harmonious manner so as to give effect to each part.

1.2.6 The tables of contents and any headings or sub-headings in this Agreement have been inserted for ease of reference only and shall not affect the interpretation of this Agreement.

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1.2.7 All interest payable under this Agreement shall accrue from day to day and be calculated on the basis of a year of three hundred and sixty five (365) days.

1.2.8 The words "hereof" or "herein", if and when used in this Agreement shall mean a reference to this Agreement.

1.2.9 The contents of Schedule 10 shall be referred to for ascertaining accuracy and correctness of the representations made by the Selected Bidder in Article 17.2.1 (f) hereof.

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ARTICLE: 2

2 EFFECTIVENESS AND TERM OF AGREEMENT

2.1 Effective Date:

This Agreement shall be effective from later of the dates of the following events:

a. The Agreement is executed and delivered by the Parties; and

b. The Selected Bidder has acquired for the Acquisition Price, one hundred percent (100%) of the equity shareholding of **'PFC Consulting Limited'** in **'Mohanlalganj Transmission Limited '** along with all its related assets and liabilities as per the provisions of the Share Purchase Agreement, and

c. The Selected Bidder, on behalf of the TSP, has provided the Contract Performance Guarantee, as per terms of Article 3.1 of this Agreement.

2.2 Term and Termination:

2.2.1 Subject to Article 2.2.2 and Article 2.4, this Agreement shall continue to be effective in relation to the Project until the Expiry Date, when it shall automatically terminate unless extended by the Appropriate Commission for such period and on such terms and conditions as the Appropriate Commission may specify in this regard in terms of the procedures laid down by the Appropriate Commission for such matters.

2.2.2 This Agreement shall terminate before the Expiry Date:

a. If a Termination Notice is served in accordance with Article 13

i. by the Majority Long Term Transmission Customers following a TSP Event of Default; or

ii. by the TSP following the Long Term Transmission Customers' Event of Default;

b. If the Long Term Transmission Customers or the TSP serves a Termination Notice in accordance with Article 3.3.2 and 3.3.4.

2.3 Conditions prior to the expiry of Transmission License

2.3.1 In order to continue the Project beyond the expiry of the Transmission License, the TSP shall be obligated to make an application to the Appropriate Commission at least two years before the date of expiry of the Transmission

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License, seeking the Appropriate Commission's approval for extension of the term of Transmission License up to the Expiry Date.

2.3.2 The TSP shall timely comply with all the requirements as may be laid down by the Appropriate Commission for extension of the term of the Transmission License beyond the initial term of 25 years and the TSP shall keep the Long Term Transmission Customers fully informed about progress on its application for extension of the term of Transmission License.

2.4 Survival:

The expiry or termination of this Agreement shall not affect any accrued rights, obligations and liabilities of the Parties under this Agreement, including the right to receive liquidated damages as per the terms of this Agreement, nor shall it effect the survival of any continuing obligations for which this Agreement provides, either expressly or by necessary implication, which are to survive after the Expiry Date or termination including those under Article 3.3.3, 3.3.5, Article 9.3 (Application of Insurance Proceeds), Article 11 (Force Majeure), Article 13 (Events of Default and Termination), Article 14 (Liability & Indemnification), Article 16 (Governing Law & Dispute Resolution), Article 18 (Miscellaneous).

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ARTICLE: 3

3 CONDITIONS SUBSEQUENT

3.1 Satisfaction of conditions subsequent by the TSP

3.1.1 Within ten (10) days from the date of issue of Letter of Intent , the Selected Bidder, on behalf of the TSP shall provide the Contract Performance Guarantee, acquire for the Acquisition Price, one hundred percent (100%) equity shareholding of **'Mohanlalganj Transmission Limited'** from **'PFC Consulting Limited'**, who shall sell to the Selected Bidder, the equity shareholding of **'Mohanlalganj Transmission Limited'**, along with all its related assets and liabilities, and apply to the Appropriate Commission for grant of Transmission License.

The Selected Bidder on behalf of the TSP will provide to the Long Term Transmission Customers the Contract Performance Guarantee for an aggregate amount of **Rs.15,33,00,000/- (Rupees Fifteen Crore Thirty Three Lakh only)** which shall be provided separately to each of the Long Term Transmission Customers for the amount calculated pro-rata in the ratio of their Allocated Project Capacity, as on the date seven (7) days prior to the Bid Deadline (rounded off to the nearest Rupees one Lakh (Rs. 100,000) with the principle that amounts below Rupees Fifty Thousand (Rs. 50,000) shall be rounded down and amounts of Rupees Fifty Thousand (Rs. 50,000) and above shall be rounded up).

3.1.2 The Contract Performance Guarantee shall be initially valid for a period up to three (3) months after the Scheduled COD of the Project and shall be extended from time to time to be valid for a period up to three (3) months after the COD of the Project. In case the validity of the Contract Performance Guarantee is expiring before the validity specified in this Article, the TSP shall, at least thirty (30) days before the expiry of the Contract Performance Guarantee, replace the Contract Performance Guarantee with another Contract Performance Guarantee or extend the validity of the existing Contract Performance Guarantee until the validity period specified in this Article.

3.1.3 The TSP agrees and undertakes to duly perform and complete the following activities within six (6) months from the Effective Date, unless such completion is affected due to the Long Term Transmission Customers' failure to comply with their obligations under Article 3.2 of this Agreement or by any Force Majeure Event, or if any of the activities is specifically waived in writing by the

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Majority Long Term Transmission Customers:

a. To obtain the Transmission License for the Project from the Appropriate Commission;

b. To obtain the order for adoption of Transmission Charges by the Appropriate Commission, as required under Section 63 of the Electricity Act 2003;

c. To submit to the Lead Long Term Transmission Customer and STU the Project Execution Plan, within one hundred and twenty (120) days from the Effective Date. The TSP's Project Execution Plan should be in conformity with the Scheduled COD as specified in Schedule 3 of this Agreement, and shall bring out clearly the organization structure, time plan and methodology for executing the Project, award of major contracts, designing, engineering, procurement, shipping, construction, testing, commissioning to commercial operation, necessary to demonstrate a complete and accurate understanding of the Project, as well as the TSP's knowledge of procedures and prevailing conditions in India. Submission of a detailed bar (GANTT) chart of the Project outlining each activity (taking longer than one Month), linkages as well as durations;

d. To achieve Financial Closure;

e. To provide an irrevocable letter to the Lenders duly accepting and acknowledging the rights provided to the Lenders under the provisions of Article 15.3 of this Agreement and all other RFP Project Documents; and

f. To award the Engineering, Procurement and Construction contract ("EPC contract") for the design and construction of towers for the Project and shall have given to such Contractor an irrevocable notice to proceed.

3.2 Satisfaction of conditions subsequent by the Long Term Transmission Customers

3.2.1 The Long Term Transmission Customers shall provide, within six (6) months from the Effective Date, an irrevocable letter to the Lenders duly accepting and acknowledging the rights provided to the Lenders as per Article 15.3 of this

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Agreement and all other RFP Project Documents

3.3 Consequences of non-fulfilment of conditions subsequent

3.3.1 If any of the conditions specified in Article 3.1.3 is not duly fulfilled by the TSP even within three (3) Months after the time specified therein, then on and from the expiry of such period and until the TSP has satisfied all the conditions specified in Article 3.1.3, the TSP shall, on a weekly basis, be liable to furnish to the Long Term Transmission Customers additional Contract Performance Guarantee of **Rs.77,00,000/- (Rupees Seventy Seven Lakh only)** within two (2) Business Days of expiry of every such Week. Such additional Contract Performance Guarantee shall be provided to each Long Term Transmission Customer in the manner provided in Article 3.1.1 and shall become part of the Contract Performance Guarantee and all the provisions of this Agreement shall be construed accordingly. The Long Term Transmission Customers shall be entitled to hold and/or invoke the Contract Performance Guarantee, including such additional Contract Performance Guarantee, in accordance with the provisions of this Agreement.

3.3.2 Subject to Article 3.3.4, if:

(i) the fulfilment of any of the conditions specified in Article 3.1.3 is delayed beyond nine (9) Months from the Effective Date and the TSP fails to furnish additional Contract Performance Guarantee to the Long Term Transmission Customers in accordance with Article 3.3.1 hereof; or

(ii) the TSP furnishes additional Performance Guarantee to the Long Term Transmission Customers in accordance with Article 3.3.1 hereof but fails to fulfil the conditions specified in Article 3.1.3 within a period of twelve (12) months from the Effective Date,

the Majority Long Term Transmission Customers, as per Article 18.1.5, shall have the right to terminate this Agreement, by giving a Termination Notice to the TSP in writing of at least seven (7) days, with a copy to the Appropriate Commission and the Lenders' Representative.

3.3.3 If the Long Term Transmission Customers elect to terminate this Agreement as per the provisions of Article 3.3.2, the TSP shall be liable to pay to the Long Term Transmission Customers an amount of **Rs.15,33,00,000/- (Rupees Fifteen Crore Thirty Three Lakh only)** as liquidated damages. The Long Term Transmission Customers shall be entitled to recover this amount of damages by invoking the Contract Performance Guarantee to the extent of

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Rs.15,33,00,000/- (Rupees Fifteen Crore Thirty Three Lakh only) which shall be provided separately to each of the Long Term Transmission Customers on the basis of their Allocated Project Capacity in MW as on the dated seven (7) days prior to the Bid Deadline, and shall then return the balance Contract Performance Guarantee, if any, to the TSP. If the Long Term Transmission Customers are unable to recover the said amount of **Rs.15,33,00,000/- (Rupees Fifteen Crore Thirty Three Lakh only)** or any part thereof from the Contract Performance Guarantee, the shortfall in such amount not recovered from the Contract Performance Guarantee, if any, shall be payable by the TSP to the Long Term Transmission Customers within ten (10) days after completion of the notice period.

It is clarified for removal of doubt that this Article shall survive the termination of this Agreement.

3.3.4 In case of inability of the TSP to fulfil the conditions specified in Article 3.1.3 due to any Force Majeure Event, the time period for fulfilment of the condition subsequent as mentioned in Article 3.1.3, shall be extended for a period of such Force Majeure Event, subject to a maximum extension period of three (3) Months, continuous or non-continuous in aggregate. Thereafter, this Agreement may be terminated by the Majority Long Term Transmission Customers or the TSP on mutually agreeable basis by giving a notice of at least seven (7) days, in writing to the other Party, with a copy to the Appropriate Commission and the Lenders' Representative and the Contract Performance Guarantee shall be returned as per the provisions of Article 6.5.2.

Provided, that due to the provisions of this Article 3.3.4, any increase in the time period for completion of conditions subsequent mentioned under Article 3.1.3, shall lead to an equal increase in the time period for the Scheduled COD. No adjustments to the Transmission Charges shall be allowed on this account.

3.3.5 Upon termination of this Agreement as per Articles 3.3.2 and 3.3.4, the Lead Long Term Transmission Customer shall approach the Appropriate Commission within seven (7) days of such termination for further necessary directions as per the provisions of the Electricity Act 2003.

3.4 Progress Reports

The TSP and the Lead Long Term Transmission Customer shall notify one another in writing at least once a Month on the progress made in satisfying the conditions subsequent in Articles 3.1.3 and 3.2.

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ARTICLE: 4

4 DEVELOPMENT OF THE PROJECT

4.1 TSP's obligations in development of the Project:

Subject to the terms and conditions of this Agreement, the TSP at its own cost and expense shall observe, comply with, perform, undertake and be responsible:

a. for procuring and maintaining in full force and effect all Consents, Clearances and Permits, required in accordance with Law for development of the Project;

b. for financing, constructing, owning and commissioning each of the Element of the Project for the scope of work set out in Schedule 2 of this Agreement in accordance with:

   i. the Grid Code, the grid connectivity standards applicable to the Transmission Line and the sub-station as per the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007, Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010, Central Electricity Authority (Grid Standards) Regulations, 2010, Central Electricity Authority (Safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations 2011 and Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2010, as amended from time to time.

   ii. Prudent Utility Practices and the Law;

   not later than the Scheduled COD as per Schedule 3 of this Agreement;

c. for entering into a Connection Agreement with the CTU/STU (as applicable) in accordance with the Grid Code.

d. for owning the Project throughout the term of this Agreement free and clear of any encumbrances except those expressly permitted under Article 15 of this Agreement;

e. to co-ordinate and liaise with concerned agencies and provide on a timely basis relevant information with regard to the specifications of the Project that may be required for interconnecting the Project with the Interconnection Facilities;

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f. for providing all assistance to the Arbitrators as they may require for the performance of their duties and responsibilities;

g. to provide to the Long Term Transmission Customers with a copy to STU, on a monthly basis, progress reports with regard to the Project and its execution (in accordance with Agreed Form) to enable the Long Term Transmission Customers / STU to monitor and co-ordinate the development of the Project matching with the Interconnection Facilities.

h. to procure the products associated with the Transmission System as per provisions of Public Procurement (Preference to Make in India) orders issued by Ministry of Power vide order No. 11/05/2018-Coord. dated 28.07.2020 for transmission sector, as amended from time to time read with Department for Promotion of Industry and Internal Trade (DPIIT) orders in this regard (Procuring Entity as defined in above orders shall deemed to have included Selected Bidder and/ or TSP).

Also, to comply with Department of Expenditure, Ministry of Finance vide Order (Public Procurement No 1) bearing File No. 6/18/2019-PPD dated 23.07.2020, Order (Public Procurement No 2) bearing File No. 6/18/2019-PPD dated 23.07.2020 and Order (Public Procurement No. 3) bearing File No. 6/18/2019-PPD, dated 24.07.2020 regarding public procurement from a bidder of a country, which shares land border with India.

i. to comply with all its obligations undertaken in this Agreement.

4.2 Long Term Transmission Customers' obligations in implementation of the Project:

4.2.1 Subject to the terms and conditions of this Agreement, Long Term Transmission Customers, at their own cost and expense, undertake to be responsible;

a. for assisting and supporting the TSP in obtaining the Consents, Clearances and Permits required for the Project and in obtaining any applicable concessions for the Project, by providing letters of recommendation to the concerned Indian Governmental Instrumentality, as may be requested by the TSP from time to time;

b. for arranging and making available the Interconnection Facilities to enable the TSP to connect the Project;

c. for complying with all their obligations under this Agreement, and

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d. for providing all assistance to the Arbitrators as they may require for the performance of their duties and responsibilities.

4.3 Time for Commencement and Completion:

a. The TSP shall take all necessary steps to commence work on the Project from the Effective Date of the Agreement and shall achieve Scheduled COD of the Project in accordance with the time schedule specified in Schedule 3 of this Agreement.

b. The COD of each Element of the Project shall occur no later than the Scheduled COD or within such extended time to which the TSP shall be entitled under Article 4.4 hereto.

4.4 Extension of time:

4.4.1 In the event that the TSP is prevented from performing its obligations under Article 4.1(a), (b) and (e) by the stipulated date, due to any Long Term Transmission Customers' Event of Default, the Scheduled COD shall be extended, by a 'day for day' basis, subject to the provisions of Article 13.

4.4.2 In the event that an Element or the Project cannot be commissioned by its Scheduled COD on account of any Force Majeure Event as per Article 11, the Scheduled COD shall be extended, by a 'day for day' basis, for a maximum period of one hundred and eighty (180) days. In case the Force Majeure Event continues even after the maximum period of one hundred and eighty (180) days, the TSP or the Majority Long Term Transmission Customers may choose to terminate the Agreement as per the provisions of Article 13.5.

4.4.3 If the Parties have not agreed, within thirty (30) days after the affected Party's performance has ceased to be affected by the relevant circumstance, on how long the Scheduled COD should be defer red by, any Party may raise the Dispute to be resolved in accordance with Article 16.

4.5 Metering Arrangements:

4.5.1 The TSP shall comply with all the provisions of the IEGC and the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 as amended from time to time, with regard to the metering arrangements for the Project. The TSP shall fully cooperate with the CTU / STU / RLDC and extend all necessary assistance in taking meter readings.

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ARTICLE: 5

5 CONSTRUCTION OF THE PROJECT

5.1 TSP's Construction Responsibilities:

5.1.1 The TSP, at its own cost and expense, shall be responsible for designing, constructing, erecting, completing and commissioning each Element of the Project by the Scheduled COD in accordance with the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007, Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2010, Central Electricity Authority (Grid Standards) Regulations, 2010, Central Electricity Authority (Safety requirements for construction, operation and maintenance of electrical plants and electric lines) Regulations 2011 and Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulations, 2010, Prudent Utility Practices and other applicable Laws.

5.1.2 The TSP acknowledges and agrees that it shall not be relieved from any of its obligations under this Agreement or be entitled to any extension of time by reason of the unsuitability of the Site or Transmission Line route(s) for whatever reasons. The TSP further acknowledges and agrees that it shall not be entitled to any financial compensation in this regard.

5.1.3 The TSP shall be responsible for obtaining all Consents, Clearances and Permits relating but not limited to road / rail / river / canal / power line / crossings, Power and Telecom Coordination Committee (PTCC), defence, civil aviation, right of way / way-leaves and environmental & forest clearances from relevant authorities required for developing, financing, constructing, maintaining/ renewing all such Consents, Clearances and Permits in order to carry out its obligations under this Agreement in general and Article 5.1.1 in particular and shall furnish to the Lead Long Term Transmission Customer promptly with copy/ies of each Consents, Clearances and Permits, which it obtains. The Long Term Transmission Customers shall assist and support the TSP in obtaining the Consents, Clearances and Permits required for the Project and in obtaining any applicable concessions for the Project, by providing letters of recommendation to the concerned Indian Governmental Instrumentality, as may be reasonably required from time to time.

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5.1.4 The TSP shall be responsible for:

(a) acquisition of land for location specific substations, switching stations or HVDC terminal or inverter stations (if required);
(b) final selection of Site including its geo-technical investigation;
(c) survey and geo-technical investigation of line route in order to determine the final route of the Transmission Lines;
(d) seeking access to the Site and other places where the Project is being executed, at its own costs, including payment of any crop compensation or any other compensation as may be required.

5.1.5 In case the Project involves any resettlement and rehabilitation, the resettlement and rehabilitation package will be implemented by the State Government authorities, for which the costs is to be borne by the TSP and no changes would be allowed in the Transmission Charges on account of any variation in the resettlement and rehabilitation cost. The TSP shall provide assistance on best endeavour basis, in implementation of the resettlement and rehabilitation package, if execution of such package is in the interest of expeditious implementation of the Project and is beneficial to the Project affected persons.

5.2 Appointing Contractors:

5.2.1 The TSP shall conform to the requirements as provided in this Agreement while appointing Contractor(s) for procurement of goods & services.

5.2.2 The appointment of such Contractor(s) shall neither relieve the TSP of any of its obligations under this Agreement nor make Long Term Transmission Customers liable for the performance of such Contractor(s).

5.3 Monthly Progress Reporting:

The TSP shall provide to the Long Term Transmission Customers, on a monthly basis, progress reports with regard to the Project and its execution (in accordance with Agreed Form) to enable the Long Term Transmission Customers to monitor and co-ordinate the development of the Project, matching with the Interconnection Facilities.

A copy of such monthly report shall also be sent by the TSP to the STU.

5.4 Quality of Workmanship:

The TSP shall ensure that the Project is designed, built and completed in a good

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workmanlike manner using sound engineering and construction practices, and using only materials and equipment that are new and of international – utility grade quality such that, the useful life of the Project will be till the Expiry Date.

The TSP shall ensure that design, construction and testing of all equipment, facilities, components and systems of the Project shall be in accordance with Indian Standards and Codes issued by Bureau of Indian Standards and only in case they are not applicable under certain conditions, the other equivalent internationally recognised Standards and Codes shall be followed.

5.5 Inspection by the Lead Long Term Transmission Customer:

The Lead Long Term Transmission Customer shall designate, from time to time by a written notice to the TSP, at the most three (3) employees from any of the Long Term Transmission Customers, who shall have access at all reasonable times to the Site and to all such places where the Project is being executed for the purpose of inspecting the progress of the Project, at its own cost and expenses.

5.6 Site regulations and Construction Documents

The TSP shall abide by the Safety Rules and Procedures as mentioned in Schedule 4 of this Agreement

The TSP shall retain at the Site and make available for inspection to the Lead Long Term Transmission Customer at all reasonable times copies of the Consents, Clearances and Permits, construction drawings and other documents related to construction.

5.7 Supervision of work:

The TSP shall provide all necessary superintendence for execution of the Project and its supervisory personnel shall be available to provide full-time superintendence for execution of the Project. The TSP shall provide skilled personnel who are experienced in their respective fields.

5.8 Remedial Measures:

The TSP shall take all necessary actions for remedying the shortfall in achievement of timely progress in execution of the Project, if any, as intimated by the STU. However, such intimation by the STU and the subsequent effect of such remedial measures carried out by the TSP shall not relieve the TSP of its obligations in the Agreement. STU may carry out random inspections during the Project execution, as and when deemed necessary by it. If the shortfalls as intimated to the TSP are not

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remedied to the satisfaction of the STU, it may refer the same to the Appropriate Commission for appropriate action.

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ARTICLE: 6

6 CONNECTION AND COMMISSIONING OF THE PROJECT

6.1 Connection with the Inter-Connection Facilities:

6.1.1 The TSP shall give the RLDC(s)/SLDC, CTU/ STU, as the case may be, the Long Term Transmission Customers and any other agencies as required at least sixty (60) days advance written notice of the date on which it intends to connect an Element of the Project, which date shall be not earlier than its Scheduled COD or Schedule COD extended as per Article 4.4.1 of this Agreement, unless the Lead Long Term Transmission Customer otherwise agrees.

6.1.2 The RLDC / SLDC (as the case may be) or the CTU / STU (as the case may be) or the Lead Long Term Transmission Customer may, for reasonable cause, including failure to arrange for Interconnection Facilities as per Article 4.2, defer the connection for up to fifteen (15) days from the date notified by the TSP pursuant to Article 6.1.1 if it notifies to the TSP in writing, before the date of connection, of the reason for the deferral and when the connection is to be rescheduled. However, no such deferment on one or more occasions would be for more than an aggregate period of 30 days. Further, the Scheduled COD would be extended as required, for all such deferments on day for day basis.

6.1.3 Subject to Articles 6.1.1 and 6.1.2, any Element of Project may be connected with the Interconnection Facilities when:

a. it has been completed in accordance with this Agreement and the Connection Agreement;

b. it meets the Grid Code, Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 and all other Indian legal requirements and

c. The TSP has obtained the approval in writing of the Electrical Inspector certifying that the Element is ready from the point of view of safety of supply and can be connected with the Interconnection Facilities.

6.2 Commercial Operation:

6.2.1 An Element of the Project shall be declared to have achieved COD seventy two (72) hours following the connection of the Element with the Interconnection Facilities or seven (7) days after the date on which it is declared by the TSP to be ready for

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charging but is not able to be charged for reasons not attributable to the TSP or seven (7) days after the date of deferment, if any, pursuant to Article 6.1.2.

Provided that an Element shall be declared to have achieved COD only after all the Element(s), if any, which are pre-required to have achieved COD as defined in Schedule 3 of this Agreement, have been declared to have achieved their respective COD.

6.2.2 Once any Element of the Project has been declared to have achieved deemed COD as per Article 6.2.1 above, such Element of the Project shall be deemed to have Availability equal to the Target Availability till the actual charging of the Element and to this extent, shall be eligible for payment of the Monthly Transmission Charges applicable for such Element.

6.3 Liquidated Damages for delay due to Long Term Transmission Customer Event of Default or Direct Non Natural Force Majeure Events or Indirect Non Natural Force Majeure Events or Natural Force Majeure Event (affecting the Long Term Transmission Customer)

6.3.1 If the TSP is otherwise ready to connect the Element(s) of the Project and has given due notice, as per provisions of Article 6.1.1, to the Long Term Transmission Customer(s) of the date of intention to connect the Element(s) of the Project, where such date is on or before the Scheduled COD, but is not able to connect the Element(s) of the Project by the said date specified in the notice, due to a Long Term Transmission Customer Event of Default or due to Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or (Natural Force Majeure Event affecting the Long Term Transmission Customer) provided such Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or (Natural Force Majeure Event affecting the Long Term Transmission Customer(s)) has continued for a period of more than three (3) continuous or non-continuous Months, the TSP shall, until the effects of the Long Term Transmission Customer Event of Default or of Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or (Natural Force Majeure Event affecting the Long Term Transmission Customer(s)) no longer prevent the TSP from connecting the Element(s) of the Project , be deemed to have achieved COD relevant to that date and to this extent, be deemed to have been providing Transmission Service with effect from the date notified, and shall be treated as follows.

a. In case of delay on account of the Long Term Transmission Customer Event of Default, the Long Term Transmission Customer(s) shall make payment to the

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TSP of Non Escalable Transmission Charges in proportion to their Allocated Project Capacity, calculated on Target Availability for and during the period of such delay.

b. In case of delay due to Direct Non Natural Force Majeure Event, the Long Term Transmission Customer(s) shall make payments to the TSP of Non Escalable Transmission Charges calculated on Target Availability for the period of such events in excess of three (3) continuous or non-continuous Months in the manner provided in (d) below.

c. In case of delay due to Indirect Non Natural Force Majeure Event or (Natural Force Majeure Event affecting the Long Term Transmission Customer(s)), the Long Term Transmission Customer(s) shall make payment to the TSP for debt service, subject to a maximum of Non Escalable Transmission Charges calculated on Target Availability, which is due under the financing agreements for the period of such events in excess of three (3) continuous or non-continuous Months in the manner provided in (d) below.

d. In case of delay due to Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Long Term Transmission Customer(s)), the Long Term Transmission Customer(s) shall be liable to make payments mentioned in (b) and (c) above, after commencement of Transmission Service, in the form of an increase in Non Escalable Transmission Charges. These amounts shall be paid from the date, being the later of a) the date of cessation of such Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event (or Natural Force Majeure Event affecting the Long Term Transmission Customer(s)) and b) the completion of sixty (60) days from the receipt of the financing agreements by the Long Term Transmission Customer(s) from the TSP.

Provided such increase in Non Escalable Transmission Charges shall be determined by Appropriate Commission on the basis of putting the TSP in the same economic position as the TSP would have been in case the TSP had been paid amounts mentioned in (b) and (c) above in a situation where the Force Majeure Event had not occurred.

For the avoidance of doubt, it is specified that the charges payable under this Article 6.3.1 shall be paid by the Long Term Transmission Customer(s) in proportion to their then Allocated Project Capacity.

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6.4 Liquidated Damages for Delay in achieving COD of Project:

6.4.1 If the TSP fails to achieve COD of any Element of the Project or the Project, by the Element's / Project's Scheduled COD as extended under Articles 4.4.1 and 4.4.2, then the TSP shall pay to the Long Term Transmission Customer(s), as communicated by the Lead Long Term Transmission Customer, in proportion to their Allocated Project Capacity as on the date seven (7) days prior to the Bid Deadline, a sum equivalent to 3.33% of Monthly Transmission Charges applicable for the Element of the Project [in case where no Elements have been defined, to be on the Project as a whole] / Project, for each day of delay up to sixty (60) days of delay and beyond that time limit, at the rate of five percent (5%) of the Monthly Transmission Charges applicable to such Element / Project, as liquidated damages for such delay and not as penalty, without prejudice to Long Term Transmission Customers' any rights under the Agreement.

6.4.2 The TSP's maximum liability under this Article 6.3 shall be limited to the amount of liquidated damages calculated in accordance with Article 6.4.1 for and up to six (6) months of delay for the Element or the Project.

Provided that in case of failure of the TSP to achieve COD of the Element of the Project even after the expiry of six (6) months from its Scheduled COD, the provisions of Article 13 shall apply.

6.4.3 The TSP shall make payment of the liquidated damages calculated pursuant to Article 6.4.1 within ten (10) days of the earlier of:

a. the date on which the applicable Element achieves COD; or

b. the date of termination of this Agreement.

The payment of such damages shall not relieve the TSP from its obligations to complete the Project or from any other obligation and liabilities under the Agreement.

6.4.4 If the TSP fails to pay the amount of liquidated damages within the said period of ten (10) days, the Long Term Transmission Customers shall be entitled to recover the said amount of the liquidated damages by invoking the Contract Performance Guarantee. If the then existing Contract Performance Guarantee is for an amount which is less than the amount of the liquidated damages payable by the TSP to the Long Term Transmission Customers under this Article 6.3, the TSP shall be liable to forthwith pay the balance amount.

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6.5 Return of Contract Performance Guarantee

6.5.1 If the TSP fails to achieve COD of any of the Elements on their respective Scheduled COD specified in this Agreement, subject to conditions mentioned in Article 4.4, the Long Term Transmission Customers shall have the right to encash the Contract Performance Guarantee and appropriate in their favour as liquidated damages an amount specified in Article 6.4.1, without prejudice to the other rights of the Long Term Transmission Customers under this Agreement.

6.5.2 The Contract Performance Guarantee as submitted by TSP in accordance with Article 3.1.1 shall be released by the Long Term Transmission Customers within three (3) months from the COD of the Project. In the event of delay in achieving Scheduled COD of any of the Elements by the TSP (otherwise than due to reasons as mentioned in Article 3.1.1 or Article 11) and consequent part invocation of the Contract Performance Guarantee by the Long Term Transmission Customers, the Long Term Transmission Customers shall release the Contract Performance Guarantee if any, remaining unadjusted, after the satisfactory completion by the TSP of all the requirements regarding achieving the Scheduled COD of the remaining Elements of the Project. It is clarified that the Long Term Transmission Customers shall also return/release the Contract Performance Guarantee in the event of (i) applicability of Article 3.3.2 to the extent the Contract Performance Guarantee is valid for an amount in excess of **Rs.15,33,00,000/- (Rupees Fifteen Crore Thirty Three Lakh only)** or (ii) termination of this Agreement by any Party as mentioned under Article 3.3.4 of this Agreement.

6.5.3 The release of the Contract Performance Guarantee shall be without prejudice to other rights of the Long Term Transmission Customers under this Agreement.

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ARTICLE: 7

7 OPERATION AND MAINTENANCE OF THE PROJECT

7.1 Operation and Maintenance of the Project:

7.1.1 The TSP shall be responsible for ensuring that the Project is operated and maintained in accordance with the Indian Electricity Grid Code (IEGC) / State Grid Code (as applicable), Transmission License, directions of National Load Despatch Centre / RLDC / SLDC (as applicable), Prudent Utility Practices, other legal requirements including the terms of Consents, Clearances and Permits and is made available for use by the Transmission Customers as per the provisions of applicable regulations including but not limited to the Central Electricity Regulatory Commission (Open Access in Inter-state Transmission) Regulations, 2008, Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-state Transmission and related matters) Regulations, 2009, Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 (as the case may be), Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, and the Central Electricity Authority (Grid Standards) of Operation and Maintenance of Transmission Lines Regulations, 2010 as amended from time to time and provisions of this Agreement.

7.1.2 The TSP shall operate and maintain the Project in an efficient, coordinated and economical manner and comply with the directions issued by the National Load Despatch Centre, RLDC or the SLDC, as the case may be, in line with the provisions of the Electricity Act 2003 and Rule 5 of the Electricity Rules, 2005, and as amended from time to time.

7.1.3 The TSP shall be responsible to provide non-discriminatory open access to the Project as per the provisions of the Electricity Act 2003, Central Electricity Regulatory Commission (Open Access in Inter-state Transmission) Regulations, 2008,Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-state Transmission and related matters) Regulations, 2009, Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 (as the case may be), as amended from time to time. The Long Term Transmission Customers agree with the TSP to provide such access to the Open Access Customers.

7.1.4 If the TSP fails to comply with the directions issued by the Appropriate Commission or the RLDC / SLDC, as the case may be and is liable to pay a penalty

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under the provisions of the Electricity Act 2003, such penalties shall be borne by the TSP and cannot be claimed from any of the Long Term Transmission Customers.

7.1.5 The TSP may, with prior intimation to the Appropriate Commission and the Lead Long Term Transmission Customer, engage in any business for the optimum utilisation of the assets, subject to the provisions of Section 41 of the Electricity Act 2003 and Transmission License.

7.1.6 The TSP shall abide by the Safety Rules and Procedures during the Operation Period as mentioned in Schedule 4 of this Agreement.

7.2 Scheduled Outage

7.2.1 In line with the provisions of the Grid Code, as amended from time to time, the TSP shall provide its annual outage plan, and shall be governed by the decisions of the RPC in this regard.

7.3 Unscheduled Outage

7.3.1 In the event of an Unscheduled Outage, the TSP shall inform, in writing to the concerned RLDC/SLDC, as the case may be, and the Lead Long Term Transmission Customer, the reasons and the details of occurrence of such Unscheduled Outage. The TSP shall further inform about, the nature of the work to be carried out, the estimated time required to complete it and the latest time by which in its opinion the work should begin consistent with the Prudent Utility Practices.

7.3.2 The TSP shall use its reasonable endeavours consistent with Prudent Utility Practices to carry out the maintenance in minimum time schedule to address such Unscheduled Outage and bring the Element/Project back in operation.

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ARTICLE: 8

8 AVAILABILITY OF THE PROJECT

8.1 Calculation of Availability of the Project:

Calculation of Availability for the Elements and for the Project, as the case may be, shall be as per Annexure B of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations, 2014, as applicable seven (7) days prior to the Bid Deadline and as appended in Schedule 9.

8.2 Target Availability:

The Target Availability of the Project shall be ninety eight percent (98%).

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ARTICLE: 9

9 INSURANCES

9.1 Insurance:

9.1.1 The TSP shall effect and maintain or cause to be effected and maintained during the Construction Period and the Operating Period, Insurances against such risks, with such deductibles and endorsements and co-beneficiary/insured, as may be necessary under

a. any of the Financing Agreements,

b. the Laws, and

c. in accordance with Prudent Utility Practices.

The Insurances shall be taken effective from a date prior to the date of the Financial Closure till the Expiry Date.

9.2 Evidence of Insurance cover:

9.2.1 The TSP shall furnish to the Lead Long Term Transmission Customer copies of certificates and policies of the Insurances as soon as they are effected and renewed by or on behalf of the TSP from time to time in terms of Article 9.1

9.3 Application of Insurance Proceeds:

9.3.1 Save as expressly provided in this Agreement, the policies of Insurances and the Financing Agreements, the proceeds of any insurance claim made due to loss or damage to the Project or any part of the Project shall be first applied to reinstatement, replacement or renewal of such loss or damage.

9.3.2 If a Natural Force Majeure Event renders the Project no longer economically and technically viable and the insurers under the Insurances make payment on a "total loss" or equivalent basis, the portion of the proceeds of such Insurance available to the TSP (after making admissible payments to the Lenders as per the Financing Agreements) shall be allocated to the TSP and the Long Term Transmission Customers shall have no claim on such proceeds of the Insurance.

9.3.3 Subject to the requirements of the Lenders under the Financing Agreements, any dispute or difference between the Parties as to whether the Project is no longer economically and technically viable due to a Force Majeure Event or whether that

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event was adequately covered in accordance with this Agreement by the Insurances shall be determined in accordance with Article 16.

9.4 Effect on liability of the Long Term Transmission Customers

9.4.1 The Long Term Transmission Customers shall have no financial obligations or liability whatsoever towards the TSP in respect of this Article 9.

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ARTICLE: 10

10 BILLING AND PAYMENT OF TRANSMISSION CHARGES

10.1 Subject to provisions of this Article 10, the Long Term Transmission Customers shall pay to the TSP, in Indian Rupees, on monthly basis, the Monthly Transmission Charges from the date on which an Element(s) has achieved COD until the Expiry Date of this Agreement, unless terminated earlier, in line with the provisions of Schedule 5 of this Agreement.

10.2 Calculation of Monthly Transmission Charges:

The Monthly Transmission Charges for each Contract Year shall be calculated in accordance with the provisions of Schedule 5 of this Agreement.

10.3 Incentive Payment

Incentive payment, on account of Availability being more than the Target Availability shall be payable by the Long Term Transmission Customer(s), in line with Clause 1.2.2 of Schedule 5 of this Agreement and shall be paid on an annual basis. The annual incentive amount payable to the TSP shall be shared by the Long Term Transmission Customer(s) in the ratio of the Transmission Charges paid or actually payable to the TSP by them existing at the end of the relevant Contract Year.

10.4 Payment of Penalty

The TSP shall pay a penalty on account of Availability being less than ninety five percent (95%) in any Contract Year in respect of the Element(s) having achieved COD or in case of the Project, after COD of the Project, to be computed in line with Clause 1.2.3 of Schedule 5 of this Agreement and paid on an annual basis. This penalty payable by the TSP shall be apportioned in favour of the Long Term Transmission Customer(s) in the ratio of the Transmission Charges paid or actually payable to the TSP by them existing at the end of the relevant Contract Year.

10.5 Delivery of Invoices:

10.5.1 **TSP's Invoices**

a. Commencing with the month following the month in which the COD of an Element (which is first Commissioned) occurs, the TSP shall submit to Long Term Transmission Customers by the fifth day of such and each succeeding month (or, if such day is not a Business Day, the immediately following Business Day) an Invoice in the Agreed Form (the "Monthly Transmission

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Charge Invoice") signed by the authorised signatory of the TSP setting out the computation of the Monthly Transmission Charges to be paid by the Long Term Transmission Customers to the TSP in respect of the immediately preceding month in accordance with this Agreement; and

b. Each Monthly Transmission Charge Invoice shall include detailed calculations of the amounts payable under it, together with such further supporting documentation and information as Long Term Transmission Customers may reasonably require / request, from time to time.

10.5.2 Long Term Transmission Customers Invoices

a. Long Term Transmission Customers shall (as and when any amount becomes due to be paid by TSP), on the fifth day of the month (or, if such day is not a Business Day, the immediately following Business Day) submit to the TSP an Invoice in the Agreed Form (the "Long Term Transmission Customers Invoice") setting out the computation of any amount that may be payable to it by the TSP for the immediately preceding month pursuant to this Agreement.

b. Each Long Term Transmission Customer's Invoice shall include detailed calculations of the amounts payable under it, together with such further supporting documentation as the TSP may reasonably require/request, from time to time.

10.6 Payment of Invoices:

10.6.1 Pursuant to Article 10.4, any amount payable under an Invoice shall be paid in immediately available and freely transferable clear funds, for value on or before the Due Date, to such account of the TSP or Long Term Transmission Customers as shall have been previously notified to Long Term Transmission Customers or the TSP, as the case may be.

10.6.2 Where in respect of any month there is both:

a. an amount payable by the Long Term Transmission Customers to TSP pursuant to a Monthly Transmission Charge Invoice and

b. an amount payable by the TSP to Long Term Transmission Customer pursuant to a Long Term Transmission Customer's Invoice as per provisions of this Agreement,

the two amounts, to the extent agreed to be set off by the TSP may, be set off against each other and the balance, if any, shall be paid by Long Term

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Transmission Customers to the TSP or by TSP to Long Term Transmission Customers, as the case may be.

10.6.3 The Long Term Transmission Customers shall pay the amount payable under the Monthly Transmission Charge Invoice and the Supplementary Bill on the Due Date to such account of the TSP, as shall have been previously notified by the TSP to the Long Term Transmission Customers in accordance with Article 10.6.6 below.

10.6.4 All payments made by the Long Term Transmission Customers shall be appropriated by the TSP in the following order of priority:

i. towards Late Payment Surcharge, payable to the TSP, if any;

ii. towards earlier unpaid Monthly Transmission Charge Invoice, if any;

iii. towards earlier unpaid Supplementary Bill, if any;

iv. towards the then current Monthly Transmission Charge Invoice, if any; and

v. towards the then current Supplementary Bill.

10.6.5 All payments required to be made under this Agreement shall only include any deduction or set off for:

i. deductions required by the Law; and

ii. amounts claimed by the Long Term Transmission Customers from the TSP, through an Invoice duly acknowledged by the TSP, to be payable by the TSP, and not disputed by the TSP within thirty (30) days of receipt of the said Invoice and such deduction or set-off shall be made to the extent of the amounts not disputed. It is clarified that the Long Term Transmission Customers shall be entitled to claim any set off or deduction under this Article, after expiry of the said thirty (30) day period.

Provided further, the maximum amounts that can be deducted or set-off by all the Long Term Transmission Customers taken together (proportionate to their Allocated Transmission Capacity in case of each Long Term Transmission Customer) under this Article in a Contract Year shall not exceed **Rs.5,14,00,000/- (Rupees Five Crore Fourteen Lakh Only)**, except on account of payments under sub Article (i) above.

10.6.6 The TSP shall open a bank account at ..... (the "Designated Account")

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for all payments to be made by the Long Term Transmission Customers to the TSP, and notify the Long Term Transmission Customers of the details of such account at least ninety (90) days before the Scheduled COD of the first Element to the Long Term Transmission Customers. The Long Term Transmission Customers shall, on the day of payment, notify the TSP of the payment made to the Designated Account. The Long Term Transmission Customers shall also designate a bank account at ..... for payments to be made by the TSP to Long Term Transmission Customers and notify the TSP of the details of such account ninety (90) days before the Scheduled COD of the first Element.

10.7 Payment of Rebate:

10.7.1 In case the Long Term Transmission Customer pays to the TSP through any mode of payment in respect of a Monthly Transmission Charge Invoice or Supplementary Bill, the following shall apply:

a. For payment of Invoices through any mode of payment, a Rebate of 2% shall be allowed on the Monthly Transmission Charge Invoice or Supplementary Bill for payments made in full within one Business Day of the receipt of the Invoice; or

b. For payment of Invoices subsequently, but within the Due Date, a Rebate of 1% shall be allowed on the payments made in full.

c. Applicable rate of Rebate at (a) and (b) above shall be based on the date on which the payment has been actually credited to the TSP's account. Any delay in transfer of money to the TSP's account, on account of a statutory holiday, public holiday, or any other reasons shall be to the account of the Long Term Transmission Customers.

d. No Rebate shall be payable on the bills raised on account of Change in Law relating to taxes, duties and cess;

Provided that if any Long Term Transmission Customer fails to pay a Monthly Transmission Charge Invoice/ Supplementary Bill or part thereof within and including the Due Date, the TSP shall recover such amount as per provisions of Article 10.11.1(f) .

10.8 Surcharge

10.8.1 Any amount due from one Party to the other, pursuant to this Agreement and remaining unpaid for thirty (30) days after the Due Date, shall bear Late Payment Surcharge @ 1.25% per month on the unpaid amount. Such Late

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Payment Surcharge shall be calculated on simple rate basis and shall accrue from the Due Date until the amount due is actually received by the payee.

10.9 Disputed Invoices

10.9.1 If either Party does not question or dispute an Invoice within thirty (30) days of receiving it, the Invoice shall be considered correct, complete and conclusive between the Parties.

10.9.2 If either Party disputes any item or part of an item set out in any Invoice then that Party shall serve a notice (an "Invoice Dispute Notice") on the other Party setting out (i) the item or part of an item which is in dispute, (ii) its estimate of what such item or part of an item should be, (iii) and with all written material in support of its claim.

10.9.3 If the invoicing Party agrees to the claim raised in the Invoice Dispute Notice issued pursuant to Article 10.9.2, the invoicing Party shall revise such Invoice within seven (7) days of receiving such notice from the disputing Party and if the disputing Party has already made the excess payment, the invoicing Party shall refund to the disputing Party, such excess amount within fifteen (15) days of receiving such notice. In such a case, the excess amount shall be refunded along with interest at the same rate as the Late Payment Surcharge, which shall be applied from the date on which such excess payment was made to the invoicing Party and up to and including the date on which such payment has been received as refund.

10.9.4 If the invoicing Party does not agree to the claim raised in the Invoice Dispute Notice issued pursuant to Article 10.9.2, it shall, within fifteen (15) days of receiving the Invoice Dispute Notice, furnish a notice to the disputing Party providing (i) reasons for its disagreement; (ii) its estimate of what the correct amount should be; and (iii) all written material in support of its counter-claim.

10.9.5 Upon receipt of notice of disagreement to the Invoice Dispute Notice under Article 10.9.4, authorised representative(s) or a director of the board of directors/member of board of each Party shall meet and make best endeavours to amicably resolve such Dispute within fifteen (15) days of receiving such notice of disagreement to the Invoice Dispute Notice.

10.9.6 If the Parties do not amicably resolve the dispute within fifteen (15) days of receipt of notice of disagreement to the Invoice Dispute Notice pursuant to Article 10.9.4, the matter shall be referred to Appropriate Commission for Dispute resolution in accordance with Article 16.

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10.9.7 If a Dispute regarding a Monthly Transmission Charge Invoice or a Supplementary Invoice is settled pursuant to Article 10.7 or by Dispute resolution mechanism provided in this Agreement in favour of the Party that issues the Invoice Dispute Notice, the other Party shall refund the amount, if any incorrectly charged and collected from the disputing Party or pay as required, within five (5) days of the Dispute either being amicably resolved by the Parties pursuant to Article 10.9.5 or settled by Dispute resolution mechanism, along with interest (at the same rate as Late Payment Surcharge) or Late Payment Surcharge from the date on which such payment had been made to the invoicing Party or the date on which such payment was originally due, as may be applicable.

10.9.8 For the avoidance of doubt, it is clarified that despite a Dispute regarding an Invoice, the concerned Long Term Transmission Customer shall, without prejudice to its right to Dispute, be under an obligation to make payment, of the lower of (a) an amount equal to simple average of last three (3) months Invoices (being the undisputed portion of such three months Invoices) and (b) Monthly Invoice which is being disputed, provided such Monthly Invoice has been raised based on the Allocated Project Capacity and in accordance with this Agreement.

10.10 Payment of Supplementary Bill

10.10.1 Either Party may raise a bill on the other Party ("Supplementary Bill") for payment on account of:

i. adjustments (if any) required by the Regional Energy Account ; or
ii. quarterly or annual reconciliation as per Article 10.13 ; or
iii. Change in Law as provided in Article 12,

and such Bill shall be paid by the other Party.

10.11 Payment Security Mechanism:

10.11.1 **Establishment of Letter of Credit**:

(a) Not later than one (1) Month prior to the Scheduled COD of the first Element of the Project, each Long Term Transmission Customer shall, through a scheduled bank, open a Letter of Credit in favour of the TSP, to be made operative from a date prior to the Due Date of its first Monthly Transmission Charge Invoice under this Agreement and shall be renewed annually.

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(b) The draft of the proposed Letter of Credit shall be provided by each Long Term Transmission Customer to the TSP not later than the Financial Closure of the Project and shall be mutually agreed between the Parties.

(c) The Letter of Credit shall have a term of twelve (12) Months and shall be for an amount:

i. for the first Contract Year or for each subsequent Contract Year, equal to one point one (1.1) times the estimated average Monthly Transmission Charges based on Target Availability of the Elements or Project with Scheduled COD in such Contract Year, as the case may be;

ii. Provided that, the TSP shall not make any drawl before the Due Date and shall not make more than one drawal in a month.

Provided further that if at any time, such Letter of Credit amount falls short of the amount specified in Article 10.11.1, otherwise than by reason of drawal of such Letter of Credit by the TSP, the relevant Long Term Transmission Customer shall restore such shortfall within seven (7) days.

(d) Long Term Transmission Customers shall cause the scheduled bank issuing the Letter of Credit to intimate the TSP, in writing regarding establishing of such Letter of Credit.

(e) In case of drawal of the Letter of Credit by the TSP in accordance with the terms of this Article 10.11.1, the amount of the Letter of Credit shall be reinstated within seven (7) days from the date of such drawal.

(f) If any Long Term Transmission Customer fails to pay a Monthly Transmission Charge Invoice / Supplementary Bill or part thereof within and including the Due Date, then, unless an Invoice Dispute Notice is received by the TSP as per the provisions of Article 10.9.2, the TSP may draw upon the Letter of Credit, and accordingly the bank shall pay without any reference or instructions from the Long Term Transmission Customers, an amount equal to such Monthly Transmission Charge Invoice/Supplementary Bill or part thereof plus Late Payment Surcharge, if applicable, in accordance with Article 10.8 above, by presenting to the scheduled bank issuing the Letter of Credit, the following documents:

i. a copy of the Monthly Transmission Charge Invoice/ Supplementary

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Bill which has remained unpaid by such Long Term Transmission Customer;

ii. a certificate from the TSP to the effect that the Invoice at item (i) above, or specified part thereof, is in accordance with the Agreement and has remained unpaid beyond the Due Date; and

iii. calculations of applicable Late Payment Surcharge, if any.

Provided that failure on the part of the TSP to present the documents for negotiation of the Letter of Credit shall not attract any Late Payment Surcharge on the Long Term Transmission Customers.

(g) Each Long Term Transmission Customer shall ensure that the Letter of Credit shall be renewed not later than thirty (30) days prior to its expiry.

(h) All costs relating to opening and maintenance of the Letter of Credit shall be borne by the Long Term Transmission Customers. However, the Letter of Credit negotiation charges shall be borne and paid by the TSP.

(i) If a Long Term Transmission Customer fails to pay (with respect to a Monthly Bill or Supplementary Bill) an amount exceeding thirty percent (30%) of the most recent undisputed Monthly Bill, for a period of seven (7) days after the Due Date and the TSP is unable to recover the amount outstanding to the TSP through the Letter of Credit,

i. the TSP shall issue a notice to such Long Term Transmission Customer within seven (7) days from such period, with a copy to each of the other Long Term Transmission Customers, highlighting the non payment of such amount by such Long Term Transmission Customer;

ii. If such Long Term Transmission Customer still fails to pay such amount within a period of thirty (30) days after the issue of notice by TSP as mentioned in (i) above, the TSP shall approach the RLDC / SLDC (as the case may be) requesting for the alteration of the schedule of dispatch of the lowest cost power of such Long Term Transmission Customer(s) from the Central Generating Stations / State Generating Stations (as the case may be), and the RLDC / SLDC shall continue to reschedule the lowest cost power till all the dues of the TSP are recovered;

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- Provided that in this case, the quantum of electricity and the corresponding period in which it would be rescheduled for dispatch shall be corresponding to the amount of default. This electricity will then be dispatched to other utilities by the concerned RLDC/SLDC, as the case may be, during the peak hours, i.e., 7pm to 10 pm. The price of this electricity will be determined as per the UI rate;

- Provided further that the revenue from such diverted power would be used to pay the dues first of the generating company (which would include the capacity charges as well as the energy charges) and the remainder would be available for covering the default amount and the balance (if any), after recovering both the charges, would be paid to the defaulting Long Term Transmission Customer.

10.12 Payment Intimation

Long Term Transmission Customers shall remit all amounts due under an Invoice raised by the TSP to the TSP's account by the Due Date and notify the TSP of such remittance on the same day. Similarly, the TSP shall pay all amounts due under an Invoice raised by Long Term Transmission Customers by the Due Date to concerned Long Term Transmission Customer's account and notify such Long Term Transmission Customers/s of such payment on the same day.

10.13 Quarterly and Annual Reconciliation

10.13.1 Parties acknowledge that all payments made against Monthly Bill(s) and Supplementary Bill(s) shall be subject to quarterly reconciliation at the beginning of the following quarter of each Contract Year and annual reconciliation at the end of each Contract Year to take into account Regional Energy Account, adjustments in Transmission Charges payments, Rebates, Late Payment Surcharge, Incentive, Penalty, or any other reasonable circumstance as may be mutually agreed between the Parties.

10.13.2 The Parties, therefore, agree that as soon as all such data in respect of any quarter of a Contract Year or a full Contract Year, as the case may be, is available and has been finally verified and adjusted, the TSP and each Long Term Transmission Customer shall jointly sign such reconciliation statement. Within fifteen (15) days of signing of a reconciliation statement, the TSP or Long Term Transmission Customers, as the case may be, shall raise a Supplementary Bill for the payments as may be due as a result of reconciliation for the relevant quarter/ Contract Year and shall make payment of such

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Supplementary Bill for the adjustments in Transmission Charges payments for the relevant quarter/Contract Year.

10.13.3 Interest / Late Payment Surcharge shall be payable in such a case from the date on which such payment had been made to the invoicing Party or the date on which any payment was originally due, as may be applicable. Any dispute with regard to the above reconciliation shall be dealt with in accordance with the provisions of Article 16.

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ARTICLE: 11

11 FORCE MAJEURE

11.1 Definitions

11.1.1 The following terms shall have the meanings given hereunder.

11.2 Affected Party

11.2.1 An Affected Party means any of the Long Term Transmission Customers or the TSP whose performance has been affected by an event of Force Majeure.

11.2.2 An event of Force Majeure affecting the CTU/STU or any agent of the Long Term Transmission Customers, which has affected the Interconnection Facilities, shall be deemed to be an event of Force Majeure affecting the Long Term Transmission Customers.

11.2.3 Any event of Force Majeure shall be deemed to be an event of Force Majeure affecting the TSP only if the Force Majeure event affects and results in, late delivery of machinery and equipment for the Project or construction, completion, commissioning of the Project by Scheduled COD and/or operation thereafter ;

11.3 Force Majeure

A 'Force Majeure' means any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:

(a) **Natural Force Majeure Events:**

act of God, including, but not limited to drought, fire and explosion (to the extent originating from a source external to the Site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred (100) years,

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(b) **Non-Natural Force Majeure Events:**

i. Direct Non–Natural Force Majeure Events

- Nationalization or compulsory acquisition by any Indian Governmental Instrumentality of any material assets or rights of the TSP; or
- the unlawful, unreasonable or discriminatory revocation of, or refusal to renew, any Consents, Clearances and Permits required by the TSP to perform their obligations under the RFP Project Documents or any unlawful, unreasonable or discriminatory refusal to grant any other Consents, Clearances and Permits required for the development/ operation of the Project, provided that a Competent Court of Law declares the revocation or refusal to be unlawful, unreasonable and discriminatory and strikes the same down; or
- any other unlawful, unreasonable or discriminatory action on the part of an Indian Governmental Instrumentality which is directed against the Project, provided that a Competent Court of Law declares the action to be unlawful, unreasonable and discriminatory and strikes the same down.

ii. Indirect Non - Natural Force Majeure Events

- act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
- radioactive contamination or ionising radiation originating from a source in India or resulting from any other Indirect Non Natural Force Majeure Event mentioned above, excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the Site by the Affected Party or those employed or engaged by the Affected Party; or
- industry wide strikes and labour disturbances, having a nationwide impact in India/ statewide impact in Uttar Pradesh.

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11.4 Force Majeure Exclusions

11.4.1 Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:

(a) Unavailability, late delivery, or changes in cost of the machinery, equipment, materials, spare parts etc. for the Project;

(b) Delay in the performance of any Contractors or their agents;

(c) Non-performance resulting from normal wear and tear typically experienced in transmission materials and equipment;

(d) Strikes or labour disturbance at the facilities of the Affected Party;

(e) Insufficiency of finances or funds or the Agreement becoming onerous to perform; and

(f) Non-performance caused by, or connected with, the Affected Party's:

i. negligent or intentional acts, errors or omissions;

ii. failure to comply with an Indian Law; or

iii. breach of, or default under this Agreement or any Project Documents.

11.5 Notification of Force Majeure Event

11.5.1 The Affected Party shall give notice to the other Party of any event of Force Majeure as soon as reasonably practicable, but not later than seven (7) days after the date on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. If an event of Force Majeure results in a breakdown of communications rendering it unreasonable to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably practicable after reinstatement of communications, but not later than one (1) day after such reinstatement.

Provided that such notice shall be a pre-condition to the Affected Party's

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entitlement to claim relief under this Agreement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed. The Affected Party shall give the other Party regular reports on the progress of those remedial measures and such other information as the other Party may reasonably request about the Force Majeure.

11.5.2 The Affected Party shall give notice to the other Party of (i) the cessation of the relevant event of Force Majeure; and (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations under this Agreement, as soon as practicable after becoming aware of each of these cessations.

11.6 Duty to perform and duty to mitigate

To the extent not prevented by a Force Majeure Event, the Affected Party shall continue to perform its obligations as provided in this Agreement. The Affected Party shall use its reasonable efforts to mitigate the effect of any event of Force Majeure as soon as practicable.

11.7 Available Relief for a Force Majeure Event

Subject to this Article 11

(a) no Party shall be in breach of its obligations pursuant to this Agreement except to the extent that the performance of its obligations was prevented, hindered or delayed due to a Force Majeure Event;

(b) every Party shall be entitled to claim relief for a Force Majeure Event affecting its performance in relation to its obligations under this Agreement.

(c) For the avoidance of doubt, it is clarified that the computation of Availability of the Element(s) under outage due to Force Majeure Event, as per Article 11.3 affecting the TSP shall be as per Annexure B to the Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations, 2014, as on seven (7) days prior to the Bid Deadline. For the event(s) for which the Element(s) is/are deemed to be available as per Annexure B to the Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations, 2014, then only the Non Escalable Transmission Charges, as applicable to such Element(s) in the relevant

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Contract Year, shall be paid by the Long Term Transmission Customers as per Schedule 5, for the duration of such event(s).

(d) For so long as the TSP is claiming relief due to any Force Majeure Event under this Agreement, the Lead Long Term Transmission Customer may, from time to time on one (1) day notice, inspect the Project and the TSP shall provide the Lead Long Term Transmission Customer's personnel with access to the Project to carry out such inspections, subject to the Lead Long Term Transmission Customer's personnel complying with all reasonable safety precautions and standards.

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ARTICLE: 12

12 CHANGE IN LAW

12.1 Change in Law

12.1.1 Change in Law means the occurrence of any of the following after the date, which is seven (7) days prior to the Bid Deadline resulting into any additional recurring / non-recurring expenditure by the TSP or any income to the TSP:

- the enactment, coming into effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any Law, including rules and regulations framed pursuant to such Law;
- a change in the interpretation or application of any Law by any Indian Governmental Instrumentality having the legal power to interpret or apply such Law, or any Competent Court of Law;
- the imposition of a requirement for obtaining any Consents, Clearances and Permits which was not required earlier;
- a change in the terms and conditions prescribed for obtaining any Consents, Clearances and Permits or the inclusion of any new terms or conditions for obtaining such Consents, Clearances and Permits;
- any change in the licensing regulations of the Appropriate Commission, under which the Transmission License for the Project was granted if made applicable by such Appropriate Commission to the TSP;
- any change in the Acquisition Price; or
- any change in tax or introduction of any tax made applicable for providing Transmission Service by the TSP as per the terms of this Agreement.

12.1.2 Notwithstanding anything contained in this Agreement, Change in Law shall not cover any change:

a. on account of regulatory measures by the Appropriate Commission including calculation of Availability; and

b. in any tax applied on the income or profits of the TSP.

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12.2 Relief for Change in Law

12.2.1 **During Construction Period:**

During the Construction Period, the impact of increase/decrease in the cost of the Project in the Transmission Charges shall be governed by the formula given below:

- For every cumulative increase/decrease of **Rs. 3,05,00,000/- (Rupees Three Crore Five Lakh Only)** in the cost of the Project up to the Scheduled COD of the Project, the increase/decrease in non-escalable Transmission Charges shall be an amount equal to 0.313 percent (0.313%) of the Non-Escalable Transmission Charges.

12.2.2 **During the Operation Period:**

During the Operation Period, the compensation for any increase/decrease in revenues shall be determined and effective from such date, as decided by the Appropriate Commission whose decision shall be final and binding on both the Parties, subject to rights of appeal provided under applicable Law.

Provided that the above mentioned compensation shall be payable only if the increase/decrease in revenues or cost to the TSP is in excess of an amount equivalent to one percent (1%) of Transmission Charges in aggregate for a Contract Year.

12.2.3 For any claims made under Articles 12.2.1 and 12.2.2 above, the TSP shall provide to the Long Term Transmission Customers and the Appropriate Commission documentary proof of such increase/decrease in cost of the Project/revenue for establishing the impact of such Change in Law.

12.2.4 The decision of the Appropriate Commission, with regards to the determination of the compensation mentioned above in Articles 12.2.1 and 12.2.2, and the date from which such compensation shall become effective, shall be final and binding on both the Parties subject to rights of appeal provided under applicable Law.

12.3 Notification of Change in Law:

12.3.1 If the TSP is affected by a Change in Law in accordance with Article 12.1 and wishes to claim relief for such Change in Law under this Article 12, it shall give notice to Lead Long Term Transmission Customer of such Change in Law as

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soon as reasonably practicable after becoming aware of the same.

12.3.2 The TSP shall also be obliged to serve a notice to Lead Long Term Transmission Customer even when it is beneficially affected by a Change in Law.

12.3.3 Any notice served pursuant to Articles 12.3.1 and 12.3.2 shall provide, amongst other things, precise details of the Change in Law and its effect on the TSP.

12.4 Payment on account of Change in Law

12.4.1 The payment for Change in Law shall be through Supplementary Bill as mentioned in Article 10.10. However, in case of any change in Monthly Transmission Charges by reason of Change in Law, as determined in accordance with this Agreement, the Monthly Invoice to be raised by the TSP after such change in Transmission Charges shall appropriately reflect the changed Monthly Transmission Charges.

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ARTICLE: 13

13 EVENTS OF DEFAULT AND TERMINATION

13.1 TSP Event of Default

The occurrence and continuation of any of the following events shall constitute a TSP Event of Default, unless any such TSP Event of Default occurs as a result of a breach by the Long Term Transmission Customers of their obligations under this Agreement, the Long Term Transmission Customers Event of Default or a Force Majeure Event:

a. After having taken up the construction of the Project, the abandonment by the TSP or the TSP's Contractors of the construction of the Project for a continuous period of two (2) months and such default is not rectified within thirty (30) days from the receipt of notice from the Lead Long Term Transmission Customer in this regard;

b. The failure to commission any Element of the Project by the date falling six (6) months after its Scheduled COD;

c. If the TSP:

i. assigns, mortgages or charges or purports to assign, mortgage or charge any of its assets or rights related to the Project in contravention of the provisions of this Agreement; or

ii. transfers or novates any of its obligations pursuant to this Agreement, in a manner contrary to the provisions of this Agreement;

except where such transfer is in pursuance of a Law and

- it does not affect the ability of the transferee to perform, and such transferee has the financial and technical capability to perform, its obligations under this Agreement;
- is to a transferee who assumes such obligations under the Project and this Agreement remains effective with respect to the transferee;

d. If:

i. The TSP becomes voluntarily or involuntarily the subject of any bankruptcy or insolvency or winding up proceedings and such proceedings remain uncontested for a period of thirty (30) days; or

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ii. any winding up or bankruptcy or insolvency order is passed against the TSP; or

iii. the TSP goes into liquidation or dissolution or a receiver or any similar officer is appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law,

Provided that a dissolution or liquidation of the TSP will not be a TSP Event of Default where such dissolution or liquidation of the TSP is for the purpose of a merger, consolidation or reorganization with the prior approval of the Appropriate Commission as per the provisions of Central Electricity Regulatory Commission (Procedure, terms and Conditions for grant of Transmission License and other related matters) Regulations, 2009 or Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulations, 2005 (as the case may be) as amended from time to time; or

e. Revocation of the Transmission License of TSP; or

f. Non-payment of i) an amount exceeding Rupees Fifty (50) lakhs required to be paid to the Long Term Transmission Customers under this Agreement within three (3) months after the Due Date of an undisputed Invoice raised by the said Long Term Transmission Customer(s) on the TSP or ii) an amount up to Rupees Fifty (50) lakhs required to be made to the Long Term Transmission Customers under this Agreement within six (6) months after the Due Date of an undisputed Invoice; or

g. Failure on the part of the TSP to comply with the provisions of Article 18.2 of this Agreement; or

h. the TSP repudiates this Agreement and does not rectify such breach even within a period of thirty (30) days from a notice from the Lead Long Term Transmission Customer in this regard; or

i. after Commercial Operation Date of the Project, the TSP fails to achieve monthly Target Availability of ninety eight percent (98%), for a period of six (6) consecutive months or within a non-consecutive period of six (6) months within any continuous aggregate period of eighteen(18) months except where the Availability is affected by Force Majeure Events as per Article 11; or

j. any of the representations and warranties made by the TSP in Article 17 of this Agreement being found to be untrue or inaccurate. Further, in addition to the above, any of the undertakings submitted by the TSP at the time of submission of the Bid being found to be breached or inaccurate, including but not limited to

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undertakings from its Parent Company/ Affiliates related to the minimum equity obligation; or

k. the TSP fails to complete/fulfil all the activities/conditions within the specified period as per Article 3 ; or

l. except where due to any Long Term Transmission Customer's failure to comply with its obligations, the TSP is in material breach of any of its obligations under this Agreement and such material breach is not rectified by the TSP within thirty (30) days of receipt of notice in this regard from the Majority Long Term Transmission Customers; or

m. the TSP fails to take the possession of the land required for location specific substations, switching stations or HVDC terminal or inverter stations and/or fails to pay the requisite price to the parties and/or any State Government authority from whom the land is acquired, within twelve (12) months from the Effective Date.

13.2 Long Term Transmission Customers' Event of Default

The occurrence and continuation of any of the following events shall constitute a Long Term Transmission Customers' Event of Default, unless any such Long Term Transmission Customers' Event of Default occurs as a result of a breach by the TSP of its obligations under this Agreement, a TSP Event of Default or a Force Majeure Event:

a. a Long Term Transmission Customer fails to pay (with respect to a Monthly Bill or Supplementary Bill) an amount exceeding thirty percent (30%) of the most recent undisputed Monthly Bill, for a period of ninety (90) days after the Due Date and the TSP is unable to recover the amount outstanding to the TSP through the Letter of Credit; or

b. the Long Term Transmission Customer repudiates this Agreement and does not rectify such breach even within a period of thirty (30) days from a notice from the TSP in this regard; or

c. except where due to the TSP's failure to comply with its obligations, the Long Term Transmission Customers are in material breach of any of their obligations under this Agreement and such material breach is not rectified by the Long Term Transmission Customer within thirty (30) days of receipt of notice in this regard from the TSP to all the Long Term Transmission Customers; or

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d. any of the representations and warranties made by the Long Term Transmission Customers in Article 17 of this Agreement being found to be untrue or inaccurate; or

e. If:

i. any Long Term Transmission Customer becomes voluntarily or involuntarily the subject of any bankruptcy or insolvency or winding up proceedings and such proceedings remain uncontested for a period of thirty (30) days; or

ii. any winding up or bankruptcy or insolvency order is passed against the Long Term Transmission Customer; or

iii. the Long Term Transmission Customer goes into liquidation or dissolution or a receiver or any similar officer is appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law,

Provided that it shall not constitute a Long Term Transmission Customer Event of Default where such dissolution or liquidation of such Long Term Transmission Customer is for the purpose of a merger, consolidation or reorganization and where the resulting entity has the financial standing to perform its obligations under this Agreement, similar to such Long Term Transmission Customer and expressly assumes all obligations of such Long Term Transmission Customer under this Agreement and is in a position to perform them;

13.3 Termination Procedure for TSP Event of Default

a. Upon the occurrence and continuance of any TSP's Event of Default under Article 13.1 the Majority Long Term Transmission Customers, through the Lead Long Term Transmission Customer, may serve notice on the TSP, with a copy to the Appropriate Commission and the Lenders' Representative, of their intention to terminate this Agreement (a "Long Term Transmission Customer's Preliminary Termination Notice"), which shall specify in reasonable detail, the circumstances giving rise to such Long Term Transmission Customer's Preliminary Termination Notice.

b. Following the issue of a Long Term Transmission Customer's Preliminary Termination Notice, the Consultation Period shall apply and would be for the Parties to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Event of Default having regard to all the circumstances.

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c. During the Consultation Period, the Parties shall, save as otherwise provided in this Agreement, continue to perform their respective obligations under this Agreement, and the TSP shall not remove any material, equipment or any part of the Project, without prior consent of the Lead Long Term Transmission Customer.

d. Following the expiry of the Consultation Period, unless the Parties shall have otherwise agreed to the contrary or the circumstances giving rise to Long Term Transmission Customers Preliminary Termination Notice shall have ceased to exist or shall have been remedied, the Long Term Transmission Customers may terminate this Agreement by giving written notice of thirty (30) days ("Long Term Transmission Customers' Termination Notice") to the TSP, with a copy to the Lenders' Representative and the Appropriate Commission. Unless the Lenders have exercised their rights of substitution as per the provisions of Article 15.3 of this Agreement and the Appropriate Commission has agreed to such substitution rights of the Lenders or otherwise directed by the Appropriate Commission, this Agreement shall terminate on the date of expiry of such Long Term Transmission Customers' Termination Notice. Upon termination of the Agreement, the Lead Long Term Transmission Customer shall approach the Appropriate Commission seeking revocation of the Transmission License and further action as per the provisions of the Electricity Act, 2003.

13.4 Termination Procedure for Long Term Transmission Customers Event of Default

a. Upon the occurrence of a Long Term Transmission Customers Event of Default under Article 13.2, the TSP may serve notice on Long Term Transmission Customers, with a copy to the Appropriate Commission and the Lenders' Representative, of its intention to terminate this Agreement (a "TSP's Preliminary Termination Notice"), which notice shall specify in reasonable detail the circumstances giving rise to such TSP's Preliminary termination Notice.

b. Following the issue of a TSP's Preliminary Termination Notice, the Consultation Period shall apply.

c. The Consultation Period would be for the Parties to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Event of Default having regard to all the circumstances.

d. During the Consultation Period, both Parties shall, save as otherwise provided in this Agreement, continue to perform their respective obligations under this Agreement.

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e. Following the expiry of the Consultation Period, unless the Parties shall have otherwise agreed or the circumstances giving rise to the TSP Preliminary Termination Notice shall have ceased to exist or shall have been remedied, the TSP may terminate this Agreement by giving written notice of thirty (30) days ("TSP's Termination Notice") to the Lead Long Term Transmission Customer, with a copy to the Lenders' Representative and the Appropriate Commission. Unless the Lenders have exercised their rights for substitution as per provisions of Article 15.3 of this Agreement and the Appropriate Commission has agreed to such substitution rights of the Lenders or otherwise directed by the Appropriate Commission, this Agreement shall terminate on the date of expiry of such Termination Notice.

13.5 Termination due to Force Majeure

13.5.1 In case the Parties could not reach an agreement pursuant to Article 4.4.2 of this Agreement and the Force Majeure Event or its effects continue to be present, either Party shall have the right to cause termination of the Agreement. The Long Term Transmission Customers shall also have the right to cause termination of the Agreement and to approach the Appropriate Commission to seek further directions in this regard. In such an event, subject to the terms and conditions of the Financing Agreements, this Agreement shall terminate on the date of such Termination Notice. In case of such termination, the Contract Performance Guarantee shall be returned to the TSP as per the provisions of Article 6.5.2.

13.5.2 In case of termination of this Agreement, the TSP shall provide to the Lead Long Term Transmission Customer the full names and addresses of its Contractors as well as complete designs, design drawings, manufacturing drawings, material specifications and technical information, as required by the Long Term Transmission Customers within 30 (thirty) days of Termination Notice.

13.6 Revocation of the Transmission License

13.6.1 The Appropriate Commission may, as per the provisions of the Electricity Act, 2003, revoke the Transmission License of the TSP. In the event of the revocation of the Transmission License, the Appropriate Commission would take necessary steps as per the provisions of the Electricity Act, 2003. Further the Long Term Transmission Customers reserve the right to terminate the Agreement in the event of the revocation of the Transmission License of the TSP by the Appropriate Commission.

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ARTICLE: 14

14 LIABILITY AND INDEMNIFICATION

14.1 Indemnity

14.1.1 The TSP shall indemnify, defend and hold each Long Term Transmission Customer harmless against:

(a) any and all third party claims, actions, suits or proceedings against the Long Term Transmission Customers for any loss of or damage to property of such third party, or death or injury to such third party, arising out of a breach by the TSP of any of its obligations under this Agreement, except to the extent that any such claim, action, suit or proceeding has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of Long Term Transmission Customers, its Contractors, servants or agents; and

(b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest actually suffered or incurred by Long Term Transmission Customers from third party claims arising by reason of:

i. a breach by the TSP of any of its obligations under this Agreement, (provided that this Article 14 shall not apply to such breaches by the TSP, for which specific remedies have been provided for under this Agreement) except to the extent that any such losses, damages, costs and expenses including legal costs, fines, penalties and interest (together to constitute "Indemnifiable Losses") has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of Long Term Transmission Customers, its Contractors, servants or agents or

ii. any of the representations and warranties of the TSP under this Agreement being found to be inaccurate or untrue.

14.1.2 Each of the Long Term Transmission Customers shall indemnify, defend and hold the TSP harmless against:

(a) any and all third party claims, actions, suits or proceedings against the TSP, for any loss of or damage to property of such third party, or death or injury to such third party, arising out of a breach by the Long Term Transmission Customers of any of their obligations under this Agreement except to the

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extent that any such claim, action, suit or proceeding has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the TSP, its Contractors, servants or agents; and

(b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest ('Indemnifiable Losses') actually suffered or incurred by the TSP from third party claims arising by reason of:

i. a breach by the Long Term Transmission Customers of any of their obligations under this Agreement (Provided that this Article 14 shall not apply to such breaches by Long Term Transmission Customers, for which specific remedies have been provided for under this Agreement.), except to the extent that any such Indemnifiable Losses have arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the TSP, its Contractors, servants or agents or

ii. any of the representations and warranties of the Long Term Transmission Customers under this Agreement being found to be inaccurate or untrue.

14.2 Patent Indemnity:

14.2.1

(a) The TSP shall, subject to the Long Term Transmission Customers compliance with Article 14.2.1 (b), indemnify and hold harmless the Long Term Transmission Customers and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Long Term Transmission Customers may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Agreement by reason of the setting up of the Project by the TSP.

Such indemnity shall not cover any use of the Project or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Agreement, any infringement resulting from the misuse of the Project or any part thereof, or any products produced in association or combination with any other equipment, plant or materials not supplied by the TSP, pursuant to the Agreement.

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(b) If any proceedings are brought or any claim is made against the Long Term Transmission Customers arising out of the matters referred to in Article 14.2.1(a), the Lead Long Term Transmission Customer shall promptly give the TSP a notice thereof, and the TSP shall at its own expense take necessary steps and attend such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. The TSP shall promptly notify the Lead Long Term Transmission Customer of all actions taken in such proceedings or claims.

(c) If the TSP fails to notify the Lead Long Term Transmission Customer within twenty-eight (28) days after receipt of such notice from the Long Term Transmission Customers under Article 14.2.1(b) above, that it intends to attend any such proceedings or claim, then the Long Term Transmission Customers shall be free to attend the same on their own behalf at the cost of the TSP. Unless the TSP has so failed to notify the Lead Long Term Transmission Customer within the twenty eight (28) days period, the Lead Long Term Transmission Customer shall make no admission that may be prejudicial to the defence of any such proceedings or claims.

(d) The Lead Long Term Transmission Customer shall, at the TSP's request, afford all available assistance to the TSP in attending to such proceedings or claim, and shall be reimbursed by the TSP for all reasonable expenses incurred in so doing.

14.2.2

(a) The Long Term Transmission Customers, subject to the TSP's compliance with Article 14.2.2(b) shall indemnify and hold harmless the TSP and its employees, officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs and expenses of whatsoever nature, including attorney's fees and expenses, which the TSP may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Agreement by reason of the setting up of the Project by the TSP.

(b) If any proceedings are brought or any claim is made against the TSP arising out of the matters referred to in Article 14.2.2 (a) the TSP shall promptly give the Lead Long Term Transmission Customer a notice thereof, and the Long Term Transmission Customers shall at its own expense take necessary steps

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and attend such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. The Lead Long Term Transmission Customer shall promptly notify the TSP of all actions taken in such proceedings or claims.

(c) If the Lead Long Term Transmission Customer fails to notify the TSP within twenty-eight (28) days after receipt of such notice from the TSP under Article 14.2.2(b) above, that it intends to attend any such proceedings or claim, then the TSP shall be free to attend the same on its own behalf at the cost of the Long Term Transmission Customers. Unless the Lead Long Term Transmission Customer has so failed to notify the TSP within the twenty (28) days period, the TSP shall make no admission that may be prejudicial to the defence of any such proceedings or claim.

(d) The TSP shall, at the Long Term Transmission Customers request, afford all available assistance to the Long Term Transmission Customers in attending to such proceedings or claim, and shall be reimbursed by the Long Term Transmission Customers for all reasonable expenses incurred in so doing.

14.3 Monetary Limitation of liability

14.3.1 A Party ("Indemnifying Party") shall be liable to indemnify the other Party ("Indemnified Party") under this Article 14 for any indemnity claims made in a Contract Year only up to an amount of **Rupees One Crore Two Lakh Only (Rs. 1,02,00,000/-)**. With respect to each Long Term Transmission Customer, the above limit of **Rupees One Crore Two Lakh Only (Rs. 1,02,00,000/-)** shall be divided in the ratio of their Allocated Project Capacity, as existing on the date of the indemnity claim.

14.4 Procedure for claiming indemnity

14.4.1 Where the Indemnified Party is entitled to indemnification from the Indemnifying Party pursuant to Articles 14.1 or 14.2 the Indemnified Party shall promptly notify the Indemnifying Party of such claim, proceeding, action or suit referred to in Articles 14.1 or 14.2 in respect of which it is entitled to be indemnified. Such notice shall be given as soon as reasonably practicable after the Indemnified Party becomes aware of such claim, proceeding, action or suit. The Indemnifying Party shall be liable to settle the indemnification claim within thirty (30) days of receipt of the above notice.

Provided however that, if:

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i. the Parties choose to contest, defend or litigate such claim, action, suit or proceedings in accordance with Article 14.4.3 below; and

ii. the claim amount is not required to be paid/deposited to such third party pending the resolution of the Dispute,

the Indemnifying Party shall become liable to pay the claim amount to the Indemnified Party or to the third party, as the case may be, promptly following the resolution of the Dispute, if such Dispute is settled in favour of the Indemnified Party.

14.4.2 The Indemnified Party may contest, defend and litigate a claim, action, suit or proceeding for which it is entitled to be indemnified under Articles 14.1 or 14.2 and the Indemnifying Party shall reimburse to the Indemnified Party all reasonable costs and expenses incurred by the Indemnified Party. However, such Indemnified Party shall not settle or compromise such claim, action, suit or proceedings without first getting the consent of the Indemnifying Party, which consent shall not be unreasonably withheld or delayed.

14.4.3 An Indemnifying Party may, at its own expense, assume control of the defence of any proceedings brought against the Indemnified Party if it acknowledges its obligation to indemnify such Indemnified Party, gives such Indemnified Party prompt notice of its intention to assume control of the defence, and employs an independent legal counsel at its own cost that is reasonably satisfactory to the Indemnified Party.

14.5 Limitation on Liability

14.5.1 Except as expressly provided in this Agreement, neither the TSP nor the Long Term Transmission Customers nor their respective officers, directors, agents, employees or Affiliates (including, officers, directors, agents or employees of such Affiliates), shall be liable or responsible to the other Party or its Affiliates including its officers, directors, agents, employees, successors, insurers or permitted assigns for incidental, indirect or consequential, punitive or exemplary damages, connected with or resulting from performance or non-performance of this Agreement, or anything done in connection herewith, including claims in the nature of lost revenues, income or profits (other than payments expressly required and properly due under this Agreement), any increased expense of, reduction in or loss of transmission capacity or equipment used therefore, irrespective of whether such claims are based upon breach of warranty, tort (including negligence, whether of the Long Term Transmission Customers, the TSP or others), strict liability, contract, breach of statutory duty, operation of law or otherwise.

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14.5.2 The Long Term Transmission Customers shall have no recourse against any officer, director or shareholder of the TSP or any Affiliate of the TSP or any of its officers, directors or shareholders for such claims excluded under this Article. The TSP shall also have no recourse against any officer, director or shareholder of Long Term Transmission Customers, or any Affiliate of Long Term Transmission Customers or any of its officers, directors or shareholders for such claims excluded under this Article.

14.6 Duty to Mitigate

The party entitled to the benefit of an indemnity under this Article 14 shall take all reasonable measures to mitigate any loss or damage which has occurred. If the party fails to take such measures, the other party's liabilities shall be correspondingly reduced.

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ARTICLE: 15

15 ASSIGNMENTS AND CHARGES

15.1 Assignments:

15.1.1 This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns. This Agreement shall not be assigned by any Party, except as provided in Article 15.2.4.

15.2 Permitted Charges:

15.2.1 Neither Party shall create or permit to subsist any encumbrance over all or any of its rights and benefits under this Agreement.

15.2.2 However, the TSP may create any encumbrance over all or part of the receivables, Letter of Credit or the other assets of the Project in favour of the Lenders or the Lenders' Representative on their behalf, as security for amounts payable under the Financing Agreements and any other amounts agreed by the Parties.

Provided that:

i. the Lenders or the Lenders' Representative on their behalf shall have entered into the Financing Agreements and agreed in writing to the provisions of this Agreement; and

ii. any encumbrance granted by the TSP in accordance with this Article 15.2.2 shall contain provisions pursuant to which the Lenders or the Lender's Representative on their behalf agrees unconditionally with the TSP to release from such encumbrances upon payment by the TSP to the Lenders of all amounts due under the Financing Agreements.

15.2.3 Article 15.2.1 does not apply to:

a. liens arising by operation of law (or by an agreement evidencing the same) in the ordinary course of the TSP carrying out the Project;

b. pledges of goods, the related documents of title and / or other related documents, arising or created in the ordinary course of the TSP carrying out the Project; or

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c. security arising out of retention of title provisions in relation to goods acquired in the ordinary course of the TSP carrying out the Project.

15.2.4 Neither the TSP nor any of the Long Term Transmission Customers can relinquish or transfer its rights and obligations, without prior approval of the Appropriate Commission.

15.3 Substitution Rights of the Lenders

15.3.1 The TSP would need to operate and maintain the Project under the provisions of the Transmission License granted by the Appropriate Commission and the provisions of this Agreement and can not assign the Transmission License or transfer the Project or part thereof to any person by sale, lease, exchange or otherwise, without the prior approval of the Appropriate Commission.

15.3.2 However, in the case of default by the TSP in debt repayments, the Appropriate Commission may, on an application from the Lenders, assign the Transmission License to the nominee of the Lenders subject to the fulfilment of the qualification requirements and provisions of the Central Electricity Regulatory Commission (Procedure, terms and Conditions for grant of Transmission License and other related matters) Regulations, 2009 or Uttar Pradesh Electricity Regulatory Commission (General Conditions of Transmission Licence) Regulations, 2005 (as the case may be) as amended from time to time.

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ARTICLE: 16

16 GOVERNING LAW AND DISPUTE RESOLUTION

16.1 Governing Law:

This Agreement shall be governed by and construed in accordance with the Laws of India. Any legal proceedings in respect of any matters, claims or disputes under this Agreement shall be under the jurisdiction of appropriate courts in Lucknow, India

16.2 Amicable Settlement:

16.2.1 Either Party is entitled to raise any claim, dispute or difference of whatever nature arising under, out of or in connection with this Agreement, including its existence or validity or termination or whether during the execution of the Project or after its completion and whether prior to or after the abandonment of the Project or termination or breach of the Agreement by giving a written notice to the other Party, which shall contain:

(i) a description of the Dispute;

(ii) the grounds for such Dispute; and

(iii) all written material in support of its claim.

16.2.2 The other Party shall, within thirty (30) days of issue of notice issued under Article 16.2.1, furnish:

(i) counter-claim and defences, if any, regarding the Dispute; and

(ii) all written material in support of its defences and counter-claim.

16.2.3 Within thirty (30) days of issue of notice by the Party pursuant to Article 16.2.1 if the other Party does not furnish any counter claim or defence under Article 16.2.2, or thirty (30) days from the date of furnishing counter claims or defence by the other Party, both the Parties to the Dispute shall meet to settle such Dispute amicably. If the Parties fail to resolve the Dispute amicably within thirty (30) days from the later of the dates mentioned in this Article 16.2.3, the Dispute shall be referred for dispute resolution in accordance with Article 16.3.

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Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

16.3 Dispute Resolution:

16.3.1 Where any Dispute

i. arises from a claim made by any Party regarding any provisions of this Agreement, , or

ii. relates to any matter agreed to be referred to the Appropriate Commission, including those under Articles, 2.2.1, 2.3.1, 3.3.5, 5.1.2, 7.1.4, 7.1.5, 9.3.3, 10.9.6, 12.1.1, 12.2, 13, 15.2.4, 15.3, 16.3.3, and 18.17.1 hereof,

such Dispute shall be submitted to adjudication by the Appropriate Commission.

Appeal against the decisions of the Appropriate Commission shall be admissible only as per the provisions of the Electricity Act, 2003, as amended from time to time.

16.3.2 The obligations of the Long Term Transmission Customers under this Agreement towards the TSP shall not be affected in any manner by reason of inter-se disputes amongst the Long Term Transmission Customers.

16.3.3 Where any dispute is referred by the Appropriate Commission to be settled through arbitration process, such Dispute shall be resolved by arbitration under the Indian Arbitration and Conciliation Act, 1996 and the Rules of the Indian Council of Arbitration, in accordance with the process specified in this Article.

(i) The Arbitration Tribunal shall consist of three arbitrators to be appointed in accordance with the Indian Council of Arbitration Rules

(ii) The place of arbitration shall be Lucknow, India. The language of the arbitration shall be English.

(iii) The Arbitration Tribunal's award shall be substantiated in writing. The Arbitration Tribunal shall also decide on the costs of the arbitration proceedings and the allocation thereof.

(iv) The award shall be enforceable in any court having jurisdiction, subject to the applicable Laws.

(v) The provisions of this Article shall survive the termination of this Agreement for any reason whatsoever.

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

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16.4 Parties to Perform Obligations:

Notwithstanding the existence of any Dispute and difference referred to the Appropriate Commission or the Arbitration Tribunal as provided in Article 16.3 and save as the Appropriate Commission or the Arbitration Tribunal may otherwise direct by a final or interim order, the Parties hereto shall continue to perform their respective obligations (which are not in dispute) under this Agreement.

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

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ARTICLE: 17

17 REPRESENTATION AND WARRANTIES

17.1 Representation and warranties of the Long Term Transmission Customers

17.1.1 Each Long Term Transmission Customer hereby represents and warrants to and agrees with the TSP as follows and acknowledges and confirms that the TSP is relying on such representations and warranties in connection with the transactions described in this Agreement:

a. It has all requisite powers and has been duly authorized to execute and consummate this Agreement;

b. This Agreement is enforceable against the said Long Term Transmission Customer in accordance with its terms;

c. The consummation of the transactions contemplated by this Agreement on the part of said Long Term Transmission Customer will not violate any provision of nor constitute a default under, nor give rise to a power to cancel any charter, mortgage, deed of trust or lien, lease, agreement, license, permit, evidence of indebtedness, restriction, or other contract to which the said Long Term Transmission Customer is a Party or to which the said Long Term Transmission Customer is bound, which violation, default or power has not been waived;

d. The said Long Term Transmission Customer is not insolvent and no insolvency proceedings have been instituted, nor threatened or pending by or against the said Long Term Transmission Customer;

e. There are no actions, suits, claims, proceedings or investigations pending or, to the best of the said Long Term Transmission Customer's knowledge, threatened in writing against the said Long Term Transmission Customer at law, in equity, or otherwise, and whether civil or criminal in nature, before or by, any court, commission, arbitrator or governmental agency or authority, and there are no outstanding judgements, decrees or orders of any such courts, commission, arbitrator or governmental agencies or authorities, which materially adversely affect its ability to comply with its obligations under this Agreement;

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Dakshinanchal Vidhyut Vitaran Nigam Limited | Kanpur Electricity Supply Company Limited | Mohanlalganj Transmission Limited

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17.1.2 Each of the said Long Term Transmission Customer makes all the representations and warranties above to be valid as on the date of this Agreement.

17.2 Representation and Warranties of the TSP:

17.2.1 The TSP hereby represents and warrants to and agrees with the Long Term Transmission Customers as follows and acknowledges and confirms that the Long Term Transmission Customers is relying on such representations and warranties in connection with the transactions described in this Agreement:

a. It has all requisite powers and has been duly authorized to execute and consummate this Agreement;

b. This Agreement is enforceable against it in accordance with its terms;

c. The consummation of the transactions contemplated by this Agreement on the part of the TSP will not violate any provision of nor constitute a default under, nor give rise to a power to cancel any charter, mortgage, deed of trust or lien, lease, agreement, license, permit, evidence of indebtedness, restriction, or other contract to which the TSP is a Party or to which the TSP is bound which violation, default or power has not been waived;

d. The TSP is not insolvent and no insolvency proceedings have been instituted, nor threatened or pending by or against the TSP;

e. There are no actions, suits, claims, proceedings or investigations pending or, to the best of the TSP's knowledge, threatened in writing against the TSP at law, in equity, or otherwise, and whether civil or criminal in nature, before or by, any court, commission, arbitrator or governmental agency or authority, and there are no outstanding judgments, decrees or orders of any such courts, commission, arbitrator or governmental agencies or authorities, which materially adversely affect its ability to execute the Project or to comply with its obligations under this Agreement.

17.2.2 The TSP makes all the representations and warranties above to be valid as on the date of this Agreement.

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Purvanchal Vidyut Vitaran Nigam Limited

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Kanpur Electricity Supply Company Limited

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Mohanlalganj Transmission Limited

ARTICLE: 18

18 MISCELLANEOUS PROVISIONS

18.1 Lead Long Term Transmission Customer:

18.1.1 The Long Term Transmission Customers hereby appoint and authorise **"Pashchimanchal Vidyut Vitran Nigam Limited"** (hereinafter referred to as the "Lead Long Term Transmission Customer") to represent all the Long Term Transmission Customers for discharging the rights and obligations of the Long Term Transmission Customers, which are required to be undertaken by all the Long Term Transmission Customers. All the Long Term Transmission Customers shall follow and be bound by the decisions of the Lead Long Term Transmission Customer on all matters specified in the Schedule 8 of this Agreement. Accordingly each Long Term Transmission Customer agrees that any decision, communication, notice, action or inaction of the Lead Long Term Transmission Customer on such matters shall be deemed to have been on its/his behalf and shall be binding on each of the Long Term Transmission Customer. The TSP shall be entitled to rely upon any such action, decision or communication or notice from the Lead Long Term Transmission Customer. It is clarified that provisions under this Article 18.1 are not intended to and shall not render the Lead Long Term Transmission Customer liable to discharge Transmission Charges payments due to TSP from the other Long Term Transmission Customers.

18.1.2 The Long Term Transmission Customers hereby also appoint and authorise **"Purvanchal Vidyut Vitaran Nigam Limited"** (hereinafter referred to as the "Alternate Lead Long Term Transmission Customer"), to act as Lead Long Term Transmission Customer as per the provisions of this Article 18.1.2, on the occurrence of any Event of Default specified in Article 13 by the Lead Long Term Transmission Customer. In such an event, the TSP may, at its option, within a period of fifteen (15) days from the date of issue of the TSP's Preliminary Termination Notice referred to in Article 13 and if the said default by the Lead Long Term Transmission Customer subsists, specify in writing to all the Long Term Transmission Customers that the Alternate Lead Long Term Transmission Customer shall thereafter act as the Lead Long Term Transmission Customer. In such a case, if the TSP so notifies, the Alternate Lead Long Term Transmission Customer shall, thereafter, act as Lead Long Term Transmission Customer for the purposes of this Agreement, and the Lead Long Term Transmission Customer earlier appointed under Article 18.1.1 shall automatically cease to be the Lead Long Term Transmission Customer. It is clarified that all decisions taken by the **"Pashchimanchal Vidyut Vitran Nigam Limited"** appointed under Article 18.1.1, in its capacity as Lead Long Term Transmission Customer before such change,

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shall continue to be valid, in accordance with this Agreement.

18.1.3 In the event of "**Purvanchal Vidyut Vitaran Nigam Limited**" becoming the Lead Long Term Transmission Customer as per Article 18.1.2, all the Long Term Transmission Customers shall also appoint any of Long Term Transmission Customers, other than "**Pashchimanchal Vidyut Vitran Nigam Limited**", appointed under Article 18.1.1, as an Alternate Lead Long Term Transmission Customer and thereafter the provisions of Article 18.1.2 shall be applicable.

18.1.4 Notwithstanding anything contained above, any decision which is required to be taken by the Long Term Transmission Customers jointly under the provisions of Article 13, shall be taken by all the Long Term Transmission Customers and in case of difference amongst the Long Term Transmission Customers, the said decision shall be taken by the Majority Long Term Transmission Customers, as defined in Article 18.1.5 below.

18.1.5 Any decision taken by Long Term Transmission Customers, who taken together constitute sixty five percent (65%) of the Allocated Project Capacity and constitute in number at least fifty percent (50%) of the total number of Long Term Transmission Customers (hereinafter referred to as "Majority Long Term Transmission Customers"), shall be binding on the Lead Long Term Transmission Customer and all other Long Term Transmission Customers. Majority Long Term Transmission Customers shall also have the right to replace the Lead Long Term Transmission Customer by any other Long Term Transmission Customer of their choice. All decisions taken by the Majority Long Term Transmission Customers in this Agreement shall be conveyed by the Lead Long Term Transmission Customer.

18.2 Equity Lock-in Commitment:

18.2.1 The aggregate equity share holding of the Selected Bidder in the issued and paid up equity share capital of **Mohanlalganj Transmission Limited** shall not be less than Fifty-one percent (51%) up to a period of (1) one year after COD of the Project.

Provided that in case the Lead Member or Bidding Company is holding equity through Affiliate/s, Ultimate Parent Company or Parent Company, such restriction as specified above shall apply to such entities.

Provided further, that in case the Selected Bidder is a Bidding Consortium, the Lead Member shall continue to hold equity of at least twenty six percent (26%) upto a period of one (1) year after COD of the Project and any Member of such Bidding Consortium shall be allowed to divest its equity as long as the other

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remaining Members (which shall always include the Lead Member) hold the minimum equity specified above.

18.2.2 If equity is held by the Affiliates, Parent Company or Ultimate Parent Company of the Selected Bidder, subject to the second proviso to Article 18.2.1, then such Affiliate, Parent Company or Ultimate Parent Company shall be eligible to transfer its shareholding in **Mohanlalganj Transmission Limited** to another Affiliate or to the Parent Company / Ultimate Parent Company of the Selected Bidder. If any such shareholding entity, qualifying as an Affiliate / Parent Company / Ultimate Parent Company, is likely to cease to meet the criteria to qualify as an Affiliate / Parent Company / Ultimate Parent Company, the shares held by such entity shall be transferred to another Affiliate / Parent Company / Ultimate Parent Company of the Selected Bidder.

18.2.3 Subject to Article 18.2.1, all transfer(s) of shareholding of **Mohanlalganj Transmission Limited** by any of the entities referred to in Article 18.2.1 and 18.2.2 above, shall be after prior written permission from the Lead Long Term Transmission Customer.

18.2.4 For computation of effective Equity holding, the Equity holding of the Selected Bidder or its Ultimate Parent Company in such Affiliate(s) or Parent Company and the equity holding of such Affiliate(s) or Ultimate Parent Company in **Mohanlalganj Transmission Limited** shall be computed in accordance with the example given below:

If the Parent Company or the Ultimate Parent Company of the Selected Bidder A directly holds thirty percent (30%) of the equity in **Mohanlalganj Transmission Limited** , then holding of Selected Bidder A in **Mohanlalganj Transmission Limited** shall be thirty percent (30%);

If Selected Bidder A holds thirty percent (30%) equity of the Affiliate and the Affiliate holds fifty percent (50%) equity in **Mohanlalganj Transmission Limited** , then, for the purposes of ascertaining the minimum equity/equity lock-in requirements specified above, the effective holding of Bidder A in **Mohanlalganj Transmission Limited** shall be fifteen percent (15%), (i.e., 30%* 50%)

18.2.5 The provisions as contained in this Article 18.2 shall override the terms of the consortium agreement submitted as part of the Bid.

18.2.6 The TSP shall be responsible to report, within thirty (30) days from the occurrence of any event that would result in any change in the equity holding structure from that existed as on the date of signing of the Share Purchase Agreement. In such

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cases, the Lead Long Term Transmission Customer would reserve the right to ascertain the equity holding structure and to call for all such required documents / information/clarifications as may be required.

18.3 Language:

18.3.1 All agreements, correspondence and communications between the Parties relating to this Agreement and all other documentation to be prepared and supplied under the Agreement shall be written in English, and the Agreement shall be construed and interpreted in accordance with English language.

18.3.2 If any of the agreements, correspondence, communications or documents are prepared in any language other than English, the English translation of such agreements, correspondence, communications or documents shall prevail in matters of interpretation.

18.4 Affirmation

The TSP and the Long Term Transmission Customers, each affirm that:

1. neither it nor its respective directors, employees, or agents has paid or undertaken to pay or shall in the future pay any unlawful commission, bribe, pay-off or kick-back; and
2. it has not in any other manner paid any sums, whether in Indian currency or foreign currency and whether in India or abroad to the other Party to procure this Agreement, and the TSP and the Long Term Transmission Customers hereby undertake not to engage in any similar acts during the Term of Agreement.

18.5 Severability

The invalidity or enforceability, for any reason, of any part of this Agreement shall not prejudice or affect the validity or enforceability of the remainder of this Agreement, unless the part held invalid or unenforceable is fundamental to this Agreement.

18.6 Counterparts

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which collectively shall be deemed one and the same Agreement.

18.7 Breach of Obligations

The Parties acknowledge that a breach of any of the obligations contained herein

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would result in injuries. The Parties further acknowledge that the amount of the liquidated damages or the method of calculating the liquidated damages specified in this Agreement is a genuine and reasonable pre-estimate of the damages that may be suffered by the non-defaulting party in each case specified under this Agreement.

18.8 Nomination Restriction

Notwithstanding anything contained to the contrary in this Agreement, wherever a reference is made to the right of a Long Term Transmission Customer to nominate a third Party to receive benefits under this Agreement, such Third Party shall have a financial standing comparable to that of the Long Term Transmission Customer in question.

18.9 Commercial Acts

The Long Term Transmission Customers and the TSP unconditionally and irrevocably agree that the execution, delivery and performance by each of them of this Agreement and any other RFP Project Document to which it is a Party constitute private and commercial acts rather than public or governmental acts;

18.10 Restriction of Shareholders/Owners Liability

18.10.1 Parties expressly agree and acknowledge that none of the shareholders of the Parties hereto shall be liable to the other Parties for any of the contractual obligations of the concerned Party under this Agreement.

18.10.2 Further, the financial liabilities of the shareholder/s of each Party to this Agreement shall be restricted to the extent provided in the Indian Companies Act, 1956/ Companies Act 2013 (as the case may be).

18.11 Taxes and Duties:

18.11.1 The TSP shall bear and promptly pay all statutory taxes, duties, levies and cess, assessed/levied on the TSP, its Contractors or their employees that are required to be paid by the TSP as per the Law in relation to the execution of the Project and for providing Transmission Service as per the terms of this Agreement.

18.11.2 Long Term Transmission Customers shall be indemnified and held harmless by the TSP against any claims that may be made against Long Term Transmission Customers in relation to the matters set out in Article 18.11.1.

18.11.3 Long Term Transmission Customers shall not be liable for any payment of, taxes, duties, levies, cess whatsoever for discharging any obligation of the TSP by the

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Dakshinanchal Vidhyut Vitaran Nigam Limited | Kanpur Electricity Supply Company Limited | Mohanlalganj Transmission Limited

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Long Term Transmission Customers on behalf of TSP or its personnel, provided the TSP has consented in writing to Long Term Transmission Customers for such work, which consent shall not be unreasonably withheld.

18.12 No Consequential or Indirect Losses

The liability of the TSP and the Long Term Transmission Customers shall be limited to that explicitly provided in this Agreement.

Provided that, notwithstanding anything contained in this Agreement, under no event shall the Long Term Transmission Customers or the TSP claim from one another any indirect or consequential losses or damages.

18.13 Discretion:

Except where this Agreement expressly requires a Party to act fairly or reasonably, a Party may exercise any discretion given to it under this Agreement in any way it deems fit.

18.14 Confidentiality

18.14.1 The Parties undertake to hold in confidence this Agreement and RFP Project Documents and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

(a) to their professional advisors;
(b) to their officers, contractors, employees, agents or representatives, financiers, who need to have access to such information for the proper performance of their activities; or
(c) disclosures required under Law

without the prior written consent of the other Parties.

Provided that the TSP agrees and acknowledges that any of the Long Term Transmission Customers may at any time, disclose the terms and conditions of the Agreement and the RFP Project Documents to any person, to the extent stipulated under the Law and the Competitive Bidding Guidelines.

18.15 Order of priority in application:

In case of inconsistencies between the terms and conditions stipulated in Transmission License issued by Appropriate Commission to the TSP, agreement(s) executed between the Parties, applicable Law including rules and regulations framed thereunder, the order of priority as between them shall be the order in which they are placed below:

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

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- terms and conditions of Transmission License
- applicable Law, rules and regulations framed thereunder,
- this Agreement.

18.16 Independent Entity:

18.16.1 The TSP shall be an independent entity performing its obligations pursuant to the Agreement.

18.16.2 Subject to the provisions of the Agreement, the TSP shall be solely responsible for the manner in which its obligations under this Agreement are to be performed. All employees and representatives of the TSP or Contractors engaged by the TSP in connection with the performance of the Agreement shall be under the complete control of the TSP and shall not be deemed to be employees, representatives, Contractors of Long Term Transmission Customers and nothing contained in the Agreement or in any agreement or contract awarded by the TSP shall be construed to create any contractual relationship between any such employees, representatives or Contractors and the Long Term Transmission Customers.

18.17 Amendments:

18.17.1 This Agreement may only be amended or supplemented by a written agreement between the Parties and after obtaining approval of the Appropriate Commission, where necessary.

18.18 Waiver:

18.18.1 No waiver by either Party of any default or breach by the other Party in the performance of any of the provisions of this Agreement shall be effective unless in writing duly executed by an authorised representative of such Party:

18.18.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement nor time or other indulgence granted by one Party to the other Parties shall act as a waiver of such breach or acceptance of any variation or the relinquishment of any such right or any other right under this Agreement, which shall remain in full force and effect.

18.19 Relationship of the Parties:

This Agreement shall not be interpreted or construed to create an association, joint venture, or partnership or agency or any such other relationship between the Parties or to impose any partnership obligation or liability upon either Party

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Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

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and neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

18.20 Entirety:

18.20.1 This Agreement along with its sections, schedules and appendices is intended by the Parties as the final expression of their agreement and is intended also as a complete and exclusive statement of the terms of their agreement.

18.20.2 Except as provided in this Agreement, all prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement or the provision of Transmission Service under this Agreement to the Long Term Transmission Customers by the TSP shall stand superseded and abrogated.

18.21 Notices:

18.21.1 All notices or other communications which are required to be given under this Agreement shall be in writing and in the English language

18.21.2 If to the TSP, all notices or communications must be delivered personally or by registered post or facsimile or any other mode duly acknowledged to the addressee below:

Mohanlalganj Transmission Limited

Address : .....

.....

.....

Attention

Email

Fax. No.

Telephone No.

18.21.3 If to the Long Term Transmission Customers, all notices or communications must be delivered personally or by registered post or facsimile or any other mode duly acknowledged to the addresses below:

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

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1. **Pashchimanchal Vidyut Vitran Nigam Limited**

Address : Victoria Street
Meerut PVVNL
.....

Attention : Rajeev Kumar
Email :
Fax. No. : 9193330071
Telephone No :

Chief Engineer (Comm.)
Pashchimanchal VidyutVitran Nigam Ltd
Meerut

2. **Purvanchal Vidyut Vitaran Nigam Limited**

Address : Vidyut Bhawan
PVVNL
Varanasi

Attention : C.B. Singh
Email : cbsingh1963mvvnl@gmail.com
Fax. No. :
Telephone No : 8004922298

इ० सी० बी० सिंह
अधीक्षण अभियन्ता
पूर्वान्चल विद्युत वितरण निगम
वाराणसी

3. **Dakshinanchal Vidhyut Vitaran Nigam Limited**

Address :
.....
.....
.....

Attention : J.K. Dohat
Email : dvvnlcom@gmail.com
Fax. No. : 9412719764
Telephone No :

Executive Engineer (Commercial), DVVNL AGRA
Head Office:-URJA BHAWAN, 220KV Sub Station
AGRA-MATHURA BYPASS ROAD
SIKANDRA - AGRA-282007

Pashchimanchal Vidyut Vitran Nigam Limited | Madhyanchal Vidyut Vitaran Nigam Limited | Purvanchal Vidyut Vitaran Nigam Limited

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4. **Madhyanchal Vidyut Vitran Nigam Limited**

Address : MVUNL
LKO

Attention : Ravi Chandra Srivastava
Email :
Fax. No. :
Telephone No. : 8005493138

अधिशाषी अभियन्ता (वा०)
म०वि०नि०लि०, लखनऊ

5. **Kanpur Electricity Supply Company Limited**

Address : Kesco
Kanpur

Attention : P. K. Singh
Email : अधीक्षण अभियन्ता (वा0)
Fax. No. : केस्को, कानपुर
Telephone No. : 9238630749

18.21.4 All notices or communications given by facsimile shall be confirmed by sending a copy of the same via post office in an envelope properly addressed to the appropriate Party for delivery by registered mail. All notices shall be deemed validly delivered upon receipt evidenced by an acknowledgement of the recipient, unless the Party delivering the notice can prove in case of delivery through the registered post that the recipient refused to acknowledge the receipt of the notice despite efforts of the postal authorities.

18.21.5 Any Party may by notice of at least fifteen (15) days to the other Party change the address and/or addresses to which such notices and communications to it

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are to be delivered or mailed.

18.22 Fraudulent and Corrupt Practices

18.22.1 The TSP and its respective officers, employees, agents and advisers shall observe the highest standard of ethics during the subsistence of this Agreement. Notwithstanding anything to the contrary contained in the Agreement, the Long Term Transmission Customer(s) may terminate the Agreement without being liable in any manner whatsoever to the TSP, if it determines that the TSP has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bid process. In such an event, the Long Term Transmission Customer(s) shall forfeit the Contract Performance Guarantee, without prejudice to any other right or remedy that may be available to the Long Term Transmission Customer(s) hereunder or subsistence otherwise.

18.22.2 Without prejudice to the rights of the Long Term Transmission Customer(s) under Clause 18.22.1 hereinabove and the rights and remedies which the Long Term Transmission Customer(s) may have under this Agreement, if a TSP is found by the Long Term Transmission Customer(s) to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bid process, or after the issue of Letter of Intent (hereinafter referred to as LoI) or after the execution of the TSA, the Long Term Transmission Customer(s) may terminate the Agreement without being liable in any manner whatsoever to the TSP. Further, the TSP shall not be eligible to participate in any tender or RFP issued by the Long Term Transmission Customer(s) during a period of 2 (two) years from the date such TSP is found by the Long Term Transmission Customer(s) to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.

18.22.3 For the purposes of this Clause 18.22, the following terms shall have the meaning hereinafter respectively assigned to them:

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

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(a) **"corrupt practice"** means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bid process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the BPC who is or has been associated or dealt in any manner, directly or indirectly with the Bid process or the LoI or has dealt with matters concerning the TSA or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the BPC, shall be deemed to constitute influencing the actions of a person connected with the Bid Process); or (ii) engaging in any manner whatsoever, whether during the Bid Process or after the issue of the LoI or after the execution of the TSA, as the case may be, any person in respect of any matter relating to the Project or the LoI or the TSA, who at any time has been or is a legal, financial or technical adviser of the BPC in relation to any matter concerning the Project;

(b)**"fraudulent practice"** means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bid process;

(c) **"coercive practice"** means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bid process;

(d) **"undesirable practice"** means (i) establishing contact with any person connected with or employed or engaged by the BPC with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bid process; or (ii) having a Conflict of Interest; and

(e) **"restrictive practice"** means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bid process;

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Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

18.23 Compliance with Law:

Despite anything contained in this Agreement but without prejudice to Article 12, if any provision of this Agreement shall be in deviation or inconsistent with or repugnant to the provisions contained in the Electricity Act, 2003, or any rules and regulations made there under, such provision shall be deemed to be amended to the extent required to bring it into compliance with the aforesaid relevant provisions as amended from time to time.

IN WITNESS WHEREOF, THE PARTIES HAVE CAUSED THIS AGREEMENT TO BE EXECUTED BY THEIR DULY AUTHORISED REPRESENTATIVES AS OF THE DATE AND PLACE AS SET FORTH ABOVE.

1. For and on behalf of **"Mohanlalganj Transmission Limited"**

Signature :

Name :

Designation :

Address : .....

.....

.....

2. For and on behalf of **"Pashchimanchal Vidyut Vitaran Nigam Limited"**

Signature :

Name : Rajeev Kumar

Designation : Chief Engineer (Comm.)
Pashchimanchal VidyutVitran Nigam Ltd
Meerut

Address : Victoria Street

Meerut, PVVNL

.....

MOHANLALGANJ TRANSMISSION LIMITED
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Mohanlalganj Transmission Limited

3. For and on behalf of **"Purvanchal Vidyut Vitaran Nigam Limited"**

Signature :

Name : C.B. Sinh

Designation : S.E. Com.

Address : P.U.V.N.L. Vidyut Bhawan Bhikharipur Varanasi

इ० सी० बी० सिंह
अधीक्षण अभियन्ता
पूर्वान्चल विद्युत वितरण निगम
वाराणसी

4. For and on behalf of **"Dakshinanchal Vidhyut Vitaran Nigam Limited"**

Signature : (C.S. Dubey)

Name :

Designation : Executive Engineer (Commercial), DVVNL AGRA

Address : Head Office:-URJA BHAWAN, 220KV Sub Station AGRA-MATHURA BYPASS ROAD SIKANDRA - AGRA-282007

5. For and on behalf of **"Madhyanchal Vidyut Vitaran Nigam Limited"**

Signature :

Name : Ravi Chandra Srivastava

Designation : EE

Address : MVVNL LKO

अधिशाषी अभियन्ता (ना०)
म०वि०वि०नि०लि०, लखनऊ

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Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

5. For and on behalf of **"Kanpur Electricity Supply Company Limited"**

Signature :

Name : P. K. Singh

Designation : SE

Address : अधीक्षण अभियन्ता (वा0)
केस्को, कानपुर

WITNESSES:

1. For and on behalf of UPPTCL

Signature:

Name:

Designation: नीरज स्वरूप (अधीक्षण अभियन्ता)
पी०पी०पी० प्रकोष्ठ, उ०प्र०पा०ट्रां०का०लि०

Address: 11वां तल, शक्ति भवन विस्तार, लखनऊ

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SCHEDULES

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Schedule : 1

[Note: As referred to in the recital of this Agreement and in the definition of "Long Term Transmission Customers" in this Agreement]

Sl. No.	Name of the Long Term Transmission Customer	Address of Registered Office	Allocated Project Capacity (in MW)
1.	Pashchimanchal Vidyut Vitaran Nigam Ltd.	Hydel Colony, Victoria Park, Meerut-250001 E-mail:- md@pvvnl.org Fax: 0121-2666062	31%
2.	Purvanchal Vidyut Vitaran Nigam Ltd.	Vidhut Nagar, Bhikharipur, P.O. DLW, Varanasi- 221010 E-mail:- mdpurvanchalvvnl@gmail.com Fax; 0542-2319158 Phone; 0542-2318437	24%
3.	Dakshinanchal Vidhyut Vitaran Nigam Ltd.	Urja Bhawan, Nh-2 9 Agra-Delhi bypass Road0 Sikandra, Agra-282002 E-mail:- dvvnlmd@gmail.com Fax: 0562-2605465 Phone; 0562-2605699	22%
4.	Madhyanchal Vidyut Vitaran Nigam Ltd.	4A, Ghokle Marg, Lucknow – 226001 E-mail:- md.mvvnl2010@gmail.com Fax: 0522-2208737	19%
5.	Kanpur Electricity Supply Co. Ltd.	Kesa House, 14/17 Civil lines, Kanpur-208001 E-mail:- md@kesco.co.in, Phone: 0512-2530832	4%

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Schedule : 2

Project Description and Scope of Project

1. Project Description

The proposed Transmission System shall be utilized to meet the power requirement of State of Uttar Pradesh and the surplus power, if any, shall be fed into Northern Grid to meet the power requirement of other states in Northern Region.

The Transmission System proposed to be implemented is divided into three parts i.e. Construction of 400/220/132 kV GIS substation, Mohanlalganj with associated lines, 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida with associated lines.

2. Scope

S. No.	Name of the transmission element	Scheduled COD from Effective Date	Conductor per phase
A)	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-**		
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.	18 months	

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S. No.	Name of the transmission element	Scheduled COD from Effective Date	Conductor per phase
2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor
3.	LILO of Lucknow (PG) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor
B)	**Construction of LILO Line**		
1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	Quad Bersimis ACSR Conductor
2.	LILO of one circuit 400 kV Bareilly (PG) - Muradabad D/C line on 765 kV GIS S/S Rampur	9 months	Twin Moose ACSR Conductor
C)	**Construction of LILO lines on Monopole**		
1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA guideline of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/s Sector-123, Noida	9 months	Quad Moose ACSR or equivalent HTLS conductor

Note:

(i) UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.

(ii) GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.

In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably.

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SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINES

1.0 The Tower shall be fully galvanized using mild steel or/ and high tensile steel sections. Bolts and nuts with spring washer are to be used for connection.

2.0 IS Steel section of tested quality in conformity with IS 2062:2011, grade E 250 (Designated Yield Strength 250 MPa) and/or grade E 350 (Designated Yield Strength 350 MPa) are to be used in towers, extensions, gantry structures and stub setting templates. However, use of steel grade having designated yield strength more than 350 MPa is not permitted. The steel used for fabrication of towers shall be manufactured by primary steel producers only.

3.0 Towers shall be designed as per IS-802:2015. However, drag coefficient of the tower shall be as follows:-

Sl No.	Solidity Radio Φ	Force Coefficient, C_t		
		Flat Sided Members	Circular Sections	
			Sub-Critical Flow ($D\bar{V}_d < 6m^2/s$	Super Critical Flow ($D\bar{V}_d \geq 6\ m^2/s$)
(1)	(2)	(3)	(4)	(5)
i)	0.1	1.9	1.2	0.7
ii)	02	1.8	1.2	0.8
iii)	0.3	1.7	1.2	0.8
iv)	0.4	1.7	1.1	0.8
v)	0.5	1.6	1.1	0.8
vi)	0.75	1.6	1.5	1.4
vii)	1.00	2.0	2.0	2.0

As per Clause 12.1.2.1 b) 2) of IS 802:2015, Under security condition for tension and dead end towers, the transverse loads due to line deviation shall be the component of 100 percent mechanical tension of conductor and ground wire/ OPGW corresponding to 100% of design wind pressure at everyday temperature or 36% design wind pressure at minimum temperature after accounting for drag coefficient and gust response factor.

Transmission Service Provider (TSP) may adopt any additional loading/ design criteria for ensuring reliability of the line, if so desired and/ or deemed necessary.

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Transmission line shall be designed considering wind zones as specified in wind map given in National Building Code 2016, Vol.1. The developer shall also make his own assessment of local wind conditions and frequent occurrences of high intensity winds (HIW) due to thunderstorms, dust-storms, downburst etc. along the line route and wherever required, higher wind zone than that given in wind map shall be considered for tower design for ensuring reliability of line.

765 kV towers, triple and quadruple circuit towers and towers with more than two sub-conductors per phase up to 400 kV shall be designed for reliability level 2.

4.0 A) For power line crossing of 400kV or above voltage level, large angle & dead end towers (i.e. D/DD/QD) shall be used on either side of power line crossing (i.e D/DD/QD- D/DD/QD arrangement).

B) For power line crossing of 132kV and 220kV voltage level, angle towers (B/C/D/DB/DC/DD/QB/QC/QD) shall be used on either side of power line crossing depending upon the merit of the prevailing site condition and line deviation requirement.

C) For power line crossing of 66 kV and below voltage level, suspension/tension towers shall be provided on either side of power line crossing depending upon the merit of the prevailing site condition and line deviation requirement.

D) For crossing of railways, national highways and state highways, transmission line with large angle & dead end towers (i.e. D/DD/QD) shall be used on either side of crossing.

5.0 The conductor configuration shall be as follows:

5.1 **For transmission lines with ACSR conductor:**

Transmission line	ACSR Conductor specified	Sub-conductor Spacing
765kV S/C (Quad Bersimis) transmission lines	Bersimis: Stranding 42/4.57 mm-Al + 7/2.54 mm-Steel, 725sq mm, Total Sectional Area, 35.05 mm diameter	457 mm
400kV D/C (Quad Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	457 mm
400kV D/C (Twin Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	450 mm

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Transmission line	ACSR Conductor specified	Sub-conductor Spacing
400kV D/C (Twin HTLS) Transmission lines	HTLS: type- INVAR/ GAP/ Composite core/ ACSS, 1596A ampacity, 28.62 mm diameter, 0.05552 (Ω/km) resistance	450 mm

Note: The transmission lines shall have to be designed for a maximum operating conductor temperature of 85 deg C for ACSR only.

6.0 The required phase to phase spacing and horizontal spacing for 765kV & 400 kV D/C line shall be governed by the tower design as well as minimum live metal clearances for 765kV and 400kV voltage level respectively under different insulator swing angles.

a) **For 765 kV transmission lines:**

The minimum live metal clearances for 765 kV line may be considered as follows:

(i) Under stationary conditions

From tower body:
For 765 kV S/C : 5.6 m

(ii) Under swing conditions for 'I' String for outer phases:
A (0°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (0°)	5.6 m
b) Swing angle (25°)	4.4 m
c) Swing angle (55°)	1.3 m

B (0°-5°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (20°)	5.6 m
b) Swing angle (41°)	4.4 m

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c) Swing angle (64°)	1.3 m

Under swing conditions for 'I' Pilot String for 4x50 Kg counter weight on outer phases:

C (0°-30°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (15°)	5.6 m
b) Swing angle (25°)	4.4 m
c) Swing angle (40°)	1.3 m

D (30°-60°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (20°)	5.6 m
b) Swing angle (30°)	4.4 m
c) Swing angle (40°)	1.3 m

'V' String (Tower type A & B) Central phase and Tower type 'C' (all phases) and V-Pilot for towers D (Central phase)

To boom frame steel	5.1 m
To window frame	5.6 m

However the phase to phase spacing for 765kV line shall not be less than 15m.

b) <u>For 400 kV transmission lines:</u>

The minimum live metal clearances for 400kV D/C transmission lines may be considered as follows:

(i) Under stationary conditions
From tower body:
For 400 kV D/C : 3.05 m

(ii) Under swing conditions:

Wind pressure Condition	Minimum electrical clearance
a) Nil	3.05 m

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b) Swing angle (22°)	3.05 m
c) Swing angle (44°)	1.86 m

However the phase to phase spacing for 400kV D/C line shall not be less than 8.0 m.

7.0 The minimum ground clearance for 765 kV transmission lines shall be 18 m, for 400 kV D/C transmission lines shall be 8.84 m so that maximum electric field does not exceed 10kV/m within the ROW and does not exceed 5kV/m at the edge of the ROW as per international guidelines.

8.0 The minimum mid span separation between earth wire and conductor shall be 9.0 m for 765 kV line & 9.0 m for 400 kV D/C transmission lines. Shielding angle shall not exceed 20 deg for 765 kV S/C line & 400 kV D/C line D/C transmission lines.

9.0 Transposition is to be done for all transmission lines whose length is greater than 100 Km.

10.0 The switching impulse withstands voltage (wet) for 765 kV line shall be 1550 kVp and 400 kV line shall be 1050 kVp. Lightning impulse withstand voltage (dry) for 765 kV line shall be 2400kVp & for 400kV line shall be 1550 kVp.

11.0 The Fault current for design of line shall be 50 kA for 1 sec for 765 kV, 63 kA for 1 sec for 400 kV.

12.0 The lines shall be designed for very heavy pollution level (creepage of 31mm/kV as per IEC-60815). Silicone rubber polymer insulators shall be used for the transmission lines.

13.0 Each tower shall be earthed such that tower footing resistance does not exceed 10 ohms. Pipe type or Counterpoise type earthing shall be provided in accordance with relevant IS. If the value (before stringing) has been recorded higher than 10 ohm, earthing shall be changed to Counterpoise type. Additional earthing shall be provided on every 7 to 8 kms distance at tension tower for direct earthing of both shield wires.

14.0 The required grade of concrete and mix design for foundation of transmission line tower shall be as per relevant IS.

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15.0 Technical specification for 400kV line on Monopole

i) The monopoles/ lattice type towers are of the following types:
400 kV Double Circuit (PA, PB, PC & PD)
400 kV Double Circuit (DA, DB, DC & DD) with Quad Moose Conductor

Classification of Monopole/Towers

The Pole for 400 kV Lines are classified as given below:-

a) For Suspension Pole PA (0-2 deg.)

Normal Span	:	200m
Wind Span	:	200m
Weight Span	:	300m

b) For Tension Pole PB (2-15 deg.)

Normal Span	:	200m
Wind Span	:	200m
Weight Span	:	300m

c) For Tension Pole PC (15-30 deg.)

Normal Span	:	200m
Wind Span	:	200m
Weight Span	:	300m

d) For Tension Pole PD (30-60 deg.)

Normal Span	:	200m
Wind Span	:	200m
Weight Span	:	300m

ii) **Broken wire Conditions:**

For Suspension pole (PA)	:	One Earthwire or One Conductor broken at a time, whichever is more stringent for a particular section.
For Tension pole (PB)	:	One Earthwire and any One Conductor broken or any two conductor broken at a time on same side, whichever is more stringent for a particular section.
For Tension pole (PC)	:	One Earthwire and any One Conductor broken or any two conductor broken at a time on same side, whichever is more stringent for a particular section.

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For Tension pole (PD)	:	One Earthwire and any Two Conductor broken or any Three conductor broken at a time on same side, whichever is more stringent for a particular section.

Code Reference

Load Calculation : IS 802

Sag & Clearance : IS: 5613 CBIP Manual

Deflection Criteria: 5% of height of pole @ ultimate load conditions and 1.5% of the height of pole @ everyday condition (safety normal)

iii) **Ground Clearance**

The minimum ground clearance from the bottom conductor shall not be less than 8840 mm for 400KV lines at the maximum sag conditions i.e. at 85° C and still air.

An allowance of 150mm shall be provided to account for errors in stringing.

Conductor creep shall be compensated by over tensioning the conductor at a temperature of 26°C lower than the stringing temperature for ACSR ,MOOSE conductor.

iv) **Electrical System Data for 400 kV line:**

1.	Nominal Voltage	kV	400
2.	Maximum system voltage	kV	420
3.	BIL (Impulse)	kV (Peak)	1550
4.	Power frequency withstand voltage (Wet)	kV (rms)	680
5.	Switching surge withstand voltage (Wet)	kV (rms)	1050
6.	Minimum Corona extinction voltage at 50 Hz AC system under dry condition	kV (rms) phase to earth	320 (Min)
7.	Radio interference voltage at one MHz for phase to earth voltage of 305 KV under dry condition.	Micro Volts	1000 (Max)

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v) **Details of line Material:**

Conductor, Earthwire & OPGW:

Sl. No.	Description	Conductor	Earthwire	OPGW (tentative)
1.	Type	ACSR 'MOOSE' conductor	7/3.66mm GS Earthwire	24 fibre OPGW
2.	Stranding and wire diameter			
	Aluminium	54/3.53	-	
	Steel	7/3.53	7/3.66	
3.	Conductor per phase	4	NA	NA
4.	Spacing between conductor of same phase(sub conductor spacing)(mm)	457mm for Quad bundle	NA	NA
5.	Configuration	Vertical (for D/C with 8000 mm min. inter phase spacing)	One continuously to run horizontally on top of the towers and conductors	One continuously to run on top of the towers and conductors
6.	Overall Diameter (mm)	31.77	11.5 (for both 24 and 48 fibres)	≈ 0.98
7.	Unit mass (kg/km)	2004	583	≈ 583
8.	Min. UTS (kN)	161.6	68.4	Equivalent to earthwire

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Polymer Insulator:

S. No.	Type of String	*Size of Composite Insulator (Core dia x Nominal length) (mm)	Minimum Creepage Distance (mm) per unit	No. of individual Units per String (Nos.)	Electro-Mechanical Strength of Insulator Unit (kN)	Mechanical Strength of Insulator String along with Hardware Fittings (kN)
FOR 400kV AC TRANSMISSION LINES WITH QUAD MOOSE CONDUCTOR						
1.	Single 'I' Suspension	20x3335	13020	1x1	120	120
2.	Single Tension	20x3335	13020	4x1	120	4x120
3.	Quadruple Tension	24x3910	13020	4x1	160	4x160

vi) **Railway Crossings**

All the railway crossings coming en-route the transmission line shall be identified by the Contractor. At the time of detailed survey, the railway crossings shall be finalized as per the regulation laid down by the Railway Authorities. The following are the important features of the prevailing regulations (revised in 1987).

a) The crossings shall be supported on PD type pole or DD type tower on either side depending on the merits of each case.

b) The crossing shall normally be at right angle to the railway track.

c) The minimum distance of the crossing pole/tower shall be at least equal to the height of the pole/tower plus 6 meters away measured from the centre of the nearest railway track.

d) No crossing shall be located over a booster transformer, traction switching station, traction sub-station or a track cabin location in an electrified area.

e) Minimum ground clearance above rail level of the lowest portion of any conductor under condition of maximum sag shall be maintained at 22.00 m for 765 kV line and 17.90 m for 400KV/220 kV/132 kV transmission lines.

The crossing span will be limited to 300 meters.

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vii) **Power line Crossings**

Where the line is to cross over another line of 132 kV or above voltage level, PD type pole or DD type tower with suitable extensions shall be used, depending upon merit of the prevailing site condition. For line crossing lower than 132 kV voltage level, suspension/tension pole, towers with suitable extension may be used depending upon the merit of the prevailing sire condition. Provisions to prevent the possibility of it coming into contact with other overhead lines shall be made in accordance with the Indian Electricity Rules, 1956 as amended up-to-date. In order to reduce the height of the crossing pole/tower, it may be advantageous to remove the ground-wire of the line to be crossed (if this is possible and permitted by the PURCHASER of the line to be crossed).

Minimum clearance in meters between lines when crossing each other:

Sr. No.	Nominal System Voltage	110-132kV	220kV	400kV	765kV
a.	110-132KV	3.05	4.58	5.49	7.94
b.	220KV	4.58	4.58	5.49	7.94
c.	400KV	5.49	5.49	5.49	7.94
d.	765KV	7.94	7.94	7.94	7.94

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SPECIFIC TECHNICAL REQUIREMENTS FOR SUBSTATION

The proposed 400kV Mohanlalganj (2x500 + 2x200 MVA) sub-station shall be gas insulated type generally confirming to the requirement of CEA regulation for construction of sub-station.

1.0 Salient features of 400/220/132 KV GIS Substation Equipment and Facilities

The design and specification of substation equipment are to be governed by the following factors:

2.0 Insulation Coordination

400 KV System would be designed to limit the Switching overvoltage to 2.5 p.u. and is expected to decay to 1.5 p.u. in 5 to 6 cycles. Consistent with these values and protective levels provided by lightning arrestors, the following insulation levels are proposed to be adopted for 400kV, 220kV and 132kV systems:

S. No.	Particulars	400 KV	220kV	132kV
a.	Impulse withstand voltage for - Transformer and reactors - for Other Equipment	 1300 kVp 1425 kVp	 950 kVp 1050 kVp	 650 kVp 650 kVp
b.	Switching surge withstand voltage	1050 kVp	-	-
c.	Minimum creepage distance	13020 mm	7595 mm	4092 mm
d.	Max. fault current	50 kA	40 kA	40 kA
e.	Duration of fault	1 Sec	1 Sec	1 Sec
f.	Corona extinction voltage	320 kV rms	156 kV rms	105 kV rms

3.0 Switching Schemes

It is essential that the system should remain secured even under conditions of major equipment or bus-bar failure. Sub-stations being the main connection points have large influence on the security of the system as a whole. The selection of the bus switching scheme is governed by the various technical and other related factors. One & Half breaker bus scheme has been considered for 400kV substations and Double main bus scheme has been considered for 220kV & 132kV side due to their

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merits in terms of reliability, security, operational flexibility and ease of maintenance of equipment.

Substation	400kV side	220kV side	132kV side
400/220/132kV, 2X 500 MVA, 2X 200 MVA GIS Substation at Mohanlalganj	One & Half Breaker	Double Main	Double Main

4.0 Substation Equipment and Facilities

The switchgear shall be designed and specified to withstand operating conditions and duty requirements. All equipment shall be designed considering the transmission line capacity.

Current rating for various feeders & bus bar are as follows:-

S.No.	Description of bay	400 kV	220 kV	132 kV
1	Bus Bar	4000A	3000A	2000A
2	Line bays	3150A	2000A	1600A
3	ICT bays	2000A	2000A	1600A
4	Bus Reactor bays	2000A	NA	NA
5	Bus coupler bays	4000A	3000A	2000A

4.1 400/220/132kV GIS Substation Equipment

GIS (Gas Insulated Switchgear) shall be indoor type and in accordance to IEC: 62271-203. The switchgear shall be designed and specified to withstand operating conditions and duty requirements. All the switchgear such as Circuit Breaker, isolator, earth switch including CT, PT etc. shall be GIS type. Surge Arrestors used for transformer/Reactor connections will be AIS or GIS type. 400kV scheme shall be designed in such a way that it shall be possible to use line reactors (if provided) as bus reactors, in case of outage of line, to control bus voltage. Local control cabinets (LCC) shall be provided as per requirement. The alarm & annunciation of GIS equipment shall be wired to SCADA System.

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4.1.1. Circuit Breakers

GIS Circuit breakers shall in general be of C2-M2 class and comply to IEC- 62271-100. The rated break time shall not exceed 40 ms for 420kV and 60 ms for 245kV and 145kV circuit breakers. 420 kV & 245 kV Circuit breakers shall be provided with single phase and three phase auto reclosing. The Circuit breakers controlling 420 KV lines wherever required shall be provided with pre insertion closing resistor of about 400 ohms with 8 ms insertion time or Controlled Switching Device (CSD) for lines longer than 100 km. The short line fault capacity shall be same as the rated capacity and this is proposed to be achieved without use of opening resistors. Control switching device shall be provided in Circuit breaker of switchable line reactor and in Main & Tie circuit breakers of Transformers, line with non-switchable line reactors, and Bus reactors. Further, it shall be possible to use line reactors as bus reactors, in case of outage of line.

4.1.2. Isolators

The isolators shall comply to IEC 62271-102 in general. Isolators shall be motor operated. Earth switches are provided at various locations to facilitate maintenance. Main blades and earth blades shall be interlocked and interlock shall be fail safe type. All earth switches shall be motor operated type.

4.1.3. Current Transformers

Current Transformers shall comply with IEC 60044-1 in general. All ratios shall be obtained by secondary taps. Generally, Current Transformers (CT) shall have five cores (four for protection and one for metering) whereas; CT in Tie bays shall have six cores (four for protections & two for metering) suitably distributed on both sides of CB. The burden and knee point voltage shall be in accordance with the requirements of the system including possible feeds for telemetry. Accuracy class for protection core shall be PS and for metering core it shall be 0.2S.

4.1.4. Voltage Transformers

The voltage transformers shall conform to IEC-60044-2. Voltage transformers shall be of the electromagnetic type with SF6 gas insulation. The earth end of the high voltage winding and the ends of the secondary winding shall be brought out in the terminal box. The voltage transformers shall be located as a separate bay module and will be connected phase to ground and shall be used for protection, metering and synchronization. The voltage transformers shall be of inductive type, nonresistant and shall be contained in their own-SF6 compartment, separated from other parts of installation. The voltage transformers shall be effectively shielded

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against high frequency electromagnetic transients. The voltage transformers shall have three secondary windings. The voltage transformer should be thermally and dielectrically safe when the secondary terminals are loaded with the guaranteed thermal burdens. The accuracy class for core - I & II for 400 kV shall be 0.5/3P and for 220 kV shall be 3P. The accuracy of 0.2 on secondary III should be maintained throughout the entire burden range up to 50VA on all the three windings without any adjustments during operation.

4.1.5. SF6 to Air Bushing

Outdoor bushings, for the connection of conventional external conductors to the SF6 metal enclosed switchgear, shall be provided. Bushings shall generally be in accordance with the requirements of IEC -60137. The creepage distance over the external surface of outdoor bushings shall not be less than 31 mm/kV and in highly polluted area it shall not be less than 31mm/kV. SF6 to air Bushing shall be of Polymer/ composite type and shall be robust and designed for adequate cantilever strength to meet the requirement of seismic condition. The electrical and mechanical characteristics of bushings shall be in accordance with IEC:60137. Polymer/ composite insulator shall be seamless sheath of a silicone rubber compound. The housing & weather sheds should have silicon content of minimum 30% by weight. It should protect the bushing against environmental influences, external pollution and humidity. The hollow silicone composite insulators shall comply with the requirements of the IEC publications IEC 61462 and the relevant parts of IEC62217.

4.1.6. Capacitor Voltage Transformers

Voltage transformers shall comply to IEC 60044-2 & IEC-6044-5 in general. These shall have three secondaries out of which two shall be used for protection and one for metering. Accuracy class for protection core shall be 3 P and for metering core shall be 0.2S. The voltage transformers on lines shall be suitable for Carrier Coupling. The Capacitance of CVT shall be 4400/8800 pF depending on PLCC requirements.

4.1.7. Surge Arresters

Station class current limiting, heavy duty gapless type Surge arresters conforming to IEC 60099-4 in general shall be provided.

The rated voltage of Surge arrester and other characteristics are chosen in accordance with system requirements. Surge arresters shall be provided near line

entrances, transformers so as to achieve proper insulation coordination. Surge arresters shall be providing with porcelain/polymer housing.

4.1.8. Power Transformers

CODES AND STANDARDS

The latest revisions of the following Codes and Standards shall be applicable for the equipment/material covered in this Specification. In case of conflict, the manufacturer may propose equipment/material conforming to one group of Industry Codes and Standards quoted hereunder without jeopardizing the requirement of this specification:

IEC60044	Instruments transformers
IEC60076	Power transformers
IEC60137	Insulating bushing for alternating voltages above 1000 V
IEC60214	On-load tap-changers
IEC60273	Characteristics of indoor and outdoor post insulators for systems with nominal voltages greater than 1000V
IEC 60282-2	High-voltage fuses
IEC60289	Reactors
IEC60529	Degrees of protection provided by enclosures (IP Code)
IEC60815	Guide for the selection of insulators in respect of polluted conditions
IEC60947	Low-voltage switchgear and control gear

Design and Construction Requirements

Core

1. The core shall be assembled with oriented grain steel, cold rolled sheet, and treated with an insulating layer heat and oil resistant.

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2. The core supports shall be designed to counter the effects of marine and overland transport under poor conditions. The air core reactance of the core shall be less than 20%.

3. The Contractor shall provide a description of construction details of the proposed core or shell design.

Over Fluxing

The transformer shall withstand without injurious heating combined voltage and frequency fluctuations which produce the following overfluxing conditions and give desired performance:

- 105% for 10minutes
- 125% for 1minute
- 140% for 5seconds
- Bidder shall provide the overvoltage withstand time for 150% and 170% over fluxing

(a) Transformer shall conform to IEC 60076 in general. The transformer and all its accessories including bushing/ built in CTs etc. shall be designed to withstand thermal and mechanical stresses caused by symmetrical or asymmetrical faults on any terminals. Mechanical strength of the transformer shall be such that it can withstand 3-phase and 1- phase through fault for transformer rated voltage applied to HV and/ or IV terminals of transformer. The short circuit shall alternatively be considered to be applied to each of the HV, IV and tertiary (LV) transformer terminals. Tertiary is not considered to be connected to source.

Core shall be constructed from high grade, non-ageing cold rolled super grain oriented silicon steel laminations (HI-B or better grade). The maximum flux density in any part of the core and yoke at the rated MVA, voltage and frequency shall not exceed 1.9 Tesla at all tap positions during 10% continuous over voltage condition. Transformers shall withstand without damage and over-heating due to over fluxing conditions of 110% for continuous, 125% for 1 minute and 140% for 5seconds.

All the windings shall be capable of withstanding the Dielectric, mechanical and thermal stresses which may be caused by switching, dead short circuit on its terminals. Transfer surge at tertiary shall not exceed 250kVp during impulse

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and switching impulse from HV & IV Terminals. The tertiary windings shall be suitable for connection of reactors or capacitors which would be subjected to frequent switching and shall be suitable for connection to LT Transformer for auxiliary supply. The air core reactance of HV winding of transformer shall not be less than 20% for 400kV class Transformer. External or internal reactors shall not be used to achieve the specified HV/LV and IV/LV impedances.

Transformers shall be fitted with two cooler banks, each capable of dissipating 50 per cent of the loss at continuous maximum rating. Transformer shall be capable of operating at full load for 20 minutes in the event of failure of the oil circulating pump or blowers associated with one cooler bank and for at least ten (10) minutes in the event of total failure of power supply to cooling fans and oil pumps, without winding hot spot temperature exceeding 140 deg C. Transformer shall be designed so that tank hotspot shall not exceed 130 deg C, considering maximum ambient temperature of 50ºC.

The transformer shall be complete with all required accessories, Bushing CTs, Neutral CT (outdoor type), cooler control cabinet, individual and common marshalling box, RTCC etc. as required for satisfactory operations of transformer. The transformer shall be provided with IEC 61850 compliant digital RTCC relay having automatic voltage regulating features to operate OLTC including parallel operation of transformers. Neutral of the transformer shall be solidly grounded.

HV and IV bushing shall be RIP (Resin Impregnated Paper)/RIS (Resin Impregnated Synthetic) with composite insulator type. LV bushing shall be OIP/ RIP/ RIS. 36kV Neutral bushing shall be solid porcelain or oil communicating type.

The major technical particulars/ parameters of transformer are given below:

(A) 500MVA, 400/220/33kV, 3-Phase Auto transformer (applicable standard: IEC-60076)

Sl. No.	Description	Unit	Technical Parameters
1.	Rated Capacity: HV/IV/LV (Tertiary)	MVA	500/ 500/ 167 (Active loading of tertiary: 5 MVA)
2.	Voltage ratio (Line to Line)		400/220/33
3.	Frequency	Hz	50

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Sl. No.	Description	Unit	Technical Parameters
4.	No. of Phase	Nos	3
5.	Vector Group (unless specified differently elsewhere)		YNa0d11
6.	Cooling		ONAN/ ONAF/ (OFAF or ODAF) OR ONAN/ ONAF1/ONAF2
7.	Rating at different cooling above	%	60/80/100
8.	Type of Transformer		Constant Ohmic impedance type
9.	Impedance at 75 Deg C		
a)	HV – IV (with tolerance as per IEC)	%	At Max./ Principal/ Min. Voltage Tap: 10.3/12.5/15.4
b)	HV – LV	%	At Principal tap(minimum) : 60
c)	IV – LV	%	At Principal tap (minimum):
			45
10.	Losses		
a)	Maximum No-Load Loss at rated voltage and frequency	kW	90
b)	Maximum Load Loss at rated current and 75°C	kW	500
c)	Max I2R loss at rated current and frequency and at 75°C for HV and IV windings	kW	375
d)	Maximum Auxiliary Loss at rated voltage and frequency	kW	15
11.	Max. Temperature rise over 50 deg C ambient Temp	Deg. C	Top oil: 50 & Winding: 55

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Sl. No.	Description	Unit	Technical Parameters
12.	Windings		
i)	Insulation Level (LI/SI/PF)		kVp/ kVp/ kVrms
	HV		1300/1050/570
	IV		950/-/395
	LV		250/-/95
	Neutral		95/-/38
ii)	Tan delta of winding	%	< 0.5
13.	Tap Changer & Tappings		OLTC with range ± 10% for HV variation in the step of 1.25%, 17 steps, on 220kV side of series winding
14.	Maximum Partial discharge (PD) level at 1.58*Ur/√3	pC	100
15.	Noise level at rated voltage and at principal tap at no load and all cooling active	dB	< 80
16.	Bushing		
i)	Rated voltage (HV/IV/LV/Neutral)	kV	420/245/52/36
ii)	Rated current(Min.) HV/IV/LV/Neutral	A	1250/2000/3150/2000
iii)	Insulation Level (LI/SI/PF)		kVp/ kVp/ kVrms
	HV		1425/ 1050/ 630
	IV		1050/ -/ 460
	LV		250/ -/ 95
	Neutral		170/ -/ 75
iv)	Tan delta of bushings HV/IV/LV	%	< 0.4
v)	Max. PD of bushings at level @	pC	100

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Sl. No.	Description	Unit	Technical Parameters
	1.5 pu		
17.	Insulating Oil		virgin high grade inhibited, conforming to IEC-60296

(B) MAIN PARAMETERS OF 200 MVA, 220/132/11KV TRANSFORMER

1.	Normal continuous ratings MVA	ONAN/ONAF/OFAF 120/160/200 MVA
2.	Maximum continuous capacity	200 MVA
3.	Phases	3(three)
4.	Other Parameters	
a)	Normal ratio of transformation	220/132/11 KV
b)	Rated Frequency	50 C/s ± 5%
c)	Rated Voltage of HV winding	220 KV
d)	Rated Voltage of IV winding	132 KV
e)	Rated voltage of tertiary winding	11 KV
5.	Rated Current :	
a)	Rated line current of HV winding	525 Amp
b)	Rated line current of IV winding	875 Amp
c)	Rated line current of tertiary winding	3150Amp (for 60MVA)
6.	Phase Connections	
a)	Series winding	Auto Star
b)	Common winding	Auto star
c)	Tertiary winding	Delta
d)	Vector group reference	YNa0d11
e)	Reference voltage group and terminal marking	HV/IV/Tertiary
f)	Polarity	Subtractive
g)	Type of cooling	ONAN/ONAF/OFAF

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h)	D.C. Voltage for relays etc. (as required)	110V/220V D.C.
7	Maximum Temperature rise	
a)	Of oil by thermometer	45ºC
b)	Of winding by resistance	50ºC. (ONAN/ONAF) 55ºC. (OFAF)
c)	By hot spot temperature indicator	66ºC
8	Limit for hot spot temperature for which the transformer is designed	140ºC
9	Temperature gradient between winding & Oil	20ºC average
10	Voltage to earth for which the star point will be insulated	95 kVp 38KV rms
11	Maximum flux density in iron at normal voltage, frequency and ration	
a)	Core	1.53 tesla
b)	Yoke	1.53 tesla
12	Over voltage operating capacity and duration	
a)	110% of rated voltage	Continuous
b)	125% of rated voltage	For 60 Sec
c)	140% of rated voltage	For 5 Sec
13	Positive Sequence impedance on rated MVA base at rated current & frequency at 75 deg.C.winding temperature at:	
a)	HV to IV % impedance at tap no.1 at 100% rating	11%
b)	HV to IV% impedance at tap no.13 (normal tap)	10%
c)	HV to IV% impedance at Tap no.17 at 100% rating	11%
d)	HV to tertiary	60%(min.)
e)	IV to tertiary	50%(min.)
	(Offers with lower% impedance will not be considered)	
	Note: No reactor either inside or outside the tank shall be used to achieve above %age impedance value.	
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a)	Location of tap changer	IV side
b)	Voltage variation	-5% to+15%

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c)	Step Voltage	1.25%
d)	Vector group	YNa0d11
15	Type of transformer	Core
16	Maximum Permissible Losses of Transformers	
a)	Max. No Load Loss at rated voltage and frequency	35 kW
b)	Max. Load Loss at rated current and frequency and at 75OC for HV and IV windings, at principal tap position	260 kW
c)	Max I2R loss at rated current and frequency and at 75OC	190 kW
d)	Max. Auxiliary Loss at rated voltage and frequency	8 kW
17	Rail Gauge	1676 mm 3048 mm
18	Core:	
a)	Material of core lamination	CRGO Silicon Steel
b)	Thickness of coal plate	0.27
c)	Whether core plates or grain oriented, cold rolled	Yes
19	KVA capacity of the auxiliary winding	60,000 KVA
20	System short circuit level and duration for which transformer shall be capable to withstand thermal & dynamic stress	40 KA for 3 sec
21	Percentage impedance	
a)	HV to IV % impedance at tap no.1 at 100%rating	11%(+/-ISTol)
b)	HVtoIV%impedanceattapno.13(normal tap) at 100% Rating	10%(+/-ISTol)
c)	HV to IV% impedance at Tap no. 17 at 100% rating	11%(+/-ISTol)
d)	HV to tertiary	60%(min.)
e)	IV to tertiary	50%(min.)

(Offers with lower% impedance will not be considered)

Note: No reactor either inside or outside the tank shall be used to achieve above %age impedance value.

4.1.9. 400kV 125, 3-Phase Shunt Reactors

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Reactor shall conform to IEC 60076-6 in general. The reactor shall be designed to withstand the over-voltages repeatedly without risk of failure at 1.05 Ur continuously, 1.25 Ur for 1 minute and 1.50 Um for 5 seconds (where Ur is 420kV). The reactors shall be designed for switching surge overvoltage of 2.5 p.u. and temporary overvoltage of 2.3p.u. for few cycles followed by power frequency overvoltage up to 1.5 p.u. The reactor must withstand the stress due to above transient dynamic conditions which may cause additional current flow as a result of changed saturation characteristics/slope beyond 1.5 p.u. voltage.

The reactor shall be of either gapped core type or magnetically shielded air core type (shell type) construction. The impedance ratio (X0/X1) specified shall be achieved by adopting either single phase construction in separate tanks or three phase with 3 limb or 5 limb core construction. In case of coreless construction, a magnetic shield shall be provided around the coreless coils and non-magnetic material sheet shall form the central core to minimize the vibrations. Core shall be constructed from state of the art low loss electrical steel laminations of conventional grade (as per BIS)/ regular grade as per IEC) or better.

Shunt Reactors shall be capable of operating continuously at a voltage 5% higher than their rated voltage without exceeding winding and tank hot spot temperature 140 Deg and 130 Deg Celsius respectively, considering maximum ambient temperature as 50 Deg C.

The reactor shall be complete with all required accessories, Bushing CTs, individual marshalling box etc. as required for satisfactory operations of reactor. HV and Neutral bushings shall be RIP (resin impregnated paper condenser) with composite insulator type.

The Technical Particulars/ Parameters of Shunt Reactor are given below:

The Technical Particulars/ Parameters of 420kV, 3-Phase Shunt Reactor			
Sl. No.	**Description**	**Unit**	**Parameters**
1.	Rated Voltage, Ur (1p.u)	kV	420
2.	Rated Capacity at 420 kV	MVAR	125
3.	Cooling System		ONAN
4.	Permissible current unbalance among different phases	%	±2

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5.	Crest value of Third Harmonic content in phase current at rated voltage with sinusoidal waveform	%	≤ 3% of the crest value of fundamental
6.	Range of constant Impedance		Up to 1.5 p.u. voltage
7.	Tolerance on current	%	0 to +5%
8.	Ratio of zero sequence reactance to positive reactance (X0/X1)	Range	0.9 - 1.0
9.	Max. Temperature rise over 50 deg C Ambient Temp at rated voltage	Deg.C	Top oil: 40 & Winding: 45
10.	Losses for 420kV, 3-phase Reactor		
	Maximum Load Loss at rated voltage, frequency and 750C (for 125 MVAR)	kW	160
11.	Windings		
a)	Insulation level (LI/SI/PF)		kVp/ kVp / kVrms
i)	HV		1300/1050/-
ii)	Neutral		550/-/230
b)	Tan delta of windings	%	< 0.5
12.	Maximum partial discharge (PD) level at 1.58 Ur/ √3	pC	100
13.	Vibration at rated voltage and frequency		≤ 200 microns peak to peak
14.	Noise level at rated V &F	dB	<80
15.	Bushing		
a)	Rated voltage: HV / Neutral	kV	420/145
b)	Rated current (Min.) HV / Neutral	A	800/800
c)	Insulation level (LI/SI/PF)		kVp/ kVp/ kVrms
i)	HV		1425/1050/695
ii)	Neutral		650/-/305
d)	Tan delta of bushings : HV / Neutral (at ambient temperature)	%	< 0.4

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e)	PD of bushings at level Um (Um=420kV)	pC	<10
16.	Insulating Oil		virgin high grade inhibited, conforming to IEC-60296

4.1.10. Protection and Control

The protective relaying system proposed to be provided for transmission lines, auto-transformers, reactors and bus bars to minimize the damage to the equipment in the events of faults and abnormal conditions, is dealt in this section. All main protective relays shall be numerical type with IEC 61850 communication interface. All numerical relays shall have built in disturbance recording feature.

a) **Transmission Line Protection**

400 kV, 220 kV and 132 kV lines shall have MAIN-I numerical three zone distance protection scheme with carrier aided inter-tripping feature. 400 kV, 220 kV and 132 kV lines shall also have MAIN-II numerical distance protection scheme like Main-I but from different make that of MAIN-I. Line Current Differential as Main–I & Main-II may be considered, for short lines (line length below 30 km) having Fibre Optic communication link. In case of loop in loop out of transmission lines, the existing protection scheme shall be studied and suitable up-gradation (if required) shall be carried out.

All 400 kV lines shall also be provided with two stages over voltage protection. Further, all 400, 220 & 132kV lines shall be provided with single and three phase auto-reclosing facility to allow reclosing of circuit breakers in case of transient faults. These lines shall also be provided with distance to fault locators to identify the location of fault on transmission lines.

b) These shall have the following protections:

i) Numerical Differential protection

ii) Numerical Restricted earth fault protection

iii) Numerical Over-current and earth fault protection on HV & MV side

iv) Numerical Over fluxing protection on HV & MV side

v) Numerical Overload alarm

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Besides these, power transformers shall also be provided with BUCHOLZ relay, protection against high oil and winding temperature and pressure relief device etc.

c) **420kV Reactor Protection**

Reactor shall be provided with the following protections:

i) Numerical Differential protection

ii) Numerical Restricted earth fault protection

iii) Numerical Back-up impedance protection

Besides these, reactors shall also be provided with Bucholz relay, protection against oil and winding temperatures & pressure relief device etc.

d) **Numerical Bus Bar Protection**

The high speed bus bar differential protection, which is essential to minimize the damage and maintain system stability at the time of bus bar faults, shall be provided for 400kV, 220kV and 132kV buses. Duplicated busbar protection is envisaged for 400kV bus-bar protection. Bus bar protection scheme shall be such that it operates selectively for each bus and incorporate necessary features required for ensuring security. The scheme shall have the provision for future expansion. For existing substations, the existing bus bar protection shall be augmented wherever required.

e) **Numerical Local Breaker Back up Protection**

This shall be provided for each 420 kV, 245 kV and 145 kV breakers and will be connected to de-energize the affected stuck breaker from both sides.

f) **Substation Automation System**

For all the new substations, state of art Substation Automation System (SAS) conforming to IEC-61850 shall be provided. The distributed architecture shall be used for Substation Automation system, where the controls shall be provided through Bay control units. The Bay control unit is to be provided bay wise for voltage level 132kV and above. All bay control units as well as protection units are normally connected through an Optic fiber high speed network. The control and monitoring of circuit breaker, dis-connector, re-setting of relays etc. can be done from Human Machine Interface (HMI) from

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the control room. SAS shall be equipped with the facility of remote operation and by providing remote HMI and suitable communication link, the substation can be controlled from a remote location. Necessary gateway & modems (as required) shall be provided to send data to RLDC/ SLDC.

The functions of control, annunciation, disturbance recording, event logging and measurement of electrical parameters shall be integrated in Substation Automation System. The Automation System shall be provided with the facility of communication and control for remote end operation. In existing Substations where Substation automation is not provided, control functions shall be done through control panels.

g) **Time Synchronization Equipment**

Time synchronization equipment complete in all respect including antenna, cable, processing equipment required to receive time signal through GPS or from National Physical Laboratory(NPL) through INSAT shall be provided. This equipment shall be used to synchronize SAS & IEDs etc.

4.1.11. Control Concept

All the EHV breakers in substation/switching stations shall be controlled and synchronized from the switchyard control room and remote control centre. Each breaker would have two sets of trip circuits which would be connected to separately fused DC supplies for greater reliability. All the isolators shall have control from remote/local whereas the earth switches shall have local control only.

4.1.12. PLCC

Power line carrier communication (PLCC) equipment complete for speech transmission line, tele-protection commands and data channels shall be provided on each 400 KV, 220 kV and 132 kV transmission line. The protections for transmission line and the line compensating equipment shall have hundred percent back up communication channels. The PLCC equipment shall in brief include the following:-

Coupling device, line traps, carrier terminals, protection couplers, HF cables, PABX and maintenance and testing instruments.

A telephone exchange (PABX) of 24 lines shall be provided at new substations as means of effective communication among various buildings of the substation, remote end substations and with control centres (RLDC/SLDC) etc.

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Coupling devices shall be suitable for 4400pF 400kV , 220 kV and 132 kV CVT. Phase to phase coupling for 400 kV line , 220 kV and 132 kV single circuit line shall be provided. For D/c line Inter circuit coupling can be provided. The pass band of coupling devices shall have sufficient margin for adding communication channel in future if required. Necessary protection devices for the safety of personnel and low voltage part against power frequency voltages and transient over voltage shall also be provided.

The line traps shall be broad band tuned suitable for blocking the complete range of carrier frequencies. Line Trap shall have the necessary protective devices such as lightning arresters for the protection of tuning device and shall be equipped with corona rings. Decoupling network consisting of line traps and coupling capacitors may also be required at certain substation in case of extreme frequency congestion.

The carrier terminals shall be of single side-band (SSB) amplitude modulation (AM) type and shall have 4 kHz band width. PLCC Carrier terminal & Protection coupler shall be considered at both ends of line.

Wherever Fiber Optic/ OPGW based telecommunication terminal equipment (i.e. SDH/MUX) are being provided; the same shall be utilized for Data, Voice and line protection applications. For protection purposes, both end Digital Protection Couplers (DPCs) shall be included at both ends. However, for line protection application, back up communication channel/ link may be considered as per requirement so as to take care of OPGW/Telecommunication equipment outage.

Addition/ Modification/ shifting/ re-commissioning etc. as required of PLCC due to LILO of transmission lines shall be covered under the scope according to element wise detailed given below:-

S.No.	Detail of element (line)	Coverage under the scope
1	LILO of Sarojini Nagar (400KV)-Unnao (765KV) S/C line at 400KV Mohanlalganj S/S	Addition/ Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.
2	LILO of 400KV Lucknow (PGCIL)-Sultanpur 400KV S/C line at 400KV Mohanlalganj S/S.	Addition/ Modification/ shifting/ re-commissioning of PLCC shall be covered.
3	LILO of 765KV Ghatampur- Hapur (WUPPTCL) line at 765KV Rampur S/S.	PLCC panel shall be provided by respective S/S owner and Modification/ shifting/ re-

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S.No.	Detail of element (line)	Coverage under the scope
		commissioning of PLCC shall be covered under the scope.
4	LILO of 400KV Bareilly (PG)-Moradabad D/C lines at 765KV Rampur S/S.	PLCC panel shall be provided by respective S/S owner and Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.
5	LILO of 400KV Atour-Indirapuram (WUPPTCL) D/C line at 400KV GIS S/S sector 123 Noida.	PLCC panel shall be provided by respective S/S owner and Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.

PLCC equipment for the transmission lines at serial 01 & 02 covered under the package (Consisting of one set of analog PLCC channel along with circuit protection coupler and one set of Digital Protection Coupler for both ends of one line segment due to LILO of existing line) shall be provided by the bidder. All other associated equipment for ends cabling, coupling device and HF cable shall also be provided by the bidder. 48 V DC Power supply for PLCC panels shall be provided by the respective substation bay owner. The wave traps, CVT's required for communications from PLCC shall be provided by respective substation owner.

4.1.13. Substation Support Facilities

Certain facilities required for operation & maintenance of substations as described below shall be provided in new substation. In existing substation, these facilities have already been provided and would be extended/ augmented, wherever required.

4.1.14. AC & DC Power Supplies

For catering to the requirements of three phase & single phase AC supply and DC supply for various substation equipment, the following arrangement is envisaged:-

i) For LT Supply at each new Substation, two (2) nos. 630 kVA LT Transformers shall be provided out of which one shall be connected with SEB supply and other one shall be connected to tertiary of 400/220 kV transformer.

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ii) SEB supply at 33kV level shall be connected to 630kVA LT transformer through 33kV AIS equipment i.e. LA, CT, PT, Isolators and breaker whereas tertiary supply of 400/220kV transformer shall be connected to LT transformer through 72.5kV AIS equipment.

iii) 2 Nos. batteries of 220V for control & protection and 2 Nos. 48V batteries for PLCC/ Communication equipment shall be provided at each new Substation. Each battery bank would have a float-cum-boost charger. Battery shall be of VRLA type.

iv) Suitable AC & DC distribution boards and associated LT Switchgear would be provided at new Substations. For Substation Extensions, existing facilities shall be augmented as required. For new substations following switch boards with minimum rating as is specified here under shall be considered with duplicate supply

a) 415V Main switch board – 1no.

b) AC distribution board – 1no.

c) Main lighting distribution board –1no.

d) Emergency lighting distribution board –1no.

e) 220 volt DC distribution board –2nos.

f) 48 volt DC distribution board –2nos.

v) In new Substations, one No. 250 KVA DG set shall be provided for emergency applications Sizing of Auxiliary system (like battery, charger, LT switchgear) may be done considering future bay requirements to avoid replacement in future with higher sizes.

4.1.15. Fire Fighting System

Fire fighting system in general conforms to fire insurance regulations of India. The fire fighting system is proposed with both AC motor & diesel engine driven pumps housed in a fire fighting pump house building along with water storage tank of adequate capacity. Automatic heat actuated mulsifying system is proposed for transformers & reactors. In addition for alarm system based on heat/smoke detectors are proposed to be installed at sensitive points in a substation e.g. Cable Vault, Control Room building and other buildings etc. Further, adequate water hydrants and portable fire extinguishers shall be provided in the substations. At

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existing substations the fire fighting systems if already available, would be extended for meeting the additional requirements.

4.1.16. Oil evacuating, filtering, testing & filling apparatus

To monitor the quality of oil for satisfactory performance of transformers, shunt reactors and for periodical maintenance necessary oil evacuating, filtering, testing and filling apparatus would be provided at new substations. Oil tanks of adequate capacities for storage of transformer oil would be provided.

4.1.17. Illumination

Adequate normal & emergency AC & DC illumination shall be provided in the control room, GIS hall & other buildings of the substation. The switchyard shall also be provided with adequate illumination. The entire control room building, fire fighting pump house lighting shall be done by LED based low power consumption luminaries

4.1.18. Control Room

Substation control room would be provided to house substation work station for station level control (SAS) along with its peripheral and recording equipment, AC & DC distribution boards, DC batteries & associated battery chargers, Fire Protection panels, Telecommunication panels & other panels as per requirements. Air conditioning will be provided in the building as functional requirements.

4.1.19. GIS Hall

The Gas Insulated Switchgear (GIS) of each voltage and other associated equipment shall be housed separately inside the GIS building. The panels i.e. Bay level units, bay mimic, relay and protection panels, RTCC panels, PLCC panels etc. are to be placed in a separate room in the GIS building. The size of the room shall be such that all the panels for the future bays/ diameters shall be accommodated in the above room. The panel room shall be air-conditioned. Further, the temperature of the room shall be monitored through substation automation system by providing necessary temperature transducers. Ventilation system of suitable capacity shall be provided for each GIS hall.

One EOT Crane, for each GIS hall, of suitable capacity shall be provided for erection & Maintenance of largest GIS component/ assembly and all plant installed in the GIS switchgear room. The crane shall be capable of fulfilling all special requirements

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for erection & maintenance of GIS equipment. The capacity of the crane shall be sized to lift the heaviest GIS switchgear component.

UHF sensors in GIS for PD (Partial Discharge) detection:

Adequate number of UHF sensors shall be provided in the offered GIS for detection of Partial discharge (of 5 pC and above as per IEC 60270). The number and location of these sensors shall be based on laboratory test on typical design of GIS as per recommendations of CIGRE Document No. 654 (Application Guide for sensitivity verification for UHF Partial discharge detection system for GIS).

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SPECIFIC TECHNICAL REQUIREMENT FOR COMMUNICATION

In order to meet the requirement for grid management and operation of substations, Transmission Service Provider (TSP) shall conform to the following requirements.

On 765 kV S/C and 400 kV D/C transmission lines one earth wire and one OPGW containing 24 fibers is to be installed by the TSP in place of conventional earth wire during the construction of line for grid management and substation operation purpose by STU/CTU and 48 fibers to be installed on LILO lines. The installation of OPGW shall be done from gantry of one substation up to gantry of another substation and shall be terminated in a joint box by the TSP at both ends.

On 220 kV and 132 kV D/C lines one OPGW containing 24 fibers is to be installed in place of conventional earth wire for grid management and substation operation purpose by STU/ CTU and 48 fibers to be installed on LILO lines.

765 kV, 400 kV & 220 kV System Parameters

S. No.	Description of parameters	765 kV System	400 kV System	220 kV System
1.	System operating voltage	765 kV	400 kV	220 kV
2.	Maximum operating voltage of the system	800 kV	420 kV	245 kV
3.	Rated frequency	50 HZ	50 HZ	50 HZ
4.	No. of phase	3	3	3
5.	Rated Insulation levels			
	i. Full wave impulse withstand voltage (1.2/50 micro sec.)	2100 kVp	1550 kVp	1050 kVp
	ii. Switching impulse withstand voltage (250/2500 micro sec.) dry and wet	1550 kVp	1050 kVp	-
	iii. One minute power frequency dry withstand voltage (rms)	830 kV	630 kV	-
	iv. One minute power frequency dry and wet withstand voltage (rms)	-	-	460 kV

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S. No.	Description of parameters	765 kV System	400 kV System	220 kV System
6.	Corona extinction voltage	508 kV	320 kV	156 kV
7.	Max. radio interference voltage for frequency between 0.5 MHz and 2 MHz at 508 kV rms for 765 kV system, 266kV rms for 400kV system and156kV rms for 220 kV system	2500 micro-volts	1000 micro-volts	1000 micro-volts
8.	Minimum Creepage distance for switchyard equipment (25mm/kV)	20000 mm	10500 mm	6125 mm
9.	Min. Clearances			
	i. Phase to phase	7600mm	4000mm	
		(for conductor - conductor configuration) 9400 mm (for rod- conductor configuration)	(for conductor - conductor configuration) 4200 mm (for rod - conductor configuration)	2100 mm
	ii. Phase to earth	4900mm (for conductor-structure) 6400mm (for rod-structure)	3500 mm	2100mm
	iii. Sectional clearances	10300mm	6500mm	5000mm
10.	Rated short circuit current for 1 sec. duration	40kA/ 50kA (as applicable)	40kA/ 50kA/ 63kA (as applicable)	40kA/ 50kA (as applicable)
11.	System neutral earthing	Effectively earthed	Effectively earthed	Effectively Earthed
12.	DC Voltage	220V	220V	110V

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132 kV, 66 kV, 33 kV & 11 kV System

Sl. No.	Description of parameters	132 kV System	66 kV System	33 kV System	11kV System
1.	System operating voltage	132 kV	66 kV	33 kV	11 kV
2.	Maximum operating voltage of the system (rms)	145 kV	72.5 kV	36 kV	12 kV
3.	Rated frequency	50 Hz	50 Hz	50 Hz	50 Hz
4.	No. of phase	3	3	3	3
5.	Rated Insulation levels				
i)	Full wave impulse withstand voltage (1.2/50 micro sec.)	650 kVp	325 kVp	170 kVp	75 kVp
ii)	One minute power frequency dry and wet withstand voltage (rms)	275 kV	140 kV	70 kV	28 kV
6.	Corona extinction voltage	105 kV	-	-	-
7.	Max. radio interference voltage				
	for frequency between 0.5 MHz and 2 MHz at 92 kV rms for132 kV system	500 micro-volts	-	-	-
8.	Minimum creepage distance (25mm/kV)	3625mm	1813mm	900mm	300mm
9.	Min. Clearances				
i)	Phase to phase	1300mm	750mm	320mm	280mm
ii)	Phase to earth	1300mm	630mm	320mm	140mm
iii)	Sectional clearances	4000mm	3000mm	3000mm	3000mm
10.	Rated short circuit current for 1 sec. Duration	31.5 kA	31.5 kA	25 kA	25 kA
11.	System neutral earthing	Effectively earthed	Effectively earthed	Effectively earthed	Effectively earthed

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Note:

1. The above parameters are applicable for installations up to an altitude of 1000m above mean sea level. For altitude exceeding 1000m, necessary altitude correction factor shall be applicable.
2. The insulation and RIV levels of the equipment shall be as per values given in the respective chapter of the equipment.

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Schedule: 3

Scheduled COD

[Note: As referred to in the definition of "Element", "Scheduled COD", and in Articles 3.1.3 (c), 4.1 (b) and 4.3 (a) of this Agreement]

All Elements of the Project are required to be commissioned progressively as per the schedule given in the following table;

Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
A.	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines**			
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension iv. 400 kV Feeder bay - 02 nos. v. 220 kV Feeder bay - 04 nos. vi. 132 kV Feeder bay - 04 nos.	18 months	30.49%	Elements at Sl No. 1, 2 & 3 shall be required simultaneously.
2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS			

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Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	substation Mohanlalganj (on Twin Moose Conductor)			
3.	LILO of Lucknow (PG) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)			
B.	**Construction of LILO Line**			
1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	61.17%	-
2.	LILO of one circuit 400 kV Bareilly (PG) - Muradabad D/C line on 765 kV GIS S/S Rampur	9 months	0.49%	-
C.	**Construction of LILO lines on Monopole**			
1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA guideline of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	9 months	7.85%	-

Note:

(i) UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.

(ii) GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.

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In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably.

The payment of Transmission Charges for any Element irrespective of its successful commissioning on or before its Scheduled COD shall only be considered after successful commissioning of the Element(s) which are pre-required for declaring the commercial operation of such Element as mentioned in the above table.

Scheduled COD for overall Project: 18 month from Effective Date.

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Schedule : 4

Safety Rules and Procedures

[Note: As referred to in Articles 5.6 and 7.1.6 of this Agreement]

1: **Site Regulations and Safety:**

The TSP shall establish Site regulations within sixty (60) days from fulfilment of conditions subsequent, as per Prudent Utility Practices setting out the rules to be observed in the execution of the Agreement at the Site and shall comply therewith.

Such Site regulations shall include, but shall not be limited to, rules in respect of security, safety of the Project, gate control, sanitation, medical care, and fire prevention, public health, environment protection, security of public life, etc.

Copies of such Site regulations shall be provided to the Lead Long Term Transmission Customer and STU for the purpose of monitoring of the Project.

2: **Emergency Work:**

In cases of any emergency, the TSP shall carry out all necessary remedial work as may be necessary.

If the work done or caused to be done by any Party other than the TSP, the TSP shall, reimburse the actual costs incurred, to the other Party carrying out such remedial works.

3: **Site Clearance:**

In the course of execution of the Agreement, the TSP shall keep the Site reasonably free from all unnecessary obstruction, storage, remove any surplus materials, clear away any wreckage, rubbish and temporary works from the Site, and remove any equipment no longer required for execution of the Agreement. After completion of all Elements of the Project, the TSP shall clear away and remove all wreckage, rubbish and debris of any kind from the Site, and shall leave the Site clean and safe.

4: **Watching and Lighting:**

The TSP shall provide and maintain at its own expense all lighting, fencing, and watching when and where necessary for the proper construction, operation, maintenance/repair of any of the Elements of the Project, or for the safety of the owners and occupiers of adjacent property and for the safety of the public, during such maintenance/repair.

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Schedule : 5

Computation of Transmission Charges

[Note: As referred to in the definitions of "Monthly Transmission Charges", "Monthly Transmission Charges Invoice" and in Articles 10.1, 10.2, 10.3, and 11.7(c) of this Agreement]

1.1 General

a. The Monthly Transmission Charges to be paid by the Long Term Transmission Customers to the TSP for providing Transmission Service for any Contract Year during the term of the Agreement shall be in accordance with this Schedule.

b. The Transmission Charges to be paid to the TSP shall comprise of the Escalable Transmission Charges and the Non Escalable Transmission Charges, payable by each Long Term Transmission Customer, in proportion to their Allocated Project Capacity for the Contract Year, as determined by the Appropriate Commission. In the event of change by Appropriate Commission in the methodology for the allocation of Transmission Charges between the Long Term Transmission Customers, such revised methodology shall apply.

c. For the purpose of payment, the Escalable Transmission Charges to be paid in any Contract Year shall be the Escalable Transmission Charge as per Schedule 6 duly escalated as provided in Schedule 7.

d. In case of any extension of time period for the Scheduled COD, the applicable Transmission Charges in relation to an Element shall be the Transmission Charges of the Contract Year in which the COD of such Element occurs or it has deemed to have occurred, and in relation to the Project, the Transmission Charges applicable will be for the Contract Year in which the COD occurs.

e. The Annual Transmission Charges shall be the sum of the Payable Annual Escalable Transmission Charges and the Payable Annual Non Escalable Transmission Charges for the Contract Year n.

f. The Transmission Charges shall be payable based on the Allocated Project Capacity at Target Availability and Incentive for Availability beyond the Target Availability as provided in this schedule shall be admissible for payment. In case of Availability being lower than the Target Availability, the Transmission Charges shall be payable on proportionate basis as provided in this Schedule. In case of the Availability being lower than the level as specified in Article 10.4, the TSP shall pay a penalty as

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Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

per the provisions in this Schedule. This penalty payable by the TSP shall be apportioned in favour of the Long Term Transmission Customer(s) in the ratio of the Transmission Charges paid or actually payable to the TSP then existing at the end of the relevant Contract Year.

g. The Availability shall be calculated as per the procedure specified in Annexure B of the Uttar Pradesh Electricity Regulatory Commission (Multi Year Transmission Tariff) Regulations, 2014 as notified by UPERC and as attached herewith.

h. All applicable Rebates and Surcharges will be computed and Invoices, as required, would be raised based on the provisions laid out in Articles 10.7 of this Agreement.

i. Reactive Power compensations and payments shall be as per the provisions of the Grid Code.

1.2 Components of Monthly Bill

The Monthly Bill for any month in a Contract Year shall consist of the following:

i. Monthly Transmission Charges in accordance with Article 1.2.1 below;

ii. Incentive Payment determined in accordance with Article 1.2.2 below (applicable on annual basis and included only in the Monthly Tariff Payment for the first month of the next Contract Year); and

iii. Penalty Payment determined in accordance with Article 1.2.3 below (applicable on annual basis and included in the Monthly Tariff Payment for the first month of the next Contract Year.

1.2.1 Computation of Monthly Transmission Charges

The Monthly Transmission Charges for any month 'm' in a Contract Year 'n' shall be calculated as below:

If CA>=NA;

Monthly Transmission Charge MTC (m)=

$\sum_{m=1}^{M}$ [T_{mn} / No. of days in the month 'm' in Contract Year 'n' * No. of days in the month 'm' in Contract Year 'n' for which bill is raised] - $\sum_{m=1}^{M-1}$ [MTC(m-1)]

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Monthly Transmission Charge MTC (m)=

$\sum_{m=1}^{M}$ [T_{mn} / No. of days in the month 'm' in Contract Year 'n' * AA/NA* No. of days in the month 'm' in Contract Year 'n' for which bill is raised] - $\sum_{m=1}^{M-1}$ [MTC(m-1)]

where:

- 'm' is the month in Contract Year 'n'
- M= month considered for payment in the Contract Year 'n'
- T_{mn}= Transmission Charges for the month 'm' in Contract Year 'n' and is equal to the sum of Monthly Escalable Transmission Charges (METC mn) and Monthly Non Escalable Transmission Charges (MNETC mn)
- CA is the Cumulative Availability , as per REA, from the first day of the Contract Year "n" in which month 'm' occurs upto and including upto the end of the month "m";
- AA is the actual Availability for the month 'm' in the Contract Year n, as per REA, (expressed in percentage);
- NA is the Target Availability;
- MTC (m-1) is the Payable Monthly Transmission Charge for the month '(m-1)' for the Contract Year 'n'

- **Monthly Escalable Transmission Charges (METC mn)**

The Monthly Escalable Transmission Charges (METCmn) for month 'm' for the Contract Year 'n' shall be calculated by the following formula,

METCmn = [Escalable Transmission Charge for the first Contract year (as provided in Schedule 6)/No. of days in the Contract Year 'n'] * No . of days in the month 'm' * p/q

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Where,

'p' is the escalation index as per Schedule 7 at the beginning of the month 'm' (expressed as a number)

'q' is the escalation index as per Schedule 7 applicable as at the beginning of the first Contract Year mentioned in Schedule 6 (expressed as a number)

- **Monthly Non Escalable Transmission Charges (MNETCmn)**

The Monthly Non Escalable Transmission Charges (MNETCmn) for month 'm' for the Contract Year 'n' shall be calculated as follows;

MNETCmn = [Non Escalable Transmission Charge for the Contract year 'n' (as provided in Schedule 6) / No. of days in the Contract Year 'n'] * No . of days in the month 'm'

Provided, no Transmission Charges shall be paid during the period for which the RLDC has not allowed the operation of the Element/Project due to the failure of the TSP to operate it as per the provisions of the Grid Code.

1.2.2 Incentive Payment

If and to the extent the Availability in a Contract Year exceeds ninety eight percent (98.0%) for AC system/ninety six percent (96%) for HVDC system, the TSP shall be entitled for an annual Incentive as calculated below:

$$Incentive = 0.02 \, x \, Annual\ Transmission\ Charges \, x (Actual\ annual\ Availability - Target\ Availability)$$

Provided that no Incentive shall be payable above the Availability of 99.75% for AC system and 98.5% for HVDC system.

Incentive shall be shared by the Long Term Transmission Customer(s) in the ratio of the Transmission Charges paid or actually payable to the TSP by then existing at the end of the relevant Contract Year.

1.2.3 Penalty

If and to the extent that the Availability in a Contract Year falls below ninety five percent (95%) for AC system / ninety two percent (92%) for HVDC system, the TSP shall be entitled for an annual penalty as per the formula given below:

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$$Penalty = 0.02 \times Annual\ Transmission\ Charges \times (Target\ Availability - Actual\ Annual\ Availability)$$

The penalty payable by the TSP shall be apportioned in favour of the Long Term Transmission Customer(s) in the ratio of the Transmission Charges paid or actually payable to the TSP by them existing at the end of the relevant Contract Year.

1.3 Recovery from Short Term Transmission Customers

The Transmission Charges to be paid by the Long Term Transmission Customers to the TSP shall stand reduced in proportion to their then existing Allocated Project Capacity at the end of the relevant month, to the extent of adjustable revenues from Short Term Transmission Customers.

The charges payable by the Short Term Transmission Customers shall be calculated on the basis of the provisions of the Central Electricity Regulatory Commission (Open Access in Inter-state Transmission) Regulations, 2008, Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 (as the case may be) or as amended from time to time.

1.4 Scheduling Charges

The payment of scheduling charges to the respective RLDC or SLDC, as the case may be, shall be the responsibility of the Long Term Transmission Customers.

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Purvanchal Vidyut Vitaran Nigam Limited

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Mohanlalganj Transmission Limited

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Schedule : 6

Transmission Charges

[Note: As referred to in the definitions of "Element", "Escalable Monthly Charges", "Non Escalable Monthly Charges" and "Monthly Transmission Charges" and in Clauses 1.1 (c) of Schedule 5 of this Agreement]

[To be incorporated from the Bid of the Selected Bidder]

[In case of pre-signing of RFP Project Documents, this needs to be inserted after selection of the Selected Bidder]

Year (Term of License)	Commencement Date of Contract Year	End Date of Contract Year	Quoted Non-Escalable Transmission Charges (in Rupees Millions)	Quoted Escalable Transmission Charges (in Rupees Millions)
(1)	(2)	(3)	(4)	(5)
1.	Scheduled COD (Refer note 7 and 9)	31-March		
2.	1-April	31-March		Same as Above
3.	1-April	31-March		Same as Above
4.	1-April	31-March		Same as Above
5.	1-April	31-March		Same as Above
6.	1-April	31-March		Same as Above
7.	1-April	31-March		Same as Above
8.	1-April	31-March		Same as Above
9.	1-April	31-March		Same as Above
10.	1-April	31-March		Same as Above
11.	1-April	31-March		Same as Above
12.	1-April	31-March		Same as Above
13.	1-April	31-March		Same as Above
14.	1-April	31-March		Same as Above
15.	1-April	31-March		Same as Above
16.	1-April	31-March		Same as Above
17.	1-April	31-March		Same as Above
18.	1-April	31-March		Same as Above
19.	1-April	31-March		Same as Above
20.	1-April	31-March		Same as Above

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Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

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Mohanlalganj Transmission Limited

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Year (Term of License)	Commencement Date of Contract Year	End Date of Contract Year	Quoted Non-Escalable Transmission Charges (in Rupees Millions)	Quoted Escalable Transmission Charges (in Rupees Millions)
21.	1-April	31-March		Same as Above
22.	1-April	31-March		Same as Above
23.	1-April	31-March		Same as Above
24.	1-April	31-March		Same as Above
25.	1-April	31-March		Same as Above
26.	1-April	31-March		Same as Above
27.	1-April	31-March		Same as Above
28.	1-April	31-March		Same as Above
29.	1-April	31-March		Same as Above
30.	1-April	31-March		Same as Above
31.	1-April	31-March		Same as Above
32.	1-April	31-March		Same as Above
33.	1-April	31-March		Same as Above
34.	1-April	31-March		Same as Above
35.	1-April	31-March		Same as Above
36.	1-April	35th anniversary of the Scheduled COD (Refer note 8 and 9)		Same as Above

[This table needs to be replicated exactly as from Annexure-4 of the RFP (i.e. Financial Bid of the Selected Bidder).]

Notes:

a. Charges for the first Contract Year are the Transmission Charges applicable for the twelve month period (from the immediately preceding 1 April from the Scheduled COD till the immediately succeeding 31 March) irrespective of the duration of the first Contract Year.

b. Charges for the second Contract Year are the Transmission Charges applicable for the full Contract Year

c. Charges for the last Contract Year are the Transmission Charges applicable for the twelve month period (from immediately preceding 1 April to the date of 35th anniversary of the Scheduled COD till the immediately succeeding 31 March) irrespective of the duration of the last Contract Year.

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Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

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d. However, in cases of both (a) and (c) above, total Transmission Charges payable to the TSP are computed proportionately for the total number of days in the first and last Contract Year respectively.

e. Charges for Short Term Open Access of the Project shall be as per the provisions of Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations 2004 as notified by Uttar Pradesh Electricity Regulatory Commission and as amended from time to time.

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

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PFC CONSULTING LTD.

पीएफसी कंसल्टिंग लिमिटेड
(भारत सरकार उपक्रम के पूर्ण स्वामित्व की पूर्णतया सहायक कंपनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)
CIN : U74140DL2008GOI176858

Ref. No. 04/TTP-45/20-21/MTL/LoI

May 12, 2022

To
Sh. B. Vamsi Rama Mohan,
Chief General Manager,
Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2, Sector - 29,
Gurgaon – 122001, Haryana

FAX: 0124 - 2571802;
E-mail: vamsi@powergrid.in

Kind Attn.: Sh. B. Vamsi Rama Mohan, Chief General Manager

Sub.: Transmission System for **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" - Letter of Intent**

Dear Sir,

We refer to:

1) The Request for Proposal document dated May 27, 2021 issued to 'M/s Power Grid Corporation of India Limited' as regards participation in the international competitive bidding process for Transmission Scheme for **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"**, and as amended till the Bid Deadline including all correspondence / clarifications / amendments exchanged between 'M/s Power Grid Corporation of India Limited' and PFC Consulting Limited in regard thereto (hereinafter collectively referred to as the **"Final RfP"**);

2) 'M/s Power Grid Corporation of India Limited' offer by way of a Non-Financial Bid pursuant to Sl. No. (1) above submitted on August 12, 2021 in response to the Final RfP.

3) 'M/s Power Grid Corporation of India Limited' offer by way of a Financial Bid during e-Reverse Auction conducted on September 03, 2021 in response to the Final RfP.

4) The Non-Financial Bid as in Sl. No. (2) above and the Financial Bid as in Sl. No. (3) above, hereinafter collectively referred to as the "Bid".

This is to inform you that the process of evaluating bids received pursuant to the Final RfP, including the Bid, had been concluded. We are pleased to inform you that your proposal and offer received by way of the "Bid" had been accepted and 'M/s Power Grid Corporation of India Limited' is hereby declared as the Successful Bidder as per clause 3.4.1.1 of the Final RfP for the above project and consequently, this Letter of Intent (hereinafter referred to as the "LoI") is being issued.

This LoI is based on the Final RfP and you are requested to please comply with the following:

a) Acknowledging its issuance and unconditionally accepting its contents and recording "Accepted unconditionally" under the signature of your authorized signatory on each page of the duplicate copy of this letter attached herewith at the place indicated for the same, and returning the same to PFC Consulting Limited within seven (7) days of the date of issuance of LoI. This LoI is issued to you in duplicate.

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iv. Completion of various activities as stipulated in the Final RfP including in particular Clause 2.4, Clause 2.5 and Clause 2.6 of the Final RfP, within the timelines as prescribed therein.

It may be noted that PFC Consulting Limited has the rights available to them under the Final RfP, including rights under clause 3.4.1.5 thereof, upon your failure to comply with the aforementioned conditions.

As you are aware, the issuance and contents of this LoI are based on the Bid submitted by you as per the Final RfP including the Transmission charges and other details regarding the Scheduled COD as contained therein. The Quoted Transmission Charges as submitted by you and the Scheduled COD of each transmission Element and the Project as agreed by you in your Bid, as per Annexure 4 and Format-1 of Annexure 6 respectively of the Final RfP is annexed herewith as Schedule A and incorporated herein by way of reference.

Thanking you.

Yours sincerely,

For PFC Consulting Limited

(Sanjay Nayak)
General Manager

Enclosures:

- *Schedule A - Quoted Transmission Charges and the Scheduled COD of each Transmission Element of the Project submitted in your Bid, as per Annexure 4 and Format-1 of Annexure 6 respectively of the Final RFP.*

Copy to:

(1) **Chairman and Managing Director, Power Finance Corporation Limited,** "Urjanidhi", 1, Barakhamba Lane, Connaught Lane, New Delhi – 110 001

(2) **Chairman, UPPTCL,** 7th Floor, Shakti Bhawan, 14, Ashok Marg, Lucknow - 226001

(3) **Managing Director, UPPTCL,** 7th Floor, Shakti Bhawan, 14, Ashok Marg, Lucknow - 226001

(4) **Managing Director, Dakshinanchal Vidyut Vitran Nigam Ltd.,** Urja Bhawan, NH-2 (Agra-Delhi bypass Road) Sikandra, Agra - 282002

(5) **Managing Director, Purvanchal Vidyut Vitran Nigam Ltd.,** Vidyut Nagar, Bhikharipur, P.O.DLW, Varanasi - 221010

(6) **Managing Director, Madhyanchal Vidyut Vitran Nigam Ltd.,** 4A Gokle Marg, Lucknow - 226001

(7) **Managing Director, Paschimanchal Vidyut Vitran Nigam Ltd.,** Hydel Colony, Victoria Park, Meerut - 250001

(8) **Managing Director, Kanpur Electricity Supply Co. Ltd.,** Kesa House, 14/17 Civil Lines, Kanpur-208001

(9) **Director (Works & Project), UPPTCL,** 7th Floor, Shakti Bhawan Extension, 14, Ashok Marg, Lucknow - 226001

(10) **Chief Engineer, 765 kV Design Unit, UPPTCL,** 15th Floor, Shakti Bhawan Extension, 14 Ashoka Marg, Lucknow - 226001

(11) **CEO, PFC Consulting Limited,** 9th Floor, A-Wing, Statesman House, Connaught Place, New Delhi - 110001

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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1. Quoted Annual Transmission Charges as per Annexure-4 of the RfP

Power Grid Corporation of India Limited

Year (Term of License)	Commencement Date of Contract Year	End Date of Contract Year	Non-Escalable Transmission Charges (Rs.in Millions)	Escalable Transmission Charges (Rs.in Millions)
1	10-Mar-23	31-Mar-23	1007.95	0.00
2	01-Apr-23	31-Mar-24	1434.81	Same as Above
3	01-Apr-24	31-Mar-25	1434.81	Same as Above
4	01-Apr-25	31-Mar-26	1434.81	Same as Above
5	01-Apr-26	31-Mar-27	1434.81	Same as Above
6	01-Apr-27	31-Mar-28	1434.81	Same as Above
7	01-Apr-28	31-Mar-29	1434.81	Same as Above
8	01-Apr-29	31-Mar-30	1434.81	Same as Above
9	01-Apr-30	31-Mar-31	1434.81	Same as Above
10	01-Apr-31	31-Mar-32	1434.81	Same as Above
11	01-Apr-32	31-Mar-33	1007.95	Same as Above
12	01-Apr-33	31-Mar-34	1007.95	Same as Above
13	01-Apr-34	31-Mar-35	1007.95	Same as Above
14	01-Apr-35	31-Mar-36	1007.95	Same as Above
15	01-Apr-36	31-Mar-37	1007.95	Same as Above
16	01-Apr-37	31-Mar-38	1007.95	Same as Above
17	01-Apr-38	31-Mar-39	1007.95	Same as Above
18	01-Apr-39	31-Mar-40	1007.95	Same as Above
19	01-Apr-40	31-Mar-41	1007.95	Same as Above
20	01-Apr-41	31-Mar-42	1007.95	Same as Above
21	01-Apr-42	31-Mar-43	1007.95	Same as Above
22	01-Apr-43	31-Mar-44	1007.95	Same as Above
23	01-Apr-44	31-Mar-45	1007.95	Same as Above
24	01-Apr-45	31-Mar-46	1007.95	Same as Above
25	01-Apr-46	31-Mar-47	1007.95	Same as Above
26	01-Apr-47	31-Mar-48	1007.95	Same as Above
27	01-Apr-48	31-Mar-49	1007.95	Same as Above
28	01-Apr-49	31-Mar-50	1007.95	Same as Above
29	01-Apr-50	31-Mar-51	1007.95	Same as Above
30	01-Apr-51	31-Mar-52	1007.95	Same as Above
31	01-Apr-52	31-Mar-53	1007.95	Same as Above
32	01-Apr-53	31-Mar-54	1007.95	Same as Above
33	01-Apr-54	31-Mar-55	1007.95	Same as Above
34	01-Apr-55	31-Mar-56	1007.95	Same as Above
35	01-Apr-56	31-Mar-57	1007.95	Same as Above
36	01-Apr-57	35th anniversary of the Schedule COD	1007.95	Same as Above

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2. Scheduled COD of each transmission Element and the Project as per Annexure 6 Format 1 of RfP

S. No	Name of the transmission element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
A)	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-**			
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.	18 months	30.49%	Elements at Sl No. 1, 2 & 3 shall be required simultaneously.
2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)			
3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)			
B)	**Construction of LILO Line**			
1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	61.17%	-
2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months	0.49%	-
C)	**Construction of LILO lines on Monopole**			
1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS 802 of CEA	9 months	7.85%	-

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S. No	Name of the transmission element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	guideline of 400 kV Atraur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector 123, Noida.			

Note:

i. *UPPTCL to provide adequate land for construction of 400/220/132 kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease cost.*

ii. *GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.*

In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/ line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/ building with extension/ interface module suitably.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Ref.: TBCB/ Mohanlalganj/LoI

Date: 13th May 2022

To,
Chief General Manager
PFC Consulting Limited,
9th Floor, A-Wing, Statesman House,
Connaught Place, New Delhi - 110001, India

Subject: LoI issued for "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" through tariff based competitive bidding process..

This has reference to the LoI dated 12 May 2022 issued to us by PFCCL for the subject project.

As per the bidding documents, the schedule dates of activities are :

LoI to be placed by PFCCL	: 31 August 2021
Effective date (handing over of SPV by PFCCL)	: 10 September 2021
Schedule CoD in months from effective date	: 18 months
Commencement of Date of Contract year	: 10 March 2023

However, as against the above dates, the LoI has been placed on 12 May 2022 and assuming that the SPV would be handed over by 25 May 2022, the Commencement Date of Contract year should be 25 November 2023 i.e., 18 months after the date of handing over of the SPV as per the bidding documents.

In view of foregoing and as per the provisions of bidding documents, the Commencement of Date of Contract year in Schedule-A of the LoI is to be stated as 18 months from the actual effective date.

In order to avoid any misinterpretation and unwarranted litigation it is requested to expedite the same so as to reflect in the LoI.

Kindly acknowledge the same.

Thanking you,

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Yours sincerely,

(B Vamsi Rama Mohan)
Chief General Manager

CONSULTING LTD.

पीएफसी कंसल्टिंग लिमिटेड

PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)
CIN : U74140DL2006GOI158858

Ref. No.: 04/ITP-45/20-21/MTL

May 17, 2022

To,
Mr. B. Vamsi Rama Mohan,
Chief General Manager,
Power Grid Corporation of India Limited,
"Saudamini", Plot No. 2, Sector – 29,
Gurgaon – 122001, Haryana

FAX : 0124 – 2571802
E-mail: vamsi@powergrid.in

Sub.: **Independent Transmission Project (ITP) "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" – Regarding Commencement Date of Contract Year**

Dear Sir,

This has reference to PGCIL letter dated 13.05.2022 regarding commencement date of contract year of the subject transmission project. In this regard, the following is clarified:

i. The bidding timelines mentioned in the RfP document are indicative considering the transfer of SPV as a pre-schedule date. As the bidding timelines were extended from time to time, these dates were extended accordingly.
ii. As per Annexure-6, Format-1 of the RfP document, the overall scheduled COD of the project is 18 months from effective date. Further, as per Clause 2.1 of Transmission Service Agreement (TSA), the effective date is defined as the date of transfer of SPV to the Successful Bidder.

In view of above, considering the date of transfer of SPV as effective date, the overall COD of the project shall be 18 months from the effective date and the date of commencement of contract year shall be read accordingly.

Thanking You,

Yours sincerely,

(Sanjay Nayak)
General Manager

Copy to:

1. **Sh. Neeraj Swaroop, Superintendent Engineer,** U.P. Power Transmission Corporation Limited, 11th Floor, Shakti Bhawan Ext., 14 Ashok Marg, Lucknow, Uttar Pradesh - 226001

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

POWERGRID

Ref.: TBCB/ Mohanlalganj/LoI

Date: 17th May 2022

To,
Chief General Manager
PFC Consulting Limited,
9th Floor, A-Wing, Statesman House,
Connaught Place, New Delhi - 110001, India

Subject: LoI issued for "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" through tariff based competitive bidding process..

This has reference to
1) LoI dated 12 May 2022 issued to us by PFCCL for the subject project.
2) Our letter dated 13 May 2022 wrt the LoI
3) PFCCL response dated 17.05.2022

Dear Sir

We are thankful for the letter dated 17.05.2022.

With reference to the aforementioned letter dated 17.05.2022 from PFCCL, it is requested to confirm the following:

a) The letter dated 17 May 2022 of PFCCL shall form an integral part of the bidding documents and the LoI
b) Schedule CoD for the project shall be 18 months from the Actual Effective date
c) 36 year Transmission charges as quoted shall be payable from the Scheduled COD as mentioned at b) above.

Thanking you,

Yours sincerely,

(B Vamsi Rama Mohan)
Chief General Manager

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Ref.: TBCB/ Mohanlalganj/LoI

Date: 18th May 2022

To,
Chief General Manager
PFC Consulting Limited,
9th Floor, A-Wing, Statesman House,
Connaught Place, New Delhi - 110001, India

Subject: LoI issued for "Construction of 400/ 220/ 132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" through tariff based competitive bidding process..

Reference :
1) LoI dated 12 May 2022 issued to us by PFCCL for the subject project.
2) Our letter dated 13 May 2022 wrt the LoI
3) PFCCL response dated 17.05.2022
4) Out letter dated 17.05.2022

Dear Sir

This has reference to the aforementioned LoI and subsequent correspondence with respect to the LoI. Having received no objection to our letter dated 17.05.2022 it is construed that our understanding in the matter is correct and we are therefore proceeding with accepting the LoI unconditionally. Readiness for transfer of the SPV may be communicated to enable us to expedite the works.

Thanking you,

Yours sincerely,

(B Vamsi Rama Mohan)
Chief General Manager

Encl.: Sl.2),3) and 4) letters as stated in the reference

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Schedule : 7

Escalation Index

[Note: As referred to in Clause 1.1 of Schedule 5 of this Agreement]

The index ("Escalation Index") to be applied for escalation of Escalable Transmission Charges shall be computed by assuming that as on the date of the Bid Deadline, the value of such Escalation Index is 100. Thereafter, for each month after the Bid Deadline, the value of the Escalation Index shall be computed by applying the per annum inflation rate specified by CERC for payment of Escalable Transmission Charges, as per the provisions of the Competitive Bidding Guidelines.

For the avoidance of doubt, it is clarified that:

- if the prevailing inflation rate specified by CERC is 4.7% per annum, then at the end of the first month after the Bid Deadline, the value of the Escalation Index shall be 100.3917 [i.e., 100* (1 + 4.7/12] for Escalable Transmission Charges. Thereafter, at the end of the second month beyond such first month, the value of the Escalation Index shall be 100.7849 [i.e., 100.3917* (1 + 4.7/12] and so on. The value of the Escalation Index at the end of the N^{th} Month after the Bid Deadline shall be calculated as: 100 * (1 + N*0.047/ 12) for Quoted Escalable Energy Charges.
- the per annum inflation rate specified by CERC shall be revised only at the end of every six (6) months.
- The value of the Escalation Index shall be calculated upto the fourth decimal point.

In case, due to any reason, CERC discontinues the publication of the inflation rate mentioned above, then the Lead Long Term Transmission Customer and the TSP shall replace the above inflation rate with an inflation rate which shall be computed on the same basis as was being used by CERC to estimate their notified inflation rate.

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Schedule: 8

List of Articles

List of Articles under which rights and obligations of the Long Term Transmission Customers (including all matters incidental thereto and related follow-up), which are required to be undertaken by the Lead Long Term Transmission Customer, or by Majority Long Term Transmission Customers or by the Long Term Transmission Customers jointly, respectively:

A) Rights and Obligations of the Long Term Transmission Customers required to be undertaken by the Lead Long Term Transmission Customer

1. **Article 3.3.5** (approach the Appropriate Commission on termination of the Agreement on TSP's not able to meet conditions subsequent)
2. **Article 5.5** (inspection of the Project during the construction phase);
3. **Articles 6.1.1** and **6.1.2** (extension of Scheduled COD);
4. **Article 6.4.1** (communication with the TSP on imposition of liquidated damages)
5. **Articles 7.3.2** (notice for maintenance of Interconnection Facilities under the purview of the Long Term Transmission Customers);
6. **Article 11.7(d)** (inspection of Project during operation of Force Majeure);
7. **Article 13.1 (a)** (notice to TSP on abandonment of Project);
8. **Article 13.3 (d)** (to approach the Appropriate Commission for revocation of Transmission Licensee on account of TSP's Event of Default);
9. **Articles 14.2.1(b), 14.2.2(b)** and **14.2.2(c)** (notice for patent indemnity);
10. **Article 14.2.1(d)** (provide assistance to the TSP during the proceedings of patent indemnity);
11. **Article 18.2.3** (written permission to TSP for divestment of equity holding and subsequent verification of equity structure, post-divestment); and
12. **Schedule 7** (computation of alternative escalation index in the event of CERC discontinuing publishing of the inflation rate mentioned in this schedule).

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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B) Rights and Obligations of the Long Term Transmission Customers required to be undertaken by the Majority Long Term Transmission Customers

1. **Article 2.3.1** (decision to continue the Project beyond the Expiry Date);
2. **Article 3.1.3** (waiver of the TSP's obligations due to reasons attributable to the Long Term Transmission Customer(s));
3. **Articles 3.3.2** and **3.3.4** (right to terminate the Agreement on non-fulfillment of conditions subsequent);
4. **Articles 13.1 (k)** and **13.1 (l)** (invocation of termination of the Agreement due to the TSP's Event of Default;
5. **Article 13.3** (notice to TSP for termination of Agreement on TSP's Event of Default;
6. **Article 18.1.2** (in case of any difference of opinion on any decision among the Long Term Transmission Customers, decision in such cases to be taken by the Majority Long Term Transmission Customers); and
7. **Article 18.1.5** (Right to replace the Lead Long Term Transmission Customer).

and any other Articles of this Agreement not specifically mentioned herein, which provide for a joint action by all the Long Term Transmission Customers.

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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Schedule : 9

Annexure B of UPERC (Multi Year Transmission Tariff) Regulations, 2014

Procedure for Calculation of Transmission System Availability

(1) Transmission System Availability factor for a Calendar Month (TAFM) shall be calculated by the respective Transmission Licensee, got verified and certified by the SLDC and separately for each A.C. transmission system and grouped according to sharing of transmission charges.

(2) TAFM, in present, shall be equal to (100 – 100 x NAFM), where NAFM is the non-availability factor in per unit for the month, for the transmission system / sub-system.

(3) NAFM for A.C. systems / sub-systems shall be calculated as follows:

Where,

$$NAFM = \frac{\left[\sum_{l=1}^{L}(OH_l \times Cktkm_l \times NSC_l) + \sum_{t=1}^{T}(OH_t \times MVA_t \times 2.5) + \sum_{r=1}^{R}(OH_r \times MVAR_r \times 4)\right]}{THM \times \left[\sum_{l=1}^{L}(Cktkm_l \times NSC_l) + \sum_{t=1}^{T}(MVA_t \times 2.5) + \sum_{r=1}^{R}(MVAR_r \times 4)\right]}$$

l identifies a transmission line circuit;

t identifies a transformer / Inter connecting transformer (ICT);

r indentifies a bus reactor, switchable line reactor or Static VAR Compensation (SVC);

L = total number of line circuits;

T = total number of transformers and ICTs;

R = total number of bus reactors, switchable line reactors and SVCs;

OH = Outage hours or hours of non-availability in the month, excluding the duration of outages not attributable to the Transmission Licensee,

Cktkm = Length of a transmission line circuit in km;

NSC = Number of sub-conductors per phase;

MVA = MVA rating of transformer / ICT;

MVAR = MVAR rating of a bus reactor, switchable line reactor or an SVC (in which case it would be the sum of inductive and capacitive capabilities);

THM = Total hours in the month;

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

(4) The transmission elements under outage due to following reasons shall be deemed to be available:

a. Shut down availed for maintenance or construction of elements of another transmission scheme. If the other transmission scheme belongs to the Transmission Licensee, the SLDC may restrict the deemed availability period to that considered reasonable by him for the work involved.
b. Switching off of a transmission line to restrict over voltage and manual tripping of switched reactors as per the directors of SLDC.

(5) Outage time of transmission elements for the following contingencies shall be excluded from the total time of the element under period of consideration:

a. Outage of elements due to force majeure events such as war, strike, riot, floods, earthquake, etc. beyond the control of the Transmission Licensee. However, onus of satisfying the SLDC that element outage was due to aforesaid events and not due to design failure shall rest with the Transmission Licensee. A reasonable restoration time for the element shall be considered by SLDC and any additional time taken by the Transmission Licensee for restoration of the element beyond the reasonable time shall be treated as outage time attributable to the Transmission Licensee. SLDC may consult the Transmission Licensee or any expert for estimation of reasonable restoration time. Circuits restored through ERS (Emergency Restoration System) shall be considered as available.
b. Outage caused by grid incident / disturbance not attributable to the Transmission Licensee, e.g. faults in substation or bays owned by other agency causing outage of the Transmission Licensee's elements, and tripping of lines, ICTs, etc. due to grid disturbance. However if the element is not restored on receipt of direction from SLDC while normalizing the system following grid incident / disturbance within reasonable time, the element will be considered not available for the period of outage after issuance of SLDC's direction for restoration.

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Schedule : 10

Entire Bid (both financial bid and non-financial bid) of the Selected Bidder to be attached

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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Power Grid Corporation of India Limited

Quoted Annual Transmission Charges

Year (Term of License)	Commencement Date of Contract Year	End Date of Contract Year	Non-Escalable Transmission Charges (Rs.in Millions)	Escalable Transmission Charges (Rs.in Millions)
1	10-Mar-23	31-Mar-23	1007.95	0.00
2	01-Apr-23	31-Mar-24	1434.81	Same as Above
3	01-Apr-24	31-Mar-25	1434.81	Same as Above
4	01-Apr-25	31-Mar-26	1434.81	Same as Above
5	01-Apr-26	31-Mar-27	1434.81	Same as Above
6	01-Apr-27	31-Mar-28	1434.81	Same as Above
7	01-Apr-28	31-Mar-29	1434.81	Same as Above
8	01-Apr-29	31-Mar-30	1434.81	Same as Above
9	01-Apr-30	31-Mar-31	1434.81	Same as Above
10	01-Apr-31	31-Mar-32	1434.81	Same as Above
11	01-Apr-32	31-Mar-33	1007.95	Same as Above
12	01-Apr-33	31-Mar-34	1007.95	Same as Above
13	01-Apr-34	31-Mar-35	1007.95	Same as Above
14	01-Apr-35	31-Mar-36	1007.95	Same as Above
15	01-Apr-36	31-Mar-37	1007.95	Same as Above
16	01-Apr-37	31-Mar-38	1007.95	Same as Above
17	01-Apr-38	31-Mar-39	1007.95	Same as Above
18	01-Apr-39	31-Mar-40	1007.95	Same as Above
19	01-Apr-40	31-Mar-41	1007.95	Same as Above
20	01-Apr-41	31-Mar-42	1007.95	Same as Above
21	01-Apr-42	31-Mar-43	1007.95	Same as Above
22	01-Apr-43	31-Mar-44	1007.95	Same as Above
23	01-Apr-44	31-Mar-45	1007.95	Same as Above
24	01-Apr-45	31-Mar-46	1007.95	Same as Above
25	01-Apr-46	31-Mar-47	1007.95	Same as Above
26	01-Apr-47	31-Mar-48	1007.95	Same as Above
27	01-Apr-48	31-Mar-49	1007.95	Same as Above
28	01-Apr-49	31-Mar-50	1007.95	Same as Above
29	01-Apr-50	31-Mar-51	1007.95	Same as Above
30	01-Apr-51	31-Mar-52	1007.95	Same as Above
31	01-Apr-52	31-Mar-53	1007.95	Same as Above
32	01-Apr-53	31-Mar-54	1007.95	Same as Above
33	01-Apr-54	31-Mar-55	1007.95	Same as Above
34	01-Apr-55	31-Mar-56	1007.95	Same as Above
35	01-Apr-56	31-Mar-57	1007.95	Same as Above
36	01-Apr-57	35th anniversary of the Schedule COD	1007.95	Same as Above

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

FOR

SELECTION OF

TRANSMISSION SERVICE PROVIDER

THROUGH TARIFF BASED COMPETITIVE BIDDING PROCESS

TO

ESTABLISH TRANSMISSION SYSTEM

FOR

Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida

Submitted by

POWER GRID CORPORATION OF INDIA LIMITED

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

POWERGRID CORPORATION

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B. VAMSI RAMA MOHAN
Chief General Manager (TBCB)
Power Grid Corporation of India Ltd.
(A Govt. of India Enterprise)
Plot No-2, Sector-29, Gurgaon-122 001 (Haryana)

पावरग्रिड
POWERGRID

(भारत सरकार का उद्यम)
POWER GRID CORPORATION OF INDIA LIMITED
(A Government of India Enterprise)

Date: 12 August 2021

To

PFC Consulting Limited
9th Floor, A-Wing,
Statesman House
Connaught Place,
New Delhi-110001

Dear Sir,

Sub: Bidders' Declaration in lieu of Bid Bond in respect of Bid for selection of TSP to establish "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Being duly authorized to present and act on behalf of Power Grid Corporation Of India Limited (hereinafter called the "Bidder") and having read and examined in detail the Request for Proposal (RFP) document, the undersigned hereby agree the following:

1. We, Power Grid Corporation Of India Limited are submitting the Bid for establishing the **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** on build, own, operate and maintain basis, in response to the RFP dated **May 27, 2021** issued by PFC Consulting Limited, as per the terms of the RFP.

2. We, Power Grid Corporation Of India Limited are submitting this Bid Security Declaration in lieu of the Bid Bond.

3. We, Power Grid Corporation Of India Limited have read the terms & conditions of RFP in particular regarding invocation/ forfeiting of the Bid Bond by the BPC under various circumstances.

4. We agree that, Power Grid Corporation Of India Limited shall be suspended from participation in the bidding process for future Inter-State transmission projects of Ministry of Power, GoI to be developed through tariff based competitive bidding route for a period of two (02) years from the bid submission date upon occurrence of a situation that otherwise would have led to revocation/forfeiture of Bid Bond as per provisions of RFP.

POWERGRID, GURGAON

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

वी. वंसी राममोहन / Dr. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टैरिफ-सीबी) / Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)
प्लॉट सं.-2, सेक्टर-29, गुरुग्राम-122001 (हरियाणा)
Plot No.-2, Sector-29, Gurugram-122001 (Haryana) Tel. : 0124-2571700-719

For and on behalf of Bidding Company

M/s Power Grid Corporation Of India Limited

(Signature of Authorized Signatory)

Name: B. Vamsi Rama Mohan
Designation: Chief General Manager
Date: 10/08/21
Place: Gurgaon

बी. वम्सी रामामोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (ग्रिड कंट्रोल) / Chief General Manager (GCC)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)
प्लाट सं०-2, सैक्टर-29, गुड़गांव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon-122 001 (Haryana)

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

POWER GRID CORPORATION OF INDIA LIMITED

Extracts from the Minutes of **393rd Meeting of Board of Directors** of POWERGRID held on **Thursday, 17th June,2021 at 04:30 p.m.** at Corporate Office, Plot No.2, Sector 29, Gurugram, Haryana **through Video Conferencing.**

The Board, after discussion, at the duly convened meeting on 17.06.2021, with the consent of all the Directors present and in compliance with the provisions of the Companies Act, 2013 passed the following resolution:

Item No.393.2.5:- (Para Nos.393.2.5.1. to 3923.2.5.3.)

Submission of Response to Request for Proposal (RFP) for selection of Transmission Service Provider (TSP) through tariff based competitive bidding process to establish transmission system for Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida. An Intra State Transmission Project in the State of Uttar Pradesh:-

393.2.5.1	X	X	X	X	X
393.2.5.2	X	X	X	X	X

393.2.5.3. After deliberations, the Board approved the proposal. The Board passed the following resolution:

I. **Submission of Response to Request for Proposal (RFP) - "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida. An Intra State Transmission Project in the State of Uttar Pradesh:**

(I) **"Resolved that** approval of the Board of Directors be and is hereby accorded for POWERGRID's participation in the Tariff based competitive bidding for Selection of Transmission Service Provider to establish Transmission System for **'Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole)**

MRINAL SHRIVASTAVA
Company Secretary-POWERGRID

बी. वमसी रामामोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टीबीसीबी)/ Chief General Manager (TBCB)

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

केन्द्रीय कार्यालय : "सौदामिनी", प्लॉट नं. 2, सैक्टर-29, गुरुग्राम-122 001 (हरियाणा), दूरभाष : 0124-2571700-719
Corporate Office : "Saudamini", Plot No. 2, Sector-29, Gurugram-122 001 (Haryana), Tel. : 0124-2571700-719
पंजीकृत कार्यालय : बी-9, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016. दूरभाष : 011-26560112, 26564812, 26564892, सीआईएन : L40101DL1989GOI038121
Registered Office : B-9, Qutab Institution Area, Katwaria Sarai, New Delhi-110016. Tel.: 011-26560112, 26564812, 26564892, CIN : L40101DL1989GOI038121
Website : www.powergridindia.com

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at 400kV GIS Substation Sector 123 Noida' through tariff based competitive bidding process."

(ii) **"Resolved that** pursuant to the provisions of the Companies Act,2013 and compliance thereof and as permitted under the Memorandum and Articles of Association of the company, approval of the Board be and is hereby accorded for investment of **100 %** (One Hundred per cent) of the total equity share capital of SPV[which is under incorporation by BPC] representing the entire amount proposed to be invested by the company for the **'Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida'** partly by acquisition of the existing equity shares from PFC Consulting Limited and / or partly by subscribing to the new equity shares, as per the terms of the RFP."

(iii) **"Resolved that** Smt. Seema Gupta, Director (Operations)/ Shri V.K. Singh, Director (Personnel)/Shri M. Taj Mukarrum, Director (Finance)/Shri Abhay Choudhary, Director (Projects) be and are hereby severally authorised to take all the steps required for submission of the Bid, including Covering Letter, Undertakings and Project Schedule (Format-1, Annexure-6) and Disclosure statement (Annexure-14), as per the RFP documents to establish transmission system for **'Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida."**

(iv) **"Resolved that** Shri A.K. Singhal, Executive Director / Shri B Vamsi Rama Mohan, Chief General Manager / Shri D. Sudharshan, General Manager be and are hereby severally authorized to take all the steps required to be taken by the Company for submission of the Bid, including in particular, signing of the Bid, making changes thereto and submitting amended Bid, all the documents related to the Bid, certified copy of this Board resolution or letter or undertakings etc., required to be submitted to BPC as part of the Bid or such other documents as may be necessary in this regard."

"Further Resolved that that the Chairman & Managing Director be and is hereby authorized to issue the Power of Attorney in this regard as per the format of the RFP documents to establish transmission system for **'Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida'** and the same be issued in line with Company policy and requirement of the RFP documents for Tariff based competitive bidding."

बी. वम्सी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (वित्त-कॉर्प.) / Chief General Manager (Fin.-Corp.)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Limited
(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)
प्लॉट सं०-2, सैक्टर-29, गुड़गाँव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

MRINAL SHRIVASTAVA
Company Secretary-POWERGRID

POWERGRID, GURGAON

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MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

(v) **"Resolved Further that** Common Seal of the company be affixed in the Response to RFP wherever considered necessary, as per the procedure laid down under Articles of Association of POWERGRID."

II. X X X

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CERTIFIED TO BE TRUE COPY

MRINAL SHRIVASTAVA
Company Secretary - POWERGRID

ED (TBCB & Engg.)

V. VAMSI RAMA MOHAN
Chief General Manager (TBCB)
Power Grid Corporation of India Ltd.
(A Govt. of India Enterprise)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Extracts from the minutes of the 385th Meeting of POWERGRID Board of Directors held on Monday, 1st March,2021 at 3:30 p.m. at POWERGRID's Corporate Office, "SAUDAMINI", Plot No.2, Sector-29, Gurgaon – 122001 through Video Conferencing.

The Board, after discussion, at the duly convened meeting on 1st March,2021, with the consent of all the Directors present and in compliance of the provisions of the Companies Act, 2013, passed the following Resolutions:

Item No.385.2.3:-

Participation of POWERGRID in the global invitation for short listing of Bidders as Transmission Service Provider to establish Transmission System for Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 NOIDA. An Intra State Transmission Project in the State of Uttar Pradesh:-

X X X X X

The Board passed the following resolution:

"Resolved that approval of the Board be and is hereby accorded for POWERGRID's participation in the Tariff based competitive bidding for short listing of Bidders as Transmission Service Provider to establish Transmission System for **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** through tariff based competitive bidding process."

"Resolved further that Smt. Seema Gupta, Director (Operations)/ Shri V.K. Singh, Director (Personnel)/ Shri Mohammed Taj Mukarrum, Director (Finance)/ Shri Abhay Choudhary, Director (Projects), the Whole Time Directors, be and are hereby severally authorized to submit the Response to RFQ & RFP."

"Further Resolved that Smt. Seema Gupta, Director (Operations) / Shri V.K. Singh, Director (Personnel)/Shri Mohammed Taj Mukarrum, Director (Finance) / Shri Abhay Choudhary, Director (Projects), the Whole Time Directors, be and are hereby severally authorised to certify Qualification requirements, Format for Disclosure, Covering Letter etc., furnish a confirmation that a legally binding board resolution shall be submitted at the time of RFP, [illegible] the total equity requirement of the Project w.r.t

बी. वंशी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टैरिफ-आधारित बोली)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(A Govt. of India Enterprise)
प्लॉट नं.-2, सेक्टर-29, गुड़गाँव- 122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

मुख्य महाप्रबंधक (टैरिफ-आधारित बोली)/ Chief General Manager (TBCB)

पंजीकृत कार्यालय : बी-9, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016. टेलि.: 011-26560112, 26564812, 26564892, सीआईएन : L40101DL1989GOI038121
Registered Office : B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016. Tel.: 011-26560112, 26564812, 26564892, CIN : L40101DL1989GOI038121
Website : www.powergridindia.com

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short listing of Bidders as Transmission Service Provider to establish Transmission System for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" through tariff based competitive bidding process."

"Resolved further that Shri A.K. Singhal, Executive Director / Shri B Vamsi Rama Mohan, Chief General Manager / Shri D. Sudharshan, General Manager be and are hereby severally authorized to do all such acts and deeds necessary in connection with or incidental to the short listing of Bidders as Transmission Service Provider to establish Transmission System for **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 NOIDA"** through tariff based competitive bidding process."

"Further Resolved that the Chairman and Managing Director be and is hereby authorized to execute Power of Attorney in this regard and the same be issued in line with Company policy and requirement of the RFQ/RFP for Tariff based competitive bidding."

"Resolved further that the Common Seal of the company in the RFQ/RFP documents wherever considered necessary, be affixed as per the procedure laid down under Articles of Association of POWERGRID."

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Certified To Be True Copy

बी. वम्सी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टैबीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
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Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

मृणाल श्रीवास्तव / MRINAL SHRIVASTAVA
कम्पनी सचिव / Company Secretary
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enterprise)
बी-9, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, न्यू दिल्ली-110016
B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110016

POWERGRID, GURGAON

बी. वम्सी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टैबीसीबी)/ Chief General Manager (TBCB)
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Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

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MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

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UNDERTAKINGS AND PROJECT SCHEDULE

Format 1: Bidders' Undertakings

Date: 11/08/2021

To,

PFC Consulting Limited
9th Floor, A-Wing
Statesman House, Barakhambha Lane,
Connaught Place, New Delhi – 110 001

Dear Sir,

Sub: Bidders' Undertakings in respect of Bid for selection of TSP for the "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

We hereby undertake on our own behalf and on behalf of the TSP, that if selected as the Successful Bidder for the Project:

1. The Project shall comply with all the relevant electricity laws, codes, regulations, standards and Prudent Utility Practices, environment laws and relevant technical, operational and safety standards, and we shall execute any agreements that may be required to be executed as per law in this regard.

2. We confirm that the Project shall also comply with the standards and codes as per Clause 1.3 of the RFP and the TSP shall comply with the provisions contained in the Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations 2004, UP Electricity Grid Code, 2007 and the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 made pursuant to Section 177(2) of the Electricity Act, 2003,as amended from time to time.

3. We hereby agree and undertake to procure the products associated with the Transmission System as per provisions of Public Procurement (Preference to Make in India) orders issued by Ministry of Power vide order No. 11/05/2018-Coord. dated 28.07.2020 for transmission sector, as amended from time to time read with Department for Promotion of Industry and Internal Trade (DPIIT) orders in this regard.

POWERGRID, GURGAON

बी. वमसी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टैरी-सी-बी-)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
प्लाट सं०-2, सैक्टर-29, गुड़गाँव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

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NEW DELHI

We hereby also agree and undertake to comply with Department of Expenditure, Ministry of Finance vide Order (Public Procurement No 1) bearing File No. 6/18/2019-PPD dated 23.07.2020, Order (Public Procurement No 2) bearing File No. 6/18/2019-PPD dated 23.07.2020 and Order (Public Procurement No. 3) bearing File No. 6/18/2019-PPD dated 24.07.2020 regarding public procurement from a bidder of a country, which shares land border with India.

4. We give our unconditional acceptance to the RFP dated 27/05/2021 issued by the BPC and the RFP Project Documents, as amended, and undertake to ensure that the TSP shall execute the Share Purchase Agreement as per the provisions of this RFP.

5. We have submitted the Bid on the terms and conditions contained in the RFP and the RFP Project Documents. Further, the Financial Bid submitted by us is strictly as per the format provided in Annexure-4 of the RFP, without mentioning any deviations, conditions, assumptions or notes in the said Annexure.

6. Our Bid is valid up to the period required under Clause 2.17 of the RFP.

7. Our Bid has been duly signed by authorized signatory and stamped in the manner and to the extent indicated in this RFP and the power of attorney/ Board resolution in requisite format as per RFP has been enclosed in original with this undertaking.

8. NOT APPLICABLE

9. We confirm that our Bid meets the Scheduled COD of each transmission Element and the Project as specified below:

Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
A. Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines				
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos.	**18 months**	30.49%	Elements at Sl No. 1, 2 & 3 shall be required simultaneously

वी. वंशी रामामोहन / V. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टीबीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project	Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element
	iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.			
2.	LILO of Sarojani Nagar (400kV) - Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)			
3.	LILO of Lucknow (PGCIL) 400 kV - Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)			
B. Construction of LILO Line				
1.	LILO of 765 kV Ghatampur - Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	**15 months**	61.17%	-
2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	**9 months**	0.49%	-
C. Construction of LILO lines on Monopole				
1.	LILO of one circuit on monopole or any other **suitable lattice structure in compliance to related IS-802 of CEA guideline** of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	**9 months**	7.85%	-

बी. वंशी रामामोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टी-बीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Note:

i. UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost on lease basis at a nominal lease rent.

ii. **GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.**

In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension/interface module suitably.

We agree that the Element(s) mentioned above are critical to the operation of the Project and the actual COD of such Element(s) shall be no later than the Scheduled COD as mentioned in the above table.

We further agree that the payment of Transmission Charges for any Element irrespective of its successful commissioning on or before its Scheduled COD shall only be considered after the successful commissioning of such critical Element(s).

Scheduled COD for the Project: 18 months from Effective Date

10. We confirm that our Financial Bid conforms to all the conditions mentioned in this RFP, and in particular, we confirm that:

    a. Ratio of minimum and maximum Quoted Transmission Charges during the term of the TSA for which Transmission Charges have been quoted in the format at Annexure-4 of the Bid is not less than zero point seven (0.7) as provided in Clause 2.14.1.2
    b. Further, the Quoted Escalable Transmission Charges (after duly escalating the Quoted Escalable Transmission Charges on the basis of the escalation rates specified in Clause 3.3.1.3) for any Contract Year does not exceed fifteen percent (15%) of the corresponding Quoted Non-Escalable Transmission Charges for that Contract Year, for the entire term.
    c. Financial Bid in the prescribed format of Annexure-4 has been submitted duly signed by the authorized signatory.
    d. Financial Bid is unconditional.
    e. Only one Financial Bid has been submitted.

11. We have neither made any statement nor provided any information in this Bid, which to the best of our knowledge is materially inaccurate or misleading. Further, all the confirmations, declarations and representations made in our Bid are true and accurate. In case this is found to be incorrect after our acquisition of **"Mohanlalganj Transmission Limited"** pursuant to our selection as Selected Bidder, we agree that the same would be treated as a TSP's Event of Default under TSA, and relevant provisions of TSA shall apply.

बी. वंसी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टैरिफ-सीबी) / Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
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Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

12. We confirm that there are no litigations or other disputes against us which materially affect our ability to fulfill our obligations with regard to the Project as per the terms of RFP Project Documents.

13. Original power of attorney/ Board resolution as per Clause 2.14.1.1 is enclosed

SEEMA GUPTA, Director (Operations)

Common Seal of Power Grid Corporation of India Limited has been affixed in my / our presence pursuant to Board of Director's Resolution dated 17/06/2021

WITNESS

.....	.....	.....
(Signature)	**(Signature)**	**(Signature)**

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

POWERGRID, GURGAON

बी. वंशी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (सीसीएम)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
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Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

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Format 2: Details of equity investment in Project

1.1.a Name of the Bidding Company: **Power Grid Corporation of India Limited**

1.2 Investment details of the Bidding Company/Member of the Bidding Consortium investing in "**Mohanlalganj Transmission Limited** " as per Clause 2.14.4.2.

Sl.No.	Name of the Bidding Company / Member in case of a Bidding Consortium	Name of the Company investing in the equity of the Mohanlalganj Transmission Limited	Relationship with Bidding Company	% of equity participation in the Mohanlalganj Transmission Limited]
(1)	(2)	(3)	(4)	(5)
1.	Power Grid Corporation of India Limited	Power Grid Corporation of India Limited	Self	100%
TOTAL				**100%**

बी. वंशी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टीबीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
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Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

Signature of Authorized Person

Name: B. Vamsi Rama Mohan

Designation: Chief General Manager

Date: 11/08/2021

POWERGRID, GURGAON

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

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Covering Letter

Bidder's Name: Power Grid Corporation of India Limited

Full Address: Saudamini, Plot No. 2, Sector 29, Gurgaon-122001 (Haryana)

Registered Office: B-9, Qutab Institutional Area, Katwaria Sarai,
New Delhi-110 016

Telephone No.:0124 -2822095 , Mobile: +91- 9910378045

Email address: tbcb@powergrid.co.in , singhal@powergrid.in, vamsi@powergrid.in,
sudarshan@powergrid.in

Fax/ No.: 0124- 2571802

To:

PFC Consulting Limited
9th Floor, A-Wing,
Statesman House,
Connaught Place,
New Delhi - 110 001

Sub: Bid for selection of a Transmission Service Provider to build, own, operate and maintain"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"under the Tariff Based Competitive Bidding Process

Dear Sir,

We, the undersigned Bidder having read and examined in detail the RFP for selection of a Transmission Service Provider to build, own, operate and maintain **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"**through the Tariff Based Competitive Bidding Process, hereby submit our Bid comprising of Financial Bid and Non-Financial Bid.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

POWERGRID, GURGAON

बी. वंसी रामोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टैरिफ-सीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
प्लॉट सं-2, सैक्टर-29, गुड़गांव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon-122 001 (Haryana)

1) *Bid Bond*

We have enclosed a Bid Security Declaration as per your proforma (Annexure-2) in terms of Clause 2.20 of the RFP.

2) *Acceptance*

We hereby unconditionally and irrevocably agree and accept that the decision made by the BPC on any matter regarding or arising out of the RFP shall be binding on us. We hereby expressly waive any and all claims in respect of Bid process.

3) ***Familiarity With Relevant Indian Laws & Regulations***

We confirm that we have studied the provisions of relevant Indian laws and regulations as required to enable us to submit this Bid and execute the Share Purchase Agreement, in the event of our selection as the TSP. We further undertake and agree that all such factors as mentioned in Clause 2.14.2 of RFP have been fully examined and considered while submitting the Bid

4) ***Contact Person***

Details of contact person as required under Clause 2.14.1.4(e) are furnished as under:

Name: B VAMSI RAMA MOHAN
Designation: Chief General Manager
Company: Power Grid Corporation of India Limited
Address: Saudamini, Plot No. 2, Sector 29, Gurgaon-122001 (Haryana)
Phone Nos.: 0124 - 2822095 . Mobile: +91-9910398014
Fax Nos.: 0124- 2571802
E-mail address: tbcb@powergrid.co.in , singhal@powergrid.in
vamsi@powergrid.in, sudarshan@powergrid.in

We are enclosing herewith Envelope I (Non Financial Bid) containing duly signed formats, in **one (1) original + one (1) copy (duly attested)** as desired by you in your RFP for your consideration.

It is confirmed that our Bid is consistent with all the requirements of submission as stated in the RFP and subsequent communications from BPC.

The information submitted in our Bid is complete, strictly as per the requirements stipulated in the RFP and is correct to the best of our knowledge and understanding. We would be

POWERGRID, GURGAON

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

बी. वमसी रामा मोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टैरिफ एवं बी.)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
प्लाट संख्या-2, सैक्टर-29, गुड़गाँव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

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solely responsible for any errors or omissions in our Bid.

We confirm that all the terms and conditions of the Bid are valid for acceptance for a period of one eighty (180) days from the Bid Deadline.

We confirm that we have not taken any deviation so as to be deemed nonresponsive with respect to the provisions stipulated at Clause 2.14.1, of this RFP.

Dated this .....11th.....day of .....August..... 2021

Place: **Gurgaon**

Thanking you,
We remain,

Yours faithfully,

बी. वंशी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टी-बीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
प्लाट सं०-2, सैक्टर-29, गुरुग्राम-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon-122 001 (Haryana)

Signature of Authorized Signatory

Name: B. Vamsi Rama Mohan
Designation: Chief General Manager
Date: 11/08/2021

POWERGRID, GURGAON

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

e-Stamp

सत्यमेव जयते

Certificate No.	:	IN-DL67000004728365T
Certificate Issued Date	:	30-Mar-2021 03:37 PM
Account Reference	:	IMPACC (IV)/ dl834903/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL83490335096284082309T
Purchased by	:	POWER GRID CORPORATION OF INDIA LIMITED
Description of Document	:	Article Others
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	POWER GRID CORPORATION OF INDIA LIMITED
Second Party	:	Not Applicable
Stamp Duty Paid By	:	POWER GRID CORPORATION OF INDIA LIMITED
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

NOTARY

Please write or type below this line

Power of Attorney

Know all men by these presents, we **Power Grid Corporation of India Limited having its registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016** do hereby constitute, appoint and authorize **Mr. B Vamsi Rama Mohan residing at E-601, POWERGRID Township, Sector-43, Gurgaon – 122002** as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for the Project **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad**

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Statutory Alert:
1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

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Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" in response to the RFP dated May 27, 2021 issued by the BPC , including signing and submission of the Bid and all other documents related to the Bid, including, undertakings, letters, certificates, acceptances, clarifications, guarantees, etc, making representations to the BPC, and providing information / responses to the BPC, representing us in all matters before the BPC, and generally dealing with the BPC in all matters in connection with our Bid for the said Project till the completion of the bidding process.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this power of attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the RFP.

Signed by the within named
Power Grid Corporation of India Limited
through the hand of **Mr. K Sreekant, CMD**
Duly authorized by the Board to issue such Power of Attorney

Dated this ....9th.... **day of** ....August.... **2021**

Accepted

.....
Signature of Attorney
Name: B Vamsi Rama Mohan
Designation: Chief General Manager
Address: E-601, POWERGRID Township, Sector-43, Gurgaon – 122002

Attested

.....
(Signature of the Executant)
Name: K Sreekant
Designation: CMD
Address: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016

.....
Signature and stamp of Notary of the place of execution

Common seal of **Power Grid Corporation of India Limited** has been affixed in my/our presence pursuant to Board of Director's Resolution dated 17.06.21.....

WITNESS

(Signature)	**(Signature)**	**(Signature)**
NIRMAL SHRIVASTAVA Company Secretary POWERGRID	ABHAY CHOUDHARY Director (Projects) POWERGRID	M. TAJ MUKARRUM Director (Finance) POWERGRID

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Government of National Capital Territory of Delhi

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सत्यमेव जयते

Certificate No.	:	IN-DL66999372009770T
Certificate Issued Date	:	30-Mar-2021 03:37 PM
Account Reference	:	IMPACC (IV)/ dl834903/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL83490335097655182259T
Purchased by	:	POWER GRID CORPORATION OF INDIA LIMITED
Description of Document	:	Article Others
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	POWER GRID CORPORATION OF INDIA LIMITED
Second Party	:	Not Applicable
Stamp Duty Paid By	:	POWER GRID CORPORATION OF INDIA LIMITED
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

NOTARY Dhan Singh Nagar Advocate R. No. [illegible] New Delhi (INDIA) Expiry Date 31-1-2023 GOVT. OF INDIA

Please write or type below this line

Power of Attorney

Know all men by these presents, we **Power Grid Corporation of India Limited having its registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016** do hereby constitute, appoint and authorize **Mr. A K Singhal residing at E-10, Bandhu Vihar Appt., Plot No. 11 Sector 10, Dwarka, New Delhi - 110075** as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for the Project **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad**

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Statutory Alert:
1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" in response to the RFP dated May 27, 2021 issued by the BPC , including signing and submission of the Bid and all other documents related to the Bid, including, undertakings, letters, certificates, acceptances, clarifications, guarantees, etc, making representations to the BPC, and providing information / responses to the BPC, representing us in all matters before the BPC, and generally dealing with the BPC in all matters in connection with our Bid for the said Project till the completion of the bidding process.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this power of attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the RFP.

Signed by the within named
Power Grid Corporation of India Limited
through the hand of **Mr. K Sreekant, CMD**

Duly authorized by the Board to issue such Power of Attorney

Dated this ....9th.... **day of** ....August.... **2021**

Accepted

.....
Signature of Attorney
Name: A K Singhal
Designation: Executive Director
Address: E-10, Bandhu Vihar Appt., Plot No. 11 Sector 10, Dwarka, New Delhi - 110075

Attested

.....
(Signature of the Executant)
Name: K Sreekant
Designation: CMD
Address: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016

.....
Signature and stamp of Notary of the piace of execution

Common seal of **Power Grid Corporation of India Limited** has been affixed in my/our presence pursuant to Board of Director's Resolution dated...17.07.11....

WITNESS

.....
(Signature)

.....
(Signature)

.....
(Signature)

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Government of National Capital Territory of Delhi

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सत्यमेव जयते

Certificate No.		IN-DL03498928450840T
Certificate Issued Date	:	29-Jul-2021 12:13 PM
Account Reference		IMPACC (IV)/ dl813603/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL81360304806125502684T
Purchased by	:	POWER GRID CORPORATION OF INDIA LIMITED
Description of Document	:	Article Others
Property Description	:	Not Applicable
Consideration Price (Rs.)		0 (Zero)
First Party	:	POWER GRID CORPORATION OF INDIA LIMITED
Second Party	:	Not Applicable
Stamp Duty Paid By	:	POWER GRID CORPORATION OF INDIA LIMITED
Stamp Duty Amount(Rs.)		100 (One Hundred only)

NOTARY Dhan Singh Nagar A Jaipur R.J No. 21 New Delhi, India Expiry Date 31-1-2025 GOVT. OF INDIA

Please write or type below this line

Power of Attorney

Know all men by these presents, we **Power Grid Corporation of India Limited having its registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016** do hereby constitute, appoint and authorize **Mr. D Sudarshan residing at Flat no B2/ 201, PWO Next to Hanuman Mandir, Sector 43, Gurgaon, Haryana – 122009** as our true and lawful attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to submission of our Bid for the Project **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO**

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" in response to the RFP dated May 27, 2021 issued by the BPC , including signing and submission of the Bid and all other documents related to the Bid, including, undertakings, letters, certificates, acceptances, clarifications, guarantees, etc, making representations to the BPC, and providing information / responses to the BPC, representing us in all matters before the BPC, and generally dealing with the BPC in all matters in connection with our Bid for the said Project till the completion of the bidding process.

We hereby agree to ratify all acts, deeds and things done by our said attorney pursuant to this power of attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

All the terms used herein but not defined shall have the meaning ascribed to such terms under the RFP.

Signed by the within named
Power Grid Corporation of India Limited
through the hand of **Mr. K Sreekant, CMD**
Duly authorized by the Board to issue such Power of Attorney
Dated this .....5th..... day of [illegible] 2021

के. श्रीकांत
K. SREEKANT
अध्यक्ष एवं प्रबंध निदेशक

Accepted

.....
Signature of Attorney
Name: D Sudarshan
Designation: General Manager
Address: Flat no B2/ 201, PWO Next to Hanuman Mandir, Sector 43, Gurgaon, Haryana - 122009

Attested

.....
(Signature of the Executant)
Name: K Sreekant
Designation: CMD
Address: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016

के. श्रीकांत
K. SREEKANT
अध्यक्ष एवं प्रबंध निदेशक
Chairman & Managing Director

ATTESTED
NOTARY PUBLIC
NEW DELHI, (INDIA)

.....
Signature and stamp of Notary of the place of execution

09 AUG 2021

Common seal of **Power Grid Corporation of India Limited** has been affixed in my/our presence pursuant to Board of Director's Resolution dated...17.06.21...

WITNESS

..... **(Signature)** Company Secretary	..... **(Signature)** Director (Finance) POWERGRID	..... **(Signature)** V. K. SINGH Director (Personnel) POWERGRID

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Disclosure

We hereby declare that the following companies with which we/ have direct or indirect relationship are also separately participating in this Bid process as per following details

S.No.	Name of the Company	Relationship
1	Nil	

Further we confirm that we don't have any Conflict of Interest with any other company participating in this bid process.

Certified as true
Seema Gupta
Director (Operations)
सीमा गुप्ता
SEEMA GUPTA
निदेशक (प्रचालन)
Director (Operations)
पावरग्रिड/POWERGRID

POWERGRID, GURGAON

बी. वंशी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टी-बीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
प्लॉट संo-2, सैक्टर-29, गुड़गाँव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

(A WHOLLY OWNED SUBSIDIARY OF POWER GRID CORPORATION OF INDIA LIMITED)

ORIGINAL FOR RECIPIENT

TAX INVOICE

No. MTL/21-22/01 Date : August 04, 2021

Assignment: "EPC Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Reference: RfP for Selection of Transmission Service Provider for Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" dated 27.05.2021

HSN Code: 998399

Details of Provider		Details of Recipient	
GSTIN:	07AAOCM6638A1ZO	Kind Attention:	Power Grid Corporation of India Ltd.
PAN:	AAOCM6638A	Name of the Recipient:	Power Grid Corporation of India Ltd.
State:	Delhi	Address:	Saudamini, Plot No.2, Sector 29, Near IFFCO Chowk, Gurgaon (Haryana) - 122001, INDIA
Code:	7	GSTIN/UID:	06AAACP0252G1ZX
Date of Supply:	02.08.2021	PAN:	AAACP0252G
Place of Supply:	Haryana	State:	Haryana
		Code:	6

Reverse Charge: Not Applicable
Mode of Payment : DD/Cheque/RTGS
Bank Details: RTGS
ICICI Bank
A/C No. 000705086117
IFSC Code: ICIC0000007
9A, Phelps Building, Connaught Place,
New Delhi-110001

Description of Supply/Services			Taxable Amount
Sale of RFP Documents			Rs.5,00,000/-
	Fee Payable		Rs.5,00,000/-
Add:	IGST	18%	Rs.90,000/-
Total Amount Payable			Rs.5,90,000/-
Rupees Five Lakh Ninety Thousand Only			

For (MOHANLALGANJ TRANSMISSION LTD.)

बी. वंशी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टैबीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
प्लाट सं०-2, सैक्टर-29, गुड़गाँव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

Authorised Signatory

Regd. Office - FIRST FLOOR, URJANIDHI, 1, BARAKHAMBA LANE,CONNAUGHT PLACE, Central Delhi, Delhi, 110001
Telephone - 011-29443900
CIN No. U40106DL2021GOI382052

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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Check List for response to RFP submission requirements

	Response to RFP Submission Requirements	Response Yes / No
A.	**Envelope – I (Non-Financial Bid)**	**Yes**
1.	Bid Security Declaration in lieu of Bid Bond in the prescribed format at Annexure-2	**Yes**
2.	Board resolutions as per the prescribed formats enclosed in Annexure 8 (and as per the illustrations in Annexure-13 of this RFP)	
	• From the Bidding Company (and from any investing Affiliate / Parent / Ultimate Parent committing 100% in aggregate of the equity requirement for the Project as per format 1 of Annexure 8	**Yes**
	• Board resolutions from each of the Consortium Member of the Bidding Consortium (and any investing Affiliate/Parent/Ultimate Parent) together committing to one hundred percent (100%) in aggregate of equity requirement for the Project, in case Bidder is a Bidding Consortium – Format-1 of Annexure-8	**No**
	• Board resolutions as per Format 2 of Annexure 8 for total equity investment commitment from the Technically / Financially Evaluated Entity(ies) whose technical / financial credentials had been considered for the purpose of meeting Qualification Requirements as per the RFQ OR from the Parent Company or the Ultimate Parent Company (as applicable)	**No**
3.	Bidder's Undertakings	
	• Bidder's undertaking as per format 1 of Annexure 6	**Yes**
	• Details of Equity Investment in the Project as per format 2 of Annexure 6	**Yes**
4.	Covering Letter as per the format at Annexure 9 of this RFP	**Yes**
5.	Power of Attorney	
	• Format 1 of Annexure 10 by the Bidding Company / Lead Member of the Bidding Consortium (as applicable) in favour of its representative	**Yes**
	• Format 2 of Annexure 10 by each of the other Members of the Consortium (in case of the Bidding Company being a	**No**

बी. वंशी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टीबीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
प्लाट सं०-2, सैक्टर-29, गुड़गांव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Response to RFP Submission Requirements		Response Yes / No
	Consortium) in favour of the Lead Member	
6.	Format of Undertaking for Equity Investment	
	• by the Technically / Financially Evaluated Entity / Ultimate Parent Company (as applicable) for equity investment, in case of failure to invest in part or full, by the Bidder or the Consortium Member in case the Selected Bidder is a Consortium) in the prescribed format at Annexure 10A	No
7.	Format for Disclosure by the Bidding Company or by each Member of the Consortium (as applicable)	Yes

BVamsi

Name: B. Vamsi Rama Mohan

Designation: Chief General Manager

Date: 11/08/2014

बी. वंसी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टीबीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
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प्लाट सं०-2, सैक्टर-29, गुड़गाँव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Details as sought under 'Common Terms' on MSTC Portal

Sl.No	Bidder's Profile	
1	Name of the Bidding company	POWER GRID CORPORATION OF INDIA LIMITED
2	Address of the Bidding company	Regd office : B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi 110016 Corp Office : Saudamini, Plot no. 2, Sector 29, Gurgaon 122001, Haryana
3	Contact Person(Authorised Signatory)	B. Vamsi Rama Mohan
4	Telephone Number	0124 - 2822095
5	Mobile Number	9910378045
6	Email Address for correspondence	tbcb@powergrid.co.in
7	PAN of the Bidding Company	/PERMANENT ACCOUNT NUMBER AAACP0252G POWER GRID CORPORATION OF INDIA LTD /DATE OF INCORPORATION/FORMATION 23-10-1989 DIRECTOR OF INCOME TAX (SYSTEMS)

Signature of Authorized Signatory

POWERGRID, GURGAON

बी. वम्सी राममोहन / B. VAMSI RAMA MOHAN
मुख्य महाप्रबंधक (टेरीबीसीबी)/ Chief General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
प्लाट सं०-2, सैक्टर-29, गुड़गाँव-122 001 (हरियाणा)
Plot No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Schedule: 11

Contract Performance Guarantee

(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution. Foreign entities submitting Bids are required to follow the applicable law in their country. To be provided separately in the name of each of the Long Term Transmission Customer(s), in proportion to their Allocated Project Capacity as provided in Schedule 1 of this document)

In consideration of the .....[Insert name of the Selected Bidder or Lead Member in case of the Consortium, with address] agreeing to undertake the obligations under the TSA dated .....and the other RFP Project Documents and **PFC Consulting Limited** and **Mohanlalganj Transmission Limited** , agreeing to execute the Share Purchase Agreement with the Selected Bidder, regarding setting up the Project, the ..... [Insert name and address of the bank issuing the guarantee and address of the head office] (hereinafter referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to .....[Insert Name of the Long Term Transmission Customer] at .....[Insert the Place from the address of the Long Term Transmission Customer indicated in the TSA] forthwith on demand in writing from .....[Name of the Long Term Transmission Customer] *or* any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees ..... crores only [Insert the amount of the bank guarantee in respect of the Long Term Transmission Customer as per the terms of TSA separately to each Long Term Transmission Customer in the ratio of Allocated Project Capacities as on the date seven (7) days prior to the Bid Deadline] on behalf of M/s. ..... [Insert name of the Selected Bidder].

This guarantee shall be valid and binding on the Guarantor Bank up to and including .....and shall not be terminable by notice or any change in the constitution of the Bank or the term of the TSA or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to Rupees ..... Crores (Rs. .....) only. Our Guarantee shall remain in force until .....[Insert the date of validity of the Guarantee as per Article 3.1.2 of this TSA]. The Long Term Transmission Customer shall be entitled to invoke this Guarantee up to thirty (30) days of the last date of the validity of this Guarantee.

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from the Long Term Transmission Customer, made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to the Long Term Transmission Customer.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by **Mohanlalganj Transmission Limited** , ... [Insert name of the Selected Bidder] and/or any other person. The Guarantor Bank shall not require the Long Term Transmission Customer to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against the Long Term Transmission Customer in respect of any payment made hereunder.

THIS BANK GUARANTEE shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

THIS BANK GUARANTEE shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

This BANK GUARANTEE shall be a primary obligation of the Guarantor Bank and accordingly the Long Term Transmission Customer shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against **Mohanlalganj Transmission Limited** or the Selected Bidder, to make any claim against or any demand on **Mohanlalganj Transmission Limited** or the Selected Bidder or to give any notice to **Mohanlalganj Transmission Limited** or the Selected Bidder or to enforce any security held by the Long Term Transmission Customer or to exercise, levy or enforce any distress, diligence or other process against **Mohanlalganj Transmission Limited** or the Selected Bidder or TSP, as the case may be.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to the Long Term Transmission Customer and may be assigned, in whole or in part, (whether absolutely or by way of security) by Long Term Transmission Customer to any entity to whom the Lead Long Term Transmission Customer is entitled to assign its rights and obligations under the TSA.

The Guarantor Bank hereby agrees and acknowledges that the Long Term Transmission Customer shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rupees ..... Crores (Rs. .....) only and it shall remain in force until .....[Date to be inserted on the basis of Article 3.1.2 of this TSA], with an additional claim period of thirty (30) days thereafter. This BANK GUARANTEE shall be extended from time to time for such period, as may be desired by ..... [Insert name of the Selected Bidder or Lead Member in case of the Consortium]. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if the Long Term Transmission Customer serves upon us a written claim or demand.

In witness where of:

Signature .....

Name: .....

Power of attorney No.: .....

For:

..... [Insert Name of the Bank]

Banker's Seal and Full Address, including mailing address of the Head Office

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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Schedule: 12

SUPPLEMENTARY AGREEMENT

BETWEEN

..... [Insert name of the TSP]

AND

..... [Insert name of the new Long Term Transmission Customer 1],

..... [Insert name of the new Long Term Transmission Customer 2],

..... [Insert name of the new Long Term Transmission Customer n]

THIS SUPPLEMENTARY AGREEMENT entered into on ..... [Insert date] ..... [Insert day] of .....[Insert month] in ..... [Insert year] by and between, ... [Insert name of the Transmission Service Provider] incorporated under the Companies Act, 1956, having its registered office at ..... (here in after referred to as Transmission Service Provider or "TSP", which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the first part,

AND

..... [Insert name of the new Long Term Transmission Customer '1'] having its registered office at..... [Insert address of the new Long Term Transmission Customer 1] and having an Allocated Project Capacity as specified in the Table 2 of this Supplementary Agreement, (which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the second part,

..... [Insert name of the new Long Term Transmission Customer '2'] having its registered office at..... [Insert address of the new Long Term Transmission Customer 1] and having an Allocated Project Capacity as specified in the Table 2 of this Supplementary Agreement, (which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the third part,

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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..... [Insert name of the new Long Term Transmission Customer 'n'] having its registered office at..... [Insert address of the new Long Term Transmission Customer 1] and having an Allocated Project Capacity as specified in the Table 2 of this Supplementary Agreement, (which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the nth part.

WHEREAS:

A. The TSP has executed the TSA with the existing Long Term Transmission Customers as listed out in Schedule 1 of the TSA.

B. The existing Long Term Transmission Customers as listed out in Schedule 1 of the TSA have executed the TSA with the TSP.

C. The TSP has agreed to provide the Transmission Service to the existing Long Term Transmission Customers as per the terms and conditions of the TSA.

D. The Allocated Project Capacity of the existing Long Term Transmission Customers as on this date.....[Insert date] is as detailed below:

Table : 1

Sl. No.	Name of the existing Long Term Transmission Customers	Allocated Project Capacity (in MW)
1		
2		
3		
.		

E. The existing Long Term Transmission Customers have agreed, on the terms and subject to the conditions of the TSA, to use the available transmission capacity of the Project and pay TSP the Transmission Charges as determined in accordance with the terms of the TSA.

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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NOW THEREFORE THIS AGREEMENT WITNESSETH as under:

1) The new Long Term Transmission Customer(s) and their Allocated Project Capacity as on this date.... [Insert date] are as detailed below:

Table 2:

Sl. No.	Name of the new Long Term Transmission Customer(s)	Allocated Project Capacity (in MW)
1		
2		
3		

2) The new Long Term Transmission Customer(s) have been granted long term open access from the CTU/STU, as the case may be, and are beneficiaries to the Project.

3) The new Long Term Transmission Customer(s) agree to the terms and conditions laid down in the TSA, to use the Project and pay the TSP the Transmission Charges as determined in accordance with the terms of the TSA and the provisions of this Supplementary Agreement.

4) The TSP agrees to provide the Transmission Service to the new Long Term Transmission Customer(s) as per the terms and conditions of the TSA.

5) All terms and conditions of the TSA between the TSP and the existing Long Term Transmission Customers (as listed out in Table 1 of this Supplementary Agreement) shall apply, *mutatis mutandis* without any change, to the new Long Term Transmission Customers (as listed out in Table 2 of this Supplementary Agreement)

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

Mohanlalganj Transmission Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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IN WITNESS WHEREOF the parties have executed these presents through their Authorised Representatives

WITNESS:

Table 3:

WITNESS	
1. Signature: Name: ..... Designation:	For and on behalf of ..... [Insert name of the TSP]
2. Signature: Name: ..... Designation:	For and on behalf of ..... [Insert name of the new Long Term Transmission Customer 1]
3. Signature: Name: ..... Designation:	For and on behalf of ..... [Insert name of the new Long Term Transmission Customer 1]
4. Signature: Name: ..... Designation:	For and on behalf of ..... [Insert name of the new Long Term Transmission Customer n]

Pashchimanchal Vidyut Vitran Nigam Limited

Madhyanchal Vidyut Vitaran Nigam Limited

Purvanchal Vidyut Vitaran Nigam Limited

Dakshinanchal Vidhyut Vitaran Nigam Limited

Kanpur Electricity Supply Company Limited

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Mohanlalganj Transmission Limited

Amendment No. 2



Amendment No. 2

to

Request for Proposal (RfP) and Transmission Service Agreement (TSA) for selection of Transmission Service Provider through tariff based competitive bidding process to establish transmission system for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

S. No	Existing Provision	Amended Provision
1.	**Clause 1.2 of RfP document and Schedule-2 of TSA**	**Clause 1.2 of RfP document and Schedule-2 of TSA**

Existing Provision

S. No	Name of the transmission element	Scheduled COD from Effective Date	Conductor per phase
A)	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-**		
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos.	18 months	

Amended Provision

S. No	Name of the transmission element	Scheduled COD from Effective Date	Conductor per phase
A)	**Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-**		
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos.	18 months	

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

S. No	Existing Provision				Amended Provision			
		iii. 132 kV Feeder bay - 04 nos.				iii. 132 kV Feeder bay - 04 nos.		
	2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor	2.	LILO of Sarojani Nagar (400kV) – Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor
	3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor	3.	LILO of Lucknow (PGCIL) 400 kV – Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)		Twin Moose ACSR Conductor
	B)	**Construction of LILO Line**			**B)**	**Construction of LILO Line**		
	1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	Quad Bersimis ACSR Conductor	1.	LILO of 765 kV Ghatampur – Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	Quad Bersimis ACSR Conductor
	2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months	Twin Moose ACSR Conductor	2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months	Twin Moose ACSR Conductor
	C)	**Construction of LILO lines on Monopole**			**C)**	**Construction of LILO lines on Monopole**		
	1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA guidelineof 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	9 months	Quad Moose ACSR Conductor	1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEAguidelineof 400 kV Ataur (WUPPTCL) – Indirapuram(WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	9 months	**Quad Moose ACSR or equivalent HTLS conductor**
	Note:				**Note:**			
	i. *UPPTCL to provide...*				*i. UPPTCL to provide...*			
	ii. GIS Bay (if any) for ...				***ii.*** *GIS Bay (if any) for ...*			
2.	**Annexure-B, Clause 5.1 of Specific Technical Requirement of Transmission Lines of RfP and Schedule 2, Clause 5.1 of Specific Technical Requirement of Transmission Lines of TSA**				**Annexure-B, Clause 5.1 of Specific Technical Requirement of Transmission Lines of RfP and Schedule 2, Clause 5.1 of Specific Technical Requirement of Transmission Lines of TSA**			
	Transmission	**ACSR**		**Sub-**	**Transmission**	**ACSR**		**Sub-**

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

S. No	Existing Provision			Amended Provision		
	line	Conductor specified	conductor Spacing	line	Conductor specified	conductor Spacing
	765kV S/C (Quad Bersimis) transmission lines	Bersimis: Stranding 42/4.57 mm-Al + 7/2.54 mm-Steel, 725sq mm, Total Sectional Area, 35.05 mm diameter	457 mm	765kV S/C (Quad Bersimis) transmission lines	Bersimis: Stranding 42/4.57 mm-Al + 7/2.54 mm-Steel, 725sq mm, Total Sectional Area, 35.05 mm diameter	457 mm
	400kV D/C (Quad Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	457 mm	400kV D/C (Quad Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	457 mm
	400kV D/C (Twin Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	450 mm	400kV D/C (Twin Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	450 mm
				400kV D/C (Twin HTLS) Transmission lines	**HTLS: type- INVAR/ GAP/ Composite core/ ACSS or any other equivalent, 1596 Ampacity or higher, minimum 28.62 mm diameter, maximum 0.05552 (Ω/km) DC resistance at 20°C**	**450 mm**

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Annexure-8

Copy of Share purchase agreement (SPA)



ATTESTED TRUE COPY
Attested from Pg 508 to 526
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

Dated 30TH May 2022

SHARE PURCHASE AGREEMENT

AMONG

PFC CONSULTING LIMITED

AND

MOHANLALGANJ TRANSMISSION LIMITED

AND

POWER GRID CORPORATION OF INDIA LIMITED

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

POWERGRID, GURGAON पावरग्रिड POWERGRID

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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PFC CONSULTING LIMITED NEW DELHI

सत्यमेव जयते

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

₹100

e-Stamp

Certificate No.	:	**IN-DL90837039267438U**
Certificate Issued Date	:	15-Feb-2022 01:10 PM
Account Reference	:	IMPACC (IV)/ dl960303/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL96030371581409741090U
Purchased by	:	PFC CONSULTING LIMITED
Description of Document	:	Article 5 General Agreement
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	PFC CONSULTING LIMITED
Second Party	:	Not Applicable
Stamp Duty Paid By	:	PFC CONSULTING LIMITED
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

₹100 ₹100 ₹100 ₹100

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Please write or type below this line IN-DL90837039267438U

SHARE PURCHASE AGREEMENT

This **SHARE PURCHASE AGREEMENT** ('Agreement') made this 30th May 2022 at New Delhi by and among:

PFC CONSULTING LIMITED (a wholly owned subsidiary of Power Finance Corporation Ltd.), a company incorporated under the Companies Act, 1956, having its registered office at First Floor, "Urjanidhi", 1 Barakhamba Lane, Connaught Place, New Delhi 110001, (hereinafter referred to as "**PFCCL**", which expression shall, unless it be repugnant to the context or

POWERGRID, GURGAON

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

PFC CONSULTING LIMITED NEW DELHI

Statutory Alert:
1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

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PFC CONSULTING LIMITED PFC CONSULTING LIMITED PFC CONSULTING LIMITED

meaning thereof, be deemed to mean and include its successors and permitted assigns) of the **FIRST PART**;

AND

Mohanlalganj Transmission Limited (MTL), (hereinafter referred to as "**Company**"),, a company incorporated under the Companies Act, 2013, having its registered office at First Floor, "Urjanidhi", 1 Barakhamba Lane, Connaught Place, New Delhi 110001, (hereinafter referred to as **"Company"** which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assigns) of the **SECOND PART**; and

AND

Power Grid Corporation of India Limited, a company incorporated under the Companies Act, 1956 having its registered office at B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi - 110016 (hereinafter referred to as **"Selected Bidder"** which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assigns) of the **THIRD PART.**

Each of PFCCL, Company and the Selected Bidder are hereinafter individually referred to as "party" and collectively as the "Parties"

WHEREAS:

A. In accordance with the Bidding Guidelines, U.P. Power Transmission Corporation Limited (UPPTCL), has identified the **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** (hereinafter referred to as "Project") for the transmission of electricity to be supplied to the Long Term Transmission Customers. .

B. U.P. Power Transmission Corporation Limited (UPPTCL) vide its letter no. 55/PS/DIR (W&P)/PTCL/Mohanlalganj dated February 09, 2021 had notified **PFCCL** to be the Bid Process Coordinator (BPC) for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish Transmission System for **"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"** through tariff based competitive bidding process.

C. PFCCL has incorporated the **Company** and PFCCL along with the Nominees hold One hundred per cent (100 %) of total issued and paid up equity share capital of the Company.

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D. In accordance with the Bidding Guidelines, PFCCL had initiated a Bid Process through issue of RFQ and RFP for selecting a Successful Bidder to build, own, operate and maintain the Project in accordance with and on the terms and conditions mentioned in the RFP Project Documents (as defined hereinafter).

E. PFCCL has initiated the development of the Project and has obtained survey report, certain clearances, consents and permits as specified in the RFP regarding the Project.

F. Pursuant to the said Bid Process, Power Grid Corporation of India Limited has been identified as the Selected Bidder vide Letter of Intent dated May 12, 2022 issued by the PFCCL in favor of the Selected Bidder.

G. As envisaged in the RFP and the RFQ, the Shares Seller (as defined hereinafter) has agreed to sell the Sale Shares (as defined hereinafter) to the Selected Bidder and the Selected Bidder has agreed to purchase the Sale Shares from the Shares Seller, subject to and on the terms and conditions set forth in this Agreement.

NOW THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS AND AGREEMENTS SET FORTH IN THIS AGREEMENT AND FOR OTHER GOOD AND VALUABLE CONSIDERATION, THE PARTIES HEREBY AGREE AS FOLLOWS:

1. DEFINITIONS

1.1 Capitalised terms in this Agreement, unless defined in this Agreement shall, in so far as the context admits, have the same meaning in this Agreement as has been ascribed to them in the Transmission Service Agreement.

1.2 Additionally, the following terms shall have the meaning hereinafter respectively assigned to them herein below:

(i) **"Acquisition Price"** shall mean Rs.9,10,45,329/- **(Rupees Nine Crore Ten Lakh Forty Five Thousand Three Hundred Twenty Nine only)**, which is the aggregate consideration payable by the Selected Bidder towards purchase of the **Sale Shares at par** along with assets and liabilities of the Company as on the Closing Date subject to adjustment as per the audited accounts of the Company as on the Closing Date;

(ii) **"Agreement"** or **"the Agreement"** or **"this Agreement"** shall mean this Share Purchase Agreement and shall include the recitals and/or annexures attached hereto, and the contracts, certificates, disclosures and other documents to be executed and delivered pursuant hereto, if any, and any amendments made to this Agreement by Parties in writing;

(iii) **"Bid Process"** shall mean the competitive bidding process initiated by the Company, by issuance of RFQ and RFP for selecting a Successful Bidder to build,

own, operate and maintain the Project in accordance with and on the terms and conditions mentioned in the RFP Project Documents;

(iv) **"Board"** shall mean the board of directors of the Company

(v) **"Closing Date"** shall mean a mutually agreed date between the Parties falling within the period as mentioned in Clause 2.4 of RFP or on failure of such mutual agreement between the Parties shall be the date falling on the last date of such period;

(vi) **"Encumbrance"** shall mean any mortgage, pledge, lien, charge, security assignment, hypothecation, trust, encumbrance or any other agreement having the effect of creating security interest;

(vii) **"Letter of Intent"** shall have the meaning ascribed thereto under the RFP;

(viii) **"Long Term Transmission Customer"** shall mean a person availing or intending to avail access to the Intra-State Transmission System for a period up to twenty-five years or more, and for the purposes of this Project, shall refer to entities listed in Annexure-1 of RFP or any such other person who executes a supplementary agreement for availing transmission service as per the provisions of the TSA;

(ix) **"Nominees"** shall mean the Persons, who are named in Annexure A, holding the Sale Shares as nominees of PFCCL.

(x) "**Party**" shall mean PFCCL, Company and the Selected Bidder, referred to individually, and "**Parties**" shall mean PFCCL, Company and the Selected Bidder collectively referred to, as relevant;

(xi) "**Person**" shall include an individual, an association, a corporation, a partnership, a joint venture, a trust, an unincorporated organisation, a joint stock company or other entity or organisation, including a government or political subdivision, or an agency or instrumentality thereof, and/or any other legal entity;

(xii) **"RfP Project Documents"** shall mean the following documents, referred to collectively:

a) Transmission Services Agreement;
b) this Agreement; and
c) Any other agreement(s) as may be required.

(xiii) "**Representations and Warranties**" shall mean the representations and warranties mentioned in **Clause 4** hereto;

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(xiv) "**Sale Shares**" shall mean **10,000 (Ten Thousand)** Shares, representing 100 percent of the total issued, subscribed and fully paid-up equity share capital of the Company held by the Shares Seller and Nominees as more particularly described in Annexure A attached hereto;

(xv) **"Shares"** shall mean the fully paid-up equity shares of Company, of face value Rs.10 each;

(xvi) "**Shares Seller**" shall mean PFCCL;

(xvii) "**Transmission Services Agreement**" or "**TSA**" means the agreement titled 'Transmission Services Agreement' dated July 09, 2021 entered into between the Long Term Transmission Customer(s) and the TSP pursuant to which the TSP shall build, own, operate and maintain the Project and make available the assets of the Project to the Long Term Transmission Customer(s) on a commercial basis, as may be amended from time to time;

1.3 Interpretation Clause

Unless the context otherwise requires, the provisions of the TSA relating to the interpretation of the TSA shall apply to this Agreement as if they were set out in full in this Agreement and to this end are incorporated herein by reference.

2. TRANSFER OF SHARES

2.1 Subject to the terms and conditions of this Agreement, the Shares Seller agrees to sell and transfer to the Selected Bidder and the Selected Bidder hereby agrees to purchase from the Shares Seller, the Sale Shares of the Company free from Encumbrances with rights and benefits attached thereto in consideration of the Acquisition Price and the covenants, undertakings and the agreements of the Selected Bidder contained in this Agreement.

2.2 The Shares Seller hereby undertakes to cause the Nominees to transfer part of the Sale Shares held by them as Nominees of the Shares Seller to the Selected Bidder and execute any documents required to deliver good title to the Sale Shares to the Selected Bidder.

3. CLOSING

3.1 Prior to the Closing Date, the Selected Bidder shall provide to the Shares Seller, valid share transfer forms ("Share Transfer Forms") duly stamped with requisite amount of stamp duty payable on the transfer of Sale Shares.

3.2 On the Closing Date, the Shares Seller shall hand over to the Selected Bidder or its authorised representative, the original share certificates representing the Sale Shares

("Sale Share Certificates") along with the Share Transfer Forms duly executed by the Shares Seller and the Nominees in favour of the Selected Bidder, simultaneously against the Selected Bidder handing over to the Shares Seller demand drafts drawn in favour of the Shares Seller for the Acquisition Price payable to it.

Provided that prior to the handing over of the Sale Share Certificates to the Selected Bidder as mentioned above, the Selected Bidder shall provide satisfactory evidence to PFCCL that on or before the Closing Date, the Selected Bidder has furnished the Performance Bank Guarantee to each of the Long Term Transmission Customers and is in a position to comply with all other requirements of Clause 2.4 of the RFP.

3.3 The Selected Bidder shall immediately upon receiving the Sale Share Certificates and the Share Transfer Forms, duly execute the Share Transfer Forms and duly lodge the Share Transfer Forms and the Sale Share Certificates with the Company. The Selected Bidder may also propose the names of its nominees to be appointed on the Board of the Company and the address within the jurisdiction of the Registrar of Delhi and Haryana, which would be the new registered office of the Company. The Company shall, upon receipt of the said documents from the Selected Bidder, do the following:

(i) Immediately on the Closing Date convene a meeting of the Board, wherein the Board shall pass the following necessary resolutions:

(a) approving the transfer of the Shares constituting the Sale Shares from the Shares Seller and the Nominees to the name of the **Power Grid Corporation of India Limited and its nominees;**

(b) approving the **Power Grid Corporation of India Limited and its nominees** as a member of the Company and entering the name of the **Power Grid Corporation of India Limited and its nominees** in the register of members.

(c) changing the address of the registered office of the Company to the new address, within the jurisdiction of the Registrar of Delhi and Haryana, as may be provided by the Selected Bidder.

(d) appointing the nominees of the Selected Bidder on the Board and accepting the resignations of the other existing Directors on the Board and the Chair of the meeting which was taken by one of the existing Directors shall be vacated and appointment of a new Chairman who shall be one of the newly appointed Director, for the rest of the meeting.

Immediately pursuant to the acceptance of resignation of the existing Directors and appointment of new Chairman, the newly constituted Board of Directors shall continue with the meeting and pass the following resolution:

(e) terminating all the authorizations granted regarding the business and/or operations of the Company or the operations of the bank accounts of the Company, with prospective effect; and

(f) acknowledging and accepting the terms and conditions as contained in the executed copies of the RFP Project Documents and to abide by the provisions contained therein.

(ii) Enter the name of the **Power Grid Corporation of India Limited and its nominees** as the legal and beneficial owner of the Sale Shares, free of all Encumbrances, in the register of members of the Company;

(iii) Make the necessary endorsements on the Sale Share Certificates, indicating the name of the **Power Grid Corporation of India Limited and its nominees** as the legal and beneficial owner of the Sale Shares evidenced there under;

(iv) Return the original Sale Share Certificates, duly endorsed in the name of the **Power Grid Corporation of India Limited and its nominees**, to the **Power Grid Corporation of India Limited and its nominees,** as the case may be or its authorised representative;

(v) Handover all the statutory registers and records, if any, of the Company to the Selected Bidder.

(vi) Handover certified true copies of the Board resolution passed by the Company as per (i)(a) to (i)(f) of Clause 3.3 (i) to the Lead Long Term Transmission Customer.

3.4 The Parties to this Agreement agree to take all measures that may be required to ensure that all the events contemplated in the **Clauses 3.1 to 3.3** above on the Closing Date are completed on the same day.

Notwithstanding the provisions of **Clause 3.3** hereto, all proceedings to be taken and all documents to be executed and delivered by the Parties at the Closing Date shall be deemed to have been taken and executed simultaneously and no proceedings shall be deemed to have been taken nor documents executed or delivered until all have been taken, executed and delivered.

3.5 The Selected Bidder hereby acknowledges and agrees that after the date of acquisition of one hundred percent (100%) of the equity shareholding of the Company, by the Selected Bidder as per Clause 3.3, (a) the authority, rights and obligations of the PFCCL/Company in respect of the Bid Process shall forthwith cease and any actions to be taken thereafter regarding the Bid Process will be undertaken by the Long Term Transmission Customer(s) themselves or through their any other authorized representative(s), (b) all rights and obligations of the PFCCL/Company shall be of the Selected Bidder and (c) any decisions taken by the PFCCL/Company prior to the date of

its acquisition by the Selected Bidder shall continue to be binding on the Selected Bidder. The Parties hereby agree that this provision shall survive the termination of this Agreement.

3.6 This agreement shall be effective from the date of its signing by the Parties and shall remain in force until all the obligations of the respective Parties under Clause 3.3 hereto are fulfilled.

4. REPRESENTATIONS AND WARRANTIES

4.1 The Selected Bidder hereby represents and warrants to the Shares Seller that:

4.1.1 The Selected Bidder has full legal right, power and authority to enter into, execute and deliver this Agreement and to perform the obligations, undertakings and transactions set forth herein, and this Agreement has been duly and validly executed and delivered by the Selected Bidder and constitutes its legal, valid and binding obligations, enforceable against it in accordance with its terms;

4.1.2 The execution, delivery and performance of this Agreement by the Selected Bidder will not violate or contravene any provision of the Memorandum of Association or Articles of the Selected Bidder, (ii) will not violate or contravene any law, statute, rule, regulation, licensing requirement, order, writ, injunction or decree of any court, governmental instrumentality or other regulatory, governmental or public body, agency or authority by which the Selected Bidder are bound or by which any of its and/or their properties or assets are bound, and (iii) except to the extent that the same have been duly and properly completed or obtained, will not require any filing with, or permit, consent or approval of or license from, or the giving of any notice to, any court, governmental instrumentality or other regulatory, governmental or public body, agency or authority, joint venture party, or any other entity or person whatsoever; and

4.1.3 The Selected Bidder is not restricted in any manner whatsoever, including without limitation, on account of any judicial or governmental order, action or proceeding, or any contractual obligation assumed by the Selected Bidder, from purchasing the Sale Shares from the Shares Seller in the manner provided for in this Agreement.

4.2 The Shares Seller hereby represents and warrants to the Selected Bidder that;

4.2.1 The Shares Seller and the Nominees are the legal and beneficial owners of the Sale Shares, free and clear of any Encumbrance and the delivery to the Selected Bidder of the Sale Shares pursuant to the provisions of this Agreement will transfer to the Selected Bidder a good title to the Sale Shares.

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4.2.2 The Shares Seller has full legal right, power and authority to enter into, execute and deliver this Agreement and to perform the obligations, undertakings and transactions set forth herein. The execution, delivery and performance of this Agreement will not violate the Memorandum and Articles of Association of the Shares Seller or contravene any contract by which it is bound.

4.2.3 The Shares Seller has obtained requisite authorizations to sell and transfer the Sale Shares to the Selected Bidder. The Shares Seller also represent that it is not prevented from transferring and selling the Sale Shares. Also, to the best of its knowledge, the Sale Shares are not the subject matter of any claim or pending proceeding or threatened by any legal proceeding made by any third party.

4.3 Except as specified in Clause 4.2, above the Shares Seller shall not be deemed to have, made any representation or warranty whatsoever, whether express or implied, in relation to the Sale Shares or Company, including but not limited to any implied warranty or representation as to the business or affairs of the Company.

4.4 The Representations and Warranties are given as at the date of this Agreement except that where a Representation and Warranty is expressed to be made as at another date, the Representation and Warranty is given with respect to that date only.

4.5 Each Representation and Warranty is to be construed independently of the others and is not limited by reference to any other Warranty. The Representations, Warranties and undertakings contained in this **Clause 4** hereto or in any document delivered pursuant to or in connection with this Agreement are continuing in nature and shall survive the Closing Date for one (1) year.

4.6 The Parties represent to each other that all Representations and Warranties provided herein by the respective Party shall be true as of Closing Date.

5. OBLIGATIONS OF THE SELECTED BIDDER

The Selected Bidder agrees that the Shares Seller shall not be liable in any manner, nor shall it assume any responsibility or liability whatsoever, in respect of the business of the Company and its operations or activities, arising after Closing Date, to any Person or any authority, central, state, local or municipal or otherwise and the same shall be the sole responsibility of the Selected Bidder.

6. FORCE MAJEURE

"No party shall be liable for its inability or delay in performing any of its obligations hereunder if such delay is caused by circumstances beyond the reasonable control of

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the party including delay caused through flood, riot, Act of God, lightning civil commotion, storm, tempest and earthquake."

7. MISCELLANEOUS

7.1 NOTICES

a) All notices to be given under this Agreement shall be in writing and in the English language.

b) All notices must be delivered personally or by registered or speed post or by recognised courier to the addresses below:

Selected Bidder	**Company Secretary,** **Power Grid Corporation of India Limited** B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi – 110016
Name of the Holding Company of the SPV	**Company Secretary,** **PFC Consulting Limited,** First Floor, "Urjanidhi", 1 Barakhamba Lane, Connaught Place, New Delhi – 110001
Company (After Closing Date)	**Chief Executive Officer,** **Mohanlalganj Transmission Limited,** B-9, Qutub Institutional Area, Katwaria Sarai, New Delhi - 110016

c) Any Party may by notice of at least fifteen (15) days to the other Parties change the address and / or addresses to which such notices and communications to it are to be delivered or mailed.

7.2 RESOLUTION OF DISPUTES

7.2.1 If any dispute arises between the Parties, in connection with the validity, interpretation, implementation or alleged breach of any provision of this Agreement ("Dispute"), the disputing Parties hereto shall endeavour to settle such Dispute amicably. The attempt to bring about an amicable settlement shall

be considered to have failed if not resolved within 60 days from the date of the Dispute.

7.2.2 If the Parties are unable to amicably settle the Dispute in accordance with Clause 7.2.1 within the period specified therein, any of the Parties shall be entitled to within 30 days after expiry of the aforesaid period, refer the Dispute to the Company Secretary of PFCCL and Chief Executive/ Managing Director of the Selected Bidder for resolution of the said Dispute. The attempt to bring about such resolution shall be considered to have failed if not resolved within 30 days from the date of receipt of a written notification in this regard.

7.2.3 In the event the Dispute is not settled in accordance with Clause 7.2.2 above, any Party to the Dispute shall be entitled to serve a notice invoking this Clause and making a reference to a sole arbitrator. If the Parties to the Dispute cannot agree as to the appointment of the sole arbitrator within 30 days of receipt of the notice of the Party making the reference, then the Shares Seller along with the Company shall appoint one arbitrator and the Selected Bidder shall appoint one arbitrator and the two arbitrators, so appointed shall appoint a third arbitrator. However, after the Closing Date, in such an event the Shares Seller shall appoint one arbitrator and the Selected Bidder along with the Company shall appoint one arbitrator and the two arbitrators, so appointed shall appoint the third arbitrator.

7.2.4 The place of the arbitration shall be New Delhi. The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996.

7.2.5 The proceedings of arbitration shall be in English language.

7.2.6 The arbitrator's award shall be substantiated in writing. The arbitrators shall also decide on the costs of the arbitration proceedings. In case the arbitrators have not decided on the costs of the arbitration proceedings, each Party to the Dispute shall bear its own costs, in relation to the arbitration proceedings.

7.3 AUTHORISED PERSON

For the purposes of this Agreement, the Selected Bidder is represented by Sh. A. K. Singhal, Executive Director (TBCB & Engg.) / Sh. Mrinal Shrivastava, Company Secretary, pursuant to an authorization granted to Sh. A. K. Singhal, Executive Director (TBCB & Engg.) / Sh. Mrinal Shrivastava, Company Secretary through necessary Board resolutions. Further, Sh. A. K. Singhal, Executive Director (TBCB & Engg.) / Sh. Mrinal Shrivastava

Company Secretary is also authorized by such resolutions to take any decision which may be required to be taken, do all acts and execute all documents which are or may be required by the Selected Bidder for the proper and effective fulfillment of the rights and obligations under this Agreement. Any action taken or document executed by Sh. A. K. Singhal, Executive Director (TBCB & Engg.) / Sh. Mrinal Shrivastava, Company Secretary shall be deemed to be acts done or documents executed by the Selected Bidder and shall be binding on the Selected Bidder.

7.4 RESERVATION OF RIGHTS

No forbearance, indulgence or relaxation or inaction by any Party at any time to require performance of any of the provisions of this Agreement shall in any way affect, diminish or prejudice the right of such Party to require performance of that provision, and any waiver or acquiescence by any Party of any breach of any of the provisions of this Agreement shall not be construed as a waiver or acquiescence of any continuing or succeeding breach of such provisions, a waiver of any right under or arising out of this Agreement or acquiescence to or recognition of rights other than that expressly stipulated in this Agreement.

7.5 CUMULATIVE RIGHTS

All remedies of either Party under this Agreement whether provided herein or conferred by statute, civil law, common law, custom or trade usage, are cumulative and not alternative and may be enforced successively or concurrently.

7.6 PARTIAL INVALIDITY

If any provision of this Agreement or the application thereof to any person or circumstance shall be invalid or unenforceable to any extent, the remainder of this Agreement and the application of such provision to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected thereby, and each provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law. Any invalid or unenforceable provision of this Agreement shall be replaced with a provision, which is valid and enforceable and most nearly reflects the original intent of the unenforceable provision.

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7.7 TERMINATION

If (i) the Closing does not occur on the Closing Date for any reason whatsoever, or (ii) the Letter of Intent is withdrawn or terminated for any reason, or (iii) due to termination of the TSA by the Long Term Transmission Customer(s) in accordance with Article 3.3.2 or Article 13 of the TSA thereof, PFCCL shall have a right to terminate this Agreement forthwith by giving a written notice to the other Parties hereto.

7.8 AMENDMENTS

No modification or amendment of this Agreement and no waiver of any of the terms or conditions hereof shall be valid or binding unless made in writing and duly executed by all the Parties.

7.9 ASSIGNMENT

This Agreement and the rights and liabilities hereunder shall bind and inure to the benefit of the respective successors of the Parties hereto, but no Party hereto shall assign or transfer its rights and liabilities hereunder to any other Person without the prior written consent of the other Parties, which will not be unreasonably withheld.

7.10 ENTIRE AGREEMENT

This Agreement constitutes the entire Agreement between the Parties with respect to the subject matter herein and supersedes and cancels any prior oral or written agreement, representation, understanding, arrangement, communication or expression of intent relating to the subject matter of this Agreement.

7.11 COSTS

Each of the Parties hereto shall pay their own costs and expenses relating to the negotiation, preparation and execution of this Agreement and the transactions contemplated by this Agreement.

The Selected Bidder shall be liable to bear and pay the stamp duty and other costs in respect of this Agreement and the Share Transfer Forms.

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7.12 RELATIONSHIP

None of the provisions of this Agreement shall be deemed to constitute a partnership between the Parties hereto and no Party shall have any authority to bind the other Party otherwise than under this Agreement or shall be deemed to be the agent of the other in any way.

7.13 GOVERNING LAW AND JURISDICTION

This Agreement shall be governed by and construed in accordance with the laws of India and shall be subject to the exclusive jurisdiction of the courts of Delhi.

7.14 COUNTERPARTS

This Agreement may be executed in counterparts by the Parties and each fully executed counterpart shall be deemed to be original.

7.15 CONFIDENTIALITY

The Parties undertake to hold in confidence and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

(a) to their professional advisors;

(b) to their officers, employees, agents or representatives, who need to have access to such information for the proper performance of their activities;

(c) disclosures required under Law;

without the prior written consent of the other Parties.

Provided that the Long Term Transmission Customer(s) and PFCCL may at any time, disclose the terms and conditions of transactions contemplated hereby to any person, to the extent stipulated under the law or the Bidding Guidelines.

7.16 INDEMNIFICATION

- The Parties hereby agree that transfer of Sale Shares to the Selected Bidder shall vest all the rights, privileges, licenses, responsibilities, liabilities and other obligations pertaining to the Company in the Selected Bidder.
- The Selected Bidder hereby agrees that the Selected Bidder shall not be entitled to any claims or initiate any legal proceedings, by itself or through the Transmission Service Provider against the Share Sellers, its directors, officers, employees and the

subscribers including the members of any committees appointed by them in respect of any actions or decisions taken by any of them up to the Closing Date in furtherance of the Project referred to in recital A of this Agreement.

- Further, the Selected Bidder hereby indemnifies and holds harmless at all times the Share Seller against all losses, damages, charges, and expenses which the Share Seller may sustain or incur towards contractual obligations with respect to the contracts awarded by the Share Seller or any other liability arising with regard to any action/ activity undertaken by the Share Seller for and on behalf of the Company in furtherance of the Project referred to above or otherwise concerning the Company. All such actions shall be defended by the Selected Bidder either itself or through the TSP at its own cost.
- The Parties hereby agree that the provisions of this clause shall survive the termination of this Agreement.

IN WITNESS WHEREOF, THE PARTIES HERETO HAVE CAUSED THIS AGREEMENT TO BE DULY EXECUTED AND DELIVERED AS OF THE DAY AND YEAR FIRST ABOVE WRITTEN

MANISH AGRAWAL
कंपनी सचिव/Company Secretary
Membership No.F5048
पीएफसी कंसल्टिंग लिमिटेड/PFC Consulting Limited
(पावर फाइनेंस कॉर्पोरेशन लि० की पूर्णतः स्वामित्वाधीन सहायक कंपनी)
(A wholly owned subsidiary of Power Finance Corp. Ltd.)
"ऊर्जानिधि", 1, बाराखंबा लेन, कनॉट प्लेस,
"URJANIDHI", 1, Barakhamba Lane, Connaught Place,
नई दिल्ली-110001/New Delhi-110001

SIGNED AND DELIVERED
BY THE WITHIN NAMED "**PFC CONSULTING LIMITED**"

BY THE HAND OF SH. MANISH AGRAWAL, COMPANY SECRETARY
PURSUANT TO THE RESOLUTION PASSED BY THE BOARD OF DIRECTORS ON 12TH OCTOBER, 2021

ON THE 30TH DAY OF MAY, 2022.

IN THE PRESENCE OF:
WITNESS:
Binay Kumar Singh, PFC Consulting
NAME, SIGNATURE, DESIGNATION AND ADDRESS:

MOHANALGANJ TRANSMISSION LIMITED
NEW DELHI

SIGNED AND DELIVERED
BY THE WITHIN NAMED "**MOHANALGANJ TRANSMISSION LIMITED**"

BY THE HAND OF SH. SANJAY NAYAK, GENERAL MANAGER
PURSUANT TO THE RESOLUTION PASSED BY THE BOARD OF DIRECTORS ON 8TH OCTOBER 2021

ON THE 30TH DAY OF MAY, 2022.

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(Naveen Kumar)
DGM

IN THE PRESENCE OF:
WITNESS:
NAME, SIGNATURE, DESIGNATION AND ADDRESS:

मृणाल श्रीवास्तव
कम्पनी सचिव
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
(भारत सरकार का उद्यम)
सैक्टर-29, गुड़गाँव-122 001 (हरियाणा)

SIGNED AND DELIVERED
BY THE WITHIN NAMED **"POWER GRID CORPORATION OF INDIA LIMITED"**

BY THE HAND OF SH. MRINAL SHRIVASTAVA, COMPANY SECRETARY
PURSUANT TO THE RESOLUTION PASSED BY THE BOARD OF DIRECTORS ON 17TH JUNE 2021

ON THE 30TH DAY OF MAY, 2022.

IN THE PRESENCE OF: Aditya
WITNESS:
NAME, SIGNATURE, DESIGNATION AND ADDRESS: L. Aditya Mahesh, Manager (TBCB)
Powergrid Corporation of India Ltd.

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ANNEXURE A

DESCRIPTION OF THE SALE SHARES

S. NO.	NAME OF THE SHAREHOLDER	NUMBER OF EQUITY SHARES HELD	PERCENTAGE OF THE TOTAL PAID UP EQUITY CAPITAL
1.	PFC Consulting Limited	9400	94%
2.	Shri Manoj Kumar Rana (Nominee of PFC Consulting Limited)	100	1%
3.	Shri Milind Madhusudan Dafade (Nominee of PFC Consulting Limited)	100	1%
4.	Shri Dharuman Manavalan (Nominee of PFC Consulting Limited)	100	1%
5.	Shri Neeraj Singh (Nominee of PFC Consulting Limited)	100	1%
6.	Shri Sachin Shukla (Nominee of PFC Consulting Limited)	100	1%
7.	Shri Sanjay Nayak (Nominee of PFC Consulting Limited)	100	1%
	Total		**100%**

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Annexure-9

Form-1 for Transmission License



ANNEXURE No.-9
FORM – 1
Application form for Grant of Transmission Licence
Particulars of the Applicant

1.	Name	Rajiv Gandhi
2.	Name ofthe Company	Mohanlalganj Transmission Limited (MTL)
3.	Registered Address	B-9, Qutub Institutional Area, Katwaria Sarai-, New Delhi- 110016
4.	Name, Designation & Address of the Contact Person	Rajiv Gandhi, Project Incharge, M/s MTL C 62 Saket, Golf View Apartmcnts, New Delhi-110017
5.	Contact Tel. Nos.	9910378126
6.	Fax No.	011-26560112
7.	E-mail ID:	rajivg@powergrid.in
8.	Place of Incorporation/Registration	New Delhi
9.	Date of Incorporation/Registration	08.06.2021

10. Geographical Area within which Application proposes to undertake transmission of electricity.

    In accordance with the Transmission Service Agreement furnished as part of the bidding documents, the Applicant Company is to establish "Transmission System for Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida" in the State of Uttar Pradesh. Scope of the Project is enclosed.

11. Following documents are to be enclosed
    a) Certificate of Registration/incorporation
    b) Certificate for commencement ofbusiness
    c) Memorandum of Association and Articles of Association
    d) Copy of Power of Attorney of the signatory to commit the application or its promoter.
    e) Details of Income Tax Registration
    f) Draft Licence
    g) All the documents Mentioned in the Regulation

12. Net worth (in equivalent Indian Rupees –Conversion to be done at the rate of exchange prevailing at the end of each Year) for immediate past 5(five) financial years. (Specify financial year as applicable)

DD/MM/YY to DD/MM/YY	In Home Currency (Indian Rupees)	Exchange Rate used	In equivalent Indian Rupees
(08.06.2021 – Date of Incorporation of Company) To (30.05.2022 – Date of Acquisition of Company)	86,009	Not applicable	86,009

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13. Annual turnover (in equivalent Indian Rupees – conversion to be done at the rate of exchange prevailing at the end of each year) for immediate past 5 (five) financial years.(Specify financial year as application).

DD/MM/YY to DD/MM/YY	In Home Currency (Indian Rupees)	Exchange Rate used	In equivalent Indian Rupees
Not Applicable			

MTL has been incorporated in June 2021 and as such the certified results as furnished by Bid Process Coordinator i.e. PFCCL are enclosed to support the above.

14 **Certificate of Credit Rating:**

The Applicant Company is a Special Purpose Vehicle (SPV) incorporated by the PFC Consulting Limited, the Bid Process Coordinator (BPC) and acquired by the successful Bidder i.e Power Grid Corporation of India Limited to set up Transmission Project through Tariff Based Competitive Bidding guidelines notified by Ministry of Power, GoI. The Project is in the initial stages for commencing activities and hence, Credit Rating is not available for Applicant Company. However, the Credit Rating of Power Grid Corporation of India Limited, the Holding Company of the Applicant Company is as attached and enclosed.

15. Certificate of 'Standard' borrower account:

The Applicant Company is a Special Purpose Vehicle (SPV) incorporated by the PFC Consulting Limited, the Bid Process Coordinator (BPC) and acquired by the successful Bidder i.e Power Grid Corporation of India Limited to set up Transmission Project through Tariff Based Competitive Bidding guidelines notified by Ministry of Power, GoI. The Project is in the initial stages for commencing activities. The Applicant Company has not raised loan from any source and hence the Certificate of Standard Borrower Account is not available.

16. Certificate stating that RBI has not classified the Applicant as a 'Wilful defaulter':

The Applicant Company is a Special Purpose Vehicle (SPV) incorporated by the PFC Consulting Limited, the Bid Process Coordinator (BPC) and acquired by the successful Bidder i.e Power Grid Corporation of India Limited to set up Transmission Project through Tariff Based Competitive Bidding guidelines notified by Ministry of Power, GoI. The Project is in the initial stages for commencing activities. The Applicant Company has not taken any loan from any lender and hence the Certificate of RBI is not applicable.

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17. List of Documents enclosed in support of Sl. No. (10) to (13) above.

Name of the documents:

Enclosure Number is mentioned against each item of Sr. No.10 & 11 enclosed herewith.

Sl.No	Name of Document	Enclosure
1	Scope of Project	Enclosure-1
2	Certificate of Registration/incorporation	Enclosure-2
3	Certificate for commencement of business	*
4	Memorandum of Association and Articles of Association	Enclosure-3
5	Copy of Power of Attorney of the signatory to commit the application or its promoter.	Enclosure-4
6	Details of Income Tax Registration	Enclosure-5
7	Draft License	Enclosure-6
8	Financial Statement of the Applicant as certified by Bid Process Coordinator – PFCCL	Enclosure-7
9	Credit Rating of Power Grid Corporation of India Limited, the Holding Company of the Applicant Company	Enclosure-8
10	All the documents Mentioned in the Regulation	NA

*Section 11 of the Companies Act, 2013 in respect of Certificate of Commencement of Business is omitted w.e.f. 29th May, 2015 and therefore Companies incorporated after 29.05.2015 are not required to obtain the said Certificate. MTL is incorporated on 08.06.2021 and hence, it is not applicable to the Company.

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a) Whether Applicant himself shall be financing the proposed transmission of electricity fully on its own balance sheet :

The Applicant Company shall finance the proposed Transmission Project through funding of Debt and Equity. The project is in the initial stages for commencing activities and the Debt and Equity shall be known on completion of the Project.

b) If, yes, proposed equity from the Applicant.

The project is in the initial stages for commencing activities and the quantum of Equity shall be known on completion of the Project. However, 100% of the Equity shall be funded by Power Grid Corporation of India Limited.

19 In case the Applicant proposes to tie up with some other Agency of equity, the name & address of such agency:

Not Applicable.

a) Name, Designation & Address of reference person of the other Agency:
b) Contact Tel. No.
c) Fax No.

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d) E-mail ID:
e) Proposed equity from the other Agency
   i. Amount
   ii. Percentage of total equity
   iii. Currency in which the equity is proposed.
f) Consent letter of the other agency to associate with the Applicant for equity participation to be enclosed
   Not Applicable
g) Nature of proposed tie-up between the Applicant and the other agency : Not Applicable.

20. Details of debt proposed for the Transmission activity :

a) Details of lenders: To be decided in due course.
b) Amount to be sourced from various lenders: To be decided in due course.
c) Letters from the lenders in support of the above to be enclosed:
   Not Applicable.

21. Organizational & Managerial Capability of the Applicant:
Enclosed and Marked as **Enclosure:9**

22. Approach & Methodology
Enclosed and marked as **Enclosure:10**

The Project has been awarded through Tariff Based Competitive Bidding Guidelines and hence, Capital Cost and Equity investment would be known only when the project is completed.

(Signature of the Applicant)

Date: Lucknow
Place: 06/06/2022

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Annexure-9 - Enclosure-1

Scope of Project



Scope of the Project

Sl. No.	Name of the Transmission Element	Completion Target
A. Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-		
(1)	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.	18 months
(2)	LILO of Sarojani Nagar (400kV) - Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)	
(3)	LILO of Lucknow (PGCIL) 400 kV - Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)	
B. Construction of LILO Line:-		
(1)	LILO of 765 kV Ghatampur - Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months
(2)	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months
C. Construction of LILO lines on Monopole		
(1)	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA guideline of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	9 months

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Annexure-9 - Enclosure-2

Certificate of Registration/incorporation



सत्यमेव जयते

GOVERNMENT OF INDIA
MINISTRY OF CORPORATE AFFAIRS

Central Registration Centre

Certificate of Incorporation

[Pursuant to sub-section (2) of section 7 and sub-section (1) of section 8 of the Companies Act, 2013 (18 of 2013) and rule 18 of the Companies (Incorporation) Rules, 2014]

I hereby certify that MOHANLALGANJ TRANSMISSION LIMITED is incorporated on this Eighth day of June Two thousand twenty-one under the Companies Act, 2013 (18 of 2013) and that the company is limited by shares.

The Corporate Identity Number of the company is U40106DL2021GOI382052.

The Permanent Account Number (PAN) of the company is **AAOCM6639A** *

The Tax Deduction and Collection Account Number (TAN) of the company is **DELM39793F** *

Given under my hand at Manesar this Eighth day of June Two thousand twenty-one .

DS MINISTRY OF CORPORATE AFFAIRS

Digital Signature Certificate
SHIVARAJ C RANJERI
ASST. REGISTRAR OF COMPANIES
For and on behalf of the Jurisdictional Registrar of Companies
Registrar of Companies
Central Registration Centre

Disclaimer: This certificate only evidences incorporation of the company on the basis of documents and declarations of the applicant(s). This certificate is neither a license nor permission to conduct business or solicit deposits or funds from public. Permission of sector regulator is necessary wherever required. Registration status and other details of the company can be verified on www.mca.gov.in

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Mailing Address as per record available in Registrar of Companies office:

MOHANLALGANJ TRANSMISSION LIMITED
Urjanidhi, First Floor, 1, Barakhamba, Lane, Connaught Place,, DELHI,
Central Delhi, Delhi, India, 110001

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

* as issued by the Income Tax Department

Annexure-9 - Enclosure-3

Memorandum of Association and Articles of Association

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

ATTESTED TRUE COPY
Attested from Pg 536 to 576
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

[Pursuant to Schedule I (see sections 4 and 5) to the Companies Act, 2013] FORM NO. INC-33

SPICe+MOA

(e-Memorandum of Association)

* **Table applicable to company as notified under schedule I of the companies Act, 2013** A

Table A- MEMORANDUM OF ASSOCIATION OF A COMPANY LIMITED BY SHARES

1. The Name of the Company is MOHANLALGANJ TRANSMISSION LIMITED

2.The Registered office of the company will be situated in the state of Delhi-DL

3.(a)The objects to be pursued by the company on its incorporation are

(i) To develop Power System Network
To plan, promote and develop an integrated and efficient power transmission system network in all its aspects including planning, investigation, research, design and engineering, preparation of preliminary, feasibility and definite project reports, construction, operation and maintenance of transmission lines, sub-stations, load dispatch stations and communication facilities and appurtenant works, coordination of integrated operation of state, regional and national grid system, execution of turn-key jobs for other utilities/organizations and wheeling of power in accordance with the policies, guidelines and objectives laid down by the Central Government from time to time.

(ii) To study, investigate, collect information and data
To study, investigate, collect information and data, review operation, plan, research, design and prepare Report, diagnose operational difficulties and weaknesses and advise on the remedial measures to improve, undertake development of new and innovative product connected with business of the Company as well as modernize existing EHV, HV lines and Sub-Stations.

(iii) To act as Consultants/ Technical Advisers of public/ private sector enterprises etc.
To act as consultants, technical advisors, surveyors and providers of technical and other services to Public or Private Sector enterprises engaged in the planning, investigation, research, design and preparations of preliminary, feasibility and definite project reports, manufacture of power plant and equipment, construction, generation, operation and maintenance of power transmission system from power generating stations and projects, transmission, distribution and sale of power.

3.(b)Matters which are necessary for furtherance of the objects specified in clause 3(a) are

(i) To obtain authority etc. to carry out its objects
To obtain license, approvals and authorization from Governmental Statutory and Regulatory Authorities, as may be necessary to carry out and achieve the Objects of the Company and connected matters which may seem expedient to develop the business interests of the Company in India and abroad.

(ii) To obtain charters, concession etc.
To enter into any arrangement with the Government of India or with any State Government or with other authorities/ commissions, local bodies or public sector or private sector undertakings, Power Utilities, Financial Institutions, Banks, International Funding Agencies and obtain such charters, subsidies, loans, advances or other money, grants, contracts, rights, sanctions, privileges, licenses or concessions whatsoever (whether statutory or otherwise) which the Company may think it desirable to obtain for carrying its activities in furthering the interests of the Company or its members.

(iii) To enter into Implementation/ Construction Agreement
To enter into any agreement, contract or any arrangement for the implementation of the power generation, evacuation, transmission and distribution system and network with Power/Transmission Utilities, State Electricity Boards, Vidyut Boards, Transmission Companies, Generation Companies, Licensees, Statutory bodies, other organizations (whether in Private, Public or Joint Sector Undertaking) and bulk consumers of power etc.

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(iv) To carry on the business or purchasing, importing, exporting and trading power
To carry on the business or purchasing, importing, exporting and trading of power subject to the provisions of Electricity Act,2003 and to supply electric power generated by other plants to distribution companies, trading companies, other generation companies and other Persons, and in this regard execute agreements with Central and State generating authorities, departments or companies, Independent Power Producers and other Persons.

(v) To enter into Agreements; etc.
To secure the payments of money, receivables on transmission and distribution of electricity and sale of fuel, as the case may be, to the State Electricity Boards, Vidyut Boards, Transmission Utilities, Generating Companies, Transmission Companies, Distribution Companies, State Governments, Licensees, statutory bodies, other organizations (whether in Private, Public or Joint Sector Undertaking) and bulk consumers of power etc. through Letter of Credits/ESCROW and other security documents.

(vi) To execute transmission service Agreements
To execute Transmission Service Agreements or other agreements for transmission of power to distribution, trading, and other companies, State Electricity Boards, State Utilities and any other organization and Persons.

(vii) To co-ordinate with Central Transmission Utility
To coordinate with the Central Transmission Utility for transmission of electricity under the provisions of Electricity Act 2003.

(viii) To borrow money
Subject to provisions of Sections 73, 179, 180 and other applicable provisions of the Companies Act, 2013 and subject to other laws or directives, if any, of SEBI/RBI, to borrow money in Indian rupees or foreign currencies and obtain foreign lines of credits/ grants/aids etc. or to receive money or deposits from public for the purpose of the Company's business in such manner and on such terms and with such rights, privileges and obligations as the Company may think fit. The Company may issue bonds/ debentures whether secured or unsecured; bills of exchange, promissory notes or other securities, mortgage or charge on all or any of the immovable and movable properties, present or future and all or any of the uncalled capital for the time being of the Company as the Company may deem fit and to repay, redeem or pay off any such securities or charges.

(ix) To lend money
To lend money on property or on mortgage of immovable properties or against Bank guarantee and to make advances of money against future supply of goods and services on such terms as the Directors may consider necessary and to invest money of the Company in such manner as the Directors may think fit and to sell, transfer or to deal with the same.

(x) To acquire, own, lease or dispose off the property
To own, possess, acquire by purchase, lease or otherwise rights, title and interests in and to, exchange or hire real estate, equipment, Transmission lines, lands, buildings, apartments, plants, equipment, machinery, fuel blocks and hereditaments of any tenure or descriptions situated in India or abroad or any estate or interest therein and any right over or connected with land so situated and turn the same to account in any manner as may seem necessary or convenient for the purpose of business of the Company and to hold, improve, exploit, re-organize, manage, lease, sell, exchange or otherwise dispose of the whole or any part thereof.

(xi) To deal in Scrips/Govt. Securities
Subject to applicable provisions of law, to subscribe for, underwrite, or otherwise acquire, hold, dispose of and deal with the shares, stocks, debentures or other securities and titles of indebtedness or the right to participate in profits or other similar documents issued by any Government authority, Corporation or body or by any company or body of persons and any option or right in respect thereof.

(xii) To create funds and appropriate profits
To create any depreciation fund, reserve fund, sinking fund, insurance fund, gratuity, provident fund or any other fund, for depreciation or for repairing, improving extending or maintaining any of the properties of the Company or for any other purposes whatsoever conducive to the interests of the Company.

(xiii) To purchase or otherwise acquire companies
To acquire shares, stocks, debentures or securities of any company carrying on any business which this Company is entitled to carry on or acquisition of undertaking itself which may seem likely or calculated to promote or advance the interests of the Company and to sell or dispose of or transfer any such shares, stocks or securities and the acquired undertaking.

(xiv) To enter into partnership Agreement or Merge /amalgamate
To enter into partnership or into any agreement for joint working, sharing or pooling profits, joint venture, amalgamation, union of interests, co-operation, reciprocal concessions or otherwise or amalgamate with any person or company carrying on or engaged in or about to carry on or engaged in any business or transaction in India or abroad which the Company is authorized to carry on or engage in any business undertaking having objects identical or similar to, as are being carried on by this Company.

(xv) To have agencies and branch offices in India and abroad
To establish and maintain agencies, branch offices and local agencies, to procure business in any part of India and world and to take such steps as may be necessary to give the Company such rights and privileges in any part of the world as deemed proper in the interest of the Company.

(xvi) To promote institutions or other companies
To promote and undertake the formation of any institution or Company or subsidiary company or for any aforesaid objects intended to benefit the Company directly or indirectly and to coordinate, control and guide their activities.

(xvii) (a) To acquire know how and import-export of machinery and tools etc.
To negotiate and enter into agreements and contracts with domestic and foreign companies, persons or other organizations, banks and

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financial institutions, in relation to the business of the Company including that of technical know-how, import, export, purchase or sale of plant, machinery, equipment, tools, accessories and consumables, financial assistance and for carrying out all or any of the objects of the Company.

(xvii) (b) To negotiate and enter into agreements etc.
To negotiate and enter into agreements and contracts for execution of turnkey jobs, works, supplies and export of plant, machinery, tools and accessories etc.

(xviii) To enter into contracts/arrangements in connection with issue of shares/securities. Upon and for the purpose of any issue of shares, debentures or any other securities of the Company, to enter into agreement with intermediaries including brokers, managers of issue/commission agents and underwriters and to provide for the remuneration of such persons for their services by way of payment in cash or issue of shares, debentures or other securities of the Company or by granting options to take the same or in any other manner as permissible under the law.

(xix) To enter into contracts of indemnity and/or guarantee
To enter into contracts of indemnity and get guarantee and allocations for the business of the Company.

(xx) To arrange for Training and Development
To make arrangements for training of all categories of employees and to employ or otherwise engage experts, advisors, consultants etc. in the interest of achieving the Company's objects.

(xxi) To promote conservation, protect environment, theft etc.
To promote conservation and protection of electricity from theft, safety of life and to protect environments including air, land and water etc.

(xxii) To provide for welfare of employees
To pay and provide for the remuneration, amelioration and welfare of persons employed or formerly employed by the Company and their families providing for pension, allowances, bonuses, other payments or by creating for the purpose from time to time the Provident Fund, Gratuity and other Funds or Trusts. Further to undertake building or contributing to the building or houses, dwellings or chawls by grants of money, or by helping persons employed by the Company to effect or maintain insurance on their lives by contributing to the payment of premium or otherwise and by providing or subscribing or contributing towards educational institutions, recreation, hospitals and dispensaries, medical and other assistance as the Company may deem fit.

(xxiii) To take Insurance
To ensure any rights, properties, undertakings, contracts, guarantees or obligations or profits of the Company of every nature and kind in any manner with any person, firm, association, institution or company.

(xxiv) To share the profits pay, dividends and provide bonus etc
To distribute among members of the Company dividend including bonus shares out of profits, accumulated profits or funds and resources of the Company in any manner permissible under law.

(xv) To institute and defend the legal proceedings
To institute, conduct, defend, compound or abandon any legal proceedings by or against the Company or its officers or otherwise concerning the affairs of the Company and also to compound and to allow time for payment or satisfaction of any debts or recovery due, claims or demands by or against the Company and to refer any claims or demands by or against the Company or any differences arising in execution of contracts to conciliation and arbitration and to observe, comply with and/or challenge any awards preliminary, interim or final made in any such arbitration.

(xxvi) To pay and subsequently write off preliminary expenses
To pay out of the funds of the Company all costs, charges, expenses and preliminary and incidental to the promotion, formation, establishment and registration of the Company or other expenses incurred in this regard.

(xvii) To contribute and make donations
Subject to provisions of Companies Act, 2013 to contribute money or otherwise assist to charitable, benevolent, religious, scientific national, defense, public or other institutions or objects or purposes.

(xviii) To open accounts in Banks
To open an account or accounts with any individual, firm or company or with any bank bankers or shrofs and to pay into and withdraw money from such account or accounts.

(xix) To accept gifts, donations etc.
To accept gifts, bequests, devises and donations from members and others and to make gifts to members and others of money, assets and properties of any kind.

(xxx) To pursue the objects of the Company as principal, agents, trustee or in any other capacity
To carry out all or any of the objects of the company and do all or any of the above things in any part of the world and either as principal, agent, contractor or trustee or otherwise and either alone or in conjunction with others.

(xxxi) To enter into Contracts
To negotiate and/or enter into agreement and contract with individuals, companies, corporations, foreign or Indian, for obtaining or providing technical, financial or any other assistance for carrying on all or any of the objects of the Company and also for the purpose of activating, research, development of projects on the basis of know-how and/or financial participation and for technical collaboration, and to acquire or provide necessary formulate and patent rights for furthering the objects of the company.

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(xxxii) To contribute towards promotion of trade and industry
To aid pecuniary or otherwise, any association, body or movement having for its object the solution, settlement or surmounting of industrial or labour problems or trouble or the promotion of industry or trade.

(xxxiii) To take all necessary steps for winding up of the company
Subject to the provisions of Companies Act, 2013 or any amendment or re-enactment thereof in the event of winding up to distribute among the members in specie any property of the Company or any proceeds of sale on disposal of any property in accordance with the provisions of the Act.

(xxxiv) To do and perform all coincidental and ancillary acts for the attainment of its objects
To do all such other things as may be deemed incidental or conducive to the attainment of the above Objects or any of them and to carry on any business which may seem to the Company capable of being conveniently carried in connection with any of the Company's Objects or calculated directly or indirectly to enhance the value of or render profitable any of the Company's property or rights.

(xxxv) To take up studies and research experiments.
To establish, provide, maintain and conduct or otherwise subsidies research laboratories and experimental workshops for scientific, technical or researches, experiments and to undertake and carry on directly or in collaboration with other agencies scientific and technical research experiments and tests of all kinds and to process, improve and invent new products and their techniques of manufacture and to promote, encourage, reward in every manner studies and research, scientific and technical investigations and inventions of any kind that may be considered likely to assist, encourage and promote rapid advances in technology, economies, import substitution or any business which the Company is authorized to carry on.

(xxxvi) To evolve scheme for restructuring or arrangement.
Subject to provisions of the Companies Act,2013, to evolve scheme for restructuring or arrangement, to amalgamate or merge or to enter into partnership or into any consortium or arrangement for sharing of profits, union of interests, co-operation, joint venture with any Person or Persons, partnership firm/firms, or company or companies carrying on or engaged in any operation capable of being conducted so conveniently in co-operation with the business of the Company or to benefit the Company or to the activities for which the Company has been established.

(xxxvii) To apply for purchase, or otherwise acquire.
To apply for purchase, or otherwise acquire any trademarks, patents, brevets, inventions, licenses, concessions and the like, conferring any exclusive or nonexclusive or limited rights to use, or any secret or other information as to any invention which may be capable of being used for any of the purposes of the Company, or the acquisition of which may benefit the Company and to use, exercise, develop or grant licenses in respect of or otherwise turn to account the property, rights or information so acquired.

(xxxviii) To sell, dispose or hive off an undertaking of the Company
To sell, dispose or hive off an undertaking of the Company or any part thereof for such consideration as the Company may think fit and in particular for shares, debentures or securities of any other association, corporation or company.

(xxxix)To sell, improve, manage, develop
To sell, improve, manage, develop, exchange, loan, lease or let, under-lease, sub - let, mortgage, dispose of, deal with in any manner, turn to account or otherwise deal with any rights or property of the Company.

(xxxx)To outsource parts of its activities
To outsource parts of its activities to achieve higher efficiencies and throughputs in the achievement of its business goals.

4.The liability of the member(s) is limited and this liability is limited to the amount unpaid, if any, on the shares held by them.

5.The share capital of the company is 100,000.00 rupees, divided into,

10,000.00	Equity	shares of	10.00	rupees each	,and

6 ☒ We, the several persons, whose names and addresses are subscribed, are desirous of being formed into a company in pursuance of this memorandum of association, and we respectively agree to take the number of shares in the capital of the company set against our respective names:

☐ I, whose name and address is given below, am desirous of forming a company in pursuance of this memorandum of association and agree to take all the shares in the capital of the company (Applicable in case of one person company):

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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S.No.	Subscriber Details				
	Name, Address, Description and Occupation	DIN/PAN/Passport Number	No. of shares taken	DSC	Dated
Total Shares taken			10,000.0 Equity		
			Preference		

Signed before Me					
Name		Address, Description and Occupation	DIN/PAN/Passport Number/ Membership Number	DSC	Dated
ACS	ANURADHA JAIN	D-427, 2nd Floor, Ramphal Chowk, (Backside of Goyalsons) Palam Extn, Sector 7, Dwarka, New Delhi-110075 Occupation: Practicing Company Secretary	36639	ANURADHA JAIN Digitally signed by ANURADHA JAIN Date: 2021.06.07 19:14:06 +05'30'	07/06/21

Modify Check Form

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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[Pursuant to Schedule I (see Sections 4 and 5) to the Companies Act, 2013)] FORM NO. INC-34

SPICe+ AOA

(e-Articles of Association)

*Table [F] as notified under schedule I of the companies Act, 2013 is applicable to the company

MOHANLALGANJ TRANSMISSION LIMITED

A COMPANY LIMITED BY SHARES

Check if not applicable	Check if altered	Article No	Description
			Interpretation
☐	☒		(1) In the interpretation of these Articles, unless repugnant to the subject or context:- The Act means The Companies Act, 2013 as amended from time to time and includes any statutory modification or re-enactment thereof for the time being in force. Articles means the articles of association of a company as originally framed or as altered from time to time or applied in pursuance of any previous company law or of this Act. Auditor(s) mean and include persons appointed as such for the time being by the Comptroller & Auditor General of India. Board or Board of Directors, in relation to a company, means the collective body of the directors of the company. Books of account includes records maintained in respect of: (i) all sums of money received and expended by a company and matters in relation to which the receipts and expenditure take place; (ii) all sales and purchases of goods and services by the company; (iii) the assets and liabilities of the company; and (iv) the items of cost as may be prescribed under section 148 in the case of a company which belongs to any class of companies specified under that section. Capital means the share capital for the time being raised or authorized to be raised for the purpose of the Company. Company Shall means MOHANLALGANJ TRANSMISSION LIMITED. Debenture includes debenture stock, bonds or any other instrument of a company evidencing a debt, whether constituting a charge on the assets of the company or not. Director means a director appointed to the Board of a company under Section 2(34) of the Act. Dividend includes any interim dividend. Financial Institution includes a scheduled bank, and any other financial institution defined or notified under the Reserve Bank of India Act, 1934. Gender Words importing the masculine gender also include the feminine gender. Generation Company shall mean any entity engaged in the business of generation of electricity. In writing and Written include printing, lithography and other modes of representing or reproducing words in a

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visible form.

Key managerial personnel, in relation to a company, means
(i) the Chief Executive Officer or the managing director or the manager;
(ii) the company secretary;
(iii) the whole-time director;
(iv) the Chief Financial Officer; and
(v) such other officer as may be prescribed.

Meeting means Annual General Meeting or Extraordinary General Meeting of Members duly called and constituted including an adjourned meeting. In the context of Board of Directors, it shall mean the meeting of the Directors including an adjourned meeting.

Member, in relation to a company, means
(i) the subscriber to the memorandum of the company who shall be deemed to have agreed to become member of the company, and on its registration, shall be entered as member in its register of members;

(ii) every other person who agrees in writing to become a member of the company and whose name is entered in the register of members of the company;

(iii) every person holding shares of the company and whose name is entered as a beneficial owner in the records of a depository.

Month means a calendar month.

Office means the Registered Office of the company for the time being.

Paid-up share capital or share capital paid-up means such aggregate amount of money credited as paid-up as is equivalent to the amount received as paid up in respect of shares issued and also includes any amount credited as paid-up in respect of shares of the company, but does not include any other amount received in respect of such shares, by whatever name called;

Persons include Corporations and firms as well as individuals.

Power / Transmission Utility shall mean any entity engaged in the business of power / transmission.

Proxy includes Attorney duly constituted under a valid Power of Attorney.

Project-In-Charge, a Director of the Company designated as Project In-charge for administrating day to day activities of the Company.

"Public Company" means a company which
a. is not a private company and
b. has a minimum paid-up share capital as may be prescribed

Provided that a company which is a subsidiary of a company, not being a private company, shall be deemed to be public company for the purposes of this Act even where such subsidiary company continues to be a private company in its articles ;

Registrar means a Registrar, an Additional Registrar, a Joint Registrar, a Deputy Registrar or an Assistant Registrar, having the duty of registering companies and discharging various functions under this Act.

Register of Members means the Register of Members to be kept pursuant to the Act.

Section 2(76) of the Act describes related party, with reference to a company, which means
(i) a director or his relative;
(ii) a key managerial personnel or his relative;
(iii) a firm, in which a director, manager or his relative is a partner;
(iv) a private company in which a director or manager is a member or director;
(v) a public company in which a director or manager is a director or holds along with his relatives, more than two per cent. of its paid-up share capital;
(vi) anybody corporate whose Board of Directors, managing director or manager is accustomed to act in accordance with the advice, directions or instructions of a director or manager;
(vii) any person on whose advice, directions or instructions a director or manager is accustomed to act:
Provided that nothing in sub-clauses (vi) and (vii) shall apply to the advice, directions or instructions given in a

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

professional capacity;
(viii) any company which is
(A) a holding, subsidiary or an associate company of such company; or
(B) a subsidiary of a holding company to which it is also a subsidiary;
(ix) such other person as may be prescribed.

Seal means the common seal of the company for the time being.

Securities and Exchange Board means the Securities and Exchange Board of India established under section 3 of the Securities & Exchange Board of India Act, 1992.

Securities means the securities as defined in clause (h) of section 2 of the Securities Contracts (Regulation) Act, 1956.

Share means a share in the share capital of a company and includes stock.

Share Capital means the total equity share capital of the Company agreed to be issued and called the Authorized Capital of the Company, as mentioned in the Memorandum of Association of the Company.

Singular Number Words importing the singular number include, where the context admits the plural number and vice-versa.

State Electricity Board means the Electricity Board or Vidyut Board or any other body by whatever name called, set up by the State Governments under Electricity (Supply) Act 1948, as amended, which expression shall include its successors, administrators, authorized representatives and permitted assigns.

Transmission Company shall mean any entity engaged in the business of transmission of electricity.

Year means English calendar year and Financial Year shall have the meaning assigned thereto by Section 2(41) of the Act.
Unless the context otherwise requires, words or expressions contained in these regulations shall bear the same meaning as in the Act or any statutory modification thereof in force at the date at which these regulations become binding on the company.

Marginal Notes are for ease of reference only and shall not affect the construction and interpretation of these Articles.

Other words or expressions contained in these Articles shall bear the same meaning as are assigned to them in the Act or any statutory modifications thereof.

Table F not to Apply
The regulations contained in Table F in the First Schedule to the Companies Act, 2013, shall not apply except to the extent that the same are repeated or contained or expressly made applicable by these Articles or by the Act but the regulations for the management of the Company and for the observance of the members thereof and their representatives shall, subject to any exercise of the statutory powers of the Company with reference to the repeal or alteration of, or addition to its regulations by Special Resolution, as prescribed by the said Companies Act, 2013 be such as contained in these Articles.

Business Purpose
The Company shall be engaged in the business of Transmission of Electricity, including construction, operation, maintenance and other related activities.

Share capital and variation of rights

1.1 Share Capital / Increase of capital by the Company and how carried into effect

The Authorized Share Capital of the Company is as mentioned in clause V of the Memorandum of Association of the Company. The Company in General Meeting may from time to time, by resolution, increase its authorized share capital by creation of new shares, such increase to be of such aggregate amount and to be divided into shares of such respective amounts as may be determined by the General Meeting subject to the provisions of the Act.

1.2 New Capital same as existing capital

Any capital raised by the creation of new shares shall be considered as part of the original capital, and shall be subject to the same provisions herein contained, with reference to the payment of calls and installments,

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		II 1	forfeiture, lien, surrender, transfer and transmission, voting and otherwise. 1.3 Reduction of Capital The Company may, from time to time, by special resolution reduce its capital, which may be paid off either with or without extinguishing or reducing liability on shares, which is in excess of the wants of the company or canceling such share capital which has been lost or is unrepresented by available assets. 1.4 Subdivision and consolidation of shares The Company in general meeting may, from time to time, sub-divide or consolidate its shares or any of them and exercise any of the other powers conferred by Section 61 of the Act and shall file with the Registrar such notice of exercise of any such powers as may be required by the Act.
☐	☒	2	2.1 Register and Index of Members/Beneficial owners The Company shall cause to be kept a Register and also an Index of Members and Debenture-holders in accordance with Sections 88 of the Act. Further, as permissible under Section 88 of the Act, the register and Index of beneficial owners maintained by a Depository shall be deemed to be the corresponding Register and Index for the purpose of this Act. 2.2 Foreign Register of members The Company shall be entitled to keep in any country outside India a Foreign Register of members resident in that country, subject to compliance with the provisions of Section 88 of the Act. 2.3 Shares to be numbered distinctively The shares in the capital held otherwise than in the depository mode shall be numbered progressively in sequence and given distinctive number, Except and in the manner herein mentioned, no share shall be forfeited or surrendered and shall continue to bear the number which it had originally borne. 2.4 Share Application Money The Company shall ensure that the share application money paid is held by it in an account with a Scheduled Commercial Bank (in the name of the Company)
☐	☒	3	3. Further Issue of Capital (a)Where at any time the Company wishes to raise its subscribed share capital by issue of further shares, it shall first offer such shares to its existing shareholders in proportion to their existing shareholdings on the date of such issue. Such offer to the existing shareholders shall be in accordance with the provisions of Section 62of the Act. (b) The Company shall subject to applicable provisions of the Act and Articles of Association, make uniform calls from time to time upon all the Shareholders in respect of the moneys remaining unpaid on the issued share capital within 30 days or such time, as the Board may deem fit and appropriate.
☐	☒	4	4. Shares under control of Directors Subject to the provisions of these Articles and of the Act, the shares including any shares forming part of any increased capital of the Company shall be under the control of the Directors, who may allot or otherwise dispose off the shares to such persons in such proportion, on such terms and conditions and at such times as the Directors may think fit and subject to the sanction of the Company in General Meeting, subject to the provisions of Sections 52 and section 54 of the Act at a premium or par and such option being exercisable for such time and for such consideration as the Directors think fit. The Board shall cause to be filed the returns as to allotment provided for in Section 39(4) of the Act.
☐	☒		5.1 Issue of shares for consideration other than cash Subject to these Articles and the provisions of the Act, if any, the Board may issue and allot shares in the capital of the Company as payment or in consideration or as part payment or in part consideration of the purchase or acquisition of any property or for services, rendered to the Company in the conduct of its business and shares which may be so issued or allotted shall be credited or deemed to be credited as fully paid up or partly paid up shares.

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		5	5.2 Power of Company to Issue Shares The Company in General Meeting may subject to the provisions of Section 42 & 62 of the Act provide that any shares (whether forming part of the original capital or of any increased capital of the Company) shall be offered to such persons (whether a Member or not), in such proportion and on such terms and conditions of the Act) at a premium or at par or at a discount, as such General Meeting shall determine and with full power to give any person (whether a Member or not) the option to call for or be allotted shares of any class of the Company either subject to compliance with the provisions of Sections 52 and 54 of the Act at a premium or at par or at discount, such option being exercisable at such times and for such consideration as may be directed by such General Meeting or the Company in General Meeting may make any other provisions whatsoever for the issue, allotment or disposal of any shares.
☐	☒	6	6.1 Acceptance of shares Any person applying for shares in the Company followed by an allotment of any shares and subscribers to the Memorandum, shall be a shareholder within the meaning of these Articles, and every person whose name is on the Register of Members shall, for the purposes of these Articles, be a Member of the Company. 6.2 Deposit & call to be a debt payable Immediately The Money, (if any), which the Board shall, on the application for allotment of any shares being made by them, require or direct to be paid by way of deposit, call or otherwise, in respect of any shares allotted by them, shall immediately on the insertion of the name of the allottee in the Register of Members as the name of the holder of such shares, become a debt due to and recoverable by the Company from the allottee thereof, and shall be paid by him accordingly. 6.3 Liability of Members Every Member, or his heirs, executors or administrators, shall pay to the Company the portion of the capital and premium, if any, represented by or payable on, his share or shares which may, for the time being, remain unpaid thereon, in such amounts, at such time or times and in such manner as the Board shall, from time to time, in accordance with the Company?s regulations, require or fix for the payment thereof.
☐	☒		7.1 Share Certificates A certificate, issued under the common seal of the company, specifying the shares held by any person, shall be prima facie evidence of the title of the person to such shares. (a) Every Member or allottee of shares who is holding such shares in the physical form shall be entitled, without payment, to receive certificate specifying the name of the person in whose favour it is issued, the shares to which it relates and the amount paid-up thereof. Such certificates shall be issued only in pursuance of a resolution passed by the Board and on surrender to the Company of the letter of allotment or the fractional coupons of requisite value, save in case of issues against letters of acceptance or of renunciation or in cases of issue of bonus shares. Every such certificate shall be issued under the seal of the Company, which shall be affixed in the presence of two Directors and the Secretary or some other person appointed by the Board for the purpose, and the two directors and the Secretary or other persons as authorized by the Board shall sign the share certificate. Provided, if the composition of the Board permits of it, at least one of the aforesaid two directors shall be a person other than a Managing or a Whole Time Director. Particulars of every share certificate issued shall be entered in the Register of Members against the name of the person, to whom it has been issued, indicating the date of issue. For issue of any further duplicate certificate, the Board shall be entitled to charge such amount which shall not exceed fifty Rupees per Certificate. (b) A Director may sign a share certificate by affixing his signature thereon by means of any machine, equipment or other mechanical means such as engraving in metal or lithography, but not by means of a rubber stamp. PROVIDED that the Director shall be personally responsible for the safe custody of such machine equipment or other material used for the purpose. 7.2 Renewal of Share Certificates (a) No certificate of any share or shares shall be issued either in exchange for those which are sub-divided or consolidated or in replacement of those which are defaced, mutilated, torn or old, decrepit, destroyed or where the pages on the reverse for recording transfers have been duly utilized, unless the certificate in lieu of which it is issued is surrendered to the Company and for issuing such share certificate the company may charge such fee as the Board thinks fit, not exceeding twenty rupees per certificate. (b) When a new share certificate has been issued in pursuance of clause (a) of this Article, it shall state on the

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			face of it and against the stub or counterfoil to the effect that it is issued in lieu of share certificate No _____ sub-divided/replaced/on consolidation. (c) If a share certificate is lost or destroyed a new certificate in lieu thereof shall be issued only with the prior consent of the Board and on such reasonable terms, such as furnishing supporting evidence and indemnity and the payment of out-of-pocket expenses incurred by the Company in investigating evidence produced, as the Board thinks fit. (d) When a new share certificate has been issued in pursuance of clause (c) of this Article, it shall state on the face of it and against the stub or counterfoil to the effect that it is duplicate issued in lieu of share certificate No._____ and the word duplicate shall be stamped or printed prominently on the face of the share certificate. (e) Where a new share certificate has been issued in pursuance of clause (a) and/ or clause (c) of this Article, particulars of every such share certificate shall be entered in a Register of Renewed and Duplicate Share Certificates indicating against the name(s) of the person(s) to whom the certificate is issued, the number and
		7	date of issue of the share certificate in lieu of which the new certificate is issued and the necessary changes indicated in the Register of Members by suitable cross reference in the Remarks column. (f) All blank forms to be used for issue of share certificates shall be printed and the printing shall be done only on the authority of a resolution of the Board and the blank forms shall be consecutively machine-numbered and the forms and the blocks, engravings, facsimiles relating to the printing of such forms shall be kept in the custody of the Secretary or of such other person as the Board may appoint for the purpose; and the Secretary or the other person aforesaid shall be responsible for rendering an account of these forms to the Board. (g) The Committee of the Board, Company Secretary of the Company or a Director specifically authorized by the Board for such purpose shall be responsible for the maintenance, preservation and safe custody of all books and documents relating to the issue of share certificates including the blank forms of share certificates referred to in clause (f). (h) All books referred to in clause (g) shall be preserved in good order for not less than thirty years and in disputed cases shall be preserved permanently. 7.3 Joint holders (a) Where two or more persons are registered as the holders of any share, they shall be treated as a single shareholder and shall be deemed to hold the same as joint holders with benefits of survivorship subject to the following and other provisions contained in these Articles. (b) The Company shall be entitled to decline to register more than four persons as the holders of any share. (c) The Joint holders of any share shall be liable, severally as well as jointly, for and in respect of all calls and other payments which ought to be made in respect of such shares. (d) On the death of any such joint holder, the survivor or survivors shall be the only person or persons recognized by the Company as having any title to the share, but the Directors may require such evidence of death as they may deem fit and nothing herein contained shall be taken to release the estate of the deceased joint holder from any liability on shares held by him jointly with any other person. (e) Delivery of share certificate to any one of such joint holders shall be deemed to be delivery to all of them and any one of such joint holders may give effectual discharge and receipts for any dividends or other moneys payable in respect of such shares and/or in respect of any other obligation of the Company towards them. (f) Only the person whose name stands in the Register of Members as the first of the joint holders of any shares shall be entitled to delivery of the certificate relating to such share or to receive notices from the Company, and any notice given to such person shall be deemed proper notice to all joint holders. (g) Any one of two or more joint holders may vote at any meeting either personally or by proxy in respect of such share as if he were solely entitled thereto, and if more than one of such joint holders be present at any meeting personally or by proxy, the holder whose name stands first or higher (as the case may be) on the Register of Members in respect of such share shall alone be entitled to vote in respect thereof. PROVIDED always that a member present at any meeting personally shall be entitled to vote in preference to a person present by proxy although the name of such person present by proxy stands first on the Register of Members in respect of such shares.

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☐	☐	8	Subject to the provisions of section 55, any preference shares may, with the sanction of an ordinary resolution, be issued on the terms that they are to be redeemed on such terms and in such manner as the company before the issue of the shares may, by special resolution, determine.
			Lien
☐	☒	9	9. Company to have lien on shares The Company shall have a first and paramount lien upon all shares (other than fully paid up shares) registered in the name of each member (whether solely or jointly with others) and upon the sale proceeds thereof, for all moneys (whether presently payable or not) called or payable at a fixed time in respect of all such shares (not being fully paid up) for all moneys presently payable by him or his estate to the Company. Any such lien shall extend to all dividends payable and bonuses declared from time to time declared in respect of such shares.
☐	☒	10	10. Enforcing lien by sale For the purpose of enforcing such lien, the Board may sell the shares subject thereto in such manner as they shall think fit, and for that purpose it may cause to be issued a duplicate certificate in respect of such shares and may authorize one of their Directors to execute a transfer thereof on behalf of and in the name of the Board. No sale shall be made until notice period for making call as aforesaid have expired and until notice in writing of the intention to sell shall have been made known to the shareholder for default in payment and default has been made by him in the payment of money called in respect of such shares for thirty days after the date of such notice. Upon issue of a duplicate certificate or certificates in lieu of the original share, the certificate or certificates originally issued shall stand cancelled and become null and void and the same shall have no effect.
☒	☐	11	
☐	☒	12	12. Application of proceeds of sale The net proceeds of any such sale shall be received by the Company and applied in or towards payment of such part of the amount as is presently payable and the residue, if any, shall (subject to a like lien for sums not presently payable as existed upon the shares before sale) be paid to the person entitled to the shares,at the date of the sale.
			Calls on shares
☐	☒	13	13.1 Directors may make calls The Board may, from time to time, subject to the terms on which any shares may have been issued and subject to the conditions of allotment, by a resolution passed at a meeting of the Board (and not by resolution by circulation) make such call as it thinks fit upon the Members in respect of all moneys unpaid on the shares held by them respectively and each member shall pay the amount of every call so made on him to the person or persons and at the times and places appointed by the board. A call may be made payable by installments. 13.2 Notice of calls Not less than thirty days? notice in writing of any call shall be given by the Company specifying the time and place of payment, and the person or persons to whom such call shall be paid. 13.3 When call made A call shall be deemed to have been made at the time when the resolution of the Board authorizing such call was passed at a meeting of the Board and demand notice is issued. 13.4 Calls may be revoked or postponed A call may be revoked or postponed at the discretion of the Board. 13.1 Directors may make calls The Board may, from time to time, subject to the terms on which any shares may have been issued and subject to the conditions of allotment, by a resolution passed at a meeting of the Board (and not by resolution by circulation) make such call as it thinks fit upon the Members in respect of all moneys unpaid on the shares held by them respectively and each member shall pay the amount of every call so made on him to the person or persons and at the times and places appointed by the board. A call may be made payable by installments.

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			13.2 Notice of calls Not less than thirty days? notice in writing of any call shall be given by the Company specifying the time and place of payment, and the person or persons to whom such call shall be paid. 13.3 When call made A call shall be deemed to have been made at the time when the resolution of the Board authorizing such call was passed at a meeting of the Board and demand notice is issued. 13.4 Calls may be revoked or postponed A call may be revoked or postponed at the discretion of the Board.
☐	☒	14	14. Directors may extend time The Board may, from time to time at its discretion, extend the time fixed for the payment of any call, and may extend such time as to all or any of the Members for reasons which the Board may consider satisfactory, but no Member shall be entitled to such extension save as a matter of grace.
☒	☐	15	
☐	☒	16	16. Calls to carry interest If any Member fails to pay any call due from him on the day appointed for payment thereof, or any such extension thereof as aforesaid, he shall be liable to pay interest on the same from the day appointed for the payment thereof to the time of actual payment at rate not exceeding 10 per cent per annum as maybe decided by the Board, but the Board may in its absolutediscretion and in special circumstances waive or reduce the levy of interest as deemed appropriate.
☐	☒	17	17. Sums deemed to be call Any sum, which by the terms of issue of a share becomes payable on allotment or at any fixed date, whether on account of the nominal value of the share or by way of premium, shall, for the purposes of these Articles be deemed to be a call duly made and payable on the date on which by the terms of issue the same becomes payable, and in case of non-payment all the relevant provisions of these Articles as to payment of interest and expenses, forfeiture or otherwise shall apply as if such sum had become payable by virtue of a call duly made and notified.
☐	☒	18	18.1 Partial payment not to preclude Forfeiture Neither the receipt by the Company of a portion of any money which shall from time to time be due from any Member to the Company in respect of his shares, either by way of principal or interest nor any indulgence granted by the Company in respect of the payment of any such money, shall preclude the Company from thereafter proceeding to enforce a forfeiture of such shares as hereinafter provided. 18.2 Payment in anticipation of calls may carry interest The Board may, if it thinks fit, agree to and in anticipation receive from any Member willing to advance the same, all of calls money or any part of the amounts of his respective shares beyond the sums actually called up, and upon the moneys so paid in advance, or upon so much thereof, from time to time, and at any time thereafter as exceeds the amount of the calls then made upon and due in respect of the shares on account of which such advances are made, the Board may pay or allow interest, at such rate as the Member paying the sum in advance and the Board agree upon. The Board may agree to repay at any time any amount so advanced or may at any time repay the same upon giving to the Member three months? notice in writing. PROVIDED that moneys paid in advance of calls on any shares may carry interest but shall not confer a right to dividend or to participate in profits. (b) No Member paying any such sum in advance shall be entitled to voting rights in respect of the moneys so paid by him until the same would but for such payment become presently payable.
			Transfer of shares

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☐	☒	19	19.1 Register of Transfers The Company shall maintain a Register of Transfers and therein shall be fairly and distinctively enter the particulars of every transfer or transmission of any share in the physical form. 19.2 Form of transfer The instrument of transfer shall be in writing and in such form as prescribed under the Act. All the provisions of Section 56 of the Act shall be duly complied with in respect of all transfers and of the registration thereof. The Company shall not charge any fee for registration of a transfer of shares or debentures. 19.3 Instrument of Transfer to be completed and presented to the Company The Instrument of Transfer duly stamped and executed by the transferor and the transferee shall be delivered to the Company in accordance with the provisions of the Act. The instrument of transfer shall be accompanied by the Share Certificate or such evidences the Board may require to prove the title of transferor and his right to transfer the shares and every registered Instrument of Transfer shall remain in the custody of the Company until destroyed by order of the Board. Any instrument of transfer which the Directors may decline to register shall be returned to the person depositing the same. 19.4 Transferor deemed to be holder The transferor shall be deemed to be the holder of such shares until the name of the transferee shall have entered in the Register of Members in respect thereof. Before the registration of a transfer, the certificate or certificates of the shares must be delivered to the Company along with Transfer Deed. 19.5 No transfer to insolvent etc. No transfer shall be made to a person of unsound mind or to an insolvent.
☐	☒	20	20. Closure of Register of Members/Debenture holders The Directors shall have power, on giving not less than seven days? previous notice as required by Section 91 of the Act, to close the Register of Transfer, Register of Members or Register of Debenture holders or the register of other security holders of the Company for any period or periods not exceeding in the aggregate forty-five days in each year (but not exceeding thirty days at any one time) as they may determine.
☐	☒	21	21. Nomination by shareholder Every share-holder or debenture holder may at any time, nominate in the prescribed manner, a person to whom his shares or debenture shall vest in the event of his death, as provided in Section 72 of the Act.
☐	☒	22	22. Title to shares of deceased holder In the event there is no nomination, the executors or administrators of a deceased Member or the holder of a Succession Certificate in respect of the shares of a deceased Member (not being one of two or more joint holders) shall be the only persons whom the Company will be bound to recognize as having any title to the shares registered in the name of such Member, and the Company shall not be bound to recognize such executors or administrators or holders unless such executors, administrators or holders shall have first obtained probate or Letters of Administration or Succession Certificate as the case may be, from a duly constituted Court in India. PROVIDED that the Directors may, at their absolute discretion dispense with production of Probate, Letters of Administration or Succession Certificate upon such terms as to indemnity or otherwise as they think fit and may enter the name of the person who claims to be absolutely entitled to the shares standing in the name of a deceased Member, as a Member
			Transmission of shares
☐	☒		23.1 Transmission of Shares Subject to the provisions of the Act, any person becoming entitled to any share in consequence of the death, lunacy or insolvency of any Member or by any lawful means other than by a transfer in accordance with these Articles, may, with the consent of the Directors (which they shall be under no obligation to give) and upon producing such evidence that he sustains the character in respect of which he proposes to act under this.

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		23	Article or of his title as the Directors may require, and upon such indemnity as the Directors may require, either be registered as a Member in respect of such shares or elect to have some person nominated by him and approved by the Directors registered as a Member in respect of such shares. PROVIDED that if such persons shall elect to have his nominee registered, he shall testify his election by executing in favor of his nominee an instrument of transfer in accordance with these Articles, and until he does so he shall not be freed from any liability in respect of such shares.
☐	☒	24	24. Right of Board to decline or suspend registration (i) Any person becoming entitled to a share in consequence of the death or insolvency of a member may, upon such evidence being produced as may from time to time properly be required by the Board and subject as hereinafter provided, elect, either- (a) to be registered himself as holder of the share; or (b) to make such transfer of the share as the deceased or insolvent member could have made. (ii) The Board shall, in either case, have the same right to decline or suspend registration as it would have had, if the deceased or insolvent member had transferred the share before his death or insolvency.
☐	☒	25	25. The Company not liable for disregard of notice prohibiting registration of transfer The Company shall incur no liability or responsibility whatever in consequence of its registering or giving effect to any transfer of shares made or purported to be made by any apparent legal owner thereof (as shown or appearing in register of Members) to the prejudice of persons having or claiming any equitable right, title or interest to or in the same shares, notwithstanding that the Company may have had notice of such equitable right, title or interest or notice prohibiting registration of such transfer, and may have entered such notice or referred to it in any book, or attended or given effect to any notice which may have been given to it of any equitable right, title or interest or be under any liability whatsoever for refusing or neglecting so to do though it may have been entered or referred to in some book of the Company, but the Company shall nevertheless be at liberty to regard and attend to any such notice and give effect thereto, if the Directors shall so think fit.
☐	☒	26	26. Rights of successors A person becoming entitled to a share by reason of the death or insolvency of the holder shall be entitled to the same dividends and other advantages to which he would have been entitled if he were the registered holder of the shares, except that he shall not, before being registered as a Member in respect of the shares, be entitled to exercise any right conferred by membership in relation to meetings of the Company. PROVIDED that the Directors shall, at any time, give notice requiring any such person to elect to be registered himself or to transfer the shares, and if the notice is not complied within ninety days from the date of issue of the notice, the Directors may thereafter withhold payment of all dividends, bonuses or other moneys payable in respect of the shares until the requirements of the notice have been complied with.
			Forfeiture of shares
☐	☒	27	27.1 If money payable on shares not paid notice to be given to members If any Member fails to pay any call, or installment of a call, on or before the day appointed for the payment of the same or any such extension thereof as aforesaid, the Board may, at any time thereafter, during such time as any part of the call or installment remains unpaid, serve a notice on him requiring him to pay the same together with any interest which may have accrued and all expenses that may have been incurred by the Company by reason of such non-payment. 27.2 Contents of Notice The notice shall name a further day (not being less than fourteen days from the date of the service of notice) and a place or places on and at which such call or installment and such interest thereon at such rate as the Directors shall determine from the day on which such call or installment ought to have been paid and expenses as aforesaid are to be paid. The notice shall also state that in the event of the non-payment on or before the day, at or before the time and at the place appointed, the shares in respect of which the call was made or installment is payable, shall be liable to be forfeited.
☐	☒	28	28. In default of payment, shares to be Forfeited If the requirement of any such notice as aforesaid are not complied with, every or any share in respect of which such notice has been given may, at any time thereafter, but before payment of all calls or installments, interest and expenses due in respect thereof, be forfeited by a resolution of the Board to that effect. Such forfeiture

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			shall include all dividends declared or any other moneys payable in respect of the aforesaid share and not actually paid before the forfeiture.In default of payment, shares to be Forfeited
☐	☒	29	29. Notice of forfeiture to a Member When any share shall have been so forfeited, notice of the forfeiture shall be given to the Member in whose name it stood immediately prior to the forfeiture, and an entry of the forfeiture, with the date thereof, shall forthwith be made in the Register of Members, but no forfeiture shall be in any manner invalid by any omission or neglect to make any such entry as aforesaid in the Register.
☐	☒	30	30. Forfeited share to be property of the Company and may be sold etc. Any share so forfeited shall be deemed to be the property of the Company, and may be sold, re-allotted, or otherwise disposed of, either to the original holder thereof or to any person, upon such terms and in such manner as the Board shall think fit.
☐	☒	31	31. Member still liable to pay calls owing at the time of forfeiture and interest Any members whose shares have been forfeited shall notwithstanding the forfeiture be liable to pay and shall forthwith pay to the Company, on demand, all calls, installment, interest and expenses owing upon or in respect of such shares at the time of the forfeiture together with interest accrued thereon at the time of the forfeiture at such rate as the Board may determine, and the Board may enforce the payment thereof, if it thinks fit.
☐	☒	32	32.1 Effect of forfeiture The forfeiture of a share shall involve extinction, at the time of the forfeiture, of all interest in and all claims and demands against the Company, in respect of the share and all other rights incidental to the share, except only such of those rights as by these Articles are expressly saved. 32.2 Evidence of forfeiture A declaration in writing by Chairman or Managing Director of the Company or by any person duly authorised in this regard that certain shares in the Company have been duly forfeited on a date stated in the declaration, shall be conclusive evidence of the facts therein stated as against all persons claiming to be entitled to the shares and such declaration, and the receipt of the Company for the consideration, if any, given for the shares on the sale or disposition thereof shall constitute a good title to such shares and the person to whom the shares are sold shall be registered as the holder of such shares and shall not be bound to see as to the application of the purchase money nor shall his title to such shares be affected by any irregularity or invalidity in the proceedings in reference to such forfeiture, sale or disposition. 32.3 Validity of sale under Articles of forfeited shares Upon any sale after forfeiture or for enforcing a lien in purported exercise of the powers herein before given, the board may appoint some person to execute an instrument of transfer of the shares sold and cause the purchaser?s name to be entered in the Register of Members in respect of the shares sold, and the purchaser shall not be bound to see the regularity of the proceedings, or to the application of the purchase money, and after his name has been entered in the Register in respect of such shares the validity of the sale shall not be impeached by any person and the remedy of any person aggrieved by the sale shall be in damages only and against the Company exclusively. 32.4 Cancellation of Share Certificates in respect of forfeited shares Upon any sale, re-allotment or other disposal under the provisions of the preceding Articles, the certificate or certificates originally issued in respect of the relative shares shall (unless the same shall on demand by the Company have been (previously) surrendered to it by the defaulting member) stand cancelled and become null and void and of no effect, and the Directors shall be entitled to issue a duplicate certificate or certificates in respect of the said shares to the person or persons entitled thereto.
☐	☒	33	33. Power to annul forfeiture The Board may at any time before any share so forfeited, shall have been sold, re-allotted or otherwise disposed of, annul the forfeiture thereof upon such terms and conditions as it thinks fit.
			Alteration of capital
☒	☐	34	

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☐	☒	35	The company may, from time to time, by ordinary resolution increase the share capital by such sum, to be divided into shares of such amount, as may be specified in the resolution. 35. Subject to the provisions of section 61, the company may, by ordinary resolution, the Company may from time to time:-- (a) consolidate and divide all or any of its share capital into shares of larger amount than its existing shares; (b) convert all or any of its fully paid-up shares into stock, and reconvert that stock into fully paid-up shares of any denomination; (c) Sub-divide its shares, or any of them into shares of smaller amount than is fixed by the memorandum, so, however, that in the sub-division the proportion between the amount paid and the amount, if any, unpaid on each reduced share shall be the same as it was in the case of the share from which the reduced share is derived.; (d) Cancel any shares which as the date of the passing of the resolution, have not been taken or agreed to be taken by any person and diminish the amount of its share capital by the amount of the shares so cancelled. The resolution whereby any share is sub-divided may determine that, as between the holders of the shares resulting from such sub-division, one or more of such shares shall have some preference or special advantage as regards dividend, capital, voting or otherwise over or as compared with the others or other, subject, to the provisions of the Act. Subject to the provisions of Sections 66 of the Act, the Board may accept from any member the surrender on such terms and conditions as shall be agreed of all or any of his shares. The company may, by special resolution, reduce in any manner and with, and subject to, any incident authorised and consent required by law, -- (a) its share capital; (b) any capital redemption reserve account; or (c) any share premium account.
☒	☐	36	
☒	☐	37	
			Capitalisation of profits
☐	☒	38	38. (1) Any General Meeting of the Company may resolve that any amounts standing to the credit of the Free Reserve or Share Premium Account or the Capital Redemption Reserve Account or any moneys, investment or other assets forming part of the undivided profits including profits or surplus moneys arising from the realization and (when permitted by the law) from the appreciation in value of any capital assets of the Company standing to the credit of the General Reserve or any other Reserve or Reserve Fund or any other Fund of the Company or in the hands of the Company and available for dividend be capitalized:- (a) by the issue and distribution of shares, as fully paid-up, and to the extent permitted by the Act, debentures, debenture stock, bonds or other obligations of the Company ; or (b) by crediting share of the Company, which may have been issued and are not fully paid-up, with the whole or any part of the sum remaining unpaid thereon; PROVIDED that any amounts standing to the credit of the Share Premium Account or the Capital Redemption Reserve Account shall be applied only in crediting the payment of capital on shares to be issued to Members as fully paid bonus shares (Further capitalization of reserve created by the revaluation of assets are not to be used for issuance of Bonus Shares as per section 63 of the Act). (2) Such issue and distribution under sub-clause (1) (a) of this Article and payment to the credit of unpaid share capital under sub-clause (1) (b) of this Article shall be made among and in favour of the Members or any class of them or any of them entitled thereto and in accordance with their respective rights and interests and in proportion to the amount of capital paid-up on the shares held by them respectively in respect of which such distribution or payment shall be made, on the footing that such Members become entitled thereto as capital. (3) The Directors shall give effect to any such resolution and for the said purpose the Board may settle any

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			difficulty which may arise in regard to distribution as it thinks expedient including in regard to fractional entitlements, and shall apply such profits, General Reserve, other Reserve or any other Fund or account as aforesaid as may be required for the purpose of making payment in full on the shares, or other obligations of the Company so distributed under sub clause (1) (a) of this Article or (as the case may be) for the purpose of paying, in whole or in part, the amount remaining unpaid on the shares which may have been issued and are not fully paid-up under sub-clause (1)(b) above. PROVIDED that no such distribution or payment shall be made unless recommended by the Directors, and, if so recommended, such distribution and payment shall be accepted by such Members as aforesaid in full satisfaction of their interest in the said capitalized fund. (4) For the purpose of giving effect to any such resolution, the Directors may settle any difficulty which may arise in regard to the distribution or payment as aforesaid as they think expedient, and, in particular, they may issue fractional certificates and may fix the value for distribution of any specific asset and may determine that any cash payment be made to any Members on the footing of the value so fixed and may vest any such cash, shares, debentures stock, bonds or other obligations in trustees upon such trusts for the persons entitled thereto as may seem expedient to the directors, and generally may make arrangement for the acceptance, allotment and sale of such shares, debentures, debentures stock, bonds or other obligations and fractional certificates or otherwise as they may think fit. (5) When deemed requisite, a proper contract shall be filed in accordance with the Act and the Board may appoint any person to sign such contract on behalf of the Members entitled as aforesaid.
☐	☒	39	39. Subject to the provisions of the Act and these Articles, in cases where some of the shares of the Company are fully paid and others are partly paid, such capitalization may be effected by the distribution of further shares in respect of the fully paid shares and by crediting the partly paid shares with the whole or part of the unpaid liability thereon, but so that as between the holders of the fully paid shares and the partly paid shares, the sums so applied in the payment of such further shares and in the extinguishment or diminution of the liability on the partly paid shares shall be applied pro rata in proportion to the amount then already paid or credited as paid on the existing fully paid and partly paid shares respectively.
			Buy-back of shares
☐	☒	40	40. Notwithstanding anything contained in these articles but subject to the provisions of sections 68 to 70 and any other applicable provision of the Act or any other law for the time being in force, the company may purchase its own shares or other specified securities.
			General meetings
☐	☒	41	41.1 Annual General Meeting The Company shall in each year hold a General Meeting as its Annual General Meeting in addition to any other meeting in that year. All General Meetings other than Annual General Meetings shall be called Extraordinary General Meetings. If for any reason beyond the control of the Board, the general meeting (including an Annual General meeting) cannot be held on the appointed day, the Board shall have power to postpone the General meeting of which a notice should be given to the members. Every member of the Company shall be entitled to attend either in person or by proxy and the Auditor of the Company shall have the right to attend and to be heard at any General Meeting which he attends on any part of the business which concerns him as Auditor. 41.2 Extraordinary General Meeting The Board may, whenever it thinks fit, call an Extraordinary General Meeting of the Company. The Board shall at the requisition in writing by a Member or Members holding in the aggregate not less than one-tenth of such of the paid-up capital of the company on that date and carries the right of voting in regard to the matter in respect of which the requisition has been made.
☐			42.1 Requisition of Members to state object of Meeting Any valid requisition so made by Members must state the object or objects of the meeting proposed to be called, and must be signed by the requisitionists and deposited at the registered office of the company. PROVIDED that such requisition may consist of several documents in like form, each signed by one or more requisitionists.

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			42.2 On receipt of requisition Directors to call meeting and in default requisitionists may do so Upon the receipt of any such requisition, the Board shall forthwith call an Extraordinary General Meeting, and if they do not proceed within twenty-one days from the date of the requisition being deposited at the Registered Office to cause a meeting to be called on a day not later than forty-five days from the date of deposit of the requisition, the requisitionists, or such of their number as represent either a majority in value of the paid-up share capital held by all of them or one-tenth of such of the paid-up share capital of the Company as is referred to in Section 100(2) of the Act, whichever is less, may themselves call the meeting, but in either case, any meeting so called shall be held within three months from the date of the deposit of the requisition, as aforesaid. 42.3 Meeting called by requisitionists Any meeting called under the foregoing Articles by the requisitionists shall be called in the same manner, as nearly as possible, as that in which meetings are to be called by the Board. 42.4 Twenty-one days notice of meeting to be given
		42	A general meeting of a Company may be called by giving not less than clear twenty-one days? notice either in writing or through electronic mode in such a manner as may be prescribed, Every notice of a meeting shall specify the place, date, day and the hour of meeting, and shall contain statement of the business to be transacted at such meeting. And, The notice of every meeting shall be given to every member of the Company, Legal Representative of any deceased member or the assignee of an insolvent member, auditor or auditors of the Company and every director of the Company and all such persons as are under these Articles entitled to receive notice from the Company "Provided that a general meeting may be called after giving shorter notice than that specified in this sub-section if consent, in writing or by electronic mode, is accorded thereto? (i) in the case of an annual general meeting, by not less than ninty-five per cent. of the members entitled to vote thereat; and (ii) in the case of any other general meeting, by members of the company? (a) holding, if the company has a share capital, majority in number of members entitled to vote and who represent not less than ninety-five per cent. of such part of the paid-up share capital of the company as gives a right to vote at the meeting; or (b) having, if the company has no share capital, not less than ninty-five per cent. of the total voting power exercisable at that meeting: Provided further that where any member of a company is entitled to vote only on some resolution or resolutions to be moved at a meeting and not on the others, those members shall be taken into account for the purposes of this sub-section in respect of the former resolution or resolutions and not in respect of the latter.".
			Proceedings at general meetings
☐	☒		43.1 Business to be transacted at the General Meeting and nature thereof In the case of an Annual General Meeting, all business to be transacted thereat shall be deemed special, other than (i) the consideration of the financial statements and the reports of the Board of Directors and Auditors; (ii) the declaration of any dividend; (iii) the appointment of Directors in place of those retiring; (iv) the appointment of, and the fixing of the remuneration of, the Auditors, and in the case of any other meeting, all business shall be deemed to be Special Business, and there shall be annexed to the notice of the Meeting an Explanatory statement setting out all material facts concerning each such item of special business, including in particular the nature of the concern or interest, financial or otherwise, if any, therein of (i) every Director, and the Manager (if any); (ii) every other key managerial personnel; and relatives of the persons mentioned in sub clauses (i) and (ii). Where any such item of Special Business relates to, or affects any other company, the extent of shareholding interest in such other company of every promoter, director and the manager, if any, and of every other key managerial personnel of the Company shall also be set out in the statement if the extent of such shareholding interest is not less than two per cent of the paid-up share capital of that other company and where any item of business consists of the according of approval to any documents by the meeting, the time and place where the document can be inspected shall be specified in the statement aforesaid. The annual general meeting shall be called during business hours on any day that is not a National Holiday and it is to be held either at the registered office of the company or at some other place within the city in which the registered office of the company is situate.

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		43	43.2 Omission to give notice not to invalidate a resolution passed The accidental omission to give any such notice as aforesaid to any of the Members, or the non-receipt thereof, shall not invalidate any resolution passed at any such meeting. 43.3 Meeting not to transact business not mentioned in notice No General Meeting, Annual or Extraordinary, shall be competent to enter upon, discuss or transact any business which has not been mentioned in the notice or notices, upon which it was convened. 43.4 Body Corporate deemed to be personally present A body corporate being a Member shall be deemed to be personally present if it is represented in accordance with Section 113 of the Act. 43.5 Quorum at General Meeting No business shall be transacted at any general meeting unless a quorum of members is present at the time when the meeting proceeds to business. Save as otherwise provided herein, the quorum for the general meetings shall be as provided in section 103 of the Companies Act, 2013 43.6 If quorum not present meeting to be dissolved or adjourned If, at the expiration of half an hour from the time appointed for holding a general meeting of the Company, a quorum is not present, the meeting, if convened by or upon the requisition of Members, shall stand dissolved, but in any other case, the meeting shall stand adjourned to the same day in the next week or, if that day is a public holiday, until the next succeeding day which is not a public holiday, at the same time and place, or to such other day and at such other time & place as the Board may determine, and if at such adjourned meeting a quorum is not present at the expiration of half an hour from the time appointed for holding the meeting, the Members present shall form the quorum, and may transact the business for which the meeting was called.
☐	☒	44	44.1 Chairman of General Meeting The Chairman of the Board shall be entitled to take the Chair at every General Meeting whether Annual or Extraordinary. If at any meeting the Chairman is not present within fifteen minutes of the time appointed for holding such meeting or he has informed that he shall be unable or unwilling to take the Chair then any one of directors with mutual consent shall so preside at the meeting. If no Director be present or if all the Directors present decline to take the Chair, then the Members present shall elect one of the members to be the Chairman of the Meeting 44.2 No Business whilst chair vacant No business shall be discussed at any General Meeting except the election of a Chairman, whilst the Chair is vacant. 44.3 Chairman with consent may adjourn meeting The Chairman, with the consent of the Members, may adjourn any meeting from time to time and from place to place within the city, town or village in which the Registered Office of the Company is situated, but no business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place. Notwithstanding, the provision as above in the event of disorder at a validly convened meeting the Chairman may adjourn the meeting provided that such an adjournment shall not be a longer period than the Chairman considers necessary to being order at the meeting and Chairman communicates his decision to those present in so far as it is possible. 44.4 Questions at General Meeting how Decided Every question submitted to a meeting shall be decided in the first instance unless a poll is demanded, on a show of hands. Before or on the declaration of the result of the voting on any resolution on a show of hands, a poll may be ordered to be taken by the Chairman of the meeting on his own motion and shall be ordered to be taken by him on a demand made in that behalf by any member or members present in person or by proxy, and holding shares in the Company, which confer a power to vote on the resolution not being less than one-tenth of the total voting power in respect of the Resolution or on which an aggregate sum of not less than five lakh rupees has been paid up. The demand for a poll may be withdrawn at any time by the person or persons

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			making the demand. Unless a poll is so demanded, a declaration by the Chairman that a resolution has, on show of hands, been carried through unanimously or by a particular majority or lost and an entry to that effect in the Minutes Book of the Company shall be conclusive evidence of the fact without proof of the number or proportion of the votes recorded in favour of or against the resolution. 44.5 Chairman s Casting Vote In the case of an equality of votes, the Chairman shall have a casting vote in addition to the vote or votes to which he may be entitled otherwise.
☐	☒	45	45.1 Poll to be taken, if demanded If a poll is demanded as aforesaid, the same shall be taken at such time (not later than forty-eight hours from the time when the demand was made) and place in the city or town in which the Registered office of the Company is for the time being situated, as the Chairman shall direct, either at once or after an interval or adjournment and the result of the poll shall be deemed to be the resolution of the meeting. 45.2 In which case poll taken without Adjournment Any poll duly demanded on the election of the Chairman of a meeting or on any question of adjournment shall be taken at the meeting forthwith. 45.3 Demand for poll not to prevent transaction of other business The demand for a poll except on the questions of the election of the Chairman and of an adjournment shall not prevent the continuance of a meeting for the transaction of any business other than the question on which the poll has been demanded.
☐	☒	46	46.1 Minutes of General Meetings (a) The Company shall cause minutes of the proceedings of every General Meeting or every resolution passed by postal ballot to be kept by making within thirty days of the conclusion of every such meeting concerned, record thereof kept with Minute Book for that purpose with their pages consecutively numbered. (b) Each page of every such book shall be initialed or signed and the last page of the record of proceedings of each meeting in such book shall be dated and signed by the Chairman of the same meeting within the aforesaid period of thirty days or in the event of the death or inability of that Chairman within that period, by a Director duly authorised by the Board for the purpose. (c) In no case the minutes of proceedings of a meeting shall be attached to any such book as aforesaid by pasting or otherwise. (d) The minutes of each meeting shall contain a fair and correct summary of the proceedings thereat. (e) All decisions taken and appointments of officers made at any meeting aforesaid shall be included in the minutes of the meeting. (f) Nothing herein contained shall require or be deemed to require the inclusion in any such minutes of any matter which in the opinion of the Chairman of the meeting (a) is or could reasonably be regarded as defamatory of any person, or (b) is irrelevant or immaterial to the proceedings, or (c) is detrimental to the interests of the Company. The Chairman of the meeting shall exercise an absolute discretion in regard to the inclusion or non-inclusion of any matter in the minutes on the aforesaid grounds. (g) Any such minutes shall be evidence of the proceedings recorded therein. Where the minutes have been kept in accordance with section then, until the contrary is proved, the meeting shall be deemed to have been duly called and held, all appointments of directors, key managerial personnel, auditors or company secretary in practice, shall be deemed to be valid. No document purporting to be a report of the proceedings of any general meeting of a company shall be circulated or advertised at the expense of the company, unless it includes the matters required to be contained in the minutes of the proceedings of such meeting. The company shall observe secretarial standards with respect to general and Board meetings specified by the Institute of Company Secretaries of India constituted under section 3 of the Company Secretaries Act, 1980, and approved as such by the Central Government. (h) The book containing the minutes of the proceedings of any general meeting of the Company or of a resolution passed by postal ballot, shall be kept at the registered office of the Company and shall be open, during business hours, to the inspection by any member without any charge, for such period not being less than two hours in each business day are allowed for inspection.

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			Adjournment of meeting
☐	☒	47	47. Adjournment of Meeting (i) The Chairperson may, with the consent of any meeting at which a quorum is present, and shall, if so directed by the meeting, adjourn the meeting from time to time and from place to place. (ii) No business shall be transacted at any adjourned meeting other than the business left unfinished at the meeting from which the adjournment took place. (iii) When a meeting is adjourned for thirty days or more, notice of the adjourned meeting shall be given as in the case of an original meeting. (iv) Save as aforesaid, and as provided in section 103 of the Act, it shall not be necessary to give any notice of an adjournment or of the business to be transacted at an adjourned meeting.
			Voting rights
☐	☒	48	48. Members in arrears not to vote No member shall be entitled to vote either personally or by proxy at any General Meeting or Meeting of a class of shareholders either upon a show of hands or upon a poll in respect of any shares registered in his name on which any calls or other sums presently payable by him have not been paid or in regard to which the Company has exercised any right of lien.
☐	☒	49	49. Number of votes to which Member Entitled Subject to the provisions of these Articles and without prejudice to any special privileges or restrictions as to voting for the time being attached to any class of shares for the time being forming part of the capital of the Company, every Member shall be entitled to be present, and to speak and vote at such meeting by show of hand for which the Member present in person shall have one vote. On a poll taken at a meeting of a company, a member entitled to more than one vote, or his proxy, need not to use all his votes or cast in the same way all the votes he uses.
☐	☒	50	50. Votes by a Member entitled to more than one vote On a poll taken at a meeting of the Company, a Member entitled to more than one vote by virtue of his share-holding or his proxy or other person entitled to vote for him, as the case may be, need not, if he votes, use all his votes or cast in the same way all the votes he uses and he may vote in different manner as he deems fit.
☐	☒	51	51. Vote of Member who is a minor If any shareholder be a minor, the vote in respect of his share or shares shall be by his guardian, or any one of his guardians, if more than one, to be selected in case of dispute by the Chairman of the meeting.
☐	☒	52	52. Votes of Joint Members If there be joint registered holders of any shares, the vote of the senior who tenders a vote, whether in person or by proxy, shall be accepted to the exclusion of the votes of the other joint holders. For this purpose, seniority shall be determined by the order in which the names stand in the register of members.
☐	☒	53	53. Voting in person or by proxy or Representative Subject to the provisions of these Articles, votes may be given either personally or by proxy. A body corporate being a Member may vote either by proxy or by a representative duly authorised in accordance with Section 113 of the Act and such representative shall be entitled to exercise the same rights and powers (including the right to vote by proxy) and by postal ballot, on behalf of the body corporate which he represents as that body could exercise if it were an individual Member of the Company.
☐	☒		54.1 Votes in respect of shares of Deceased Any person entitled under the Transmission Clause to transfer any shares may vote at any General Meeting in respect thereof in the same manner as if he were the registered holder of such shares. PROVIDED that forty-eight hours at least before the time of holding the meeting or adjourned meeting, as the case may be, at which he proposes to vote he shall satisfy the Chairman of his right to transfer such shares and give such indemnity (if any) as the Chairman may require or the Chairman shall have previously admitted his right to vote at such meeting in respect thereof.

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		54	54.2 Time for objection to vote No objection shall be made to the validity of any vote, except at the meeting or poll at which such vote was tendered, and every vote whether given personally or by proxy, not disallowed at such meeting or poll, shall be deemed valid for purposes of such meeting or poll whatsoever. 54.3 Chairman of the meeting to be the judge of the validity of any Vote The Chairman of any meeting shall be the sole judge of the validity of every vote tendered at such meeting. The Chairman present at the taking of a poll shall be the sole judge of the validity of every vote tendered at such poll.
			Proxy
☐	☒	55	55.1 Appointment of proxy A person can act as proxy on behalf of members not exceeding fifty and holding in the aggregate not more than ten percent of the total share capital of the company carrying voting rights: Provided that a member holding more than ten percent of the total share capital of the Company carrying voting rights may appoint a single person as proxy and such person shall not act as proxy for any other person or shareholder. Every proxy shall be appointed in writing under the hand of the Member or if such Member is a body corporate under the common seal of such corporation, or be signed by an appointer or his attorney duly authorised in writing. The proxy so appointed shall not have any right to speak at the meetings. 55.2 Deposit of instrument of Proxy etc. The instrument appointing a proxy and the power of attorney or other authority (if any), under which it is signed or a notarized copy of that power or authority, shall be deposited at the Registered Office of the Company not later than forty-eight hours before the time for holding the meeting at which the person named in the instrument proposes to vote, and in default, the instrument of proxy shall not be treated as valid. No instrument appointing a proxy shall be valid after the expiration of twelve months from the date of its execution.
☐	☒	56	56. Form of proxy An instrument appointing a proxy shall be in the form No. MGT-11 as prescribed in the rules made under section 105 of the Companies Act, 2013
☐	☒	57	57. Proxy either for specified meeting or for a period An instrument of proxy may appoint a proxy either for the purpose of a particular meeting specified in the instrument and any adjournment thereof or it may appoint for the purpose of every meeting of the Company, or of every meeting to be held before a date specified in the instrument and every adjournment of any such meeting. 57.2 Validity of votes given by proxy notwithstanding death of Member A vote given in accordance with the terms of an instrument of proxy shall be valid, notwithstanding the previous death or insanity of the principal or the revocation of the proxy or of the authority under which the proxy was executed, or the transfer of the shares in respect of which the proxy is given. Provided that no intimation in writing of such death, insanity, revocation or transfer shall have been received by the company at its office before the commencement of the meeting or adjourned meeting at which the proxy is used.
			Board of Directors
☐	☒		58.1 Management of Affairs The day to day management of the business and affairs of the Company shall be vested with Project-in-charge under the supervision, direction & control of the Board. The Board, may exercise all such powers of the Company and do all such acts, deeds and things as are not prohibited by the Act or any other statute or by the Memorandum of Association of the Company and without prejudice to the foregoing, shall be responsible for

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		58	all policy matters and the supervision, direction and control of the conduct of the business, affairs & operations of the Company. 58.2 First Directors Shri Sanjay Nayak, Shri Dharuman Manavalan and Shri Sachin Shukla shall be the First Directors of the Company
☐	☒	59	59.1 Number and appointment of Directors The Board of Directors of the Company shall consist of not less than 3 but not more than 15 Directors. A Director shall not be required to hold any qualification shares in the Company. Notwithstanding anything to the contrary contained in these Articles, so long as any moneys remain owing by the Company to a Financial Institution or any other person by the Company or the Company has entered into any agreement or undertaking or arrangement (hereinafter refer as ?agreement?) with Bodies (like State Electricity Board/Nigam) or the Board of Directors have decided to seek nomination on the Board from the beneficiary state or any Financial Institution or PFC Consulting Limited or person holds Debentures in the Company by direct subscription or private placement, the Company may agree to grant to such Financial Institution, PFC Consulting Limited, person or other Bodies as a condition of such loan or subscription to Debenture or any other agreement or to a Debenture Trustee, the right to appoint from time to time any person or persons as Director or Directors of the Company, (which director or directors is /are hereinafter referred to as ?Nominee Director/s?), retiring or non-retiring, subject to and on such terms and conditions as the Company may agree with such Financial Institutions, PFC Consulting Limited, Person, other Bodies and/or Debenture Trustee. The Company shall have a right to remove from office Nominee Director(s) at the option of the Company in consultation with Financial Institutions, PFC Consulting Limited, Bodies, persons or Debenture Trustee. Such Nominee Director(s) shall not be required to hold any Share qualification in the Company. Also at the option of the Company such Nominee Director(s) shall not be liable to retirement by rotation of the Directors. Subject as aforesaid, the Nominee Director(s) shall be entitled to the same rights and privileges and be subject to the same obligations as any other Director of the Company. The Nominee Director(s) so appointed shall hold the said office only so long as moneys remain owing by the Company to the Financial Institution or so long as the Debenture Trustee hold debenture in the Company or operation of agreement and the Nominee Director/s so appointed in the exercise of the said person shall ipso facto vacate such office immediately the money owing by the Company to the Financial Institution, or on the Debenture Trustee ceasing to hold Debentures/ Shares on the satisfaction of liability of the Company arising out of any Guarantee furnished by the Financial Institutions or satisfactory completion of term of agreement with Bodies. The Nominee Director(s) appointed under this article shall be entitled to receive all notice of and attend all General meeting, Board Meeting and of the meetings of the Committee of which the Nominee Director(s) is/are member(s) as also the minutes of meetings. The financial institutions/Debenture Trustee/persons/bodies shall also be entitled to receive all such notice and minutes. The Company shall pay to the Nominee Director(s) sitting fees and expenses which other Director of the Company are entitled, but if any other fees, commission, remuneration in any form is payable to the Director of the Company the fees, commission, money and remuneration in relation to such Nominee Director(s) shall accrued to Debenture Trustee and same shall accordingly be paid by the Company directly to the debenture trustee. Any expenses that may incurred by the financial institution or such Nominee Director(s) in connection with their appointment or Directorship shall also be paid or reimbursed by the Company to the financial Institution or as the case may be to such Nominee Director(s). Provided that if any such Nominee Director(s) is/are an officer of the Financial Institution, the sitting fees in relation to such Nominee Director(s) shall also accrue to the Financial Institute and the same shall accordingly be paid by the Company directly to that Financial Institution. Provided further that if such Nominee Director(s) is/are an official of any of the Reserve Bank of India, the sitting fees in relation to such Nominee Director(s) shall also accrue to Financial Institution to whom he represents as Nominee Director from Reserve Bank of India and the same shall accordingly be paid by the Company directly to that Financial Institution. Provided also that in the event of the Nominee Director(s) being appointed as Whole Time Director(s) such Nominee Director(s) shall exercise such powers and duties as may be approved by the Lenders or Bodies in consultation with Board and have such rights as are usually exercised or available to a Whole Time Director, in management of the Borrower or Bodies and such Nominee Director(s) shall be entitled to receive such

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			remuneration fees commission and moneys as may be approved by the Lenders or Bodies in consultation with Board. 59.2 Company may increase the number of Directors Subject to Section 149 of the Act, the Company may subject to special resolution in General Meeting increase the maximum number of Directors. Further the Company may, subject to the provisions of Section 169 of the Act, by passing the ordinary resolution in the General Meeting of the members, may remove any Director before the expiration of his period of office and appoint another person in the place of director so removed. 59.3 Appointment of Alternate Directors In accordance with Section 161 and other applicable provisions (if any) of the Act, the Board shall have power at any time and from time to time, to, appoint a person, not being a person holding any alternate directorship for any other Director in the Company, to act as an alternate director for a director (herelnafter called the original Director) during his absence for a period of not less than three months from India. 59.4 Directors power to fill up casual Vacancies Casual vacancies among Directors may be filled by the Board of Directors at their meeting and any person so appointed shall hold the office as per the provision of section 161. 59.5 Appointment of Additional Director Subject to the provisions of Section 161 and other applicable provisions (if any) of the Act, the Board shall have power at any time and from time to time, to appoint a person as an Additional Director but so that the total number of Directors shall not at any time exceed the maximum number fixed by these Articles. The Additional Director so appointed shall retire from Office at next following Annual General Meeting but shall be eligible for election by the company at that meeting as a Director. 59.6 Directors may act notwithstanding any vacancy The continuing Directors may act notwithstanding any vacancy in their body, but if, and so long as their number is reduced below the minimum number fixed by Article 100 thereof, the continuing Directors may act for the purpose of increasing the number of Directors to that number, or of summoning a General Meeting for that purpose.
☐	☒	60	60.1 Remuneration of Directors Subject to the provisions of the Act, the Chairman or Managing Director or any other functional Directors who is/are in the whole-time employment of the Company may be paid remuneration either by way of a monthly payment or at a specified percentage of the net profit of the Company or partly by one way and partly by the other, keeping in view the limiting provisions governing the Managerial remuneration under the provisions of the Act. Subject to the provisions of the Act, a Director, who is neither in the whole-time employment nor a Chairman cum Managing Director of the Company may be paid remuneration either:- (a) by way of monthly, quarterly or annual payment with the approval of the Central Government, or (b) by way of commission if the Company by a special resolution authorizes such payment; and The sitting fee payable to a Director (excluding Whole-time Director) for attending a meeting of the Board or Committee thereof shall be such sum as may be fixed by the Board provided that the same shall not exceed Rs. 1,00,000/- or such other sum as prescribed in the Act as amended from time to time. 60.2 Travelling expenses incurred by Director going out on Companys Business The Board may allow and pay to any Director who is not a bona-fide resident of the place where the Registered Office of the Company or where the meetings of the Board are actually held and who has to come to such place for the purpose of attending any meeting, such sum as the Board may consider fair compensation for travelling, boarding, lodging and other actual incidental expenses, in addition to his fee for

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			attending such meeting as specified above. If any Director be called upon to go or reside out of the bonafide place of his residence on the Companys business, he shall be entitled to be paid and reimbursed any travelling or other actual expenses incurred by him in connection with the business of the Company.
☐	☒	61	61. When office of Directors to become Vacant Subject to Section 167 of the Act, the office of a Director shall become vacant if:- (a) he incurs any of the disqualifications specified in section 164 under the act; (b) he absents himself from all the meetings of the Board of Directors held during a period of twelve months with or without seeking leave of absence of the Board; (c) he acts in contravention of the provisions of entering into contracts or arrangements in which he is directly or indirectly interested; (d) he fails to disclose his interest in any contract or arrangement in which he isdirectly or indirectly interested; (e) he becomes disqualified by an order of a court or the Tribunal; (f) he is convicted by a court of any offence, whether involving moral turpitude or otherwise and sentenced in respect thereof to imprisonment for not less than six months: Provided that the office shall be vacated by the director even if he has filed an appeal against the order of such court; (g) he is removed in pursuance of the provisions of this Act; (h) he, having been appointed a director by virtue of his holding any office or other employment in the holding, subsidiary or associate company, ceases to hold such office or other employment in that company.
☐	☒	62	62. Directors may contract with Company Except with the consent of the Board of Directors given by a resolution at a meeting of the Board and subject to such conditions, the company shall not enter into any contract or arrangement with a related party with respect to? (a) sale, purchase or supply of any goods or materials; (b) selling or otherwise disposing of, or buying, property of any kind; (c) leasing of property of any kind; (d) availing or rendering of any services; (e) appointment of any agent for purchase or sale of goods, materials, services or property; (f) such related party's appointment to any office or place of profit in the company, its subsidiary company or associate company; (g) underwriting the subscription of any securities or derivatives thereof, of the company. Every contract or arrangement entered as related party transaction shall be referred in the Board?s report to the shareholders along with the justification for entering into such contract or arrangement.
☐	☒	63	63.1 Disclosure of interest by Directors 1) Every Director of the Company, who is in any way, whether directly or indirectly, concerned or interested in a contract or arrangement, or proposed by Directors interested in a contract or arrangement, or proposed contract or arrangement entered into or to be entered into, by or on behalf of the Company, shall disclose the nature of his concern or interest at every financial year or whenever there is change in the disclosure of interest. (2) Nothing in sub-clause (1) of this Article shall apply to any contract or arrangement entered into or to be entered into between the Company and any other company, where any of the Directors of the Company or two or more of the Directors together holds or hold not more than two per cent of the paid-up share capital in the other company 63.2 Interested Directors not to participate or vote in Board?s proceedings An interested director, who is in any way, whether by himself or through any of his relatives or firm, body corporate or other association of individuals in which he or any of his relatives is a partner, director or a member, interested in a contract or arrangement, or proposed contract or arrangement, entered into or to be entered into by or on behalf of a company, shall, take any part in the discussion of, or vote on any contract or arrangement entered into, or to be entered into, by or on behalf of the Company, if he is in any way, whether directly or indirectly, concerned or interested in such contract or arrangement, nor shall his presence count for the purpose of forming a quorum at the time of any such discussion or vote, and if he does vote, his vote shall be void. A contract or arrangement entered into by the company without disclosure or with participation by a director

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			who is concerned or interested in any way, directly or indirectly, in the contract or arrangement, shall be voidable at the option of the company.
☐	☒	64	64.1 Register of Contracts in which Directors are interested The company shall keep registers in accordance with Section 189(1) giving separately the particulars of all contracts or arrangements to which to matter of disclosure of interest by directors and related party transaction applies, in such manner and containing such particulars as may be prescribed and after entering the particulars, such registers shall be placed before the next meeting of the Board and signed by all the directors present at the meeting and shall within thirty days of appointment make such disclosure as are necessary for the purpose of same. The Register shall be kept at the Registered office of the Company and shall be open to inspection at such office shall be open for inspection at such office during business hours and extracts may be taken there from, and copies thereof as may be required by any member of the company shall be furnished by the company to such extent, in such manner, and on payment of same fee as in the case of the Register of Members of the Company. 64.2 Director may be Director of companies promoted by the Company A Director may become a Director of any other company promoted by the Company, or in which it may be interested as a vendor, shareholder, or otherwise and no such Director shall be accountable for any benefits received as Director or shareholder of such a company except in so far as Section 188 of the Act may be applicable. 64.3 Register of Directors and key managerial personnel and their Shareholding The Company shall keep at its registered office a Register containing such particulars of its Directors and key managerial personnel, Manager as may be prescribed under Section 170 of the Act and shall comply with the provisions of the said Section in all respects. The register shall include the details of securities held by each of them in the company or its holding, subsidiary, subsidiary of companys holding company or associate companies.
			Proceedings of the Board
☐	☒	65	65.1 Meetings of Directors The Directors may meet together as a Board for the dispatch of business from time to time, so that at least four such meetings shall be held in every year in such a manner that not more than one hundred and twenty days shall intervene between two consecutive meetings of the Board. The Directors may adjourn and regulate their meetings as they think fit. 65.2 Board may appoint Chairman All meetings of the Directors shall be presided over by the Chairman, if present, but if at any meeting of the Directors, the Chairman is not present at the time appointed for holding the same then in that case the Directors shall choose one of the Directors present to preside over the meeting.
☐	☒	66	66. Certain persons not to be appointed Chairman & Managing Directors & Functional Director The Company shall not appoint a person as its Chairman, Managing Director or Whole-time Director who:- (a) is an undischarged insolvent, or had at any time been adjudged an insolvent; (b) is or has at any time been, convicted by a Court of an offence involving moral turpitude.
☐	☒		67.1 Notice of Directors Meeting A meeting of the Board shall be called by giving not less than seven days notice in writing to every director at his address registered with the company and such notice shall be sent by hand delivery or by post or by electronic means. Board may be called at shorter notice to transact urgent business where at least one independent director, if any, shall be present. Every notice convening a meeting of the Board of Directors shall set out the agenda of the business to be transacted thereat in sufficient detail provided however that the meeting may consider any other business with the permission of the chair.

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		67	67.2 When meeting to be convened The Company Secretary or any director of the Company may, as and when directed by the Chairman to do so, convene a meeting of the Board by giving a notice in writing to every Director. 67.3 Quorum at Board Meeting No business shall be transacted at any Board meeting unless a quorum of Board of Director is present at the time when the meeting proceeds to business. Save as otherwise provided herein, the quorum for the Board meetings shall be as provided in section 174 . 67.4 Questions at Board meetings how to be decided All questions arising at a Meeting of the Board or any committee thereof shall be decided by majority of votes of directors present and in case of equality of votes, the Chairperson shall have a second and casting vote.
☐	☒	68	68.1 Committee of Board Subject to the restrictions contained in Section 179, 180 and other applicable provisions of the Act and preceding Articles, the Board may delegate any of its powers to Committees of the Board consisting of such member or members of its body as it may think fit. PROVIDED that the Board may, from time to time, revoke, modify and discharge any such Committee of the Board either wholly or in part. Every Committee of the Board so formed shall in the exercise of the powers so delegated conform to any Policy/regulations that may, from time to time, be laid down by the Board. All acts done by any such Committee of the Board in conformity with such regulations and in fulfillment of the purposes of their appointment shall have the like force and effect as if done by the Board 68.2 Meeting of Committee how to be Governed The meetings and proceedings of any such Committee of the Board consisting of two or more members shall be governed by the provisions of the act and guidelines laid down for regulating the meetings and proceedings of the Directors, so far as the same are applicable thereto and are not superseded by any regulations made by Directors under the last preceding Article.
☐	☒	69	69. Resolution by circulation No resolution on matters shall be deemed to have been duly passed by the Board or by a Committee thereof by circulation, unless the resolution has been circulated in draft, together with the necessary papers, if any, to all the Directors, or members of the Committee, as the case may be, at their addresses registered with the company in India by hand delivery or by post or by courier, or through such electronic means as may be prescribed and has been approved by a majority of the directors or members, who are entitled to vote on the resolution. Resolution passed in such circulation shall be made part of the minutes of such meeting. Provided that, where not less than one-third of the total number of directors of the company for the time being require that any resolution under circulation must be decided at a meeting, the chairperson shall put the resolution to be decided at a meeting of the Board.
☐	☒	70	70. Defects in appointment of Directors not to invalidate actions taken All acts done by any meeting of the Board, or by a Committee of the Board, or by any person acting as a Director shall notwithstanding that it was subsequently noticed that there was some defect in the appointment of such Director or persons acting as aforesaid, or that they, or any of them, were disqualified or had vacated office or that the appointment of any of them had been terminated by virtue of any provisions contained in the Act or these Articles, be as valid as if every such person had been duly appointed and was qualified to be a Director and had not vacated his office or his appointment had not been terminated. PROVIDED that nothing in this Article shall be deemed to give validity to acts done by a Director after his appointment had been noticed by the Company to be invalid or to have terminated.
☐	☒		71. Minutes of proceedings of meetings of the Board (a) The Company shall cause minutes of all proceedings of every meeting of the Board and committee thereof to be kept by making within thirty days of the conclusion of every such meeting record thereof in Minute Book kept for that purpose with their pages consecutively numbered.

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		71	(b) Each page of every such book shall be initialed or signed and the last page of the record of proceedings of each meeting in such book shall be dated and signed by the Chairman of the said meeting or the Chairman of the next succeeding meeting. The minute books of the Board and committee meetings shall be preserved permanently and kept in the custody of the company secretary of the company or any director duly authorized by the Board for the purpose and shall be kept in the registered office or such place as Board may decide. The minutes shall also contain:- (i) the names of the Directors present at the meeting; And (ii) in the case of each resolution passed at the meeting, the names of the Directors, if any, dissenting from, or not concurring with the resolution. Nothing deemed to require the inclusion in any such minutes of any matter which, in the opinion of the Chairman of the meeting ? (i) is, or could reasonably be regarded as, defamatory of any person. (ii) is irrelevant or immaterial to the proceedings, or (iii) is detrimental to the interests of the Company. The Chairman shall exercise an absolute discretion in regard to the inclusion or non-inclusion of any matter in the minutes on the grounds specified in this sub-clause. (c) Minutes of meetings kept in accordance with the aforesaid provisions shall be evidence of the proceedings recorded therein.
☐	☒	72	72. Powers of Board The Board may exercise all such powers of the Company and do all such acts and things as it is entitled to do under section 179 of the Act and rules made thereunder, or by the Memorandum or Articles of the Company but shall not decide matters required to be exercised or done by the Company in General Meeting, Subject to these Articles no regulation made by the Company in General Meeting shall invalidate any prior act of the Board which would have been valid if that regulation had not been so made.
☐	☒		73. Certain powers of the Board Without prejudice to the general powers conferred by the Act and preceding Article and so as not in any way to limit or restrict those powers, and without prejudice to the other powers conferred by these Articles and by General Body, it is hereby declared that the Directors shall have the following powers, that is to say, power:- (1) to pay and charge to the capital account of the Company any commission or interest lawfully payable there out under the provisions of Sections 40 of the Act; (2) Subject to Sections 179 and 180 of the Act, to purchase or otherwise acquire for the Company any property, rights or privileges which the Company is authorised to acquire, at or for such price or consideration and generally on such terms and conditions as they may think fit, and in any such purchase or other acquisition to accept such title as the Directors may believe or may be advised to be reasonably satisfactory; (3) At their discretion and subject to the provisions of the Act, to pay for any property, rights or privileges acquired by, or services rendered to, the Company either wholly or partially, in cash or in shares, bonds, debentures, mortgages, or other securities of the Company, and any such shares may be issued either as fully paid-up or with such amount credited as paid-up thereon as may be agreed upon, and any such bonds, debentures, mortgages or other securities may be either specially charged upon all or any part of the property of the Company and its uncalled capital or not so charged; (4) To secure the fulfillment of any contract or engagement entered into by the Company in the normal course of business, by mortgage or charge any of the property of the Company and its uncalled capital for the time being or in such manner as they may think fit; (5) To accept from any Member, as far as may be permissible by law, a surrender of his shares or any part thereof, on such terms and conditions as shall be agreed upon; (6) To appoint any person to accept and hold in trust for the Company any property belonging to the Company, which it is interested, or for any other purposes and to execute and do all such deeds and things as may be

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required in relation to any such trust, and to provide for the remuneration of such trust or trustees;

(7) To institute, conduct, defend, compound, or abandon any legal proceedings by or against the Company or its officers, or otherwise concerning the affairs of the Company, and also to compound and allow time for payment or satisfaction of any debts due and of any claim or demand by or against the Company and to refer any differences to arbitration, and observe and execute any awards made thereon;

(8) To act on behalf of the Company in all matters relating to bankruptcy and insolvency;

(9) To make and give receipts, releases, and other discharges for moneys payable to the Company and for the claims and demands of the Company;

(10) Subject to applicable provisions of the Act, to invest and deal with any moneys of the Company not immediately required for the purposes thereof upon such security (not being shares of this Company), or without security and in such manner as they may think fit, and from time to time to vary or realise such investments. Save as provided in Section 187 of the Act, all investments shall be made and held in the Company?s own name;

(11) To execute, in the name and on behalf of the Company, in favour of any Director or other person who may incur or going to incur any personal liability whether as principal or surety, for the benefit of the Company, such mortgages of the Company?s property (present and future) as they think fit, and any such mortgage may contain a power of sale and such other powers, provisions covenants as shall be agreed upon;

(12) To open account with any bank or banks and to determine from time to time who shall be entitled to sign, on the Company?s behalf bills, notes, receipts, acceptances, endorsements, cheques dividend warrants, releases, contracts and documents and to issue the necessary authority for such purpose;

(13) To distribute by way of bonus or commission amongst the staff of the Company on the profits of any particular business or transaction, and to charge such bonus or commission as part of the working expense of the Company;

(14) To provide for the welfare of employees or ex-employees of the Company and their families or connections of such persons, by building or contributing to the building of houses, dwellings or chawls, or by grants of money, pension, gratuities, allowances, bonus or other payments, or by creating, and from time to time subscribing or contributing to provident and other funds, associations, institutions or trusts and by providing or subscribing or contributing towards places of instrument and recreation, hospitals and dispensaries, medical and other attendance and other assistance as the Board shall think fit; and to subscribe or contribute or otherwise to assist or to guarantee money to charitable, benevolent, religious, scientific, national or other institutions or objects which shall have any moral or other claim to support or aid by the Company either by reason of locality of operation, or of public and general utility or otherwise;

73 (15) Before recommending any dividend, to set aside out of the profits of the Company such sums as they may think proper for depreciation or to a Depreciation Fund, or to an Insurance Fund, or as a Reserve Fund or Sinking Fund or any Special Fund to meet contingencies or to repay debentures or debenture stock; or for special dividends or for equalizing dividends or for repairing, improving, extending and maintaining any of the property of the Company and for such other purposes (including the purposes referred to in the preceding clause), as the Board may, in their absolute discretion, think conducive to the interest of the Company, and subject to Section 179 of the Act, to invest the several sums so set aside or so much thereof as required to be invested, upon such investments (other than shares of the Company) as they may think fit, and from time to time to deal with and vary such investments and dispose of and apply and expend all or any part thereof for the benefit of the Company, in such manner and for such purposes as the Board, in their absolute discretion, think conducive to the interest of the Company notwithstanding that the matters to which the Board apply or upon which they expend the same or any part thereof, may be matters to or upon which the capital moneys of the Company might rightly be applied or expended, and to divide the Reserve Fund or division or a reserve Fund to another Reserve Fund or division of a Reserve Fund and with full power to employ the assets constituting all or any of the above funds, including the Depreciation Fund, in the business of the Company or in the purchase or repayment of Debentures or debenture stock, and without being bound to keep the same separate from the other assets, and without being bound to pay interest on the same with power however to the Board at their discretion to pay or allow to the credit of such funds interest at such rate as the Board may think proper;

(16) To appoint and at their discretion remove or suspend such officers such as Executive Director, general managers, managers, secretaries, assistants, supervisors, clerks, agents and servants etc. for permanent, temporary or special services as they may from time to time think fit, and to determine their powers and duties and fix their salaries or emoluments or remunerations and to require security in such instances and to such amounts as they may think fit. And also from time to time to provide for the management and transaction of the

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			affairs of the Company in any specified locality in India or abroad in such manner as they think fit, and the provisions contained in the following sub-clauses shall be without prejudice to the general powers conferred by this sub clause; (17) From time to time and at any time to establish any number of offices and establishment for properly managing the affairs of the Company in any specified locality in India or elsewhere and to appoint staff for such offices and to fix their remuneration; (18) Subject to the provisions of the Act, from time to time and at any time, to delegate to any such local Board, or any member or members thereof or any managers or agents so appointed or to any other person(s) any of the powers, authorities, and discretions for the time being vested in the Board, and to authorise the members for the time being of any such local Board, or any of them to fill up any vacancies, therein and to act notwithstanding vacancies and any such appointment or delegation under the preceding and this sub-clause may be made on such terms and subject to such conditions as the Board may think fit, and the Board may at any time remove any person so appointed, and may annul or vary any such delegation; (19) At any time and from time to time by Power of Attorney under the Seal of the Company, to appoint any person or persons to be the Attorney or Attorneys of the Company for such purposes and with such powers, authorities and discretions (not exceeding those vested in or exercisable by the Board under these presents and excluding the power to make calls and excluding also those which are to be exercised by the Board, in its Meetings) and for such period and subject to such conditions as the Board may from time to time think fit, and any such appointment may (if the Board thinks fit) be made in favour of the members or any of the members of any local Board, established as aforesaid or in favour of any company, or the shareholders, directors, nominees, or managers or any company or firm or otherwise in favour of any persons whether appointed by name or designation by the Board and any such Power of Attorney may contain such powers for the protection or convenience of such Attorney as the Board may think fit, and Board may specifically bestow powers enabling any such delegate or attorneys to sub-delegate all or any of the powers, authorities and discretions for the time being vested in them; (20) Subject to Sections 188 of the Act, for or in relation to any of the matters aforesaid or otherwise for the purposes of the Company, to enter into such negotiations and contracts and rescind and vary such contracts, and execute and do all such acts deeds and things in the name and on behalf of the Company as they may consider expedient; (21) From time to time to make vary and repeal bye-laws for the regulations of the business of the Company regulate employment of its officers and servants by making service Rules and Regulations; (22) Maintain proper records at places as per provisions of the Act and where the Company has a branch office, whether in or outside India, the Company shall be deemed to have complied with this Article if proper Books of Account relating to the transactions effected at the branch office are kept at the branch office and proper summarized returns, made up-to-date at intervals of not more than three months, are sent by the branch office to the Company at its Office or other place in India, at which the Company?s Books of Accounts are kept as aforesaid; (23) Ensure proper maintenance of the Books of Account which shall give a true and fair view of the state of the affairs of the Company or branch office, as the case may be, and explain its transactions. The Books of Account and other books and papers shall be open to inspection by any Director during business hours.
			Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer
☐	☒	74	Subject to the provisions of the Act, -- (i) A chief executive officer, manager, company secretary or chief financial officer may be appointed by the Board for such term, at such remuneration and upon such conditions as it may thinks fit; and any chief executive officer, manager, company secretary or chief financial officer so appointed may be removed by means of a resolution of the Board; (ii) A director may be appointed as chief executive officer, manager, company secretary or chief financial officer
☐	☒	75	A provisions of the Act or these regulations requiring or authorising a thing to be done by or to a director and chief executive officer, manager, company secretary or chief financial officer shall not be satisfied by its being done by or to the same person acting both as director and as, or in place of, chief executive officer, manager, company secretary or chief financial officer.

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			The Seal
☐	☒	76	76.1 The Seal its custody and use The Board shall provide a Common Seal for the purpose of the Company, and shall have power, from time to time, to destroy the same and substitute a new Seal in lieu thereof, and the Board shall provide for the safe custody of the Seal for the time being, and the seal shall never be used except on the authority of the Board or by Committee of the Board as authorised.' 76.2 Deeds how executed Every deed or other instrument, to which the Seal of the Company is required to be affixed, shall unless the same is executed by a duly constituted attorney issued under the seal; be signed by two Directors or one Director and Secretary or some other person authorised by the Board for the purpose: PROVIDED that in respect of the Share Certificate, the Seal shall be affixed in accordance with Article as mentioned above .
			Dividends and Reserve
☐	☒	77	77. Division of profits and dividends in proportion to amount paid- up (a) The profits of the Company, subject to any special rights relating thereto created or authorised to be created by these Articles and subject to the provisions of these Articles, shall be divisible among the Members in proportion to the amount of capital paid-up or credited as paid-up on the shares held by them. (b) All dividends shall be apportioned and paid proportionately to the amounts paid or credited as paid on the shares held during any portion or portions of the period in respect of which the dividend is paid, but if any share is issued on terms providing that it shall rank for dividend from a particular date, such share shall rank for dividend accordingly.
☐	☒	78	78.1 The Company in General Meeting may declare a dividend Company in General Meeting may declare dividends to be paid to Members according to their respective rights, but no dividends shall exceed the amount recommended by the Board, but the Company in General Meeting may declare a smaller dividend. 78.2 Dividends only to be paid out of Profits a) No dividend shall be declared or paid by the Company for any financial year except out of its profits for that year arrived at in the manner set out in Section 123 of the Act. (b) Where, owing to inadequacy or absence of profits in any financial year, any Company proposes to declare dividend out of the accumulated profits earned by it in previous years and transferred by the company to reserves, such declaration of dividend shall not be made except in accordance with such rules as may be made in that behalf. (c) No dividend shall be declared or paid by a company from its reserves other than free reserves. 78.3 Interim Dividend Subject to the provisions of Section 123, the Board may, from time to time, pay the Members such interim dividend as appear to it to be justified by the profits of the Company.
☐	☒	79	79. Capital paid - up in advance to carry Interest Where capital is paid in advance of calls such capital may carry interest but shall not in respect thereof confer a right to dividend or participate in profits .
☐	☒		80.1 Retention of dividends until completion of transfer The Board may retain the dividends payable on shares in terms of Section 126 in respect of which any person is entitled to become a Member, or on completion any person under those Articles is entitled to transfer, or until such person shall become a Member in respect of such shares or shall duly transfer the same. 80.2 Transfer of shares must be Registered A transfer of shares shall not pass the right to any dividend declared thereon before the registration of transfer.

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		80	Provided that where any instrument of transfer of shares has been delivered to the Company for registration and the transfer of such shares has not been registered by the Company, it shall, notwithstanding anything contained in any other provision of this Act a) transfer the dividend in relation to such shares to the Unpaid Dividend Account referred to in Section 124 of the Act unless the Company is authorised by the registered holder of such shares in writing to pay such dividend to the transferee specified in such instrument of transfer ;and (b) keep in abeyance in relation to such shares, any offer of rights shares under clause (a) of sub-section (1) of section 62 of the Act and any issue of fully paid-up bonus shares in pursuance of first proviso to sub-section (5) of section 123 of the Act.
☐	☒	81	81. No Member to receive dividend whilst indebted to the Company & Company s right of reimbursement Thereon No Member shall be entitled to receive payment as interest or dividend in respect of his shares, whilst any money may be due or owing from him to the Company in respect of such share or shares or otherwise howsoever, either alone or jointly with any person or persons, and the Board may deduct from the interest or dividend payable to any Member all sums of money so due from him to the Company.
☐	☒	82	82. Dividends how remitted (1) Unless otherwise directed any dividend payable in cash may be paid by cheque or warrant or in any electronic mode or by a pay slip or receipt or in any other manner having the force of a cheque or warrant sent through the post to the registered address of the Member or person entitled or in case of joint holders to that one of them first named in the Register in respect of the joint holdings. Every such cheque or warrant shall be made payable to the order of the person to whom it is sent the Company shall not be liable or responsible for any cheque or warrant or pay slip or receipt lost in transmission, or for any dividend lost to the Member or person entitled thereto by the forged endorsement of any cheque or warrant or the forged signature of any pay slip or receipt or the fraudulent recovery of the dividend by any other means. (2) Notwithstanding anything contained in these Articles any dividend declared, may be paid by Electronic Clearing System through any Sponsor Bank, after getting registration with the Reserve Bank of India for using this facility and collecting from the members necessary bank mandate in the prescribed format.
☐	☒	83	83. Dividends and call together Any General Meeting declaring a dividend, may, on the recommendation of the Board, make a call on the Members of such amount as the meeting may fix, but so that the call on each Member shall not exceed the dividend payable to him and so that the call be made payable at the same time as the dividend, and the dividend may, if so arranged between the Company and the Member, be set off against the calls.
☐	☒	84	84. Unclaimed dividend No unclaimed dividend shall be forfeited and all unclaimed dividends shall be dealt with in accordance with the provisions of Section 124 and other applicable provisions of the Act.
☐	☒	85	85. No interest against Dividend No dividend shall bear interest against the company.
			Accounts
☐	☒		86.1 Directors to keep true accounts (a) Every company shall prepare and keep at its registered office including its branch office or offices or at such other place in India as the Board thinks fit, Books of Accounts and other relevant books and papers and financial statement for every financial year which give a true and fair view of the state of the affairs of the company in accordance with Section 128 of the Act with respect to- (i) all sums of money received and expended by the Company and the matters in respect of which the receipts and expenditure take place; (ii) all sales and purchases of goods by the Company; (iii) the assets and liabilities of the Company. (iv) state of affairs of the company. (b) Where the Board decides to keep all or any of the Books of Account at any place other than the Office of

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			the Company, the Company shall within seven days of the decision file with the Registrar a Notice in writing giving the full address of that other place in accordance with Section 128 of the Act. (c) The company may keep such books of account or other relevant papers in electronic mode in such manner as may be prescribed. (d) The Company shall preserve in good order the Books of Account relating to a period of not less than eight financial years immediately preceding a financial year. The books of account and other relevant books and papers maintained in electronic mode shall remain accessible in India so as to be usable for subsequent reference together with the vouchers relevant to any entry in such Books of Account.
		86	86.2 Inspection of accounts or record by members No Member (not being a director) shall have any right of inspecting any account or books or documents of the Company except as conferred by Section 94 of the Act or authorised by the Board or by the company in general meeting. The Board may determine whether and to what extent and at what time and place and under what conditions or regulations the accounts and books of the Company or any of them may be open to inspection of the Members. Notwithstanding anything to the contrary contained hereinabove, the authorised representative of Promoters shall have a right to inspect the accounts books, plant, facility, documents, records, premises, equipment and machinery and all other property of the Company at convenient time(s), after giving advance notice to the Company. 86.3 Statement of Accounts to be furnished to General Meeting The Directors shall, from time to time, in accordance with Sections 129 and 134 and other applicable provisions of the Act, cause to be prepared and to be laid before the Company in General Meeting, such Balance Sheets, Profit and Loss Accounts and Reports as are required by these Sections. 86.4 Copies shall be sent to each Member Without prejudice to the provisions of Section 101 and subject to the provisions of Section 136 of the Act, a copy of the financial statements, including consolidated financial statements, auditors report and every other document required by law to be annexed or attached to the Balance Sheet shall at least twenty-one days before the General Body Meeting at which the same are to be laid before the members, be sent to the members of the company, to every trustee for every holder of any debenture issued by the company and to all persons other than such members or trustee, being the person so entitled to attend the General Body Meeting. 86.5 Copy of financial statement to be filed with registrar The Company shall comply with Section 137 of the Act as to filing copies of the Balance Sheet and Profit and Loss Account and documents required to be annexed or attached thereto with the Registrar.
			Winding up
☐	☒	87	87. If the Company shall be wound up and the assets available for distribution among the members as such shall be insufficient to repay the whole of the paid up capital such assets shall be distributed so that as nearly as may be the losses shall be borne by the members in proportion to the capital paid up or which ought to have been paid up at the commencement of the winding-up on the shares held by them respectively. And if in a winding-up the assets available for distribution among the members shall be more than sufficient to repay the whole of the capital paid up at the commencement of the winding-up, the excess shall be distributed amongst the members in proportion to the capital at the commencement of the winding-up paid up or whichought to have been paid up on the shares held by them respectively. But this Article is to be without prejudice to the rights of the holders of shares issued upon special terms and conditions. If the Company shall be wound up, whether voluntarily or otherwise, the liquidators may, with the sanction of a Special Resolution, divide among the contributions, in specie or kind, any part of the assets of the Company and may, with the like sanction, vest any part of the assets of the Company in Trustees upon such trusts for the benefit of the contributories, or any of them, as the liquidators, with the like sanction, shall think fit.
			Indemnity

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

☐	☒	88	88. Officers to be indemnified Subject to provisions of the Act, Every officer of the company shall be indemnified out of the assets of the company against any liability incurred by him in defending any proceedings, whether civil or criminal, in which judgment is given in his favour or in which he is acquitted or in which relief is granted to him by the court or the Tribunal. Provided that if such person is proved to be guilty, the premium paid on such insurance shall be treated as part of the remuneration.
☒			***Others***
			89. Company not bound to recognize holding of shares on trust or any interest in shares other than that of registered holder Except as ordered by a Court of competent jurisdiction or as required by law , the Company shall not be bound to recognize holding of any share upon any trust and to recognize any equitable, contingent, future or partial interest in any share, or any interest in any fractional part of a share (except only as is by these Articles otherwise expressly provided) any right in respect of a share other than an absolute right thereto, in accordance with these Articles, in the person from time to time registered as the holder thereof, but the Board shall be at liberty at their sole discretion to register any share in the joint names of any two or more persons or the survivor or survivors of them. 90. Funds etc. of Company may not be applied in purchase of shares of the Company The Company shall not give, either directly or indirectly, and either by means of a loan, guarantee, the provision of security or otherwise, any financial assistance for the purpose of or in connection with the purchase or subscription made or to be made by any person for purchase of any shares in the Company except in conformity with the provisions of Section 67 of the Act. 91. Underwriting and Brokerage 91.1 Commission may be paid Subject to the provisions of Section 40 of the Act, the Company may at any time pay a commission to any person in consideration of his subscribing or agreeing to subscribe for any shares in or debentures of the Company, or procuring, or agreeing to procure subscriptions for any shares in or debentures of the Company, but so that the commission shall not exceed in case of shares, five percent of the price at which the shares are issued, and in case of debentures, two and a half percent of the price at which the debentures are issued. Such commission may be satisfied by payment in cash or by allotment of fully or partly paid shares or debentures or partly in one way and partly in the other. 91.2 Brokerage The Company may also on any issue of shares or debentures, pay such brokerage as may be lawful. 92. Interest out of Capital Interest may be paid out of capital Where any shares are issued for the purpose of raising money to defray the expenses of the construction of any work or building or the provision of any plant, which cannot be made profitable for a lengthy period, the Company may pay interest on so much of that share capital as is for the time being paid up, for the period, at the rate and subject to the conditions and restrictions provided by the Company Act, 2013 and may charge the same to capital as part of the cost of construction of the work or building, or the provision of plant. 93. Annual Returns The Company shall comply with the provisions of Sections 92 of the Act as to the making of Annual Returns. 94. Borrowing powers 94.1 As per the provisions of Section 73, 76, 179, 180 and other applicable provisions of the Act, the Board of Directors may, from time to time at its discretion, by resolution at a meeting of the Board and subject to the approval of the shareholders in General Meeting, accept deposits from Members, either in advance of calls or otherwise, and generally raise or borrow or secure the payment of any sums of money for the purpose of the Company. Provided however, where the moneys already borrowed (apart from temporary loans obtained from

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

the Companys bankers in the ordinary due course of business) exceed the aggregate of the paid-up capital of the Company, its free reserves (not being reserves set apart for any specific purpose) and the securities premium, the Board shall not borrow such moneys without the consent of the Company in General Meeting.

94.2 Payment or repayment of borrowed Moneys

Subject to the provisions of Article 64 hereof, the payment and repayment of moneys borrowed as aforesaid may be secured in such manner and upon such terms and conditions in all respects as the Board of Directors may think fit, by resolutions passed at a meeting of the Board and in particular, by the issue of bonds or debentures of the Company whether unsecured or secured by a mortgage or charge over all or any part of the property of the Company (both present and future) including its uncalled capital for the time being, and debentures and other securities may be made assignable free from any equities between the Company and the person to whom the same may be issued.

94.3 Terms of issue of Debentures

Any debentures or other securities may be issued or otherwise and may be issued on condition that they shall be convertible into shares of any denomination, and with any privileges and conditions to redemption , surrender, drawing, allotment of shares and attending (but not voting) at General Meetings. Debentures with the right to conversion into or allotment of shares shall be issued only with the consent of the Company in General Meetings accorded by special resolution.

94.4 Register of charges to be Kept

The Board shall cause a proper Register to be kept in accordance with the provisions of Section 85 of the Act of all charges and floating charges affecting the property or assets of the Company or any of its undertakings and shall cause the requirements of Sections 77, 79, and 81 to 87 (both inclusive) of the Act in that behalf to be duly complied with, so far as they are required to be complied with by the Board.

94.5 Register of Debenture holders

The Company shall, if at any time it issues debentures, keep a Register and Index of Debenture holders in accordance with Section 88 of the Act. The Company shall have the power to keep in any Country outside India a Register of Debenture holders residing outside India, in such manner as may be prescribed.

94.6 Application to Debentures and other securities

The provisions of the Articles shall apply mutatis mutandis to debentures, bonds or other securities issued by the company.

95. Dematerialization of Securities

95.1 Definitions :
For the purpose of this Article :

"Depository" means a depository as defined in clause (e) of sub-section (1) of section 2 of the Depositories Act, 1996.

"Beneficial Owner" means a person or persons whose name is recorded in the Register maintained by a Depository under the Depository Act, 1996.

"SEBI" means the Securities and Exchange Board of India established under section 3 of the Securities& Exchange Board of India Act, 1992.

"Securities" means the securities as defined in clause (h) of section 2 of the Securities Contracts (Regulation) Act, 1956;

95.2 Dematerialization of Securities

Notwithstanding anything contained in these Articles, the Company shall be entitled to dematerialize its existing securities, rematerialize its securities held in the Depositories and / or offer its fresh securities in dematerialized form pursuant to the provisions of the Depositories Act, 1996 and the rules framed there under, if any.

95.3 Option for investors

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

			Every person subscribing to or holding securities of the Company shall have the option to receive securities certificates or to hold the securities with the Depository. Such a person who is the beneficial owner of the securities can at any time opt out of the Depository, if permitted by the law, in respect of any security in the manner and within the time prescribed, issued to the beneficial owner the required certificate of the securities. If a person opts to hold his securities with a Depository, the Company shall intimate such Depository, the details of allotment of the security and on receipt of the information, the depository shall enter in its records the name of the allottees as the beneficial owner of the securities. 95.3 Securities in Depository to be in Fungible Form All securities held by a Depository shall be dematerialized and be in fungible form. Nothing contained in Section 88, 89, 112 and 186 of the Act shall apply to a Depository in respect of the securities held by it on behalf of the Beneficial Owners. 95.4 Rights and Liabilities of Beneficial Owner (a) Notwithstanding anything to the contrary contained in the Act or these Articles, a Depository shall be deemed to be the registered owner for the purposes of effecting transfer of ownership of security on behalf of the beneficial owners. (b) Save as otherwise provided in (a) above, the Depository as the registered owner of the securities shall not have any voting rights or any other rights in respect of the securities held by it. (c) Every person holding securities of the Company and whose name is entered as the beneficial owner in the records of the Depository shall be deemed to be a member of the Company. The beneficial owner of securities shall be entitled to all the rights and benefits and be subject to all the liabilities in respect of his securities, which are held, by a Depository. 95.5 Service of Documents Notwithstanding anything to the contrary contained in the Act or Articles to the contrary, where securities are held in a Depository, the records of the beneficial ownership may be served by such Depository on the Company by means of electronic mode or by delivery of floppies or discs. 95.6 Provisions of Articles to apply to shares held in Depository
		89	Nothing contained in Section 56 of the Act or these Articles shall apply to a transfer of securities effected by a transferor and transferee both of whom are entered as beneficial owners in the records of a Depository. 95.7 Allotment of Securities dealt within a Depository Notwithstanding anything in the Act or these Articles, where securities are dealt with by the Depository, the Company shall intimate the details thereof to the Depository immediately on allotment of such securities. 95.8 Distinctive numbers of securities held in the depository Mode Nothing contained in the Act or these Articles regarding the necessity of having distinctive numbers on securities issued by the Company shall apply to securities held with a Depository. 95.9 Register and Index of Beneficial Owners The Register and Index of Beneficial Owners maintained by a Depository under the Depositories Act, 1996 shall be deemed to be the Register and Index of member and security holder for the purpose of these Articles. 96. Conversion of Shares into Stock and Reconversion 96.1 Shares may be converted into stock and reconverted The Company in General Meeting may convert any paid up shares into stock and when any shares shall have been converted into stock, the several holders of such stock may henceforth transfer their respective interest therein, or any part of such interest, in the same manner and subject to the same regulations, as if no such conversion had taken place, or as near thereto as circumstances will admit. The Company may at any time reconvert any stock into paid-up shares. 96.2 Rights of stock holders

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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The holders of stock shall, according to the amount of stock held by them, have the same rights, privileges and advantages as regards dividends, voting at meetings of the Company, and other matters, as if they held the shares from which the stock arose

97 Audit

97.1 Accounts to be audited

The Auditors of the Company shall be appointed or reappointed by the Comptroller and Auditor General of India and their remuneration, rights and duties shall be regulated by Section 139 to 143 and 145 to 148 of the Act.

97.2 Powers of the Comptroller and Auditor General of India.
The Comptroller and Auditor General of India shall have the powers:-

(a) to direct the manner in which the Company's accounts shall be audited by the auditors appointed in pursuance of Article hereof and to give such auditors instruction in regard to any matter relating to the performance of their functions as such.

(b) to conduct a supplementary or test audit of the financial statement of the Company by such person or persons as he may authorize in this behalf, and for the purposes of such audit, to have access at all reasonable times, to all accounts, account books, vouchers, documents and other papers of the Company and to require information or additional information to be furnished to any person or persons so authorized on such matters, by such person or persons and in such form as the Comptroller and Auditor General may, by general or special order, direct.

97.3 Comments upon or supplement to audit report by the Comptroller & Auditor General of India to be placed before the annual general meeting

The auditors aforesaid shall submit a copy of his / her audit report to the Comptroller and Auditor General of India who shall have the right to comment upon or supplement such audit report in such manner as he may think fit. Any such comments upon or supplement to the audit report shall be placed before the Annual General Meeting of the Company at the same time and in the same manner as the audit report.

98. Service of Documents

98.1 Manner of Service of Documents

A document or notice may be served or given by the Company to any Member either through speed post, registered post or through electronic mode to his registered address or (if he has no registered address in India) to the address, if any, in India supplied by him to the Company for serving documents or notices on him. Notice is to be sent by the company through its authorized and secured computer programme which is capable of producing confirmation and keeping record of such communication addressed to the person entitled to receive such communication at the last electronic mail address provided by the member.

The notice may be sent through e-mail as a text or as an attachment to e-mail or as a notification providing electronic link or Uniform Resource Locator for accessing such notice through in-house facility or its registrar and transfer agent or authorise any third party agency providing bulk e-mail facility.

98.2 When notices or documents served on Members

Where a document or notice is sent by post, service of the document or notice shall be deemed to be effected by properly addressing, prepaying and posting a letter containing the document or notice.

When notice or notifications of availability of notice are sent by e-mail, the company should ensure that it uses a system which produces confirmation of the total number of recipients e-mailed and a record of each recipient to whom the notice has been sent and copy of such record and any notices of any failed transmissions and subsequent re-sending shall be retained by or on behalf of the company as "proof of sending".

Provided that the member shall provide the updated email address to the company and for that company will provide an advance opportunity atleast once in a financial year, to the member to register his e-mail address and changes therein and such request may be made by only those members who have not got their email id recorded or to update a fresh email id. Notice will also be simultaneously updated in the website of the company.

98.3 By Advertisement

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI 574

A document or notice advertised in a newspaper circulating in the neighborhood of the Registered Office shall be deemed to be duly served or sent on the day on which the advertisement appears on or to every Member who has no registered address in India and has not supplied to the Company an address within India for the serving of documents on sending the notices to him. Explanatory Statement of material facts under Section 102 need not be advertised but it will be mentioned in the advertisement that the Statement has been forwarded to the Members.

98.4 On personal representatives etc.

A document or notice may be served or given by the Company on or to the persons entitled to a share in consequence of the death or insolvency of a Member by sending it through the post in prepaid letter addressed to them by name or by the title of representative of the deceased, or assignee of the insolvent or by any like description, at the address (if any) in India supplied for the purpose by the persons claimed to be entitled, or until such an address has been so supplied by serving the document or notice in any manner in which the same might have been given if the death or insolvency had not occurred.

98.5 To whom documents or notices must be served or given

Documents or notices of every General Meeting shall be served or given in same manner as herein before or to (a) every member of the company, legal representative of any deceased member or the assignee of an insolvent member,(b) the auditor or auditors of the company; and (c) every director of the company.

98.6 Members bound by documents or notices served on or given to previous holders

Every person who, by operation of law, transfer or other means whatsoever, shall become entitled to any share, shall be bound by every document or notice in respect of such share, which previously to his name and address being entered in the Register of Members, shall have been duly served on or given to the person from whom he derives his title to such shares

98.7 Documents or notice by Company and signature thereto

Any document or notice to be served or given by the Company may be signed by a director or key managerial personnel or an officer of the company duly authorised by the Board in this behalf.

98.8 Service of document or notice by Member

All documents or notices to be served or given by Members on or to the Company or any officer thereof shall be served or given by sending it to the Company or Officer at the Office by post or through electronic mode under a certificate of posting or by registered post, or through email.

99. Secrecy

(a) Every Director, Manager, Auditor, Treasurer, Trustee, member of a committee, officer, servant, agent, accountant or other person employed in the business of the Company, shall, if so required by the Directors, before entering upon his duties, sign a declaration pledging himself to observe strict secrecy respecting all transactions and affairs of the Company with the customers and the state of the accounts with individuals and in matters relating thereto, and shall by such declaration pledge himself not to reveal any of the matters which may come to his knowledge in the discharge of his duties except when required so to do by the Directors or by law or by the person to whom such matters relate and except so far as may be necessary in order to comply with any of the provisions in these presents contained.

(b) No Member shall be entitled to visit or inspect any work of the Company without the permission of the Directors or to require discovery of or any information respecting any details of the Company s trading, or any matter which is or may be in the nature of a trade secret, mystery of trade, secret process or any other matter which may relate to the conduct of the business of the Company and which in the opinion of the Directors, it would be in expedient in the interest of the Company to disclose.

100. Copies of Memorandum and Articles of Association to be sent by the Company

Copies of the Memorandum and Articles of Association of the Company and other documents referred to in Section 17 of the Act shall be sent by the Company to every Member at his request within seven days of the request on payment of such fees as may be prescribed.

MOHANLALGANJ TRANSMISSION LIMITED 575 NEW DELHI

	Subscriber Details				
S. NO	Name, Address, Description and Occupation	DIN/PAN/Passport Number	Place	DSC	Dated

Signed Before Me

Name		Address, Description and Occupation	DIN/PAN/ Passport Number/ Membership Number	Place	DSC	Dated
ACS	ANURADHA JAIN	D-427, 2nd Floor, Ramphal Chowk, (Backside of Goyalsons) Palam Extn, Sector 7, Dwarka, New Delhi-110075, Occupation Practicing Company Secretary	36639	NEW DELHI	ANURADHA JAIN Digitally signed by ANURADHA JAIN Date: 2021.06.07	07/06/2021

Checkform Modify

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Annexure-9 - Enclosure-4

Copy of Power of Attorney of the signatory to commit the application or its promoter

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

ATTESTED TRUE COPY
Attested from pg 577 to 580
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

सत्यमेव जयते

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

₹100

e-Stamp

Certificate No.	:	IN-DL31963704482286U
Certificate Issued Date	:	13-May-2022 12:24 PM
Account Reference	:	IMPACC (IV)/ dl959903/ DELHI/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL95990349815400659397U
Purchased by	:	MOHANLALGANJ TRANSMISSION LIMITED
Description of Document	:	Article Others
Property Description	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	MOHANLALGANJ TRANSMISSION LIMITED
Second Party	:	Not Applicable
Stamp Duty Paid By	:	MOHANLALGANJ TRANSMISSION LIMITED
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

NOTARY Dhan Singh Nagar Advocate R. No.-107, 25 New Delhi, INDIA Expiry Date 31-1-2025 GOVT. OF INDIA

Please write or type below this line IN-DL31963704482286U

General Power of Attorney

Know all men by these presents, we **Mohanlalganj Transmission Limited** (hereinafter referred to as MTL which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, and assigns) having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016 do hereby constitute, appoint and authorize Shri Rajiv Gandhi, Project Incharge of MTL residing at C 62 Saket, Golf View Apartments, New Delhi-110 017 as our true and lawful attorney, to do in our name and our behalf, all of the acts or things hereinafter mentioned, that is to say :-

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Rajiv Gandhi

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Statutory Alert:
1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

MOHANLALGANJ TRANSMISSION LIMITED MOHANLALGANJ TRANSMISSION LIMITED MOHANLALGANJ TRANSMISSION LIMITED MOHANLALGANJ TRANSMISSION LIMITED MOHANLALGANJ TRANSMISSION LIMITED MOHANLALGANJ TRANSMISSION LIMITED

1. To constitute, and defend legal cases, sign and verify plaints, written statements, petitions and objections, memorandum of appeal, claims, affidavits, applications, re-applications and pleadings of all kinds and to file them in Central Electricity Regulatory Commission (CERC), State Electricity Regulatory Commissions (SERCs), Appellate Tribunal for Electricity (ATE) , Civil, Criminal or Revenue courts, Arbitration, Labour Court, Industrial Tribunal, High Court and Supreme Court, whether having original or appellate jurisdiction and before Government or Local Authorities or Registration Authorities, Tax Authorities, Tribunals, etc.

2. To appear, before various Courts / Tribunals / CERC / SERCs / Appellate Tribunal for Electricity.

3. To appoint any Advocate, Vakil, Pleader, Solicitor or any other legal practitioner as Attorney to appear and conduct case proceedings on behalf of the company and to sign Vakalatnama.

4. To compromise, compound or withdraw cases from any Court / Tribunal / CERC / SERCs / Appellate Tribunal for Electricity.

5. To file petitions/applications or affidavits before the Supreme Court / High Court / CERC / SERCs / Appellate Tribunal for Electricity and to obtain the copies of documents, papers, records etc.

6. To file and receive bank documents, to deposit and withdraw money from Courts, Tribunal, Registrar's Office and other Government or Local Authorities and to issue valid receipts thereof.

7. To apply for and obtain refund of stamp duty or court fee, etc.

8. To issue notices and accept service of any summons, notices or orders issued by any Court / Tribunal / CERC / SERCs / Appellate Tribunal for Electricity on behalf of the Company.

9. To execute deeds, agreements, bonds and other documents and returns in connection with the affairs of the company and file them or cause to be filed for Registration, whenever necessary.

10. To issue Project Authority Certificate(s) in respect of contracts for Load Despatch & Communication Systems, Transmission Systems etc. and to lodge claims with the Railways, Transporters, Shipping Agents and Clearing Agents and to settle/compromise such claims.

11. To lodge claims with the Insurance companies, to settle/compromise such claims and on satisfactory settlement thereof, to issue letters of subrogation/power of attorney in favour of Insurance companies.

12. To execute, sign and file applications, undertakings, agreements etc. to or with the Central / State Government(s) / Body(ies) to obtain 'right of way' or any of other Right(s) / Privilege(s) etc.

13. To execute, sign and file applications, undertakings, agreements, bills, documents etc. to or with the Central / State Government(s) / Body(ies) and other authorities / entities including Central Transmission Utility (CTU)/Power System Operation Corporation Limited (POSOCO) / Central Electricity Authority (CEA)/ CERC with respect to

NOTARY Dhan Singh Nagar Advocate R. No.-16726 New Delhi, IND Expiry 31-1-2025 GOVT. OF INDIA

MOHANGANJ TRANSMISSION LIMITED NEW DELHI

579 Abhay Choudhary

Commissioning of the Project, realization of Transmission charges, to obtain 'right of way' or any of other Right(s) / Privilege(s) etc.

14. To execute Consultancy, Funding and other Agreements.

15. To act as administrator for e-filing process with CERC and other Statutory authorities.

16. Generally to do all lawful acts, necessary for the above mentioned purposes.

The Company hereby agrees to ratify and confirm all and whatsoever the said Attorney shall lawfully do execute or perform or cause to be done, executed or performed in exercise of the power or authority conferred under and by virtue of this Power of Attorney.

Abhay Choudhary

.....

Signed by the within named

Mohanlalganj Transmission Limited

through the hand of Sh. Abhay Choudhary (Chairman)

Duly authorized by the Board to issue such Power of Attorney

Dated this ..03rd.... day of June 2022

NOTARY
Dhan Singh Nagar
Advocate
R. No.-16726
New Delhi, INDIA
Expiry Date
31-1-2025
GOVT. OF INDIA

Accepted

Rajiv

.....

Signature of Attorney

Name: Shri Rajiv Gandhi

Designation: Project Incharge, **Mohanlalganj Transmission Limited**

Address: C 62 Saket, Golf View Apartments, New Delhi-110 017

Rajiv

Attested

Abhay Choudhary

.....

(Signature of the Executant)

Name: Abhay Choudhary

Designation: Chairman

Address: B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016

.....

Signature and Stamp of Notary of the place of execution

ATTESTED
NOTARY PUBLIC
NEW DELHI. (INDIA)

03 JUN 2022

WITNESS

POWERGRID
(Co. Secretary)

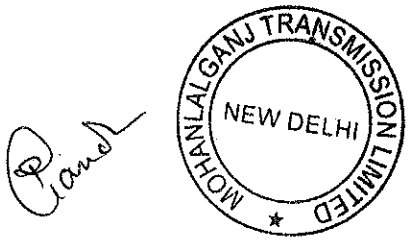
K. K. Gupta
SRD DIRECTOR

Ashwani Gupta
Ashwani Kumar Gupta
DIRECTOR

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Annexure-9 - Enclosure-5

Details of Income Tax Registration



आयकर विभाग भारत सरकार

INCOME TAX DEPARTMENT GOVT. OF INDIA

सत्यमेव जयते

Jun 08, 2021

Ref No.: 88305916003583/TAN/NEW

TO,
MOHANLALGANJ TRANSMISSION LIMITED
URJANIDHI, FIRST FLOOR, 1,
BARAKHAMBA
LANE, CONNAUGHT PLACE,
DELHI, CENTRAL DELHI-110001
DELHI
TEL NO: 23443900

Sir/Madam,

Sub : Allotment of Tax Deduction Account Number (TAN) as per Income Tax Act,1961

Kindly refer to your application (Form 49B) dated Jun 08, 2021 for the allotment of Tax Deduction Account Number.

In this connection, the following TAN has been issued to you/your organisation:

DELM39793F

Please quote the same in all TDS challans,TDS Certificates,TDS returns,Tax Collection at Source(TCS) returns as well as other documents pertaining to such transactions.

Quoting of TAN on all TDS returns and challans for payment of TDS is necessary to ensure credit of TDS paid by you and faster processing of TDS returns.

The above TAN should also be used as Tax Collections at Source Account Number under section 206CA.

Kindly note that it is mandatory to quote TAN while furnishing TDS returns, including e-TDS returns. e-TDS returns will not be accepted if TAN is not quoted.

This supersedes all the Tax Deduction / Collection Account Number, alloted to you earlier.

Income Tax Department

Signature valid

Digitally signed by [illegible]
Goverance Infrastructure Ltd
Date: [illegible]
GMT+5:30
Reason: [illegible] Sign
Location: [illegible]

Caution : Income Tax Department does not send e-mails regarding refunds and does not seek any taxpayer information like username, password, details of ATM, bank accounts, credit cards, etc. Taxpayers are advised not to part with such information on the basis of emails.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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आयकर विभाग भारत सरकार
INCOME TAX DEPARTMENT GOVT. OF INDIA

ई– स्थायी लेखा संख्या कार्ड
e - Permanent Account Number (e-PAN) Card

AAOCM6639A

नाम / Name	MOHANLALGANJ TRANSMISSION LIMITED
निगमन/गठन की तारीख Date of Incorporation / Formation	08/06/2021

Signature valid

Digitally signed by Income Tax Dept
Date: 2021.08.1 1:32
GM 30

- ✓ Permanent Account Number (PAN) facilitate Income Tax Department linking of various documents, including payment of taxes, assessment, tax demand tax arrears, matching of information and easy maintenance & retrieval of electronic information etc. relating to a taxpayer.
  स्थायी लेखा संख्या (पैन) एक करदाता से संबंधित विभिन्न दस्तावेजों को जोड़ने में आयकर विभाग को सहायक होता है, जिसमें करों के भुगतान, आकलन, कर मांग, टैक्स बकाया, सूचना के मिलान और इलक्ट्रॉनिक जानकारी का आसान रखरखाव व बहाली आदि भी शामिल है ।
- ✓ Quoting of PAN is now mandatory for several transactions specified under Income Tax Act, 1961 (Refer Rule 114B of Income Tax Rules, 1962)
  आयकर अधिनियम, 1961 के तहत निर्दिष्ट कई लेनदेन के लिए स्थायी लेखा संख्या (पैन) का उल्लेख अब अनिवार्य है (आयकर नियम, 1962 के नियम 114B, का संदर्भ लें)
- ✓ Possessing or using more than one PAN is against the law & may attract penalty of upto Rs. 10,000.
  एक से अधिक स्थायी लेखा संख्या (पैन) का रखना या उपयोग करना, कानून के विरुद्ध है और इसके लिए 10,000 रुपये तक का दंड लगाया जा सकता है।
- ✓ The PAN Card enclosed contains Enhanced QR Code which is readable by a specific Android Mobile App. Keyword to search this specific Mobile App on Google Play Store is "Enhanced QR Code Reader for PAN Card.
  संलग्न पैन कार्ड में एनहान्स क्यूआर कोड शामिल है जो एक विशिष्ट एंड्रॉइड मोबाइल ऐप द्वारा पठनीय है। Google Play Store पर इस विशिष्ट मोबाइल ऐप को खोजने के लिए कीवर्ड "Enhanced QR Code Reader for PAN Card" है।

Out

आयकर विभाग भारत सरकार
INCOME TAX DEPARTMENT GOVT. OF INDIA

स्थायी लेखा संख्या कार्ड
Permanent Account Number Card

AAOCM6639A

नाम/Name
MOHANLALGANJ TRANSMISSION LIMITED

निगमन/गठन की तारीख
Date of Incorporation/Formation
08/06/2021

Fold

इस कार्ड के खोने/मिले पर कृपया सूचित करें/लौटाएं:
आयकर पैन सेवा इकाई, एन एस डी एल
5 वी मंजिल, मंत्री स्टर्लिंग,
प्लॉट नं. 341, सर्वे क्र. 997/8,
मॉडल कालोनी, दीप बंगला चौक के पास,
पुणे - 411 016.

If this card is lost / someone's lost card is found, please inform / return to :
Income Tax PAN Services Unit, NSDL
5th Floor, Mantri Sterling,
Plot No. 341, Survey No. 997/8,
Model Colony, Near Deep Bungalow Chowk,
Pune - 411 016.
Tel: 91-20-2721 8080, Fax: 91-20-2721 8081
e-mail: tininfo@nsdl.co.in

Electronically issued and Digitally signed ePAN is a valid mode of issue of Permanent Account Number (PAN) post amendments in clause (c) in the Explanation occurring after sub-section (8) of Section 139A of Income Tax Act, 1961 and sub-rule (6) of Rule 114 of the Income Tax Rules, 1962. For more details, click here

MOHANLALGANJ TRANSMISSION LIMITED
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Annexure-9 - Enclosure-6

Draft Licence



DRAFT

TRANSMISSION LICENSE, 2022 UNDER ELECTRICITY ACT – 2003

TO

.....

(License No.....of 2022)

1. The Uttar Pradesh Electricity Regulatory Commission (hereinafter referred to as "the Commission"), in exercise of the powers under Section 14 of the Electricity Act, 2003 (hereinafter referred to as "the Act"), hereby grants the transmission license to **Mohanlalganj Transmission Limited** (hereinafter referred to as 'MTL' or "the licensee"), a company incorporated under the Companies Act, 2013 and having its registered office at B-9, Qutab Institutional Area, Katwaria Saria, New Delhi - 110016, India (hereinafter referred as 'Licensee') to establish Transmission System for Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida on Build, Own, Operate and Maintain (BOOM) basis, more specifically described in the Schedule attached to this license, which shall be read as part and parcel of this license, subject to the act, the rules and conditions specified under the General Conditions of Transmission License Regulation No. UPERC / Secy.05- 0931dated December 14, 2005.

2. The Licensee may be called "**Mohanlalganj Transmission Limited (MTL)** Transmission License, 2022 (License No.....of 2022)".

3.

a) The transmission license shall, unless revoked earlier, remain in force for a period of 25 years; with effect from date of issue of this license.

b) As the Tariff Stream in TSA is for 35 years, MTL shall make an application two years prior to expiry of the initial period of license for grant of license for a further period of 10 years, which shall be appropriately considered by the Commission in accordance with the then prevailing laws;

4. MTL shall remain bound by the provision of the Act, the rules and regulations framed there under, in particular the transmission license regulations, Indian Electricity Grid Code, UP Electricity Grid Code, the Standards specified by the Central Electricity Authority and the orders & directions of the Commission issued from time to time.

MTL, as Transmission Licensee, shall carry out the responsibilities conferred upon it, under UP Electricity Grid Code, UPERC (Terms & Conditions for Open Access) Regulations, 2004, UPERC (Grant of connectivity to Intra State Transmission System) Regulations, 2010 including their amendments and modifications as and when carried out. MTL shall provide non-discriminatory open access to its transmission system for use by any other licensee, including a distribution licensee or an electricity trader, or generating company or any other person in accordance with

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

the Uttar Pradesh Electricity Regulatory Commission (Open Access in intra-State Transmission) Regulations, as amended from time to time.

6. The licensee shall comply with the directions of the Regional Load Dispatch Centre under Sub-section (3) of section 28 or subsection (1) of section 29 of the Act and the directions of the State Load Dispatch Centre under Section (2) of Section 32 or subsection (1) of Section 33 of the Act, as may be issued from time to time for maintaining the availability of transmission system;

7. The Transmission Service Agreement (TSA) entered into between the licensee and long term transmission customers shall be honoured by the parties involved in TSA,

8. The applicant shall not enter into contract or otherwise engage in the business of trading in electricity during the period of subsistence of the transmission license;

9. Unless otherwise specified by the Commission, the licensee shall pay an annual license fee in accordance with UPERC(Fee & Fine) Regulations, 2010 and amendments/re-enactments made thereof. The License fee for a part of the year shall be paid on pro-rata basis. The year for the purpose of this clause shall mean a financial year i.e. a period of twelve months from 1st April of a year to 31st March of the following year.

10. The Licensee may lay down or place electricity supply lines and other installations subject to provisions of Section 67 to 69 and 159 to 161 of the Electricity Act, 2003.

11. The licensee shall ensure adherence with the requirement laid down under Section 164 of Electricity Act, 2003.

12. The license may be revoked subject to Section 19 of Electricity Act, 2003 at any time during its period of operation as specified in Electricity Act, 2003.

Secretary

Dated : .....

Place : .....

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Scope of the Project and Schedule:

Sl. No.	Name of the Transmission Element	Scheduled COD from Effective Date	Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project
A)	**Construction of 400/220/132kV GIS substation Mohanlalganj (Lucknow) with associated 400kV lines:-**		
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.	18 months	30.49%
2.	LILO of Sarojani Nagar (400kV) - Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)		
3.	LILO of Lucknow (PGCIL) 400 kV - Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)		
B)	**Construction of LILO Line**		
1.	LILO of 765 kV Ghatampur - Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months	61.17%
2.	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months	0.49%
C)	**Construction of LILO lines on Monopole**		
1.	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA guideline of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	9 months	7.85%

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Annexure-9 - Enclosure-7

Financial Statements of the Applicant as certified by Bid Process Coordinator – PFCCL

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ATTESTED TRUE COPY
Attested from Pg 588 to 619
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

Kailash Sushil & Associates
CHARTERED ACCOUNTANTS

1-A, (K-429/135), Adarsh Nagar Extn., G.T. Karnal Road,
Near Pillar No. 96 of Metro, Delhi - 110 033
Phones Off. : 2767-2251, 2767-3650
Mobile : KCG - 98110 41558, DNB - 98110 41559
Email : davender.bhardwaj@gmail.com
kailashchandgupta@gmail.com

INDEPENDENT AUDITOR'S REPORT

To the Members of,

MOHANLALGANJ TRANSMISSION LIMITED

Report on the Audit of the Standalone Financial Statements

Opinion

We have audited the accompanying standalone financial statements of **MOHANLALGANJ TRANSMISSION LIMITED** ("the Company"), which comprise the Balance Sheet as at 31st March 2022, the statement of Profit and Loss, the statement of changes in equity and the statement of cash flows for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone financial statements give the information required by the Companies Act, 2013 ("the Act") in the manner so required and give a true and fair view in conformity with the Indian Accounting Standards prescribed under section 133 of the Act read with the Companies (Indian Accounting standards) Rules, 2015, as amended ("Ind AS") and other accounting principles generally accepted in India, of the state of affairs of the Company as at 31st March 2022, its loss, changes in equity and its cash flows for the year ended on that date.

Basis for Opinion

We conducted our audit in accordance with the Standards on Auditing (SAs) specified under section 143(10) of the Companies Act, 2013. Our responsibilities under those Standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are independent of the Company in accordance with the *Code of Ethics* issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules made thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for standalone the Financial Statements

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these standalone financial statements that give a true and fair view of the financial position, financial performance (including other comprehensive income), changes in equity and cash flows of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards specified in the Companies (Indian Accounting Standards) Rules 2015 under section 133 of the Act. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for

KAILASH SUSHIL & ASSOCIATES * FRN : 003952N New Delhi Chartered Accountants *

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ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

The Board of Directors is also responsible for overseeing the company's financial reporting process.

Auditor's Responsibilities for the Audit of the Standalone Financial Statements
Our objectives are to obtain reasonable assurance about whether the standalone financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the standalone financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the company has adequate internal financial controls system in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the standalone financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

Materiality is the magnitude of misstatements in the financial statements that, individually or in aggregate, makes it probable that the economic decisions of a reasonably knowledgeable user of the financial statements may be influenced. We consider quantitative materiality and qualitative factors in (i) planning the scope of our audit work and in evaluating the results of our work; and (ii) to evaluate the effect of any identified misstatements in the financial statements.

KAILASH SUSHIL & ASSOCIATES * Chartered Accountants * FRN : 003952N New Delhi

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We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

Key Audit Matters

We have determined that there are no key audit matters to communicate in our reports for the Mohanlalganj Transmission Limited.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2020 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the "**Annexure-I**" a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.

2. We are enclosing our report in terms of Section 143(5) of the Act, on the basis of such checks of the books and records of the company as we considered appropriate and according to the information and explanations given to us, in the "**Annexure-II**" on the directions and sub-directions issued by the Comptroller and Auditor General of India.

3. As required by Section 143(3) of the Act, we report that: -

   a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.

   b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books.

   c) The Balance Sheet, the Statement of Profit and Loss, the Statement of Changes in Equity and the Cash Flow Statement dealt with by this Report are in agreement with the books of account.

   d) In our opinion, the aforesaid standalone financial statements comply with the Indian Accounting Standards specified under Section 133 of the Act read with relevant rules.

   e) Being a Government Company, pursuant to notification no. G.S.R. 463(E) dated 05.06.2015 issued by the Government of India, provisions of Section 164(2) of the Act, regarding disqualification of director is not applicable to the company.

   f) With respect to the adequacy of the internal financial controls over financial reporting of the Company and the operating effectiveness of such controls, refer to our separate Report in "**Annexure III**".

   g) Being a Government Company, pursuant to notification no. G.S.R. 463(E) dated 05.06.2015 issued by the Government of India, provisions of Section 197(16) of the Act, regarding managerial remuneration is not applicable to the company.

KAILASH SUSHIL & ASSOCIATES FRN : 003952N New Delhi Chartered Accountants

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

h) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

i. The Company does not have any pending litigations which would impact its financial position.

ii. The Company did not have any long-term contracts including derivative contracts for which there were any material foreseeable losses.

iii. There were no amounts which were required to be transferred to the Investor Education and Protection Fund by the Company.

iv. (a) The management has represented that, to the best of it's knowledge and belief, other than as disclosed in the notes to the accounts, no funds have been advanced or loaned or invested (either from borrowed funds or share premium or any other sources or kind of funds) by the company to or in any other person(s) or entity(ies), including foreign entities ("Intermediaries"), with the understanding, whether recorded in writing or otherwise, that the Intermediary shall, whether, directly or indirectly lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the company ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries;

(b) The management has represented, that, to the best of it's knowledge and belief, other than as disclosed in the notes to the accounts, no funds have been received by the company from any person(s) or entity(ies), including foreign entities ("Funding Parties"), with the understanding, whether recorded in writing or otherwise, that the company shall, whether, directly or indirectly, lend or invest in other persons or entities identified in any manner whatsoever by or on behalf of the Funding Party ("Ultimate Beneficiaries") or provide any guarantee, security or the like on behalf of the Ultimate Beneficiaries; and

(c) Based on such audit procedures that have been considered reasonable and appropriate in the circumstances, nothing has come to our notice that has caused us to believe that the representations under sub-clause (i) and (ii) of Rule 11(e), as provided under (a) and (b) above, contain any material misstatement.

v. No dividend has been declared or paid by the company during the year, as such the compliance with section 123 of the Companies Act, 2013 is not applicable to the company.

For Kailash Sushil & Associates
Chartered Accountants
Firm Reg. No. 003952N

KAILASH SUSHIL & ASSOCIATES * FRN : 003952N New Delhi * Chartered Accountants

Neha Gupta
Partner
M. No. 526216

Place: New Delhi
Date: 12-05-2022
UDIN: 22526216AIXZTU5408

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ANNEXURE-I TO THE INDEPENDENT AUDITOR'S REPORT OF MOHANLALGANJ TRANSMISSION LIMITED

The annexure referred to in paragraph 1 under the heading 'Report on Other Legal and Regulatory Requirements' section of our report of even date to the members of **Mohanlalganj Transmission Limited** on the Ind AS financial statements for the financial year ended on 31st March 2022. We report that: -

(i) (a) The company has no item of Property, Plant and Equipment or intangible assets, other than Capital work in progress. Hence reporting under clause (i)(a), (b), (c) and (d) of the Order are not applicable to the company.

(b) In our opinion and according to the information and explanations given to us, no proceedings have been initiated or are pending against the Company for holding any benami property under the Benami Transactions (Prohibition) Act, 1988 (45 of 1988) and rules made thereunder.

(ii) (a) The Company does not hold any inventories. Therefore hence reporting under clause 3(ii)(a) of the Order is not applicable to the company.

(b) The Company has not been sanctioned working capital limits in excess of ₹ 5 crore, in aggregate, at any points of time during the year, from banks or financial institutions on the basis of security of current assets, hence reporting under clause 3(ii)(b) of the Order is not applicable to the company.

(iii) In our opinion and according to the information and explanations given to us, during the year the company has not made any investments in, provided any guarantee or security or granted any loans or advances in the nature of loans, secured or unsecured, to companies, firms, Limited Liability Partnerships or any other parties, hence reporting under clause 3(iii) of the Order is not applicable to the company.

(iv) In our opinion and according to the information and explanations given to us, the company has not given any loans, investments, guarantees and security, therefore the reporting under clause 3(iv) of the Order for compliance of provisions of section 185 and 186 of the Companies Act are not applicable.

(v) Based on our scrutiny of the company's records and according to the information and explanations given to us, in our opinion, the Company has not accepted deposit or amounts which are deemed to be deposits, hence reporting under clause 3(v) of the Order is not applicable.

(vi) In our opinion and according to the information and explanations given to us, the maintenance of cost records has not been specified by the Central Government under sub-section (1) of section 148 of the Companies Act, 2013, for any of the activities of the company, hence reporting under clause 3(vi) of the Order is not applicable.

(vii) a). The company is regular in depositing undisputed statutory dues including Goods and Services Tax, provident fund, employees' state insurance, income-tax, sales-tax, service tax, duty of customs, duty of excise, value added tax, cess and any other statutory dues applicable to it to the appropriate authorities. According to the information and explanations given to us there are no arrears of outstanding statutory dues as on 31st March 2022 for a period of more than six months from the date they became payable.

b). In our opinion and according to the information and explanations given to us, there are no statutory dues referred to in sub-clause (a) which have not been deposited on account of any dispute.

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

(viii) In our opinion and according to the information and explanations given to us, there were no transactions which have not been recorded in the books of account and have been surrendered or disclosed as income during the year in the tax assessments under the Income Tax Act, 1961 (43 of 1961).

(ix) (a) In our opinion and according to the information and explanations given to us, the company has not defaulted in repayment of loans or other borrowings or in the payment of interest thereon to any lender during the year.
(b) The company has not been declared a wilful defaulter by any bank or financial institution or other lender.
(c) The company during the year has not taken any term loan other than loan from its holding company which has been applied for the purpose for which the loans were obtained.
(d) The company during the year has not raised funds on short term basis other than loan from its holding company.
(e) The company has no subsidiaries, associates or joint ventures, as such the reporting requirements for taking any funds from any entity or person on account of or to meet the obligations of subsidiaries, associates or joint ventures is not applicable to the company.
(f) As the company has no subsidiaries, associates or joint ventures, the reporting requirements whether the company has raised loans during the year on the pledge of securities held in its subsidiaries, joint ventures or associate companies is not applicable to the company.

(x) (a)The Company has not raised moneys by way of initial public offer or further public offer (including debt instruments) during the year, hence reporting under clause 3(x)(a) of the Order is not applicable.
(b) The Company has not made any preferential allotment or private placement of shares or convertible debentures (fully or partly or optionally) during the year, hence reporting under clause 3(x)(b) of the Order is not applicable.

(xi) (a) No fraud by the Company and no material fraud on the Company has been noticed or reported during the year, hence reporting under clause 3(xi)(a) of the Order is not applicable.
(b) No report under sub-section (12) of section 143 of the Companies Act has been filed in Form ADT-4 as prescribed under rule 13 of Companies (Audit and Auditors) Rules, 2014 with the Central Government.
(c) According to the information and explanations given to us, the company has not received any whistle blower complaints during the year.

(xii) The Company is not a Nidhi Company and hence reporting under clause (xii) of the Order is not applicable.

(xiii) In our opinion, all transactions with the related parties are in compliance with sections 177 and 188 of Companies Act where applicable and the details have been disclosed in the financial statements, etc., as required by the applicable accounting standards.

(xiv) In our opinion and based on our examination, the company does not have an internal audit system and is not required to have an internal audit system as per provisions of the Companies Act 2013.

(xv) In our opinion during the year the Company has not entered into any non-cash transactions with its Directors or persons connected with him, hence reporting requirements for compliance of provisions of section 192 of the Companies Act, 2013 are not applicable to the Company.

KAILASH SUSHIL & ASSOCIATES * FRN : 003952N New Delhi * Chartered Accountants

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

(xvi) (a)In our opinion, the Company is not required to be registered under section 45-IA of the Reserve Bank of India Act, 1934. Hence, reporting under clause 3(xvi)(a) of the Order is not applicable.
(b) In our opinion, the company has not conducted any Non-Banking Financial or Housing Finance activities during the year.
(c) In our opinion, the company is not a Core Investment Company (CIC) as defined in the regulations made by the Reserve Bank of India..
(d) In our opinion, there is no core investment company within the Group (as defined in the Core Investment Companies (Reserve Bank) Directions, 2016) and accordingly reporting under clause 3(xvi)(d) of the Order is not applicable.

(xvii) The Company has incurred cash losses of Rs.13,991/- on account of company formation expenses etc. during the financial year covered by our audit. The Company was not in existence in the immediately preceding financial year.

(xviii) There has been no resignation of the statutory auditors of the Company during the year.

(xix) On the basis of the financial ratios, ageing and expected dates of realisation of financial assets and payment of financial liabilities, other information accompanying the financial statements, our knowledge of the Board of Directors and management plans, we are of the opinion that no material uncertainty exists as on the date of the audit report that company is capable of meeting its liabilities existing at the date of balance sheet as and when they fall due within a period of one year from the balance sheet date. We, however, state that this is not an assurance as to the future viability of the Company. We further state that our reporting is based on the facts up to the date of the audit report and we neither give any guarantee nor any assurance that all liabilities falling due within a period of one year from the balance sheet date, will get discharged by the Company as and when they fall due.

(xx) In our opinion and according to the information and explanations given to us, the provisions of corporate social responsibility as per section 135 of the Companies Act 2013 are not applicable on the company, hence reporting under clause (xx) of the Order is not applicable to the company.

(xxi) In our opinion and according to the information and explanations given to us, the company is not required to prepare consolidated financial statements, hence reporting under clause (xxi) of the Order regarding qualifications or adverse remarks by the respective auditors in the Companies (Auditor's Report) Order (CARO) reports of the companies included in the consolidated financial statements is not applicable to the company.

For Kailash Sushil & Associates
Chartered Accountants
Firm Reg. No. 003952N

KAILASH SUSHIL & ASSOCIATES FRN : 003952N New Delhi Chartered Accountants

Neha Gupta
Partner
M. No. 526216

Place: New Delhi
Date: 12-05-2022
UDIN: 22526216AIXZTU5408

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ANNEXURE-II TO THE INDEPENDENT AUDITOR'S REPORT OF MOHANLALGANJ TRANSMISSION LIMITED

The Annexure referred to in our report to the members of MOHANLALGANJ TRANSMISSION LIMITED ('the Company') for the year ended 31st March 2022.

Replies to the Directions issued by Comptroller & Auditor General of India to the Statutory Auditors under Section 143(5) of the Companies Act, 2013 for the year ended 31st March 2022

S. No	Particulars	Reply
1.	Whether the company has system in place to process all the accounting transaction through IT system? If yes, the implications of processing of accounting transactions outsides IT system on the integrity of the accounts along with the financial implications, if any, may be stated.	Yes, the company has system in place to process all the accounting transactions through IT system i.e. Oracle. In our opinion and to the best of our information and according to the explanations given to us, the company has not processed any accounting transaction outside its IT system. Further, the company has adequate control system to verify the correctness of the entries posted in Oracle.
2.	Whether there is any restructuring of an existing loan or cases of waiver/write off of debts/loans/interest etc. made by a lender to the Company due to the Company's inability to repay the loan? If yes, the financial impact may be stated. Whether such cases are properly accounted for? (In case, lender is a government company, then this direction is also applicable for statutory auditors of lender company).	There is no restructuring of an existing loan are no cases of waiver/ write-off of debts/ loans/ interest etc., hence this clause is not applicable.
3.	Whether funds (grants/subsidy etc.) received/receivable for specific schemes from Central/State government or its agencies were properly accounted for/utilized as per its terms and conditions? List the cases of deviation.	There are no funds (grants/ subsidy etc.) received/ receivable for specific schemes from Central/ State government or agencies, hence this clause is not applicable.

For Kailash Sushil & Associates
Chartered Accountants
Firm Reg. No. 003952N

KAILASH SUSHIL & ASSOCIATES FRN : 003952N New Delhi Chartered Accountants

Neha Gupta
Partner
M. No. 526216

Place: New Delhi
Date: 12-05-2022
UDIN: 22526216AIXZTU5408

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ANNEXURE-III TO THE INDEPENDENT AUDITOR'S REPORT OF MOHANLALGANJ TRANSMISSION LIMITED

Annexure referred to in paragraph 3(f) under the heading 'Report on Other Legal and Regulatory Requirements' section of our report of even date to the members of Mohanlalganj Transmission Limited ("the Company") on the financial statements for the financial year ended on 31st March 2022.

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of **MOHANLALGANJ TRANSMISSION LIMITED** ("the Company") as of 31st March 2022 in conjunction with our audit of the standalone financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls
The Company's management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls over Financial Reporting issued by the Institute of Chartered Accountants of India ('ICAI'). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

Auditors' Responsibility
Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting based on our audit. We conducted our audit in accordance with the Guidance Note on Audit of Internal Financial Controls over Financial Reporting (the "Guidance Note") and the Standards on Auditing, issued by ICAI and deemed to be prescribed under section 143(10) of the Act, to the extent applicable to an audit of internal financial controls, both applicable to an audit of Internal Financial Controls and, both issued by the Institute of Chartered Accountants of India. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls system over financial reporting and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the Company's internal financial controls system over financial reporting.

Meaning of Internal Financial Controls over Financial Reporting
A company's internal financial control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally

KAILASH SUSHIL & ASSOCIATES * Chartered Accountants * FRN : 003952N New Delhi

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MOHANLALGANJ TRANSMISSION LIMITED * NEW DELHI *

accepted accounting principles. A company's internal financial control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls over Financial Reporting
Because of the inherent limitations of internal financial controls over financial reporting, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting to future periods are subject to the risk that the internal financial control over financial reporting may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion
In our opinion, the Company has, in all material respects, an adequate internal financial controls system over financial reporting and such internal financial controls over financial reporting were operating effectively as at 31st March, 2022, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting issued by the Institute of Chartered Accountants of India.

For Kailash Sushil & Associates
Chartered Accountants
Firm Reg. No. 003952N

KAILASH SUSHIL & ASSOCIATES FRN : 003952N New Delhi Chartered Accountants

Neha Gupta
Partner
M. No. 526216

Place: New Delhi
Date: 12-05-2022
UDIN: 22526216AIXZTU5408

MOHANIALGANJ TRANSMISSION LIMITED NEW DELHI

Kailash Sushil & Associates
CHARTERED ACCOUNTANTS

1-A, (K-429/135), Adarsh Nagar Extn., G.T. Karnal Road,
Near Pillar No. 96 of Metro, Delhi - 110 033
Phones Off. : 2767-2251, 2767-3650
Mobile : KCG - 98110 41558, DNB - 98110 41559
Email : davender.bhardwaj@gmail.com
kailashchandgupta@gmail.com

Compliance Certificate

We have conducted the audit of annual accounts of **MOHANLALGANJ TRANSMISSION LIMITED** for the year ended 31st March 2022 in accordance with the directions/ sub-directions issued by the C&AG of India under section 143(5) of the Companies Act, 2013 and certify that we have complied with all the Directions/ Sub-directions issued to us.

For Kailash Sushil & Associates
Chartered Accountants
Firm Reg. No. 003952N

KAILASH SUSHIL & ASSOCIATES * FRN : 003952N New Delhi Chartered Accountants *

Neha Gupta
Partner
M. No. 526216

Place: - New Delhi
Date: 12-05-2022
UDIN: 22526216AIYACD8157

MOHANLALGANJ TRANSMISSION LIMITED * NEW DELHI *

MOHANLALGANJ TRANSMISSION LIMITED

(CIN:U40106DL2021GOI382052)

Balance Sheet as at March 31, 2022

(₹ in Hundreds)

	Particulars	Note No.	As at March 31, 2022
(I)	**Assets**		
(1)	**Non-current Assets**		
	(a) Capital Work-In-Progress	3	2,56,411.35
(2)	**Current Assets**		
	(a) Financial assets		
	(i) Cash and Cash Equivalents	4	999.70
	(b) Other Current Assets	5	40,859.30
			41,859.00
	Total Assets		**2,98,270.35**
(II)	**Equity and Liabilities**		
(1)	**Equity**		
	(a) Equity Share Capital	6	1,000.00
	(b) Other Equity	7	(139.91)
			860.09
(2)	**Liabilities**		
(A)	**Current Liabilities**		
	(a) Financial Liabilities		
	(i) Borrowings	8	2,95,449.91
	(ii) Other Financial Liabilities	9	295.00
	(b) Other Current Liabilities	10	1,665.35
			2,97,410.26
	Total Equity and Liabilities		**2,98,270.35**

See accompanying notes to the Financial Statements 1-31

For and on behalf of Board of Directors

Sachin Shukla
(Director)
DIN:08613963

Sanjay Kr. Nayak
(Director)
DIN: 08197193

D. Manavalan
(Chairman)
DIN: 08102722

As per our report of even date
For and on behalf of
Kailash Sushil & Associates
Chartered Accountants
Firm Reg No. : 003952N

KAILASH SUSHIL & ASSOCIATES FRN: 003952N New Delhi Chartered Accountants

Neha Gupta
(Partner)
M. No. 526216

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Place: New Delhi
Date: 12/05/2022
UDIN: 22526216AIX2TU5408

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MOHANLALGANJ TRANSMISSION LIMITED
(CIN:U40106DL2021GOI382052)

Statement of Profit and Loss for the period ending 31st March 2022

(₹ in Hundreds)

Particulars	Note No.	For the period ending 31st March 2022
Revenue from Operations		-
Other Income		-
Total Income (I)		-
Expenses		
Other Expenses	11	139.91
Total Expenses (II)		**139.91**
Profit/(Loss) before tax (I- II =III)		(139.91)
Tax expenses: (IV)		
Current tax		-
Deferred tax		-
Profit/(Loss) for the period (III - IV = V)		**(139.91)**
Other Comprehensive Income (VI)		-
Total Comprehensive Income for the period (V + VI =VII)		**(139.91)**
Earnings per equity share : (VIII)		
Basic and Diluted (in ₹) (Par value Rs. 10/- per share)	13	(1.40)

See accompanying notes to the Financial Statements 1-31

For and on behalf of Board of Directors

Sachin Shukla
(Director)
DIN:08613963

Sanjay Kr. Nayak
(Director)
DIN: 08197193

D. Manavalan
(Chairman)
DIN: 08102722

As per our report of even date
For and on behalf of
Kailash Sushil & Associates
Chartered Accountants
Firm Reg No. : 003952N

Neha Gupta
(Partner)
M. No. 526216

Place: New Delhi
Date: 12/05/2022
UDIN:- 22526216AIXZTU5408

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI
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MOHANLALGANJ TRANSMISSION LIMITED
(CIN:U40106DL2021GOI382052)

Statement of Cash Flows for the period ending 31st March 2022

(₹ in Hundreds)

	Particulars	For the period ending 31st March 2022
A.	**Cash Flow from Operating Activities:**	
	Net profit/(loss) before tax	(139.91)
	Adjustments for:	
	Adjustments	-
	Operating Profit before Working Capital changes	**(139.91)**
	Adjustments for changes in Working Capital :	
	- Increase/(decrease) in Other financial liabilities	295.00
	- Increase/(decrease) in Other current liabilities	1,665.35
	- Increase/(decrease) in Other current assets	(40,859.30)
	Cash Generated From Operating Activities	**(39,038.86)**
	Income Taxes paid	-
	Net Cash from Operating Activities	**(39,038.86)**
B.	**Cash Flow from Investing Activities:**	
	Addition in Capital work in Progress	(2,56,411.35)
	Net Cash from Investing Activities	**(2,56,411.35)**
C.	**Cash Flow from Financing Activities:**	
	Increase in Borrowings	2,95,449.91
	Issue of Share Capital	1,000.00
	Net Cash from Financing Activities	**2,96,449.91**
	Net Increase/(Decrease) in Cash & Cash Equivalents (A+B+C)	**999.70**
	Cash and Cash Equivalents as at beginning	-
	Cash and Cash Equivalents as at Closing (Note-4)	**999.70**
	Cash and Cash Equivalents Comprising of:	
	Balance with Bank in Current Account	999.70

See accompanying notes to the Financial Statements 1-31

For and on behalf of Board of Directors

Sachin Shukla
(Director)
DIN:08613963

Sanjay Kr. Nayak
(Director)
DIN: 08197193

D. Manavalan
(Chairman)
DIN: 08102722

As per our report of even date
For & on behalf of
Kailash Sushil & Associates
Chartered Accountants
Firm Reg No. : 003952N

KAILASH SUSHIL & ASSOCIATES * Chartered Accountants *

Neha Gupta
(Partner)
M. No 526216

Place: New Delhi
Date: 12/05/2022

UDIN :- 22526216AIKZTU5408

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI
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MOHANLALGANJ TRANSMISSION LIMITED
(CIN:U40106DL2021GOI382052)

Statement of Changes in Equity for the period ended March 31, 2022

A. Equity share capital

(1) Current reporting period (FY 2021-22)

(₹ in Hundreds)

Balance as at 8th June 2021	Changes in Equity Share Capital due to prior period errors	Restated balance as at 8th June 2021	Changes in equity share capital during the current year	Balance at the 31th March 2022
-	-	-	1,000.00	1,000.00

B. Other Equity

(1) Current reporting period (FY 2021-22)

Particulars	Reserves and Surplus		Total
	Retained earnings	Others	
Balance as at 8th June 2021	-	-	-
Changes in accounting policy or prior period errors	-	-	-
Restated balance as at 1st April 2021	-	-	-
Total Comprehensive Income for the current year	(139.91)	-	(139.91)
Others	-	-	-
Balance as at 31st March 2022	**(139.91)**	-	**(139.91)**

See accompanying notes to the Financial Statements 1-31

For and on behalf of Board of Directors

Sachin Shukla
(Director)
DIN:08613963

Sanjay Kr. Nayak
(Director)
DIN: 08197193

D. Manavalan
(Chairman)
DIN: 08102722

As per our report of even date
For and on behalf of
Kailash Sushil & Associates
Chartered Accountants
Firm Reg No. : 003952N

KAILASH SUSHIL & ASSOCIATES * FRN : 003952N New Delhi Chartered Accountants

Neha Gupta
(Partner)
M. No. 526216

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Place: New Delhi
Date: 12/05/2022

UDIN:-22526216AIXZTU5408

MOHANLALGANJ TRANSMISSION LIMITED
(CIN:U40106DL2021GOI382052)
Notes to the Financial Statements for the period ending 31st March 2022

1 Corporate Information

Mohanlalganj Transmission Limited "the Company" was incorporated on 8th June 2021 under the Companies Act, 2013, as a wholly owned subsidiary of PFC Consulting Limited "PFCCL", which is a wholly owned subsidiary of Power Finance Corporation Ltd (PFC Ltd), a Govt. of India undertaking. The registered office of the Company is located at 'Urjanidhi', 1, Barakhamba Lane, Connaught Place, New Delhi-110001. The company has been incorporated to develop power system network and Study, Investigate, collect information and data, preparation of survey report, forest clearance etc., if required for the purpose of transmission of electricity and to conduct bidding process etc. for the selection of transmission service provider for construction of GIS substations at Mohanlalgunj, Rampur and Noida, Sector- 123, Uttar Pradesh. The company will be transferred to developer selected as per tariff based competitive bidding guidelines for Transmission Service issued by Ministry of Power, Government of India.

2 Significant accounting policies

a. Basis of Preparation and Statement of Compliance

These Financial Statements have been prepared on historical cost and accrual basis of accounting and are in compliance with the Indian Accounting Standards (referred to as "Ind AS") notified under the Companies (Indian Accounting Standards) Rules, 2015 (as amended) and applicable provisions of the Companies Act, 2013. The Financial Statements have been prepared under Ind AS because Ind AS are applicable to its holding company PFCCL.

The Company's financial statements are presented in Indian Rupees (INR), which is its functional currency.
Amounts in these financial statements have been rounded off to 'nearest hundreds upto two decimal points (unless otherwise indicated).

b. Use of Estimates

The preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts of revenue, expense, assets and liabilities and disclosures relating to contingent liabilities on the date of the financial statements. Actual results could differ from those estimates. Estimates and underlying assumptions are reviewed on an ongoing basis. Revision to accounting estimates is recognised in the period in which the estimate is revised and in any future period affected.

c. Recognition of Income / Expenditure

Income and expenses (except otherwise stated) are accounted for on accrual basis.

d. Capital Work in Progress

Expenditure incurred on Consultancy /Administration /Interest /Manpower Charges/ Legal & Professional etc during construction period/setting up of project (net of incomes) is capitalized & treated as Capital Work In Progress.

e. Expenditure incurred by Holding Company

Expenditure incurred by the company for the Project is funded by the Holding Company (PFCCL) and is considered as Borrowings and disclosed under the head Current Liabilities. Interest is charged by holding company (PFCCL) as per rate applicable from time to time.

f. Preliminary Expenses

Preliminary expenses has been charged to the Statement of Profit & Loss in the year in which such expenditure has been incurred.

g. Borrowing Costs

Borrowing cost is charged to the Statement of Profit & Loss for the year in which it is incurred except for capital work in progress which is capitalized till the date of commercial use of the assets.

KAILASH SUSHIL & ASSOCIATES FRN. 003952N New Delhi Chartered Accountants

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

h. Provisions, Contingent Liabilities and Contingent Assets

(i) Provisions are recognised when the Company has a present obligation (legal or constructive) as a result of a past event, if it is probable that the Company will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

(ii) Where it is not probable that an outflow of economic benefits will be required or the amount cannot be estimated reliably, the obligation is disclosed as contingent liability in notes to accounts, unless the probability of outflow of economic benefits is remote.

(iii) Contingent Assets are not recognised in the financial statements but are disclosed, where an inflow of economic benefit is probable.

(iv) These are reviewed at each balance sheet date and are adjusted to reflect the current management estimate.

i. Cash & Cash Equivalents

Cash comprises cash on hand and demand deposits. The Company considers cash equivalents as all short term balances (with an original maturity of three months or less from the date of acquisition), highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of changes in value.

j. Cash Flow Statement

Cash flow Statement is prepared in accordance with the indirect method, whereby net profit/(loss) before tax is adjusted for the effects of transactions of a non-cash nature and any deferrals or accruals of past or future cash receipts or payments. The cash flows from operating, investing and financing activities of the company are segregated.

k. Taxes on Income

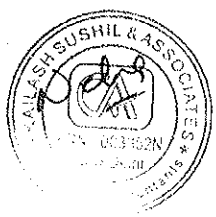
Income Tax expense comprises of current and deferred tax. It is recognised in Statement of Profit and Loss, except when it relates to an item that is recognised in OCI or directly in equity, in which case, tax is also recognised in OCI or directly in equity.

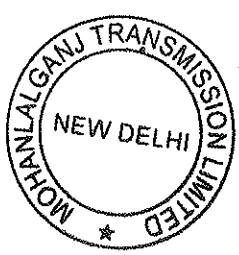
Current tax is the expected tax payable on taxable income for the year, using tax rates enacted or substantively enacted and as applicable at the reporting date, and any adjustments to tax payable in respect of Previous Years.

Deferred tax is recognised on temporary differences between the carrying amounts of assets and liabilities in the financial statements and the corresponding tax bases used in the computation of taxable income. Deferred tax is measured at the tax rates based on the laws that have been enacted or substantively enacted by the reporting date. Deferred tax assets and liabilities are offset if there is a legally enforceable right to offset current tax liabilities and assets, and they relate to income taxes levied by the same tax authority.

A deferred tax liability is recognised for all taxable temporary differences. A deferred tax asset is recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which the deductible temporary difference can be utilized. Deferred tax assets are reviewed at each reporting date and are reduced to the extent that it is no longer probable that the related tax benefit will be realized.

Additional Income Tax that arises from the distribution of dividend is recognized at the same time when the liability to pay dividend is recognized.





MOHANLALGANJ TRANSMISSION LIMITED
(CIN:U40106DL2021GOI382052)
Notes to the Financial Statements for the period ending 31st March 2022

I. Financial Instruments

Financial assets and financial liabilities are recognised when the Company becomes a party to the contractual provisions of the financial instruments.

On initial recognition, financial assets and financial liabilities are recognised at fair value plus/ minus transaction cost that are attributable to the acquisition or issue of financial assets and financial liabilities. In case of financial assets and financial liabilities which are recognised at fair value through profit and loss (FVTPL), it's transaction costs are recognised in Statement of Profit and Loss.

I.1 Financial Assets

All regular way purchases or sales of financial assets are recognised and derecognised on a settlement date basis.

After initial recognition, financial assets are subsequently measured in their entirety at either amortised cost or fair value, depending on the classification of the financial assets.

i) Classification and Measurement of Financial Assets (other than Equity instruments)

a) Financial Assets at Amortised Cost:

Financial assets that meet the following conditions are subsequently measured at amortised cost using Effective Interest Rate method (EIR):

- the asset is held within a business model whose objective is to hold assets in order to collect contractual cash flows; and
- the contractual terms of the asset give rise on specified dates to cash flows that are Solely Payments of Principal and Interest (SPPI) on the principal amount outstanding.

b) Financial Assets at Fair Value through Other Comprehensive Income (FVTOCI)

A financial asset is measured at FVTOCI if both the following conditions are met:

- The objective of the business model is achieved both by collecting contractual cash flows and selling the financial asset; and
- the contractual terms of the asset give rise on specified dates to cash flows that are Solely Payments of Principal and Interest (SPPI) on the principal amount outstanding.

c) Financial Assets at fair value through Profit or Loss (FVTPL)

A financial asset is measured at FVTPL unless it is measured at amortised cost or FVTOCI, with all changes in fair value recognised in Statement of Profit and Loss.

ii) Impairment of Financial Assets

a) Subsequent to initial recognition, the Company recognises expected credit loss (ECL) on financial assets measured at amortised cost. ECL on such financial assets, other than loan assets, is measured at an amount equal to life time expected losses.

The impairment requirements for the recognition and measurement of ECL are equally applied to Loan asset at FVTOCI except that ECL is recognised in other comprehensive income and is not reduced from the carrying amount in the balance sheet.

b) Impairment of Loan Assets and commitments under Letter of Comfort (LoC):

The Company measures ECL on loan assets at an amount equal to the lifetime ECL if there is credit impairment or there has been significant increase in credit risk (SICR) since initial recognition. If there is no SICR as compared to initial recognition, the Company measures ECL at an amount equal to 12-month ECL. When making the assessment of whether there has been a SICR since initial recognition, the Company considers reasonable and supportable information, that is available without undue cost or effort. If the Company measured loss allowance as lifetime ECL in the previous period, but determines in a subsequent period that there has been no SICR since initial recognition due to improvement in credit quality, the Company again measures the loss allowance based on 12-month ECL. ECL is measured on individual basis for credit impaired loan assets, and on other loan assets it is generally measured on collective basis using homogenous groups.

c) The impairment losses and reversals are recognised in Statement of Profit and Loss.

KAILASH SHIL & ASSOCIATES FRN : 003952N New Delhi

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

iii) **De-recognition of Financial Assets**

The Company derecognises a financial asset when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another party.

On de-recognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable, and the cumulative gain or loss that had been recognised in other comprehensive income and accumulated in equity, is recognised in Statement of Profit and Loss if such gain or loss would have otherwise been recognised in Statement of Profit and Loss on disposal of that financial asset.

I.2 Financial Liabilities

i) All financial liabilities other than derivatives and financial guarantee contracts are subsequently measured at amortised cost using the effective interest rate (EIR) method.

EIR is determined at the initial recognition of the financial liability. EIR is subsequently updated for financial liabilities having floating interest rate, at the respective reset date , in accordance with the terms of the respective contract.

ii) De-recognition of financial liabilities

The Company derecognises financial liabilities when, and only when, the Company's obligations are discharged, cancelled or have expired. The difference between the carrying amount of the financial liability derecognised and the consideration paid and payable is recognised in Statement of Profit and Loss.

(m) Earnings Per Share

Basic earnings per share are computed by dividing the net profit after tax by the weighted average number of equity shares outstanding during the period. Diluted earnings per shares is computed by dividing the profit after tax by the weighted average number of equity shares considered for deriving basic earnings per shares and also the weighted average number of equity shares that could have been issued upon conversion of all dilutive potential equity shares.

KAILASH SUSHIL & ASSOCIATES * FRN : 003952N New Delhi * Chartered Accountants

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

MOHANLALGANJ TRANSMISSION LIMITED
(CIN:U40106DL2021GOI382052)

Notes forming part of the financial statements for the period ending March 31, 2022

3. Capital work in progress

(₹ in Hundreds)

Particulars	As at March 31, 2022
Opening Capital work in progress	-
Add: Transferred from Expenditure during construction period (Note no-12)	2,56,411.35
	2,56,411.35

3.1 CWIP aging schedule:

Particulars	Amount in CWIP for a period of				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
As on 31.03.2022					
Projects in progress	2,56,411.35	-	-	-	2,56,411.35
Projects temporarily suspended	-	-	-	-	-
Total	**2,56,411.35**	-	-	-	**2,56,411.35**

3.2 CWIP completion schedule:

Particulars	To be competed in				Total
	Less than 1 year	1-2 years	2-3 years	More than 3 years	
As on 31.03.2022					
Projects in progress	-	-	-	2,56,411.35	2,56,411.35
Projects temporarily suspended	-	-	-	-	-
Total	-	-	-	**2,56,411.35**	**2,56,411.35**

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

MOHANLALGANJ TRANSMISSION LIMITED
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Notes to the Financial Statements for the period ending 31st March 2022

4. CASH AND CASH EQUIVALENTS

(₹ in Hundreds)

Particulars	As at March 31, 2022
Balance with Bank in Current Account	999.70
TOTAL	**999.70**

5. OTHER CURRENT ASSETS

(₹ in Hundreds)

Particulars	As at March 31, 2022
Balance with revenue authorities (Input Tax Credit-GST)	40,859.30
TOTAL	**40,859.30**

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MOHANLALGANJ TRANSMISSION LIMITED * NEW DELHI

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Notes to the Financial Statements for the period ending 31st March 2022

6. EQUITY SHARE CAPITAL

(₹ in Hundreds)

Particulars	As at March 31, 2022
Authorised Capital	
10,000 Equity shares of Rs.10/- each	1,000.00
Issued, Subscribed and Paid up	
10,000 Equity shares of Rs.10/- each fully paid up	1,000.00
TOTAL	**1,000.00**

(i) Reconciliation of the number of Shares outstanding at the beginning and at the end of the period.

Particulars	As at 31st March 2022	
	No. of Shares	Amount
Outstanding as at the beginning of the period	-	-
Add: Addition during the period	10,000	1,000.00
Outstanding as at the end of the period	**10,000**	**1,000.00**

(ii) Rights, Preferences and restriction attached to Equity Shares

The Company has one class of equity shares having a par value of Rs. 10 per share. Each shareholder is eligible for one vote per share held. The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend. In the event of liquidation, the equity shareholders are eligible to receive the remaining assets of the Company after distribution of all preferential amounts, in proportion to their shareholding.

(iii) Equity Shares held by the Controlling Entity:

Particulars	As at 31st March 2022	
	No of shares	%
Equity Shares		
PFC Consulting Limited, the Holding Company *	10,000	100%

(iv) Details of shares held by each shareholder holding more than 5% shares in the Company:

Particulars	As at 31st March 2022	
	No of shares	%
Equity Shares		
PFC Consulting Limited, the Holding Company *	10,000	100%

* Equity shares are held by PFC Consulting Limited and through its nominees.

(v) Details of shareholding of Promoters:

Shares held by promoters at the end of the year			
Promoter name	**Number of shares**	**% of total shares**	**% change during the year**
As at 31.03.2022			
PFC Consulting Limited, the Holding Company	9,400	94.00%	-
Nominees of PFC Consulting Limited	600	6.00%	-

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI 610

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Notes to the Financial Statements for the period ending 31st March 2022

7. OTHER EQUITY

(₹ in Hundreds)

Particulars	As at March 31, 2022
Retained Earnings:	
Balance at the beginning of the Period	-
Add: Total Comprehensive Income for the period	(139.91)
Balance at the end of the period	**(139.91)**

8. BORROWINGS

(₹ in Hundreds)

Particulars	As at March 31, 2022
Financial Liabilities carried at Amortised Cost (Unsecured)	
Loans from related party (PFC Consulting Limited, holding company)	2,82,767.92
Interest accrued but not due on loans from related party	12,681.99
TOTAL	**2,95,449.91**

9. OTHER FINANCIAL LIABILITIES

(₹ in Hundreds)

Particulars	As at March 31, 2022
Expenses Payable	295.00
TOTAL	**295.00**

10. OTHER CURRENT LIABILITIES

(₹ in Hundreds)

Particulars	As at March 31, 2022
Statutory dues Payable	1,665.35
TOTAL	**1,665.35**

KAILASH SUSHIL & ASSOCIATES

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

MOHANLALGANJ TRANSMISSION LIMITED
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Notes to the Financial Statements for the period ending 31st March 2022

11. OTHER EXPENSES

(₹ in Hundreds)

Particulars	For the period ending 31st March 2022
Preliminary Expenses	139.91
TOTAL	**139.91**

12. EXPENDITURE DURING CONSTRUCTION PERIOD

(₹ in Hundreds)

Particulars	For the period ending 31st March 2022
Manpower Charges	1,30,812.53
Professional Charges	1,13,100.00
Consultancy Charges	1,260.00
Outsourcing Expenses	1,418.29
Other Expenses	592.00
Interest Expenses	14,091.10
Legal and Filing Fees	1.00
Advertisement Expenses	14,886.13
Audit fees	250.00
Bank Charges	0.30
TOTAL	**2,76,411.35**
Less: Sale of RFP	20,000.00
TOTAL (Transferred to CWIP, Note-3)	**2,56,411.35**

13. EARNINGS PER SHARE

(₹ in Hundreds)

Particulars	For the period ending 31st March 2022
Basic and diluted Earning Per Share	
Face value per Equity Share **(In ₹)**	10.00
Net Profit / (Loss) after Tax as per Statement of Profit and Loss attributable to Equity Shareholders	(139.91)
Weighted Average number of Equity Shares used as denominator for calculating Basic & Diluted EPS	10,000
Basic and diluted Earning Per Share (in ₹)	(1.40)
There are no dilutive instruments issued by the company.	

SUSHIL & ASSOCIATES

MOHANLALGANJ TRANSMISSION LIMITED
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MOHANLALGANJ TRANSMISSION LIMITED
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Notes to the Financial Statements for the period ending 31st March 2022

14. STATEMENT OF TRANSACTIONS WITH RELATED PARTIES

14.1 Name of related parties and description of relationship:

Holding Company			
1	Power Finance Corporation Limited (PFCL)		
Fellow Subsidiary			
1	PFC Consulting Limited (PFCCL)	2	REC Limited (RECL)
3	REC Power Development and Consultancy Limited (formerly REC Power Distribution Company Limited)		
Associate of Fellow Subsidiary			
1	Bijawar- Vidarbha Transmission Limited	2	Kishtwar Transmission Limited incorporated on 15th April 2021
3	Shongtong Karcham- Wangtoo Transmission Limited*	4	Nangalbibra Transmission Limited transferred to Sterlite Grid 26 Limited on 16th December 2021
5	Chhatarpur Transmission Limited incorporated on 25th Januray 2022	6	Ananthpuram Kurnool Transmission Limited
7	Karur Tansmission Limited transferred to Adani transmission Limited on 18th January 2022	8	Tanda Transmission Company Limited*
9	Sikar-II Aligarh Transmission Limited transferred to PGCIL on 08th June 2021	10	Khavda Bhuj Transmission Limited transferred to Adani transmission Limited on 18th January 2022
11	Khetri-Narela Transmission Limited	12	Bhadla Sikar Transmission Limited
13	Koppal-Narendra Transmission Limited transferred to Renew Transmission ventures Pvt Ltd on 13th December 2021		
Associate through PFCL			
1	Coastal Maharashtra Mega Power Limited (through PFCL)*	2	Sakhigopal Integrated Power Company Limited (through PFCL)
3	Ghogarpalli Integrated Power Company Limited (through PFCL)	4	Coastal Karnataka Power Limited (through PFCL)
5	Orissa Integrated Power Limited (through PFCL)	6	Chhattisgarh Surguja Power Limited (through PFCL)*
7	Tatiya Andhra Mega Power Limited (through PFCL)*	8	Deoghar Mega Power Limited (through PFCL)
9	Deoghar Infra Limited (through PFCL)	10	Coastal Tamil Nadu Power Limited (through PFCL)
11	Bihar Infrapower Limited (through PFCL)	12	Odisha Infrapower Limited (through PFCL)
13	Jharkhand Infrapower Limited (through PFCL)	14	Bihar Mega Power Limited (through PFCL)
Associate of RECL			
1	SIKAR NEW TRANSMISSION LIMITED (incorporated on 2 June, 2020 and transferred to M/s power Grid Corporation of india Limited on 4 June, 2021)	2	MP POWER TRANSMISSION PACKAGE-II LIMITED (incorporated on 20 August, 2020 and transferred to M/s Adani Transmission Limited on 1 November, 2021)
3	MP POWER TRANSMISSION PACKAGE-I LIMITED	4	RAJGARH TRANSMISSION LIMITED
5	KALLAM TRANSMISSION Limited (incorporated on 28 May, 2020 and transferred to M/s Indigrid 1 Limited (Lead Member) on 28 December, 2021)	6	GADAG TRANSMISSION Limited (incorporated on 2 June, 2020 and transferred to M/s Renew Transmission Ventures Private Limited on 17 March 2022)
7	BIDAR TRANSMISSION LIMITED	8	ER NER Transmission Limited (incorporated on 06.10.2021)
9	FATEHGARH BHADLA TRANSCO LIMITED (incorporated on 2 June, 2020 and transferred to M/s power Grid Corporation of India Limited on 4 June, 2021)	10	DINCHANG TRANSMISSION LIMITED (struck off from the RoC vide MCA letter dated 17.08.2021)
11	CHANDIL TRANSMISSION LIMITED	12	MANDAR TRANSMISSION LIMITED
13	DUMKA TRANSMISSION LIMITED	14	KODERMA TRANSMISSION LIMITED
Joint Venture of PFCL			
1	Energy Efficiency Services Limited (through PFCL)	2	Ceighton Energy Limited (through EESL)
3	EESL EnergyPro Assets Limited (through EESL)	4	Edina Acquisitions Limited (through EESL)
5	Aneco Energy Services (South) Limited (through EESL)	6	Edina Limited (through EESL)
7	EPAL Holdings Limited (through EESL)	8	Edina Australia Pty Limited (through EESL)
9	Edina Power Services Limited (through EESL)	10	Stanbeck Limited (through EESL)
11	Edina UK Limited (through EESL)	12	Edina Power Limited (through EESL)
13	Armoura Holdings Limited (through EESL)	14	Edina Manufacturing Limited (through EESL)
15	EPSL Trgeneration Private Ltd (Through EESL)	16	Convergence Energy Services Limited

*under process of striking off

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

14.2 The Key Management Personnel of the Company are Employees of the ultimate Holding Company (PFC) and deployed on Part Time basis:

S. No.	Name	Designation	Date of Appointment	Date of Cessation
1	Shri D. Manavalan	Chairman	08.06.2021	Continuing
2	Shri Sachin Shukla	Director	08.06.2021	Continuing
3	Shri Sanjay Kr. Nayak	Director	08.06.2021	Continuing

14.3 Details of Transactions:

14.3.1 Transactions with Related Parties

(₹ in Hundreds)

Particulars	For the period ending 31st March 2022
PFC Consulting Limited (Holding Company)	
- Manpower charges	130,812.53
- Interest on borrowing	14,091.10
- Reimbursement of expenses	131,397.33
- Loans received (Net)	282,767.92

14.3.2 Outstanding Balances with Related Parties

(₹ in Hundreds)

Particulars	As at March 31, 2022
PFC Consulting Limited (Holding Company)	
- Borrowings	282,767.92
- Interest Accrued but not due on Borrowings	12,681.99

14.4 Compensation of Key Management Personnel:

The employees in the company are on contractual terms as per agreement entered with PFC/PFCCL. No sitting fees has been paid to the directors.

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NILALGANJ TRANSMISSION LIMITED NEW DELHI

MOHANLALGANJ TRANSMISSION LIMITED
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Notes to the Financial Statements for the period ending 31st March 2022

15. Financial Instruments

(i) Categories of Financial Instruments

(₹ in Hundreds)

Particulars	As at March 31, 2022
Financial Assets:	
Measured at amortised cost	
(a) Cash and Cash Equivalents	999.70
Financial Liabilities:	
Measured at amortised cost	
(a) Borrowings	2,82,767.92
(b) Interest on Borrowings	12,681.99
(c) Other Financial Liabilities	295.00

(ii) Financial Risk Management Objectives

The Company's financial liabilities comprise of borrowings and other payables. The Company's financial assets comprise mainly of cash and cash equivalents. The Company is exposed to market risk (including currency risk, interest risk and other price risk), credit risk and liquidity risk.

The Company's management monitors and manages the financial risks relating to the operations of the Company by analysing exposures by degree and magnitude of risks. Since the entire operations of the company are in India, the currency risk is not applicable to the company.

(iii) Market Risk

Market risk is the risk that the fair value of future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risks: interest rate risk, currency risk and other price risk. The Company has no exposure from the international market as the Company operations are in India only. Financial instruments affected by interest rate risk includes borrowings . The Company is not exposed to other price risk.

Market risk exposures are measured using sensitivity analysis.

There has been no change to the Company's exposure to market risks or the manner in which these risks are being managed and measured.

(iv) Interest Rate Risk Management

The Company is exposed to interest rate risk because it borrow funds at the floating rate of interest charged by Power Finance Corporation Limited (Ultimate Holding Company) under category of " State Sector Borrowers (Category 'A') as determined from time to time.

The Company's exposures to interest rates on financial assets and financial liabilities are detailed in the liquidity risk management section of this note.

(v) Interest Rate Sensitivity Analysis

The sensitivity analysis below have been determined based on the exposure to interest rates at the end of the financial year. For floating rate liabilities, the analysis is prepared assuming the amount of the liability outstanding at the end of the financial year was outstanding for the whole year. A 50 basis point increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

Sensitivity analysis for a 50 basis points fluctuation in interest and all other variables were held constant is explained below:

If increase by 50 basis point

Particulars	For the period ending 31st March 2022
Impact for Profit or (Loss)	-
Impact for Other comprehensive income	-

If decrease by 50 basis point

Particulars	For the period ending 31st March 2022
Impact for Profit or (Loss)	-
Impact for Other comprehensive income	-

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

15. Financial Instruments

(vi) Credit Risk Management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Company. Company's bank balances are held with a reputed and creditworthy banking institution resulting to limited credit risk from the counterparties.

(vii)Liquidity Risk Management

Liquidity risk refers to the risk that an entity will encounter difficulty in meeting obligations associated with financial liabilities that are settled by delivering cash or another financial asset.
The Company's financial liabilities comprises majorly of unsecured borrowings from its holding company (PFCCL).

The table below provides details regarding the contractual maturities of Financial Liabilities as at 31st March, 2022 :

(₹ in Hundreds)

Particulars	Carrying Amount	Due in 1st year	Due in 2-5 year	Due in More than 5 year	Due Date not Specified	Total Contracted Cash Flows
Financial Liabilities						
Borrowings	2,82,767.92	2,82,767.92	-	-	-	2,82,767.92
Interest on Borrowings	12,681.99	12,681.99	-	-	-	12,681.99
Other Financial Liabilities	295.00	295.00	-	-	-	295.00

(viii) Fair Value Measurements

Fair value of the Company's financial assets and financial liabilities that are measured at fair value on a recurring basis is as follows:

(₹ in Hundreds)

Particulars	Fair Value Hierarchy	As at March 31, 2022	
		Carrying Amount	Fair Value
Financial Liabilities			
Borrowings	Level 3	2,82,767.92	2,82,767.92
Interest on Borrowings	Level 3	12,681.99	12,681.99
Other Financial Liabilities	Level 3	295.00	295.00

There was no transfer between Level 1, Level 2 and Level 3 in the year. The carrying amount of financial assets and financial liabilities measured at amortised cost in the Ind AS financial statements are a reasonable approximation of their fair value since the Company does not anticipate that carrying value would be significantly different from the values that would eventually be received or settled.

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

16. Capital management:
The Company manages it's capital to ensure that it will be able to meet the expenses towards the setting up of Independent Transmission Project. The capital structure of the Company consists of equity and debt from its holding company. For the purpose of the capital management, capital includes issued equity capital, share premium and all other equity reserves attributable to the equity holders of the Company. The primary objective of the Company's management is to maximise the shareholder value. The Company is not subject to any externally imposed capital requirements. The Company's Board reviews the capital structure of the Company on need basis. During the year company has obtained loan from its holding company of Rs.2,82,767.92 hundreds and equity share capital as on March 31, 2022 of Rs. 1,000.00 hundreds.

17. All the expenses incurred by the Company are towards the setting up of Independent Transmission Project. Since the project is identified, all the expenditures are required to be capitalized as Capital work-in-progress . Hence, expenditure during construction Period as mentioned in Note 12 containing all expenses has been transferred to Capital work-in-progress (Refer Accounting Policy Number 2(d)).

18. The expenses are mainly allocated by PFCCL to **Mohanlalganj Transmission Limited.** Direct Expenditures related to ITP are allocated on 100% basis and common expenditure are allocated based on sharing of services between various ITPs. Original supporting bills in respect of such expenditure incurred by the PFCCL are in the name of PFCCL and retained by them of which copies are available with the company. PFCCL is complying with all the statutory provisions relating to the 'Deduction of Tax At Source and GST etc as appilable to these expenses.

19. Employees working for the Company are from holding company i.e. PFC Consulting Ltd. (PFCCL). The expenses appearing in the Note No. 12 "Expenditure during construction period" include manpower charges of PFCCL employees of Rs. 1,30,812.53 hundreds. The manpower cost of PFCCL employees are charged by PFCCL on the basis of cost to company based on actual time spent by the employees for the Company as per invoice raised by PFCCL. This includes manpower charges of Shri Sanjay Kr. Nayak, Director, Rs. 14,228.25 hundreds, Shri Sachin Shukla, Director, Rs. 1,417.16 hundreds.

20. The expenditure on development of the project are incurred by PFC Consulting Limited (PFCCL) (Holding Co.). The company shall pay interest to PFCCL on the expenditure incurred by PFCCL. The rate of interest charged / paid is as applicable in PFC Ltd. for the Project Loan/Schemes (Transmission) for Borrowers under category "State Sector Borrowers (Category 'A') as determined from time to time.

21. During the period, deferred tax asset on the timing difference on carried forward of losses has arisen, however, in absence of virtual certainity of future taxable profit, the same has not been recognised in the Financial Statements.

22. Segment Information
The board of directors of the Company, which has been identified as being the chief operating decision maker (CODM), evaluates the Company's performance, allocate resources based on the analysis of the various performance indicator of the Company. The Company is mainly engaged in the business of transmission of electricity and all activities of the Company revolve around this main business as a single unit. Further there are no geographical segments as all the operations of the Company are in India. Therefore, there is no separate reportable segment for the Company as per the requirement of Ind AS 108 "Operating Segments".

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MOHANLALGANJ TRANSMISSION LIMITED * NEW DELHI *

MOHANLALGANJ TRANSMISSION LIMITED
(CIN:U40106DL2021GOI382052)
Notes to the Financial Statements for the period ending 31st March 2022

23. The Particulars of dues to Micro, Small and Medium Enterprises under Micro, Small and Medium Enterprises Development Act,2006 ("MSMED Act"), based on the information available with the Company:

Particulars	As at March 31, 2022
(a) the principal amount and the interest due thereon remaining unpaid to any supplier at the end of accounting period	-
(b) the amount of interest paid by the buyer in terms of section 16 of the MSMED Act 2006, along with the amount of the payment made to the supplier beyond the appointed day during the accounting period	-
(c) the amount of interest due and payable for the period of delay in making payment (which has been paid but beyond the appointed day during the period) but without adding the interest specified under the MSMED Act 2006	-
(d) the amount of interest accrued and remaining unpaid at the end of accounting period	-
(e) the amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues above are actually paid to the small enterprise, for the purpose of disallowance of a deductible expenditure under section 23 of the MSMED Act 2006	-

24. Commitments:

Particulars	As at March 31, 2022
Estimated amount of contracts remaining to be executed on capital account and not provided for	-
Other commitments	-

25.Contingent Liabilities and Contingent assets

Particulars	As at March 31, 2022
Contingent liabilities of the company and claims against the company not acknowledged by the company as certified by the management for the period	-
Further, No contingent assets and contingent gains are probable to the company.	-

26. Employee Benefit Plans
Since there are no employees in the company, the disclosure requirement as per Ind AS- 19 is not applicable.

27. Auditors Remuneration (₹ in Hundreds)

Particulars	For the period ending 31st March 2022
Statutory Audit Fees (Excluding taxes)	250.00

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

MOHANLALGANJ TRANSMISSION LIMITED
(CIN:U40106DL2021GOI382052)
Notes to the Financial Statements for the period ending 31st March 2022

28. Other Disclousures:
(a) Expenditure in foreign currency- NIL

(b) Income in foreign exchange- NIL

29.Ratios:
Details of ratios are as under: -

Ratio	Numerator	Denominator	31.03.2022
(a) Current Ratio	Current Assets	Current Liabilities	0.14
(b) Debt-Equity Ratio	Total Debt	Shareholder's Equity	343.51

Other ratios requiring disclosures as per Schedule-III of the Companies Act 2013 are not applicable to the company as the company is under project implementation period.

30. The company was incorporated during the year on 8th June 2021 and the financial statements have been prepared from the date of incorporation to 31st March 2022. Since these are the first financial statements of the company, previous period figures are not applicable.

31. Approval of Financial Statements
The Financial Statements for the period ended 31st March 2022 were approved by the Board of Directors and authorised for issue on 12 May 22

For and on behalf of Board of Directors

Sachin Shukla
(Director)
DIN:08613963

Sanjay Kr. Nayak
(Director)
DIN: 08197193

D. Manavalan
(Chairman)
DIN: 08102722

As per our report of even date
For and on behalf of
Kailash Sushil & Associates
Chartered Accountants
Firm Reg No. : 003952N

KAILASH SUSHIL & ASSOCIATES

Neha Gupta
(Partner)
M. No. 526216

Place: New Delhi
Date: 12/05/2022
UDIN:-22526216AIXZTU5408

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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Annexure-9 - Enclosure-8

Credit Rating of Power Grid Corporation of India Limited, the Holding Company of the Applicant Company

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ATTESTED TRUE COPY
Attested from Pg 620 to 657
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

May 02, 2022

Power Grid Corporation of India Limited: Ratings reaffirmed

Summary of rating action

Instrument*	Previous Rated Amount (Rs. crore)	Current Rated Amount (Rs. crore)	Rating Action
Long-term bonds programme	66,891.23	66,891.23	[ICRA]AAA(Stable); reaffirmed
Long-term bonds programme	17,693.82	-	[ICRA]AAA(Stable); reaffirmed and withdrawn
Commercial Paper^	9,000.00	9,000.00	[ICRA]A1+; reaffirmed
Short term borrowing programme^	9,000.00	9,000.00	[ICRA]A1+; reaffirmed
Long term loans	32,830.00	31,767.96	[ICRA]AAA(Stable); reaffirmed
Long term unallocated limits	10,000.00	10,000.00	[ICRA]AAA(Stable); reaffirmed
Long term/short term fund based/non-fund based limits	5,700.00	5,700.00	[ICRA]AAA(Stable)/[ICRA]A1+; reaffirmed
Total	**1,51,115.05**	**132,359.19**	

**Instrument details are provided in Annexure-1*

^Aggregate borrowing under commercial paper and short term borrowing programme capped at Rs 9,000 crore.

ICRA has reaffirmed and withdrawn the long-term rating of [ICRA]AAA(Stable) assigned to the Rs. 8,223.72-crore bonds of Power Grid Corporation of India Limited (PGCIL) as there are no outstanding dues against the same. The redemption payments have been independently verified. ICRA has also withdrawn the long-term rating of [ICRA]AAA(Stable) assigned to the Rs. 9,470.10-crore bonds[1] of PGCIL as the rated bonds have not been placed. The ratings have been withdrawn at the request of the company.

Rationale

The rating reaffirmation factors in the strategic role of Power Grid Corporation of India Limited (PGCIL) in the Indian power sector owing to its role as India's largest power transmission utility and its ownership and near monopoly in the inter-state transmission network, along with the low level of business risks in its core operations. The ratings also factor in the cost-plus transmission tariff structure for majority of the company's operational assets (above 95% of the total gross block) and PGCIL's superior operating efficiency indicated by the availability factor which has remained consistently high over the years. The ratings also take into account the continued capitalisation of transmission assets, which is expected to boost the company's revenues and cash flows going forward. ICRA notes that the asset monetisation through INVIT will enable quick redeployment of capital to build incremental transmission assets going forward.

ICRA continues to take into consideration the support from the Government of India (GoI) (guarantees extended for some of PGCIL's borrowing programmes) which enables the company raise long-term funds at competitive rates. The ratings also note that majority of the company's transmission lines are a part of the inter-state transmission system (ISTS) network wherein the billing and collection is through point of connection (PoC) mechanism and the licensee does not have direct exposure to a single discom. The Central Transmission Utility (CTU) receives the bills from all ISTS licensees and collects the payments from counterparties (primarily state distribution utilities) that are part of the transmission service agreement (TSA). The timely collection by CTU from state distribution utilities is ensured by a payment security mechanism which comprises a letter of credit for 1.05 times of monthly billing as per the terms of the TSA, regulation of power supply in case of non-payment of dues

[1]part of Rs. 10,000 crore bonds programme of FY2022 rated in May 2021

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

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and the option of invocation of a tripartite agreement among the RBI, Government of India and state governments. PGCIL's cash collections have continued to be strong since 2003-04 and the resultant payment discipline. ICRA believes that the collection efficiency will be sustained going forward.

The ratings are constrained by the counterparty credit risk associated with the exposure to state distribution utilities, majority of which have a weak to moderate financial profile. However, timely issuance of tariff orders, adequate tariff hikes for reduction of revenue gaps and time-bound recovery of the regulatory assets and reduction of distribution loss levels going forward remain imperative for a sustained improvement in the health of the power distribution sector, reducing the counterparty credit risks for entities serving the power sector, including transmission companies such as PGCIL. ICRA has also taken note of the fact that the CTU function has been separated from PGCIL and a new entity, Central Transmission Utility of India Ltd (a subsidiary of PGCIL), has been designated as the CTU from April 2021. This entity will eventually be owned directly by the GoI. ICRA will continue to monitor the developments in this regard.

ICRA's ratings consider the fact that new projects are awarded either on a nomination basis or through a tariff-based competitive bidding. The projects awarded through the competitive bidding process shall not have cost overruns as pass-through in tariffs, resulting in increased business risks in the core business, although the proportion of such assets as a percentage of the total gross block is expected to remain low in the near future. While PGCIL is exposed to project execution risks, this has reduced compared to the earlier years due to the relatively low capital expenditure planned for the coming years.

The Stable outlook on the [ICRA]AAA rating reflects ICRA's opinion that PGCIL will continue to benefit from the cost-plus nature of transmission tariff for majority of its assets, its satisfactory operational performance and the receipt of timely payments from its customers, primarily the state distribution utilities.

Key rating drivers and their description

Credit strengths

Significant ownership of GoI and support by Government: - PGCIL is the largest transmission company in the country. The GoI held a 51.34% stake in PGCIL as on March 31, 2022 and the company is executing several strategically important projects assigned to it by the government. The GoI has also extended its support to PGCIL in the form of guarantees for some of the loans availed by the company which enables the company to raise long-term funds at competitive rates

Large network of transmission assets with satisfactory operational performance: - As on February 10, 2022, the company owned transmission lines of 172,190 circuit kilometres (ckms) and 264 substations with a capacity of 469,600 MVA (including subsidiaries). Further, PGCIL owns 85% of the inter-regional capacity of the country as of February 2022. PGCIL has demonstrated consistently high system availability of above 99.7% in the last five years against the minimum target of 98% as per CERC norms, ensuring the recovery of annual transmission charges and earning incentive for availability being higher than the normative levels.

Cost-plus nature of tariff for majority of assets ensures healthy return on equity: The company generates stable revenues and cash flows as a significant portion (above 95% of its revenues) of the transmission assets are commissioned under the cost-plus tariff norms by the CERC for transmission projects. The components of the annual transmission charges include return on equity, tax on return on equity, interest on term loan, interest on working capital loan, operation and maintenance expenses and depreciation. The company needs to ensure network availability above the normative level of 98% to recover the annual transmission charges.

Credit challenges

Exposure to state distribution utilities with weak financial profiles: The company is exposed to the weak financial profile of its counterparties i.e. the state distribution utilities. However, the company has demonstrated satisfactory collection efficiency of 99.4% in FY2017, 98.7% in FY2018, 94.9% in FY2019, 100.0% in FY2020 and 103.78% in FY2021. During Covid-19 induced lockdown in Q1 FY2022, the cash flow of state distribution utilities was impacted due to the decline in energy demand but the

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payments improved subsequently, evident from the overall collection efficiency of 94.79% in 9M FY2022. Moreover, the availability of letter of credit amounting to 1.05 times of billing as per the terms of the transmission service agreement, regulation of power supply and invocation of TPA in case of non-payment of dues mitigate the counterparty credit risk to some extent.

Execution risk associated with under-construction projects: While the company is exposed to execution risks for its under-construction projects, the quantum of the same is coming down and remains much smaller compared to the installed capacity base. Works in hand (including upcoming Leh-Transmission corridor project) stand at 26,000 crore against its gross block of~ Rs. 2,40,000 crore as on March 31, 2021. Moreover, the execution risk is mitigated by superior execution capabilities and the long-track record of executing transmission line projects.

Liquidity position: Superior

The liquidity of the company is superior, supported by the regulated nature of operations (which allow for adequate recovery of fixed charges, including debt servicing requirements). This is supplemented by the satisfactory operational track record of the company, with line availability higher than normative line availability for recovery of transmission charges, evident in the availability of 99.82% in 9M FY2022. The collection efficiency is aided by the presence of LC and tripartite agreement and was satisfactory at 94.79% in 9M FY2022. The cash generated from operations coupled with the available liquid cash and undrawn limits is expected to remain sufficient to meet the debt repayment obligations. The average undrawn working capital limits were Rs 4,800 crore in the last 12 months ended March 2022. The same is also supported by the company's superior financial flexibility due to its strong parentage and large asset base with stable cost-plus return.

Rating sensitivities

Positive factors – Not Applicable

Negative factors – Negative pressure on PGCIL's ratings could arise if there is a change in ownership/or weakening of linkages with the Government of India. A significant build-up of receivables led by any adverse change in the tripartite agreement mechanism could also affect the ratings.

Analytical approach

Analytical Approach	Comments
Applicable Rating Methodologies	Corporate Credit Rating Methodology Rating Methodology for Power Transmission Companies Impact of Parent or Group support on an Entity's Credit Rating Policy on Withdrawal of Credit Ratings
Parent/Group Support	The rating derives strength from PGCIL's majority ownership by the Government of India (51.34% as on March 31, 2022) and its role in the power sector in India
Consolidation/Standalone	The rating is based on consolidated financial statements of the company. Details in Annexure-2.

About the company

Power Grid Corporation of India Limited is a Maharatna CPSU and India's largest electric power transmission company. The GoI held 51.34% shares of the company as on March 31, 2022. PGCIL is also executing several strategically important projects assigned to the company by the Government of India on nomination basis. The GoI has provided guarantee for some of the loans raised by the company. As on December 31, 2021, PGCIL owned transmission lines of 172,190 ckm with 264 substations with capacity of 469,600 MVA on consolidated basis (including subsidiaries).

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Key financial indicators (audited)

PGCIL Consolidated	FY2020	FY2021
Operating Income (Rs. crore)	37,744	39,640
PAT (Rs. crore)	11,904	11,822
OPBDIT/OI (%)	87.9%	88.5%
PAT/OI (%)	29.3%	29.8%
Total Outside Liabilities/Tangible Net Worth (times)	2.98	2.70
Total Debt/OPBDIT (times)	4.50	4.17
Interest Coverage (times)	3.49	4.31

PAT: Profit after Tax; OPBDIT: Operating Profit before Depreciation, Interest, Taxes and Amortisation
Note: Amount in Rs. crore; All calculations are as per ICRA research
Source: Annual Reports and ICRA research

Status of non-cooperation with previous CRA: Not applicable

Any other information: None

Rating history for past three years

	Instrument	Current Rating (FY2023)			Chronology of Rating History for the past 3 years			
		Type	Amount Rated (Rs. crore)	Amount Outstanding as on March 31, 2022 (Rs. crore)	Date & Rating on	Date & Rating in FY2022	Date & Rating in FY2021	Date & Rating in FY2020
					May 02, 2022	May 03, 2021	Apr 07, 2020	Sep 27, 2019 Nov 01, 2019 Feb 03, 2020	May 09, 2019 Jul 03, 2019
1	Long term bonds programme	Long-term	66,891.23	66,891.23	**[ICRA] AAA (Stable)**	[ICRA] AAA (Stable)	[ICRA] AAA (Stable)	[ICRA] AAA (Stable)	[ICRA] AAA (Stable)
2	Long term bonds programme[1]	Long-term	9,470.10	-	**[ICRA] AAA (Stable); withdrawn**	[ICRA] AAA (Stable)	-	-	-
3	Long term bonds programme	Long-term	8,223.72	-	**[ICRA] AAA (Stable); withdrawn**	[ICRA] AAA (Stable)	[ICRA] AAA (Stable)	[ICRA] AAA (Stable)	[ICRA] AAA (Stable)
4	Commercial Paper^	Short-term	9,000.0	-	**[ICRA] A1+**	[ICRA] A1+	[ICRA] A1+	[ICRA] A1+	[ICRA] A1+
5	Short term borrowing programme^	Short-term	9,000.0	-	**[ICRA] A1+**	[ICRA] A1+	[ICRA] A1+	[ICRA] A1+	[ICRA] A1+
6	Long term loans	Long-term	31,767.96	24,216.06	**[ICRA] AAA (Stable)**	[ICRA] AAA (Stable)	[ICRA] AAA (Stable)	[ICRA] AAA (Stable)	[ICRA] AAA (Stable)
7	Long term unallocated limits	Long-term	10,000.0	-	**[ICRA] AAA (Stable)**	[ICRA] AAA (Stable)	-	-	-

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8	Long term/ short term fund based/ non-fund based limits^^	Long-term/ short-term	5,700.0	-	**[ICRA] AAA (Stable)/[ICRA] A1+**	[ICRA] AAA (Stable)/[ICRA]A1+	[ICRA] AAA (Stable)/[ICRA]A 1+	[ICRA] AAA (Stable)/[ICRA]A1 +	

^Aggregate borrowing under commercial paper and short term borrowing programme capped at Rs 9,000 crore.
^^Long term/short term fund based/ non fund based limits comprise of Rs 3000.00 crore of cash credit (fund based limits), Rs 1100.00 crore bank guarantee and Rs 1600.00 crore letter of credit. The limits are inter-changeable as per individual sanctions from the banks
[1]part of Rs. 10,000 crore bonds programme of FY2022 rated in May 2021

Complexity level of the rated instruments

Instrument	Complexity Indicator
Bonds programme	Very Simple
Long term loans	Simple
Long-term/Short-term Fund Based Limits	Simple
Long-term/Short-term Non-Fund Based Limits	Very Simple
Long term unallocated limits	Not Applicable
Short Term Borrowing Programme	Very Simple
Commercial Paper	Very Simple

The Complexity Indicator refers to the ease with which the returns associated with the rated instrument could be estimated. It does not indicate the risk related to the timely payments on the instrument, which is rather indicated by the instrument's credit rating. It also does not indicate the complexity associated with analyzing an entity's financial, business, industry risks or complexity related to the structural, transactional, or legal aspects. Details on the complexity levels of the instruments, is available on ICRA's website: www.icra.in

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Annexure-1: Instrument details

ISIN No	Instrument Name	Date of Issuance / Sanction	Coupon Rate	Maturity Date	Amount Rated (RS Crore)	Current Rating and Outlook
INE752E07DV7	BOND - XXV ISSUE	12-Jun-07	10.10%	12-Jun-22	88.75	[ICRA]AAA (stable)
INE752E07EH4	BOND - XXVI ISSUE	7-Mar-08	9.30%	7-Mar-23	83.25	[ICRA]AAA (stable)
INE752E07ET9	BOND - XXVII ISSUE	31-Mar-08	9.47%	31-Mar-23	58.75	[ICRA]AAA (stable)
INE752E07FE8	BOND - XXVIII ISSUE	15-Dec-08	9.33%	15-Dec-22	200	[ICRA]AAA (stable)
INE752E07FF5	BOND - XXVIII ISSUE	15-Dec-08	9.33%	15-Dec-23	200	[ICRA]AAA (stable)
INE752E07FQ2	BOND - XXIX ISSUE	12-Mar-09	9.20%	12-Mar-23	108.125	[ICRA]AAA (stable)
INE752E07FR0	BOND - XXIX ISSUE	12-Mar-09	9.20%	12-Mar-24	108.125	[ICRA]AAA (stable)
INE752E07GB2	BOND - XXX ISSUE	29-Sep-09	8.80%	29-Sep-22	194.375	[ICRA]AAA (stable)
INE752E07GC0	BOND - XXX ISSUE	29-Sep-09	8.80%	29-Sep-23	194.375	[ICRA]AAA (stable)
INE752E07GD8	BOND - XXX ISSUE	29-Sep-09	8.80%	29-Sep-24	194.375	[ICRA]AAA (stable)
INE752E07GN7	BOND - XXXI ISSUE	25-Feb-10	8.90%	25-Feb-23	170.625	[ICRA]AAA (stable)
INE752E07GO5	BOND - XXXI ISSUE	25-Feb-10	8.90%	25-Feb-24	170.625	[ICRA]AAA (stable)
INE752E07GP2	BOND - XXXI ISSUE	25-Feb-10	8.90%	25-Feb-25	170.625	[ICRA]AAA (stable)
INE752E07GZ1	BOND - XXXII ISSUE	29-Mar-10	8.84%	29-Mar-23	86.25	[ICRA]AAA (stable)
INE752E07HA2	BOND - XXXII ISSUE	29-Mar-10	8.84%	29-Mar-24	86.25	[ICRA]AAA (stable)
INE752E07HB0	BOND - XXXII ISSUE	29-Mar-10	8.84%	29-Mar-25	86.25	[ICRA]AAA (stable)
INE752E07HK1	BOND - XXXIII ISSUE	8-Jul-10	8.64%	8-Jul-22	240	[ICRA]AAA (stable)
INE752E07HL9	BOND - XXXIII ISSUE	8-Jul-10	8.64%	8-Jul-23	240	[ICRA]AAA (stable)
INE752E07HM7	BOND - XXXIII ISSUE	8-Jul-10	8.64%	8-Jul-24	240	[ICRA]AAA (stable)
INE752E07HN5	BOND - XXXIII ISSUE	8-Jul-10	8.64%	8-Jul-25	240	[ICRA]AAA (stable)
INE752E07HW6	BOND - XXXIV ISSUE	21-Oct-10	8.84%	21-Oct-22	290.625	[ICRA]AAA (stable)
INE752E07HX4	BOND - XXXIV ISSUE	21-Oct-10	8.84%	21-Oct-23	290.625	[ICRA]AAA (stable)
INE752E07HY2	BOND - XXXIV ISSUE	21-Oct-10	8.84%	21-Oct-24	290.625	[ICRA]AAA (stable)
INE752E07HZ9	BOND - XXXIV ISSUE	21-Oct-10	8.84%	21-Oct-25	290.625	[ICRA]AAA (stable)
INE752E07IH5	BOND - XXXV ISSUE	31-May-11	9.64%	31-May-22	163.125	[ICRA]AAA (stable)
INE752E07II3	BOND - XXXV ISSUE	31-May-11	9.64%	31-May-23	163.125	[ICRA]AAA (stable)
INE752E07IJ1	BOND - XXXV ISSUE	31-May-11	9.64%	31-May-24	163.125	[ICRA]AAA (stable)
INE752E07IK9	BOND - XXXV ISSUE	31-May-11	9.64%	31-May-25	163.125	[ICRA]AAA (stable)
INE752E07IL7	BOND - XXXV ISSUE	31-May-11	9.64%	31-May-26	163.125	[ICRA]AAA (stable)
INE752E07IS2	BOND - XXXVI ISSUE	29-Aug-11	9.35%	29-Aug-22	206	[ICRA]AAA (stable)
INE752E07IT0	BOND - XXXVI ISSUE	29-Aug-11	9.35%	29-Aug-23	206	[ICRA]AAA (stable)
INE752E07IU8	BOND - XXXVI ISSUE	29-Aug-11	9.35%	29-Aug-24	206	[ICRA]AAA (stable)
INE752E07IV6	BOND - XXXVI ISSUE	29-Aug-11	9.35%	29-Aug-25	206	[ICRA]AAA (stable)
INE752E07IW4	BOND - XXXVI ISSUE	29-Aug-11	9.35%	29-Aug-26	206	[ICRA]AAA (stable)
INE752E07IX2	BOND - XXXVI ISSUE	29-Aug-11	9.35%	29-Aug-27	206	[ICRA]AAA (stable)
INE752E07IY0	BOND - XXXVI ISSUE	29-Aug-11	9.35%	29-Aug-28	206	[ICRA]AAA (stable)
INE752E07IZ7	BOND - XXXVI ISSUE	29-Aug-11	9.35%	29-Aug-29	206	[ICRA]AAA (stable)
INE752E07JA8	BOND - XXXVI ISSUE	29-Aug-11	9.35%	29-Aug-30	206	[ICRA]AAA (stable)
INE752E07JI1	BOND - XXXVII ISSUE	26-Dec-11	9.25%	26-Dec-22	166.25	[ICRA]AAA (stable)
INE752E07JJ9	BOND - XXXVII ISSUE	26-Dec-11	9.25%	26-Dec-23	166.25	[ICRA]AAA (stable)

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ISIN No	Instrument Name	Date of Issuance / Sanction	Coupon Rate	Maturity Date	Amount Rated (RS Crore)	Current Rating and Outlook
INE752E07JK7	BOND - XXXVII ISSUE	26-Dec-11	9.25%	26-Dec-24	166.25	[ICRA]AAA (stable)
INE752E07JL5	BOND - XXXVII ISSUE	26-Dec-11	9.25%	26-Dec-25	166.25	[ICRA]AAA (stable)
INE752E07JM3	BOND - XXXVII ISSUE	26-Dec-11	9.25%	26-Dec-26	166.25	[ICRA]AAA (stable)
INE752E07JN1	BOND - XXXVIII ISSUE	9-Mar-12	9.25%	9-Mar-27	855	[ICRA]AAA (stable)
INE752E07JO9	BOND - XXXIX ISSUE	29-Mar-12	9.40%	29-Mar-27	1800	[ICRA]AAA (stable)
INE752E07JV4	BOND - XL ISSUE	28-Jun-12	9.30%	28-Jun-22	333.125	[ICRA]AAA (stable)
INE752E07JW2	BOND - XL ISSUE	28-Jun-12	9.30%	28-Jun-23	333.125	[ICRA]AAA (stable)
INE752E07JX0	BOND - XL ISSUE	28-Jun-12	9.30%	28-Jun-24	333.125	[ICRA]AAA (stable)
INE752E07JY8	BOND - XL ISSUE	28-Jun-12	9.30%	28-Jun-25	333.125	[ICRA]AAA (stable)
INE752E07JZ5	BOND - XL ISSUE	28-Jun-12	9.30%	28-Jun-26	333.125	[ICRA]AAA (stable)
INE752E07KA6	BOND - XL ISSUE	28-Jun-12	9.30%	28-Jun-27	333.125	[ICRA]AAA (stable)
INE752E07KH1	BOND - XLI ISSUE	19-Oct-12	8.85%	19-Oct-22	236.875	[ICRA]AAA (stable)
INE752E07KI9	BOND - XLI ISSUE	19-Oct-12	8.85%	19-Oct-23	236.875	[ICRA]AAA (stable)
INE752E07KJ7	BOND - XLI ISSUE	19-Oct-12	8.85%	19-Oct-24	236.875	[ICRA]AAA (stable)
INE752E07KK5	BOND - XLI ISSUE	19-Oct-12	8.85%	19-Oct-25	236.875	[ICRA]AAA (stable)
INE752E07KL3	BOND - XLI ISSUE	19-Oct-12	8.85%	19-Oct-26	236.875	[ICRA]AAA (stable)
INE752E07KM1	BOND - XLI ISSUE	19-Oct-12	8.85%	19-Oct-27	236.875	[ICRA]AAA (stable)
INE752E07KN9	BOND - XLII ISSUE	13-Mar-13	8.80%	13-Mar-23	1990	[ICRA]AAA (stable)
INE752E07KT6	BOND - XLIII ISSUE	20-May-13	7.93%	20-May-22	260.5	[ICRA]AAA (stable)
INE752E07KU4	BOND - XLIII ISSUE	20-May-13	7.93%	20-May-23	260.5	[ICRA]AAA (stable)
INE752E07KV2	BOND - XLIII ISSUE	20-May-13	7.93%	20-May-24	260.5	[ICRA]AAA (stable)
INE752E07KW0	BOND - XLIII ISSUE	20-May-13	7.93%	20-May-25	260.5	[ICRA]AAA (stable)
INE752E07KX8	BOND - XLIII ISSUE	20-May-13	7.93%	20-May-26	260.5	[ICRA]AAA (stable)
INE752E07KY6	BOND - XLIII ISSUE	20-May-13	7.93%	20-May-27	260.5	[ICRA]AAA (stable)
INE752E07KZ3	BOND - XLIII ISSUE	20-May-13	7.93%	20-May-28	260.5	[ICRA]AAA (stable)
INE752E07LB2	BOND - XLIV ISSUE	15-Jul-13	8.70%	15-Jul-23	1322	[ICRA]AAA (stable)
INE752E07LC0	BOND - XLIV ISSUE	15-Jul-13	8.70%	15-Jul-28	1322	[ICRA]AAA (stable)
INE752E07LI7	BOND - XLV ISSUE	28-Feb-14	9.65%	28-Feb-23	166.6	[ICRA]AAA (stable)
INE752E07LJ5	BOND - XLV ISSUE	28-Feb-14	9.65%	28-Feb-24	166.6	[ICRA]AAA (stable)
INE752E07LK3	BOND - XLV ISSUE	28-Feb-14	9.65%	28-Feb-25	166.6	[ICRA]AAA (stable)
INE752E07LL1	BOND - XLV ISSUE	28-Feb-14	9.65%	28-Feb-26	166.6	[ICRA]AAA (stable)
INE752E07LM9	BOND - XLV ISSUE	28-Feb-14	9.65%	28-Feb-27	166.6	[ICRA]AAA (stable)
INE752E07LN7	BOND - XLV ISSUE	28-Feb-14	9.65%	28-Feb-28	166.6	[ICRA]AAA (stable)
INE752E07LO5	BOND - XLV ISSUE	28-Feb-14	9.65%	28-Feb-29	166.6	[ICRA]AAA (stable)
INE752E07LQ0	BOND - XLVI ISSUE	4-Sep-14	9.30%	4-Sep-24	1454	[ICRA]AAA (stable)
INE752E07LR8	BOND - XLVI ISSUE	4-Sep-14	9.30%	4-Sep-29	1454	[ICRA]AAA (stable)
INE752E07LW8	BOND - XLVII ISSUE	20-Oct-14	8.93%	20-Oct-22	220	[ICRA]AAA (stable)
INE752E07LX6	BOND - XLVII ISSUE	20-Oct-14	8.93%	20-Oct-23	220	[ICRA]AAA (stable)

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ISIN No	Instrument Name	Date of Issuance / Sanction	Coupon Rate	Maturity Date	Amount Rated (RS Crore)	Current Rating and Outlook
INE752E07LY4	BOND - XLVII ISSUE	20-Oct-14	8.93%	20-Oct-24	220	[ICRA]AAA (stable)
INE752E07LZ1	BOND - XLVII ISSUE	20-Oct-14	8.93%	20-Oct-25	220	[ICRA]AAA (stable)
INE752E07MA2	BOND - XLVII ISSUE	20-Oct-14	8.93%	20-Oct-26	220	[ICRA]AAA (stable)
INE752E07MB0	BOND - XLVII ISSUE	20-Oct-14	8.93%	20-Oct-27	220	[ICRA]AAA (stable)
INE752E07MC8	BOND - XLVII ISSUE	20-Oct-14	8.93%	20-Oct-28	220	[ICRA]AAA (stable)
INE752E07MD6	BOND - XLVII ISSUE	20-Oct-14	8.93%	20-Oct-29	220	[ICRA]AAA (stable)
INE752E07MG9	BOND - XLVIII ISSUE	23-Jan-15	8.20%	23-Jan-25	645	[ICRA]AAA (stable)
INE752E07MH7	BOND - XLVIII ISSUE	23-Jan-15	8.20%	23-Jan-30	645	[ICRA]AAA (stable)
INE752E07MJ3	BOND - XLIX ISSUE	9-Mar-15	8.15%	9-Mar-25	435	[ICRA]AAA (stable)
INE752E07MK1	BOND - XLIX ISSUE	9-Mar-15	8.15%	9-Mar-30	435	[ICRA]AAA (stable)
INE752E07MO3	BOND - L ISSUE	27-May-15	8.40%	27-May-22	244	[ICRA]AAA (stable)
INE752E07MP0	BOND - L ISSUE	27-May-15	8.40%	27-May-23	244	[ICRA]AAA (stable)
INE752E07MQ8	BOND - L ISSUE	27-May-15	8.40%	27-May-24	244	[ICRA]AAA (stable)
INE752E07MR6	BOND - L ISSUE	27-May-15	8.40%	27-May-25	244	[ICRA]AAA (stable)
INE752E07MS4	BOND - L ISSUE	27-May-15	8.40%	27-May-26	244	[ICRA]AAA (stable)
INE752E07MT2	BOND - L ISSUE	27-May-15	8.40%	27-May-27	244	[ICRA]AAA (stable)
INE752E07MU0	BOND - L ISSUE	27-May-15	8.40%	27-May-28	244	[ICRA]AAA (stable)
INE752E07MV8	BOND - L ISSUE	27-May-15	8.40%	27-May-29	244	[ICRA]AAA (stable)
INE752E07MW6	BOND - L ISSUE	27-May-15	8.40%	27-May-30	244	[ICRA]AAA (stable)
INE752E07NA0	BOND - LI ISSUE	14-Sep-15	8.40%	14-Sep-22	250	[ICRA]AAA (stable)
INE752E07NB8	BOND - LI ISSUE	14-Sep-15	8.40%	14-Sep-23	250	[ICRA]AAA (stable)
INE752E07NC6	BOND - LI ISSUE	14-Sep-15	8.40%	14-Sep-24	250	[ICRA]AAA (stable)
INE752E07ND4	BOND - LI ISSUE	14-Sep-15	8.40%	14-Sep-25	250	[ICRA]AAA (stable)
INE752E07NE2	BOND - LI ISSUE	14-Sep-15	8.40%	14-Sep-26	250	[ICRA]AAA (stable)
INE752E07NF9	BOND - LI ISSUE	14-Sep-15	8.40%	14-Sep-27	250	[ICRA]AAA (stable)
INE752E07NG7	BOND - LI ISSUE	14-Sep-15	8.40%	14-Sep-28	250	[ICRA]AAA (stable)
INE752E07NH5	BOND - LI ISSUE	14-Sep-15	8.40%	14-Sep-29	250	[ICRA]AAA (stable)
INE752E07NI3	BOND - LI ISSUE	14-Sep-15	8.40%	14-Sep-30	250	[ICRA]AAA (stable)
INE752E07NK9	BOND - LII ISSUE	23-Dec-15	8.32%	23-Dec-25	466	[ICRA]AAA (stable)
INE752E07NL7	BOND - LII ISSUE	23-Dec-15	8.32%	23-Dec-30	466	[ICRA]AAA (stable)
INE752E07NO1	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-22	333	[ICRA]AAA (stable)
INE752E07NP8	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-23	333	[ICRA]AAA (stable)
INE752E07NQ6	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-24	333	[ICRA]AAA (stable)
INE752E07NR4	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-25	333	[ICRA]AAA (stable)
INE752E07NS2	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-26	333	[ICRA]AAA (stable)
INE752E07NT0	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-27	333	[ICRA]AAA (stable)
INE752E07NU8	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-28	333	[ICRA]AAA (stable)
INE752E07NV6	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-29	333	[ICRA]AAA (stable)
INE752E07NW4	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-30	333	[ICRA]AAA (stable)
INE752E07NX2	BOND - LIII ISSUE	25-Apr-16	8.13%	25-Apr-31	333	[ICRA]AAA (stable)

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ISIN No	Instrument Name	Date of Issuance / Sanction	Coupon Rate	Maturity Date	Amount Rated (RS Crore)	Current Rating and Outlook
INE752E07NZ7	BOND - LIV ISSUE	15-Jul-16	7.97%	15-Jul-26	1000	[ICRA]AAA (stable)
INE752E07OA8	BOND - LIV ISSUE	15-Jul-16	7.97%	15-Jul-31	1000	[ICRA]AAA (stable)
INE752E07OB6	BOND - LV ISSUE	21-Sep-16	7.55%	21-Sep-31	1240	[ICRA]AAA (stable)
INE752E07OC4	BOND - LVI ISSUE	18-Oct-16	7.36%	18-Oct-26	1065	[ICRA]AAA (stable)
INE752E07OE0	BOND - LVIII ISSUE	9-Mar-17	7.89%	9-Mar-27	2060	[ICRA]AAA (stable)
INE752E07OF7	BOND – LIX ISSUE	19-Jun-17	7.30%	19-Jun-27	3070	[ICRA]AAA (stable)
INE752E07OG5	BOND – LX ISSUE	9-Aug-17	7.20%	9-Aug-27	3060	[ICRA]AAA (stable)
INE752E08502	BOND – LXI ISSUE	12-Dec-17	7.74%	12-Dec-28	600	[ICRA]AAA (stable)
INE752E08510	BOND – LXI ISSUE	12-Dec-17	7.74%	12-Dec-29	600	[ICRA]AAA (stable)
INE752E08528	BOND – LXI ISSUE	12-Dec-17	7.74%	12-Dec-30	600	[ICRA]AAA (stable)
INE752E08536	BOND – LXI ISSUE	12-Dec-17	7.74%	12-Dec-31	600	[ICRA]AAA (stable)
INE752E08544	BOND – LXI ISSUE	12-Dec-17	7.74%	12-Dec-32	600	[ICRA]AAA (stable)
INE752E07OH3	BOND – LXII ISSUE	7-Jan-19	8.36%	7-Jan-29	2,000.00	[ICRA]AAA (stable)
INE752E08551	GoI Fully serviced bonds	14-Feb-19	8.24%	14-Feb-29	3,487.50	[ICRA]AAA (stable)
INE752E08569	BOND – LXIII ISSUE	15-Jul-19	7.34%	15-Jul-24	600	[ICRA]AAA (stable)
INE752E08577	BOND – LXIII ISSUE	15-Jul-19	7.34%	15-Jul-29	600	[ICRA]AAA (stable)
INE752E08585	BOND – LXIII ISSUE	15-Jul-19	7.34%	15-Jul-34	600	[ICRA]AAA (stable)
INE752E08593	BOND – LXIV ISSUE	25-Oct-19	7.49%	25-Oct-24	756	[ICRA]AAA (stable)
INE752E08601	BOND – LXIV ISSUE	25-Oct-19	7.49%	25-Oct-29	756	[ICRA]AAA (stable)
INE752E08619	BOND – LXIV ISSUE	25-Oct-19	7.49%	25-Oct-34	1008	[ICRA]AAA (stable)
INE752E08627	BOND – LXV ISSUE	8-Jan-20	6.35%	14-Apr-23	200	[ICRA]AAA (stable)
INE752E08635	BOND – LXVI ISSUE	8-Jan-20	7.38%	12-Apr-30	500	[ICRA]AAA (stable)
INE752E08643	BOND – LXVII ISSUE	15-Apr-20	6.85%	15-Apr-25	2800	[ICRA]AAA (stable)
INE752E08650	BOND – LXVIII ISSUE	5-Aug-20	6.28%	11-Apr-31	500	[ICRA]AAA (stable)
INE752E08668	BOND – LXIX ISSUE	25-Mar-22	6.05%	25-Mar-27	529.90	[ICRA]AAA (stable)
INE752E07NN3	BOND - LIII ISSUE	25-Apr-2016	8.13%	25-Apr-2021	333.00	[ICRA]AAA (stable); Withdrawn
INE752E07KS8	BOND - XLIII ISSUE	20-May-2013	7.93%	20-May-2021	260.50	[ICRA]AAA (stable); Withdrawn
INE752E07MN5	BOND - L ISSUE	27-May-2015	8.40%	27-May-2021	244.00	[ICRA]AAA (stable); Withdrawn
INE752E07IG7	BOND - XXXV ISSUE	31-May-2011	9.64%	31-May-2021	163.13	[ICRA]AAA (stable); Withdrawn
INE752E07DU9	BOND - XXV ISSUE	12-Jun-2007	10.10%	12-Jun-2021	88.75	[ICRA]AAA (stable); Withdrawn
INE752E07JU6	BOND - XXXV ISSUE	28-Jun-2012	9.64%	28-Jun-2021	333.13	[ICRA]AAA (stable); Withdrawn
INE752E07HJ3	BOND - XXXIII ISSUE	08-Jul-2010	8.64%	08-Jul-2021	240.00	[ICRA]AAA (stable); Withdrawn
INE752E07NY0	BOND - LIV ISSUE	15-Jul-2016	7.97%	15-Jul-2021	1,000.00	[ICRA]AAA (stable); Withdrawn
INE752E07BB3	BOND - XIX ISSUE	24-Jul-2006	9.25%	24-Jul-2021	41.25	[ICRA]AAA (stable); Withdrawn
INE752E07IR4	BOND - XXXVI ISSUE	29-Aug-2011	9.35%	29-Aug-2021	206.00	[ICRA]AAA (stable); Withdrawn
INE752E07BC1	BOND - XX ISSUE	07-Sep-2006	8.93%	07-Sep-2021	125.00	[ICRA]AAA (stable); Withdrawn
INE752E07MZ9	BOND - LI ISSUE	14-Sep-2015	8.40%	14-Sep-2021	250.00	[ICRA]AAA (stable); Withdrawn

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ISIN No	Instrument Name	Date of Issuance / Sanction	Coupon Rate	Maturity Date	Amount Rated (RS Crore)	Current Rating and Outlook
INE752E07GA4	BOND - XXX ISSUE	29-Sep-2009	8.80%	29-Sep-2021	194.38	[ICRA]AAA (stable); Withdrawn
INE752E07BZ2	BOND - XXI ISSUE	11-Oct-2006	8.73%	11-Oct-2021	42.50	[ICRA]AAA (stable); Withdrawn
INE752E07KG3	BOND - XLI ISSUE	19-Oct-2012	8.85%	19-Oct-2021	236.88	[ICRA]AAA (stable); Withdrawn
INE752E07LV0	BOND - XLVII ISSUE	20-Oct-2014	8.93%	20-Oct-2021	220.00	[ICRA]AAA (stable); Withdrawn
INE752E07HV8	BOND - XXXIV ISSUE	21-Oct-2010	8.84%	21-Oct-2021	290.63	[ICRA]AAA (stable); Withdrawn
INE752E07CL0	BOND - XXII ISSUE	07-Dec-2006	8.68%	07-Dec-2021	57.50	[ICRA]AAA (stable); Withdrawn
INE752E07FD0	BOND - XXVIII ISSUE	15-Dec-2008	9.33%	15-Dec-2021	200.00	[ICRA]AAA (stable); Withdrawn
INE752E07OD2	BOND - LVII ISSUE	21-Dec-2016	7.20%	21-Dec-2021	2,120.00	[ICRA]AAA (stable); Withdrawn
INE752E07JH3	BOND - XXXVII ISSUE	26-Dec-2011	9.25%	26-Dec-2021	166.25	[ICRA]AAA (stable); Withdrawn
INE752E07MF1	BOND - XLVIII ISSUE	23-Jan-2015	8.20%	23-Jan-2022	645.00	[ICRA]AAA (stable); Withdrawn
INE752E07CX5	BOND - XXIII ISSUE	09-Feb-2007	9.25%	09-Feb-2022	25.63	[ICRA]AAA (stable); Withdrawn
INE752E07GM9	BOND - XXXI ISSUE	25-Feb-2010	8.90%	25-Feb-2022	170.63	[ICRA]AAA (stable); Withdrawn
INE752E07LH9	BOND - XLV ISSUE	28-Feb-2014	9.65%	28-Feb-2022	166.60	[ICRA]AAA (stable); Withdrawn
INE752E07EG6	BOND - XXVI ISSUE	07-Mar-2008	9.30%	07-Mar-2022	83.25	[ICRA]AAA (stable); Withdrawn
INE752E07FP4	BOND - XXIX ISSUE	12-Mar-2009	9.20%	12-Mar-2022	108.13	[ICRA]AAA (stable); Withdrawn
INE752E07DJ2	BOND - XXIV ISSUE	26-Mar-2007	9.95%	26-Mar-2022	66.63	[ICRA]AAA (stable); Withdrawn
INE752E07GY4	BOND - XXXII ISSUE	29-Mar-2010	8.84%	29-Mar-2022	86.25	[ICRA]AAA (stable); Withdrawn
INE752E07ES1	BOND - XXVII ISSUE	31-Mar-2008	9.47%	31-Mar-2022	58.75	[ICRA]AAA (stable); Withdrawn
Unplaced	Long term bonds programme				9,470.10	[ICRA]AAA (stable); Withdrawn
	Long term unallocated limits	-	-	-	10,000.00	[ICRA]AAA (stable)
	Long term Loan-1	FY2012		FY2027	2275.36	[ICRA]AAA (stable)
	Long term Loan-2	FY2014		FY2029	6999.67	[ICRA]AAA (stable)
	Long term Loan-3	FY2017		FY2032	3000.00	[ICRA]AAA (stable)
	Long term Loan-4	FY2018		FY2033	4492.93	[ICRA]AAA (stable)
	Long term Loan-5	FY2019		FY2034	10000.00	[ICRA]AAA (stable)
	Long term Loan-6	FY2021		FY2036	5000.00	[ICRA]AAA (stable)
To be placed	Commercial Paper^	-	-		9000.00	[ICRA]A1+
To be placed	Short term borrowing programme^	-	-		9000.00	[ICRA]A1+

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ISIN No	Instrument Name	Date of Issuance / Sanction	Coupon Rate	Maturity Date	Amount Rated (RS Crore)	Current Rating and Outlook
	Long term/ short term fund based/ non fund based limits#	-	-	-	5700.00	[ICRA]AAA (stable)/ [ICRA]A1+

#Long term/short term fund based/ non fund based limits comprise of Rs 3000.00 crore of cash credit (fund based limits), Rs 1100.00 crore bank guarantee and Rs 1600.00 crore letter of credit. The limits are inter-changeable as per individual sanctions from the banks

^Commercial Paper and Short term Borrowing programme limits of Rs 9000 crore each, subject to total borrowing from Commercial Paper and short term borrowing at all times shall not exceed Rs 9000 crore; no amount outstanding

Source: *Company*

Please click here to view details of lender-wise facilities rated by ICRA

Annexure-2: List of entities considered for consolidated analysis

Company Name	PGCIL Ownership	Consolidation Approach
Power Grid Corporation of India Limited	100.00% (rated entity)	Full Consolidation
Powergrid Bikaner Transmission Limited	100.00%	Full Consolidation
Powergrid NM Transmission Limited	100.00%	Full Consolidation
Powergrid Unchahar Transmission Limited	100.00%	Full Consolidation
Powergrid Himachal Transmission Limited	100.00%	Full Consolidation
Powergrid RamgarhTransmission Limited	100.00%	Full Consolidation
Powergrid Bhadla Transmission Limited	100.00%	Full Consolidation
Powergrid Sikar Transmission Limited	100.00%	Full Consolidation
Powergrid Southern Interconnector Transmission System Limited	100.00%	Full Consolidation
Powergrid Medinipur Jeerat Transmission Limited	100.00%	Full Consolidation
Powergrid Mithilanchal Transmission Limited	100.00%	Full Consolidation
Powergrid Vemagiri Transmission Limited	100.00%	Full Consolidation
Powergrid Varanasi Transmission System Limited	100.00%	Full Consolidation
Powergrid Jawaharpur Firozabad Transmission Limited	100.00%	Full Consolidation
Powergrid Khetri Transmission System Limited	100.00%	Full Consolidation
Powergrid Aligarh Sikar Transmission Limited	100.00%	Full Consolidation
Powergrid Bhind Guna Transmission Limited	100.00%	Full Consolidation
Powergrid Ajmer Phagi Transmission Limited	100.00%	Full Consolidation
Powergrid Fatehgarh Transmission Limited	100.00%	Full Consolidation
Powergrid Rampur Sambhal Transmission Limited	100.00%	Full Consolidation
Powergrid Meerut Simbhavali Transmission Limited	100.00%	Full Consolidation
Powerlinks Transmission Limited	49%	Equity Method
Torrent Power Grid Limited	26%	Equity Method
Parbati Koldam Transmission Company Limited	26%	Equity Method
Teestavalley Power Transmission Limited	30.92%	Equity Method
North East Transmission Company Limited	26%	Equity Method
National High Power Test Laboratory Limited	20%	Equity Method
Bihar Grid Company Limited	50%	Equity Method
Cross Border Power Transmission Company Limited	26%	Equity Method
RINL Powergrid TLT Private Limited	50%	Equity Method
Energy Efficiency Services Limited	33.33%	Equity Method
Power Transmission Company Nepal Limited	26%	Equity Method

Source: *Company*

Note: *ICRA has taken a consolidated view of the parent (PGCIL), its subsidiaries and associates while assigning the ratings.*

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ANALYST CONTACTS

Sabyasachi Majumdar
+91 124 4545304
sabyasachi@icraindia.com

Girishkumar Kadam
+91 22 61143441
girishkumar@icraindia.com

Siddhartha Kaushik
+91 124 4545323
siddhartha.kaushik@icraindia.com

Peeush Middha
+91 124 4545330
peeush.middha@icraindia.com

RELATIONSHIP CONTACT

L. Shivakumar
+91 22 6114 3406
shivakumar@icraindia.com

MEDIA AND PUBLIC RELATIONS CONTACT

Ms. Naznin Prodhani
Tel: +91 124 4545 860
communications@icraindia.com

Helpline for business queries

+91-9354738909 (open Monday to Friday, from 9:30 am to 6 pm)

info@icraindia.com

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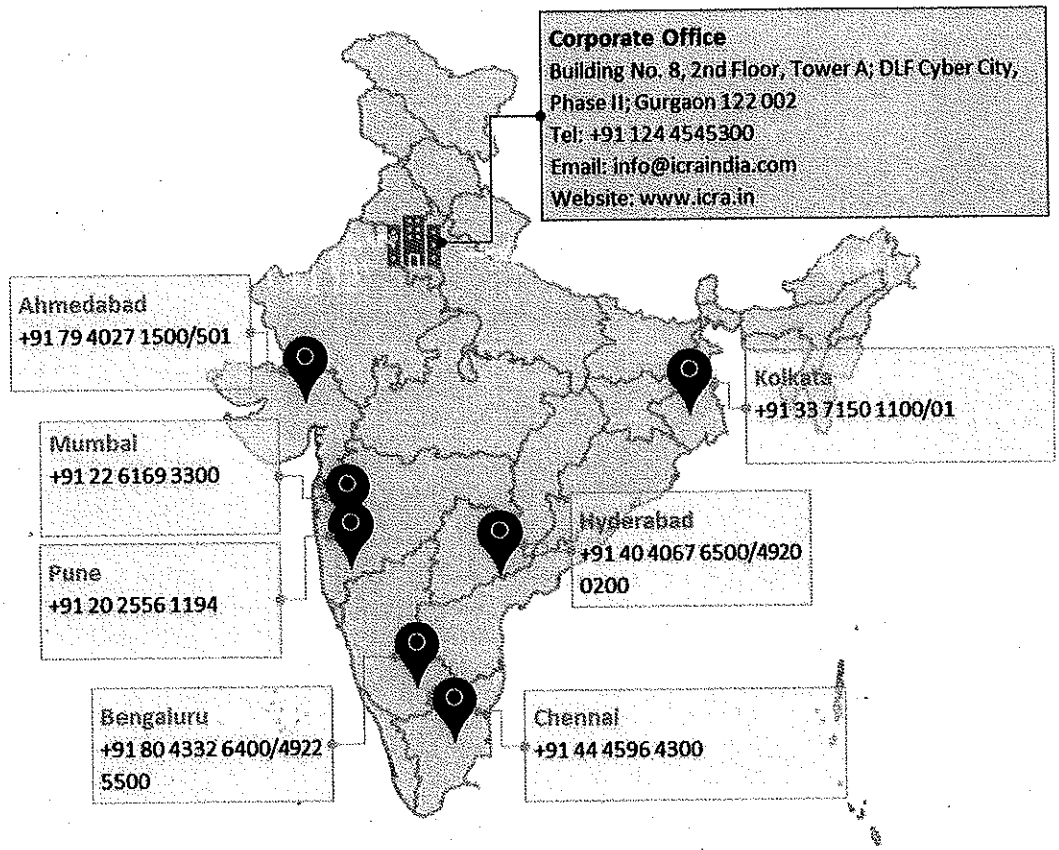
MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ICRA Limited

Registered Office

B-710, Statesman House, 148, Barakhamba Road, New Delhi-110001
Tel: +91 11 23357940-45

Branches



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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Power Grid Corporation of India Limited (Revised)

July 05, 2021

Ratings

Facilities/Instruments	Amount (Rs. crore)	Rating[1]	Rating Action
Long Term Bank Facilities	46,230.00	CARE AAA; Stable (Triple A; Outlook: Stable)	Reaffirmed
Long Term / Short Term Bank Facilities	2,700.00	CARE AAA; Stable / CARE A1+ (Triple A; Outlook: Stable/ A One Plus)	Reaffirmed
Total Bank Facilities	**48,930.00 (Rs. Forty-Eight Thousand Nine Hundred Thirty Crore Only)**		
Long Term Borrowing Programme for FY22	10,000.00	CARE AAA; Stable (Triple A; Outlook: Stable)	Reaffirmed
Long Term Bonds Issue	73,048.44 (Reduced from 83,892.78)	CARE AAA; Stable (Triple A; Outlook: Stable)	Reaffirmed
Total Long Term Instruments	**83,048.44 (Rs. Eighty-Three Thousand Forty-Eight Crore and Forty-Four Lakhs Only)**		
Commercial Paper Issue^	9,000.00	CARE A1+ (A One Plus)	Reaffirmed
Short Term Borrowing Programme^	9,000.00	CARE A1+ (A One Plus)	Reaffirmed
Total Short Term Instruments	**18,000.00 (Rs. Eighteen Thousand Crore Only)**		

Details of instruments/facilities in Annexure-1

^As communicated by the company, combined utilization of commercial paper and short-term borrowing programme shall not exceed Rs. 9,000 crore at any point of time.

Detailed Rationale & Key Rating Drivers

The reaffirmation of the ratings assigned to the bank facilities and instruments of Power Grid Corporation of India Limited (PGCIL) continues to derive strength from the majority ownership of Government of India (GoI) in the company, the support extended by GoI through guarantees to raise funds from various agencies, the company's pivotal role in the Indian power transmission sector and its low-risk business having a cost-plus-tariff structure for majority of its projects. The ratings also take into account PGCIL's high operating efficiency leading to above-normative performance consistently over the years, growing income and cash accruals, strong project execution skills, comfortable financial risk profile and strong liquidity position. CARE also takes note of the monetization of 74% stake in five subsidiaries through Powergrid Infrastructure Investment Trust (PGInviT) and balance stake shall be monetized as per terms of Transmission Service Agreement (TSA) in due course of time.

The ratings, however, takes cognizance of the weak credit profile of its customers viz. state-owned power distribution utilities. They also factor in the basis of awarding new projects largely through tariff based competitive bidding (TBCB), barring a few on nomination basis, although the proportion of TBCB projects vis-à-vis total portfolio of PGCIL is likely to remain low in the medium term.

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

[1] *Complete definitions of the ratings assigned are available at www.careratings.com and in other CARE publications.*

Rating Sensitivities

Negative Factors

- Moderation in the collection period to more than 180 days.
- Any adverse change in the regulatory environment of power transmission sector.
- Any material change in the ownership of PGCIL.

Detailed description of the key rating drivers

Key Rating Strengths

Majority ownership and support extended by GoI; pivotal role in the Indian power sector

The GoI continues to be the major shareholder in the company with 51.34% shareholding as on March 31, 2021. It has provided regular support in the form of guarantees to PGCIL for availing of some of the loans from multilateral agencies from time-to-time. The company plays an important role in the Indian power sector as it operates most of India's inter regional and Inter State Transmission System (ISTS) network. Although, with the introduction of tariff-based bidding, a few private players have entered the power transmission segment, PGCIL continues to maintain its leadership position. Also, the transmission projects of strategic importance continue to be assigned by GoI to PGCIL on a cost-plus mechanism.

The function of the central transmission utility (CTU) which was earlier with PGCIL has been transferred to newly incorporated subsidiary i.e. Central Transmission Utility of India Limited (CTUIL) of PGCIL w.e.f. April 01, 2021. Going forward, the CTUIL is expected to become independent company under the direct control of GoI.

Favourable regulatory framework having a cost-plus-tariff structure

PGCIL's charges for transmission customers are governed by tariff norms determined by the Central Electricity Regulatory Commission (CERC) which ensures a fixed return on equity (RoE), recovery of operation & maintenance expenses, interest charge and depreciation cost. The mechanism ensures full recovery on achieving the normative system availability parameters and incentives on exceeding the performance. Although TBCB for inter-state transmission services had been introduced from January 2011, a majority of PGCIL's project portfolio have continued to derive revenue based on the cost-plus-tariff structure. Besides, the company has been able to secure 21 transmission projects based on TBCB, of which nine projects have become operational (including five monetized through PGInviT), while the balance projects are under progress and expected to be commissioned by September 2022.

High operating efficiency of its transmission system

Despite the extensive network under its management, PGCIL has been able to maintain system availability at more than 99% (above normative availability), which enables the company to earn incentive income consistently. During FY21 (refers to period April 01 to March 31), transmission system availability of 99.76% (PY: 99.82%) was achieved for the transmission network. Besides, the number of trippings per line was contained at 0.36 times in FY21 (0.39 times in FY20).

Strong project execution skills

During FY21 on consolidated basis, the company has capitalized assets of Rs. 21,467 crore (Rs. 18,234 crore in FY20), adding about 6,500 ckm transmission lines, 9 new sub-stations and about 27,300 MVA transformation capacity in the transmission system. Besides, the company has made capital expenditure of Rs. 11,284 crore in FY21 as against target of Rs. 10,500 crore.

Comfortable financial risk profile

PGCIL has comfortable financial risk profile marked by a consistent increase in scale of operations with capitalization of new transmission assets, healthy profitability margins, moderate capital structure and comfortable debt coverage indicators. About 94% of the PGCIL's revenue was contributed from the transmission segment while the remaining was from the telecom and

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consultancy segment. The PBILDT and PAT margin of the company stood healthy at 88.68% and 29.33% respectively, on account of cost-plus tariff structure as laid down by CERC, high operating efficiency leading to incentive income and low level of operating expenses due to the nature of business. PGCIL has a healthy net worth base and financial flexibility, given its status as the largest transmission utility of India, substantially owned by GoI. The capital structure as depicted by overall gearing of 2.10x as on March 31, 2021 (PY: 2.35x) stood modest driven by its annual capex plans and long gestation period of the projects. The debt coverage indicators stood comfortable as observed in interest coverage of 4.47x in FY21 (PY: 3.55x) and a total debt-to-GCA of 5.74x as on March 31, 2021 (PY: 6.21x).

Key Rating Weaknesses

Weak credit profile of state-owned utilities

The timely collection of dues from various state-owned utilities continues to be a challenge given the weak credit profile of those entities, though all the receivables are covered by letters of credit covering 105% of the average monthly billing and tri-partite agreement. Furthermore, the beneficiary profile of the company is highly diversified which mitigates the counterparty risk to some extent. The collections of the company were impacted in Q1FY21 on account of Covid-19 pandemic. However, the company has witnessed improvement in the collection efficiency post the unlock activity supported by collections under Atmanirbhar Bharat package of the GoI. The collection efficiency for FY21 stood at 103.78% vis-à-vis 100% for FY20. As on March 31, 2021, the overdue debtors (>45 days) are about Rs. 1,900 crore and are majorly from J&K DISCOM.

Liquidity: Strong

The company has strong liquidity profile marked by expected healthy cash generation vis-à-vis its scheduled debt repayments for FY22, and cushion available in the working capital limits to match the fund flow mismatches, if any. Besides, the company has also partially tied up debt for meeting the funding requirement of its capex plans. The liquidity profile of the company is also supported by unencumbered cash and bank balance of Rs. 1,304 crore and collection efficiency of 103.78% as on March 31, 2021.

Analytical approach: Consolidated. Besides, the rating factors in PGCIL's strategic importance for Indian power sector and to the GoI. CARE has revised the analytical approach from standalone to consolidated as there are strong linkages between PGCIL and its subsidiaries including same line of business and common management. Please refer to Annexure 4 for list of subsidiaries, associates and joint ventures getting consolidated as on March 31, 2021.

Applicable Criteria

Criteria on assigning Outlook and Credit Watch to Credit Ratings
CARE's Policy on Default Recognition
Criteria for Short Term Instruments
Rating Methodology: Power Transmission Projects
Financial Ratios: Non-Financial Sector
Rating Methodology: Notching by Factoring Linkages with Governments
Rating Methodology: Consolidation
Liquidity Analysis of Non-financial Sector Entities

About the Company

PGCIL, incorporated in October 1989, is engaged into power transmission business with the responsibility for implementation, operation and maintenance of the high-voltage transmission systems. It owns and operates most of India's inter-regional and inter-state power transmission system (ISTS) with transmission network of 1,68,256 ckm, 259 extra high voltage alternating current (EHVAC) and high voltage direct current (HVDC) substations with 4,38,108 mega volt ampere (MVA) transformation

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capacity as on March 31, 2021. Besides, the company has more than 71,000 kms of fibre optic network as on May 31, 2021. PGCIL has also been notified as a Maharatna company by the GoI.

Brief Financials- PGCIL Consolidated (Rs. crore)	FY20 (Audited)	FY21 (Abridged)
Total operating income	38,600	41,038
PBILDT	33,753	36,392
PAT	11,059	12,036
Overall gearing (times)	2.35	2.10
Interest coverage (times)	3.55	4.47

Status of non-cooperation with previous CRA: NA

Any other information: NA

Rating History for last three years: Please refer Annexure-2

Annexure-1: Details of Instruments/Facilities

Name of the Instrument	Date of Issuance	Coupon Rate	Maturity Date	Size of the Issue (Rs. crore)	Rating assigned along with Rating Outlook
Non-fund-based - LT/ ST-BG/LC	-	-	-	2700.00	CARE AAA; Stable / CARE A1+
Fund-based - LT-Cash Credit	-	-	-	3000.00	CARE AAA; Stable
Fund-based - LT-Line Of Credit	-	-	Sep-2032	8000.00	CARE AAA; Stable
Fund-based - LT-Term Loan	-	-	Oct-2028	10230.00	CARE AAA; Stable
Fund-based - LT-Term Loan	July 26, 2018	-	Dec-2035	25000.00	CARE AAA; Stable
Short Term Instruments-Short Term Borrowing	-	-	-	9000.00	CARE A1+
Commercial Paper-Commercial Paper (Standalone)	-	-	7 days to 364 days	9000.00	CARE A1+

Details of Bonds

S. No.	ISIN	Bond Series	Issuance Date	Coupon Rate	Date of Maturity	Rated Amount (Rs. Crore)	Rating assigned along with rating outlook
1.a	INE752E07EG6	26	07-Mar-08	9.30%	07-Mar-22	83.25	CARE AAA; Stable
	INE752E07EH4		07-Mar-08	9.30%	07-Mar-23	83.25	CARE AAA; Stable
1.b	INE752E07ES1	27	31-Mar-08	9.47%	31-Mar-22	58.75	CARE AAA; Stable
	INE752E07ET9		31-Mar-08	9.47%	31-Mar-23	58.75	CARE AAA; Stable
2.a	INE752E07FD0	28	15-Dec-08	9.33%	15-Dec-21	200.00	CARE AAA; Stable
	INE752E07FE8		15-Dec-08	9.33%	15-Dec-22	200.00	CARE AAA; Stable
	INE752E07FF5		15-Dec-08	9.33%	15-Dec-23	200.00	CARE AAA; Stable
2.b	INE752E07FP4	29	12-Mar-09	9.20%	12-Mar-22	108.125	CARE AAA; Stable
	INE752E07FQ2		12-Mar-09	9.20%	12-Mar-23	108.125	CARE AAA; Stable
	INE752E07FR0		12-Mar-09	9.20%	12-Mar-24	108.125	CARE AAA; Stable
3.a	INE752E07GA4	30	29-Sep-09	8.80%	29-Sep-21	194.375	CARE AAA; Stable
	INE752E07GB2		29-Sep-09	8.80%	29-Sep-22	194.375	CARE AAA; Stable
	INE752E07GC0		29-Sep-09	8.80%	29-Sep-23	194.375	CARE AAA; Stable
	INE752E07GD8		29-Sep-09	8.80%	29-Sep-24	194.375	CARE AAA; Stable
3.b	INE752E07GM9	31	25-Feb-10	8.90%	25-Feb-22	170.625	CARE AAA; Stable
	INE752E07GN7		25-Feb-10	8.90%	25-Feb-23	170.625	CARE AAA; Stable
	INE752E07GO5		25-Feb-10	8.90%	25-Feb-24	170.625	CARE AAA; Stable

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S. No.	ISIN	Bond Series	Issuance Date	Coupon Rate	Date of Maturity	Rated Amount (Rs. Crore)	Rating assigned along with rating outlook
	INE752E07GP2		25-Feb-10	8.90%	25-Feb-25	170.625	CARE AAA; Stable
3.c	INE752E07GY4	32	29-Mar-10	8.84%	29-Mar-22	86.25	CARE AAA; Stable
	INE752E07GZ1		29-Mar-10	8.84%	29-Mar-23	86.25	CARE AAA; Stable
	INE752E07HA2		29-Mar-10	8.84%	29-Mar-24	86.25	CARE AAA; Stable
	INE752E07HB0		29-Mar-10	8.84%	29-Mar-25	86.25	CARE AAA; Stable
4.a	INE752E07HJ3	33	08-Jul-10	8.64%	08-Jul-21	240.00	CARE AAA; Stable
	INE752E07HK1		08-Jul-10	8.64%	08-Jul-22	240.00	CARE AAA; Stable
	INE752E07HL9		08-Jul-10	8.64%	08-Jul-23	240.00	CARE AAA; Stable
	INE752E07HM7		08-Jul-10	8.64%	08-Jul-24	240.00	CARE AAA; Stable
	INE752E07HN5		08-Jul-10	8.64%	08-Jul-25	240.00	CARE AAA; Stable
4.b	INE752E07HV8	34	21-Oct-10	8.84%	21-Oct-21	290.625	CARE AAA; Stable
	INE752E07HW6		21-Oct-10	8.84%	21-Oct-22	290.625	CARE AAA; Stable
	INE752E07HX4		21-Oct-10	8.84%	21-Oct-23	290.625	CARE AAA; Stable
	INE752E07HY2		21-Oct-10	8.84%	21-Oct-24	290.625	CARE AAA; Stable
	INE752E07HZ9		21-Oct-10	8.84%	21-Oct-25	290.625	CARE AAA; Stable
5.a	INE752E07IH5	35	31-May-11	9.64%	31-May-22	163.125	CARE AAA; Stable
	INE752E07II3		31-May-11	9.64%	31-May-23	163.125	CARE AAA; Stable
	INE752E07IJ1		31-May-11	9.64%	31-May-24	163.125	CARE AAA; Stable
	INE752E07IK9		31-May-11	9.64%	31-May-25	163.125	CARE AAA; Stable
	INE752E07IL7		31-May-11	9.64%	31-May-26	163.125	CARE AAA; Stable
5.b	INE752E07IR4	36	29-Aug-11	9.35%	29-Aug-21	206.00	CARE AAA; Stable
	INE752E07IS2		29-Aug-11	9.35%	29-Aug-22	206.00	CARE AAA; Stable
	INE752E07IT0		29-Aug-11	9.35%	29-Aug-23	206.00	CARE AAA; Stable
	INE752E07IU8		29-Aug-11	9.35%	29-Aug-24	206.00	CARE AAA; Stable
	INE752E07IV6		29-Aug-11	9.35%	29-Aug-25	206.00	CARE AAA; Stable
	INE752E07IW4		29-Aug-11	9.35%	29-Aug-26	206.00	CARE AAA; Stable
	INE752E07IX2		29-Aug-11	9.35%	29-Aug-27	206.00	CARE AAA; Stable
	INE752E07IY0		29-Aug-11	9.35%	29-Aug-28	206.00.	CARE AAA; Stable
	INE752E07IZ7		29-Aug-11	9.35%	29-Aug-29	206.00	CARE AAA; Stable
	INE752E07JA8		29-Aug-11	9.35%	29-Aug-30	206.00	CARE AAA; Stable
5.c	INE752E07JH3	37	26-Dec-11	9.25%	26-Dec-21	166.25	CARE AAA; Stable
	INE752E07JI1		26-Dec-11	9.25%	26-Dec-22	166.25	CARE AAA; Stable
	INE752E07JJ9		26-Dec-11	9.25%	26-Dec-23	166.25	CARE AAA; Stable
	INE752E07JK7		26-Dec-11	9.25%	26-Dec-24	166.25	CARE AAA; Stable
	INE752E07JL5		26-Dec-11	9.25%	26-Dec-25	166.25	CARE AAA; Stable
	INE752E07JM3		26-Dec-11	9.25%	26-Dec-26	166.25	CARE AAA; Stable
5.d	INE752E07JN1	38	09-Mar-12	9.25%	09-Mar-27	855.00	CARE AAA; Stable
5.e	INE752E07JO9	39	29-Mar-12	9.40%	29-Mar-27	1,800.00	CARE AAA; Stable
6.a	INE752E07JU6	40	28-Jun-12	9.30%	28-Jun-21	333.125	CARE AAA; Stable
	INE752E07JV4		28-Jun-12	9.30%	28-Jun-22	333.125	CARE AAA; Stable
	INE752E07JW2		28-Jun-12	9.30%	28-Jun-23	333.125	CARE AAA; Stable
	INE752E07JX0		28-Jun-12	9.30%	28-Jun-24	333.125	CARE AAA; Stable
	INE752E07JY8		28-Jun-12	9.30%	28-Jun-25	333.125	CARE AAA; Stable
	INE752E07JZ5		28-Jun-12	9.30%	28-Jun-26	333.125	CARE AAA; Stable
	INE752E07KA6		28-Jun-12	9.30%	28-Jun-27	333.125	CARE AAA; Stable
6.b	INE752E07KG3	41	19-Oct-12	8.85%	19-Oct-21	236.875	CARE AAA; Stable
	INE752E07KH1		19-Oct-12	8.85%	19-Oct-22	236.875	CARE AAA; Stable
	INE752E07KI9		19-Oct-12	8.85%	19-Oct-23	236.875	CARE AAA; Stable
	INE752E07KJ7		19-Oct-12	8.85%	19-Oct-24	236.875	CARE AAA; Stable
	INE752E07KK5		19-Oct-12	8.85%	19-Oct-25	236.875	CARE AAA; Stable
	INE752E07KL3		19-Oct-12	8.85%	19-Oct-26	236.875	CARE AAA; Stable
	INE752E07KM1		19-Oct-12	8.85%	19-Oct-27	236.875	CARE AAA; Stable
6.c	INE752E07KN9	42	13-Mar-13	8.80%	13-Mar-23	1,990.00	CARE AAA; Stable
7.a	INE752E07KT6	43	20-May-13	7.93%	20-May-22	260.50	CARE AAA; Stable

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

S. No.	ISIN	Bond Series	Issuance Date	Coupon Rate	Date of Maturity	Rated Amount (Rs. Crore)	Rating assigned along with rating outlook
	INE752E07KU4		20-May-13	7.93%	20-May-23	260.50	CARE AAA; Stable
	INE752E07KV2		20-May-13	7.93%	20-May-24	260.50	CARE AAA; Stable
	INE752E07KW0		20-May-13	7.93%	20-May-25	260.50	CARE AAA; Stable
	INE752E07KX8		20-May-13	7.93%	20-May-26	260.50	CARE AAA; Stable
	INE752E07KY6		20-May-13	7.93%	20-May-27	260.50	CARE AAA; Stable
	INE752E07KZ3		20-May-13	7.93%	20-May-28	260.50	CARE AAA; Stable
7.b	INE752E07LB2	44	15-Jul-13	8.70%	15-Jul-23	1,322.00	CARE AAA; Stable
	INE752E07LC0		15-Jul-13	8.70%	15-Jul-28	1,322.00	CARE AAA; Stable
7.c	INE752E07LH9	45	28-Feb-14	9.65%	28-Feb-22	166.60	CARE AAA; Stable
	INE752E07LI7		28-Feb-14	9.65%	28-Feb-23	166.60	CARE AAA; Stable
	INE752E07LJ5		28-Feb-14	9.65%	28-Feb-24	166.60	CARE AAA; Stable
	INE752E07LK3		28-Feb-14	9.65%	28-Feb-25	166.60	CARE AAA; Stable
	INE752E07LL1		28-Feb-14	9.65%	28-Feb-26	166.60	CARE AAA; Stable
	INE752E07LM9		28-Feb-14	9.65%	28-Feb-27	166.60	CARE AAA; Stable
	INE752E07LN7		28-Feb-14	9.65%	28-Feb-28	166.60	CARE AAA; Stable
	INE752E07LO5		28-Feb-14	9.65%	28-Feb-29	166.60	CARE AAA; Stable
8.a	INE752E07LQ0	46	04-Sep-14	9.30%	04-Sep-24	1,454.00	CARE AAA; Stable
	INE752E07LR8		04-Sep-14	9.30%	04-Sep-29	1,454.00	CARE AAA; Stable
8.b	INE752E07LV0	47	20-Oct-14	8.93%	20-Oct-21	220.00	CARE AAA; Stable
	INE752E07LW8		20-Oct-14	8.93%	20-Oct-22	220.00	CARE AAA; Stable
	INE752E07LX6		20-Oct-14	8.93%	20-Oct-23	220.00	CARE AAA; Stable
	INE752E07LY4		20-Oct-14	8.93%	20-Oct-24	220.00	CARE AAA; Stable
	INE752E07LZ1		20-Oct-14	8.93%	20-Oct-25	220.00	CARE AAA; Stable
	INE752E07MA2		20-Oct-14	8.93%	20-Oct-26	220.00	CARE AAA; Stable
	INE752E07MB0		20-Oct-14	8.93%	20-Oct-27	220.00	CARE AAA; Stable
	INE752E07MC8		20-Oct-14	8.93%	20-Oct-28	220.00	CARE AAA; Stable
	INE752E07MD6		20-Oct-14	8.93%	20-Oct-29	220.00	CARE AAA; Stable
8.c	INE752E07MF1	48	23-Jan-15	8.20%	23-Jan-22	645.00	CARE AAA; Stable
	INE752E07MG9		23-Jan-15	8.20%	23-Jan-25	645.00	CARE AAA; Stable
	INE752E07MH7		23-Jan-15	8.20%	23-Jan-30	645.00	CARE AAA; Stable
8.d	INE752E07MJ3	49	09-Mar-15	8.15%	09-Mar-25	435.00	CARE AAA; Stable
	INE752E07MK1		09-Mar-15	8.15%	09-Mar-30	435.00	CARE AAA; Stable
9.a	INE752E07MO3	50	27-May-15	8.40%	27-May-22	244.00	CARE AAA; Stable
	INE752E07MP0		27-May-15	8.40%	27-May-23	244.00	CARE AAA; Stable
	INE752E07MQ8		27-May-15	8.40%	27-May-24	244.00	CARE AAA; Stable
	INE752E07MR6		27-May-15	8.40%	27-May-25	244.00	CARE AAA; Stable
	INE752E07MS4		27-May-15	8.40%	27-May-26	244.00	CARE AAA; Stable
	INE752E07MT2		27-May-15	8.40%	27-May-27	244.00	CARE AAA; Stable
	INE752E07MU0		27-May-15	8.40%	27-May-28	244.00	CARE AAA; Stable
	INE752E07MV8		27-May-15	8.40%	27-May-29	244.00	CARE AAA; Stable
	INE752E07MW6		27-May-15	8.40%	27-May-30	244.00	CARE AAA; Stable
9.b	INE752E07MZ9	51	14-Sep-15	8.40%	14-Sep-21	250.00	CARE AAA; Stable
	INE752E07NA0		14-Sep-15	8.40%	14-Sep-22	250..00	CARE AAA; Stable
	INE752E07NB8		14-Sep-15	8.40%	14-Sep-23	250.00	CARE AAA; Stable
	INE752E07NC6		14-Sep-15	8.40%	14-Sep-24	250.00	CARE AAA; Stable
	INE752E07ND4		14-Sep-15	8.40%	14-Sep-25	250.00	CARE AAA; Stable
	INE752E07NE2		14-Sep-15	8.40%	14-Sep-26	250.00	CARE AAA; Stable
	INE752E07NF9		14-Sep-15	8.40%	14-Sep-27	250.00	CARE AAA; Stable
	INE752E07NG7		14-Sep-15	8.40%	14-Sep-28	250.00	CARE AAA; Stable
	INE752E07NH5		14-Sep-15	8.40%	14-Sep-29	250.00	CARE AAA; Stable
	INE752E07NI3		14-Sep-15	8.40%	14-Sep-30	250.00	CARE AAA; Stable
9.c	INE752E07NK9	52	23-Dec-15	8.32%	23-Dec-25	466.00	CARE AAA; Stable
	INE752E07NL7		23-Dec-15	8.32%	23-Dec-30	466.00	CARE AAA; Stable
10.a	INE752E07NO1	53	25-Apr-16	8.13%	25-Apr-22	333.00	CARE AAA; Stable

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

S. No.	ISIN	Bond Series	Issuance Date	Coupon Rate	Date of Maturity	Rated Amount (Rs. Crore)	Rating assigned along with rating outlook
	INE752E07NP8		25-Apr-16	8.13%	25-Apr-23	333.00	CARE AAA; Stable
	INE752E07NQ6		25-Apr-16	8.13%	25-Apr-24	333.00	CARE AAA; Stable
	INE752E07NR4		25-Apr-16	8.13%	25-Apr-25	333.00	CARE AAA; Stable
	INE752E07NS2		25-Apr-16	8.13%	25-Apr-26	333.00	CARE AAA; Stable
	INE752E07NT0		25-Apr-16	8.13%	25-Apr-27	333.00	CARE AAA; Stable
	INE752E07NU8		25-Apr-16	8.13%	25-Apr-28	333.00	CARE AAA; Stable
	INE752E07NV6		25-Apr-16	8.13%	25-Apr-29	333.00	CARE AAA; Stable
	INE752E07NW4		25-Apr-16	8.13%	25-Apr-30	333.00	CARE AAA; Stable
	INE752E07NX2		25-Apr-16	8.13%	25-Apr-31	333.00	CARE AAA; Stable
10.b	INE752E07NY0	54	15-Jul-16	7.97%	15-Jul-21	1,000.00	CARE AAA; Stable
	INE752E07NZ7		15-Jul-16	7.97%	15-Jul-26	1,000.00	CARE AAA; Stable
	INE752E07OA8		15-Jul-16	7.97%	15-Jul-31	1,000.00	CARE AAA; Stable
10.c	INE752E07OB6	55	21-Sep-16	7.55%	21-Sep-31	1,240.00	CARE AAA; Stable
10.d	INE752E07OC4	56	18-Oct-16	7.36%	18-Oct-26	1,065.00	CARE AAA; Stable
10.e	INE752E07OD2	57	21-Dec-16	7.20%	21-Dec-21	2,120.00	CARE AAA; Stable
10.f	INE752E07OE0	58	09-Mar-17	7.89%	09-Mar-27	2,060.00	CARE AAA; Stable
11.a	INE752E07OF7	59	19-Jun-17	7.30%	19-Jun-27	3,070.00	CARE AAA; Stable
11.b	INE752E07OG5	60	09-Aug-17	7.20%	09-Aug-27	3,060.00	CARE AAA; Stable
11.c	INE752E08502	61	12-Dec-17	7.74%	12-Dec-28	600.00	CARE AAA; Stable
	INE752E08510		12-Dec-17	7.74%	12-Dec-29	600.00	CARE AAA; Stable
	INE752E08528		12-Dec-17	7.74%	12-Dec-30	600.00	CARE AAA; Stable
	INE752E08536		12-Dec-17	7.74%	12-Dec-31	600.00	CARE AAA; Stable
	INE752E08544		12-Dec-17	7.74%	12-Dec-32	600.00	CARE AAA; Stable
12.a	INE752E07OH3	62	07-Jan-19	8.36%	07-Jan-29	2000.00	CARE AAA; Stable
12.b	INE752E08551	GOI	14-Feb-19	8.24%	14-Feb-29	3487.50	CARE AAA; Stable
13.a	INE752E08569	63	15-Jul-19	7.34%	15-Jul-24	600.00	CARE AAA; Stable
	INE752E08577		15-Jul-19	7.34%	15-Jul-29	600.00	CARE AAA; Stable
	INE752E08585		15-Jul-19	7.34%	15-Jul-34	600.00	CARE AAA; Stable
13.b	INE752E08593	64	25-Oct-19	7.49%	25-Oct-24	756.00	CARE AAA; Stable
	INE752E08601		25-Oct-19	7.49%	25-Oct-29	756.00	CARE AAA; Stable
	INE752E08619		25-Oct-19	7.49%	25-Oct-34	1008.00	CARE AAA; Stable
13.c	INE752E08627	65	08-Jan-20	6.35%	14-Apr-23	200.00	CARE AAA; Stable
13.d	INE752E08635	66	08-Jan-20	7.38%	12-Apr-30	500.00	CARE AAA; Stable
14.a	INE752E08643	67	15-Apr-20	6.85%	15-Apr-25	2800.00	CARE AAA; Stable
14.b	INE752E08650	68	05-Aug-20	6.29%	11-Apr-31	500.00	CARE AAA; Stable
15	Proposed					10000.00	CARE AAA; Stable
					Total	**83,048.44**	

Annexure-2: Rating History of last three years

Sr. No.	Name of the Instrument/Bank Facilities	Current Ratings			Rating history			
		Type	Amount Outstanding (Rs. crore)	Rating	Date(s) & Rating(s) assigned in 2021-2022	Date(s) & Rating(s) assigned in 2020-2021	Date(s) & Rating(s) assigned in 2019-2020	Date(s) & Rating(s) assigned in 2018-2019
1.	Borrowings-Secured Long Term Borrowings	LT	924.38	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
2.	Bonds-Secured Reedemable Bonds	LT	284.00	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)

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Sr. No.	Name of the Instrument/Bank Facilities	Current Ratings			Rating history			
		Type	Amount Outstanding (Rs. crore)	Rating	Date(s) & Rating(s) assigned in 2021-2022	Date(s) & Rating(s) assigned in 2020-2021	Date(s) & Rating(s) assigned in 2019-2020	Date(s) & Rating(s) assigned in 2018-2019
3.	Borrowings-Secured Long Term Borrowings	LT	1805.00	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
4.	Borrowings-Secured Long Term Borrowings	LT	2653.13	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
5.	Non-fund-based - LT/ ST-BG/LC	LT/ST	2700.00	CARE AAA; Stable / CARE A1+	1)CARE AAA; Stable / CARE A1+ (28-Apr-21)	1)CARE AAA; Stable / CARE A1+ (06-Jul-20)	1)CARE AAA; Stable / CARE A1+ (12-Aug-19) 2)CARE AAA; Stable / CARE A1+ (25-Jun-19)	1)CARE AAA; Stable / CARE A1+ (20-Sep-18)
6.	Fund-based - LT-Cash Credit	LT	3000.00	CARE AAA; Stable	1)CARE AAA; Stable (28-Apr-21)	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (12-Aug-19) 2)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
7.	Borrowings-Secured Long Term Borrowings	LT	6528.13	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
8.	Borrowings-Market Borrowing Programme	LT	5980.00	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
9.	Borrowings-Market Borrowing Programme	LT	5800.30	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
10.	Borrowings-Market Borrowing Programme	LT	7693.00	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
11.	Borrowings-Market Borrowing Programme	LT	5628.00	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
12.	Borrowings-Market Borrowing Programme	LT	12815.00	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
13.	Short Term Instruments-Short Term Borrowing	ST	9000.00	CARE A1+	-	1)CARE A1+ (06-Jul-20)	1)CARE A1+ (01-Nov-19) 2)CARE A1+	1)CARE A1+ (20-Sep-18) 2)CARE A1+

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Sr. No.	Name of the Instrument/Bank Facilities	Current Ratings			Rating history			
		Type	Amount Outstanding (Rs. crore)	Rating	Date(s) & Rating(s) assigned in 2021-2022	Date(s) & Rating(s) assigned in 2020-2021	Date(s) & Rating(s) assigned in 2019-2020	Date(s) & Rating(s) assigned in 2018-2019
							(25-Jun-19)	(05-Apr-18)
14.	Fund-based - LT-Line Of Credit	LT	8000.00	CARE AAA; Stable	1)CARE AAA; Stable (28-Apr-21)	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
15.	Borrowings-Market Borrowing Programme	LT	9130.00	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
16.	Fund-based - LT-Term Loan	LT	10230.00	CARE AAA; Stable	1)CARE AAA; Stable (28-Apr-21)	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18)
17.	Commercial Paper-Commercial Paper (Standalone)	ST	9000.00	CARE A1+	-	1)CARE A1+ (06-Jul-20)	1)CARE A1+ (01-Nov-19) 2)CARE A1+ (25-Jun-19) 3)CARE A1+ (17-May-19)	1)CARE A1+ (20-Sep-18) 2)CARE A1+ (05-Apr-18)
18.	Borrowings-Market Borrowing Programme	LT	5487.50	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (20-Sep-18) 2)CARE AAA; Stable (05-Apr-18)
19.	Fund-based - LT-Term Loan	LT	25000.00	CARE AAA; Stable	1)CARE AAA; Stable (28-Apr-21)	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19)	1)CARE AAA; Stable (11-Mar-19) 2)CARE AAA; Stable (20-Sep-18) 3)CARE AAA; Stable (05-Apr-18)
20.	Bonds	LT	5020.00	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20)	1)CARE AAA; Stable (25-Jun-19) 2)CARE AAA; Stable (22-May-19)	-
21.	Bonds	LT	3300.00	CARE AAA; Stable	-	1)CARE AAA; Stable (06-Jul-20) 2)CARE AAA; Stable (07-Apr-20)	-	-
22.	Bonds	LT	10000.00	CARE AAA; Stable	1)CARE AAA; Stable (28-Apr-21)	-	-	-

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Annexure-3: Detailed explanation of covenants of the rated instrument / facilities: N.A.

Annexure-4: Complexity level of various instruments rated for this company

Sr. No.	Name of the Instrument	Complexity Level
1.	Bonds	Simple
2.	Bonds-Secured Redeemable Bonds	Simple
3.	Borrowings-Market Borrowing Programme	Simple
4.	Borrowings-Secured Long Term Borrowings	Simple
5.	Commercial Paper-Commercial Paper (Standalone)	Simple
6.	Fund-based - LT-Cash Credit	Simple
7.	Fund-based - LT-Line Of Credit	Simple
8.	Fund-based - LT-Term Loan	Simple
9.	Non-fund-based - LT/ ST-BG/LC	Simple
10.	Short Term Instruments-Short Term Borrowing	Simple

Annexure-5: List of subsidiaries, associates & joint ventures of PGCIL getting consolidated (as on March 31, 2021)

S. No.	Name of companies/ Entities	% of holding
1	Powergrid Nm Transmission Limited	100
2	Powergrid Vemagiri Transmission Limited	100
3	Powergrid Vizag Transmission Limited*	100
4	Powergrid Unchahar Transmission Limited	100
5	Powergrid Kala Amb Transmission Limited*	100
6	Powergrid Jabalpur Transmission Limited*	100
7	Powergrid Warora Transmission Limited*	100
8	Powergrid Parli Transmission Limited*	100
9	Powergrid Southern Inerconnector Transmission System Limited	100
10	Powergrid Medinipur – Jeerat Transmission Limited	100
11	Powergrid Mithilanchal Transmission Limited	100
12	Powergrid Varanasi Transmission System Limited	100
13	Powergrid Jawaharpur Firozabad Transmission Limited	100
14	Powergrid Khetri Transmission System Limited	100
15	Powergrid Bhind Guna Transmission Limited	100
16	Powergrid Ajmer Phagi Transmission Limited	100
17	Powergrid Fatehgarh Transmission Limited	100
18	Powergrid Bhuj Transmission Limited	100
19	Powergrid Rampur Sambhal Transmission Limited	100
20	Powergrid Meerut-Simbhavali Transmission Limited	100
21	Jaypee Powergrid Limited^	100
22	Central Transmission Utility of India Limited	100
23	Powergrid Ramgarh Transmission Limited	100
24	Bikaner-II Bhiwadi Transco Limited	100
25	Powerlinks Transmission Limited@	49
26	Torrent Power Grid Limited@	26
27	North-East Transmission Company Limited@	26
28	Parbati-Koldam Transmission Company Limited@	26
29	Teesta Valley Power Transmission Limited@	30.92
30	National High Power Test Laboratory Pvt. Limited@	20
31	Cross Border Power Transmission Company Limited@	26
32	Bihar Grid Company Limited@	50

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S. No.	Name of companies/ Entities	% of holding
33	Kalinga Bidyut Prasaran Nigam Private Limited@	50
34	Power Transmission Company Nepal Ltd. (PTCN)@	26
35	RINL POWERGRID TLT Private Ltd. (RPTPL)@	50

@Joint venture companies of PGCIL.
^Wholly owned subsidiary from March 26, 2021 (joint venture till March 25, 2021).
*In April 2021, the company has sold 74% stake in the entities to Power Grid InviT.

Note on complexity levels of the rated instrument: *CARE has classified instruments rated by it on the basis of complexity. This classification is available at www.careratings.com. Investors/market intermediaries/regulators or others are welcome to write to care@careratings.com for any clarifications.*

Contact us

Media Contact
Mradul Mishra
Contact no. – +91-22-6837 4424
Email ID: mradul.mishra@careratings.com

Analyst Contact
Sudhir Kumar
Contact no. - +91-11-4533 3232
Email ID: sudhir.kumar@careratings.com

Business Development Contact
Swati Agrawal
Contact no. : +91-11-4533 3200
Email ID: swati.agrawal@careratings.com

About CARE Ratings:

CARE Ratings commenced operations in April 1993 and over two decades, it has established itself as one of the leading credit rating agencies in India. CARE is registered with the Securities and Exchange Board of India (SEBI) and also recognized as an External Credit Assessment Institution (ECAI) by the Reserve Bank of India (RBI). CARE Ratings is proud of its rightful place in the Indian capital market built around investor confidence. CARE Ratings provides the entire spectrum of credit rating that helps the corporates to raise capital for their various requirements and assists the investors to form an informed investment decision based on the credit risk and their own risk-return expectations. Our rating and grading service offerings leverage our domain and analytical expertise backed by the methodologies congruent with the international best practices.

Disclaimer

CARE's ratings are opinions on the likelihood of timely payment of the obligations under the rated instrument and are not recommendations to sanction, renew, disburse or recall the concerned bank facilities or to buy, sell or hold any security. CARE's ratings do not convey suitability or price for the investor. CARE's ratings do not constitute an audit on the rated entity. CARE has based its ratings/outlooks on information obtained from sources believed by it to be accurate and reliable. CARE does not, however, guarantee the accuracy, adequacy or completeness of any information and is not responsible for any errors or omissions or for the results obtained from the use of such information. Most entities whose bank facilities/instruments are rated by CARE have paid a credit rating fee, based on the amount and type of bank facilities/instruments. CARE or its subsidiaries/associates may also have other commercial transactions with the entity. In case of partnership/proprietary concerns, the rating /outlook assigned by CARE is, inter-alia, based on the capital deployed by the partners/proprietor and the financial strength of the firm at present. The rating/outlook may undergo change in case of withdrawal of capital or the unsecured loans brought in by the partners/proprietor in addition to the financial performance and other relevant factors. CARE is not responsible for any errors and states that it has no financial liability whatsoever to the users of CARE's rating.

Our ratings do not factor in any rating related trigger clauses as per the terms of the facility/instrument, which may involve acceleration of payments in case of rating downgrades. However, if any such clauses are introduced and if triggered, the ratings may see volatility and sharp downgrades.

****For detailed Rationale Report and subscription information, please contact us at www.careratings.com**

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Rating Rationale

May 19, 2021 | Mumbai

Power Grid Corporation of India Limited

'CRISIL AAA/Stable' assigned to long-term borrowing programme

Rating Action

Total Bank Loan Facilities Rated	**Rs.25700 Crore (Enhanced from Rs.12500 Crore)**
Long Term Rating	**CRISIL AAA/Stable (Reaffirmed)**
Short Term Rating	**CRISIL A1+ (Reaffirmed)**

Rs.10000 Crore Long-Term Borrowing Programme!	**CRISIL AAA/Stable (Assigned)**
Rs.30000 Crore Long-Term Borrowing Programme^	**CRISIL AAA/Stable (Reaffirmed)**
Rs.10000 Crore Long-Term Borrowing Programme%	**CRISIL AAA/Stable (Reaffirmed)**
Rs.10000 Crore Long-Term Borrowing Programme$	**CRISIL AAA/Stable (Reaffirmed)**
Rs.25334 Crore (Reduced from Rs.26000 Crore) Long-Term Borrowing Programme#	**CRISIL AAA/Stable (Reaffirmed)**
Rs.26000 Crore Long-Term Borrowing Programme@	**CRISIL AAA/Stable (Reaffirmed)**
Rs.38499.42 Crore (Reduced from Rs.42913.94 Crore) Bond	**CRISIL AAA/Stable (Reaffirmed)**
Rs.9000 Crore Short Term Debt&	**CRISIL A1+ (Reaffirmed)**
Rs.9000 Crore Commercial Paper~	**CRISIL A1+ (Reaffirmed)**

& Short-term debt and commercial paper borrowing will cumulatively not exceed Rs 9,000 crore at any point
^ The borrowing programme pertains to fiscal 2019. Of the total Rs 30,000 crore, Rs 20,000 crore was to be raised as bonds, against which Rs 5,487.5 crore was raised under Series LXII and GOI Fully Serviced Bond. The remaining Rs 10,000 crore was to be raised as long-term loans.
% The borrowing programme pertains to fiscal 2020. Of the total Rs 10,000 crore, Rs 5,020 crore was raised as bonds under Series LXIII, LXIV, LXV and LXVI
$ The borrowing programme pertains to fiscal 2021. Of the total Rs 10,000 crore, Rs 3,300 crore has been raised as bonds under Series LXVII and LXVIII
 # The borrowing programme pertains to fiscal 2017. Of the total Rs 26,000 crore, Rs 14,000 crore was to be raised as bonds against which Rs 13,481 crore has already been raised under Series LIII, LIV, LV, LVI, LVII and LVIII. The remaining Rs 12,000 crore was to be raised as long-term loans.
@ The borrowing programme pertains to fiscal 2018. Of the total Rs 26,000 crore, Rs 14,000 crore was to be raised as bonds against which Rs 9,130 crore has already been raised under Series LIX, LX and LXI. The remaining Rs 12,000 crore was to be raised as long-term loans.
! The borrowing programme pertains to fiscal 2022
~ Short-term debt and commercial paper borrowing will cumulatively not exceed Rs 9,000 crore at any point
1 crore = 10 million
Refer to Annexure for Details of Instruments & Bank Facilities

Detailed Rationale

CRISIL Ratings has assigned its **'CRISIL AAA/Stable'** rating to the long-term borrowing programme of Power Grid Corporation of India Ltd (PGCIL). The ratings on the remaining debt programmes and bank loan facilities have been reaffirmed at 'CRISIL AAA/Stable/CRISIL A1+'.

The rating on bonds worth Rs 5,080.52 crore (see Annexure 'Details of Rating Withdrawn') has been withdrawn, as the instruments have been fully redeemed. The action is in line with CRISIL Ratings' policy on withdrawal of ratings.

As the company is in the power transmission sector, which is an essential service, operations were unaffected by the nationwide lockdown imposed by the government to contain the Covid-19 pandemic. However, there were delays in receipt of payments from power distribution companies (discoms). Monthly collection efficiency, which is usually over 95%, fell to around 50% in the first quarter of fiscal 2021. However, with the lifting of lockdown restrictions as well as the liquidity injection for discoms announced by the Ministry of Finance, collection efficiency increased to over 100% from July 2020 and averaged around 95% for the nine months ended December 31, 2020.

In January 2021, the company sponsored the Powergrid Infrastructure Investment Trust (Powergrid InvIT; rated 'Provisional CCR AAA/Stable'). It will divest five of its operational transmission assets to the InvIT and is expected to receive around Rs 8,000 crore in the transaction. These funds should support future capital expenditure (capex) requirement. The planned capex of Rs 7,500 crore for fiscal 2022 would be partly funded by debt.

The ratings continue to reflect strong operating metrics, as seen in line availability continuing to exceed the normative level of 98% and the high collection efficiency. Revenue growth should remain steady over the medium term, supported by healthy capitalisation. These strengths are partially offset by the weak credit risk profiles of customers

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MOHANLALA AND TRANSMISSION LIMITED NEW DELHI

Analytical Approach

For arriving at the ratings, CRISIL Ratings has combined the business and financial risk profiles of PGCIL and its subsidiaries, as the companies are in the same business and under a common management. Strategic importance to the Government of India (GoI) has also been factored into the ratings, because of the critical role the company plays in inter-state power transmission.

Please refer Annexure - Details of Consolidation, which captures the list of entities considered and their analytical treatment of consolidation.

Key Rating Drivers & Detailed Description

Strengths:

*** Strategic importance to the government**

The company plays a vital role in the development of India's power sector. It owns about 85% of the interstate transmission network, and carries around 45% of total power generated in the country. Moreover, the strong project implementation capability should help to ensure that projects of strategic importance, of compressed implementation timelines, or involving difficult terrain or other complexities, will continue to be awarded to the comany on nomination basis. In the past, the government has extended equity support for capex and has also guaranteed loans availed from multilateral lending agencies.

*** Favourable regulatory framework, ensuring secured and stable cash flow**

The regulatory framework is structured by Central Electricity Regulatory Commission (CERC), which helps to generate stable revenue and cash flow. Tariff recovery is linked to transmission network availability maintained by the company and is not impacted by actual power transmitted through the network that could be extraneous to its control. Also, the tariff structure ensures recovery of all expenses, including debt-servicing charges, and provides for a fixed return on equity (RoE), if the company adheres to operational benchmarks. The tariff structure also ensures recovery of annual obligation for debt contracted to finance capex in transmission projects and funded in a debt-to-equity mix of 70:30.

Currently, a large part of the asset base is on the regulated RoE structure, resulting in secured and stable cash flow, mitigating any immediate pressure on profitability from increased participation of private sector players through the competitive bidding route.

*** Strong operating efficiency, resulting in full recovery of cost**

Strong operating efficiency has helped surpass operational benchmarks set by CERC—system availability was over 99% in fiscal 2020, against the benchmark of 98%. As per the regulator's stipulation, this ensured recovery of the entire cost, including debt-servicing charges, and provided for RoE. The regulated tariff structure and superior operating efficiency lend stability to cash flow. As the company owns and manages most of the inter-regional transmission network, its customer profile is diversified, reducing counterparty concentration risk.

*** Healthy financial flexibility supported by strong cash accrual**

Cash accrual of over Rs 17,000 crore per fiscal provides significant flexibility to raise funds despite a leveraged capital structure. The cash accrual is backed by a regulated tariff structure, which ensures recovery of all expenses, including repayment of loans, and strong operating efficiency. To fund its projects, the company contracts long-term debt for a tenure of 10 years and more. Debt servicing begins only after new projects become operational and start generating revenue. Furthermore, the tariff structure for the assets won through nomination ensures recovery of the amount of debt repaid as approved by CERC every year. Thus, there is no asset-liability mismatch.

Weakness:

*** Weak credit risk profiles of customers**

State power utilities (SPUs), which account for the entire revenue, are the weak link in the value chain from a credit profile perspective. The risk is mitigated by strong collection efficiency with SPUs paying on time. Furthermore, adequate letters of credit have been opened in favour of the company by SPUs as per the settlement scheme. Moreover, as the owner of most inter-regional transmission networks, the company has a diversified customer profile. As per CERC's regulations, the company, as the central transmission utility (CTU) had to carry out billing, collection, and disbursement for all inter-state transmission system (ISTS) licensees, based on the point of connection methodology of allocation of transmission charges. As the sole collection agency of all ISTS networks in India, The company's ability to negotiate with designated ISTS customers has increased. Moreover, it also has authority to regulate power to defaulting customers as per CERC's norms, which it could use in exceptional circumstances. From April 2021, the CTU function has been transferred from PGCIL into a new entity, Central Transmission Utility of India Ltd (CTUIL). While CTUIL is currently wholly owned by PGCIL, it is eventually expected to have an independent shareholding under the Government of India. CRISIL Ratings will continue to monitor developments in this regard.

Liquidity: Superior

Healthy cash accrual of over Rs 17,000 crore per fiscal should suffice to cover debt obligation. Liquidity is also supported by a cash balance of Rs 7,429 crore as on September 30, 2020. Furthermore, the regulated tariff structure for the assets won through nomination ensures recovery of the amount of debt repaid as approved by CERC every year.

Outlook: Stable

PGCIL should maintain a robust financial risk profile over the medium term, despite the planned debt-funded capex, backed by strong operating efficiency and the regulated tariff regime. The company should also continue to benefit from its strategic importance to India's power sector, given its role in developing and operating the national power transmission network.

Rating Sensitivity factors

Downward factors

- Significant delays or default in payments by SPUs
- Adverse impact of any changes in the regulatory regime

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About the Company

PGCIL was incorporated in 1989 to set up extra-high voltage alternating current and high-voltage direct current (HVDC) transmission lines. The company moves large blocks of power from the central generating agencies and areas that have surplus power to load centres within and across regions. It is under the administrative control of the Ministry of Power, GoI. The company owns and operates an extensive nationwide network of transmission lines, which mainly comprise 400-kilovolt transmission lines and HVDC transmission systems, carrying more than 45% of the total power generated in India. As on December 31, 2020, it owned and operated a transmission line network of 1,68,000 circuit kilometre and 253 substations, with a transformer capacity of over 4,25,000 megavolt ampere.

For the nine months ended December 31, 2020, on a consolidated basis, net profit was Rs 8,510 crore on an operating income of Rs 29,129 crore, against Rs 7,746 crore and Rs 27,595 crore, respectively, in the corresponding period of the previous fiscal.

Key Financial Indicators *(Consolidated; as reported by PGCIL)*

Particulars	Unit	2020	2019
Revenue	Rs crore	38,671	35,661
Profit after tax (PAT)	Rs crore	11,059	10,034
PAT margin	%	28.6	28.1
Adjusted debt/Adjusted networth	Times	2.4	2.5
Interest coverage	Times	3.5	3.5

Any other information: Not applicable

Note on complexity levels of the rated instrument:

CRISIL complexity levels are assigned to various types of financial instruments. The CRISIL complexity levels are available on www.crisil.com/complexity-levels. Users are advised to refer to the CRISIL complexity levels for instruments that they consider for investment. Users may also call the Customer Service Helpdesk with queries on specific instruments.

Annexure - Details of Instrument(s)

ISIN	Name of Instrument	Date of Allotment	Coupon Rate (%)	Maturity Date	Issue Size (Rs Cr)	Complexity Level	Rating Assigned with outlook
NA	Proposed Long-term bank loan facility	NA	NA	NA	20,000	NA	CRISIL AAA/Stable
NA	Bank Guarantee	NA	NA	NA	1100	NA	CRISIL A1+
NA	Cash Credit	NA	NA	NA	3000	NA	CRISIL AAA/Stable
NA	Letter of Credit	NA	NA	NA	1600	NA	CRISIL A1+
NA	Short-Term Debt**	NA	NA	7-365 days	9000	Simple	CRISIL A1+
NA	Commercial Paper**	NA	NA	7-365 days	9000	Simple	CRISIL A1+
NA	Long-Term Borrowing Programme*	NA	NA	NA	4980	Simple	CRISIL AAA/Stable
NA	Long-Term Borrowing Programme@	NA	NA	NA	24513	Simple	CRISIL AAA/Stable
NA	Long-Term Borrowing Programme#	NA	NA	NA	12519	Simple	CRISIL AAA/Stable
NA	Long-Term Borrowing Programme^	NA	NA	NA	16870	Simple	CRISIL AAA/Stable
NA	Long-Term Borrowing Programme &	NA	NA	NA	6700	Simple	CRISIL AAA/Stable
NA	Long-Term Borrowing Programme ^^	NA	NA	NA	10000	Simple	CRISIL AAA/Stable
INE752E07BB3	Bond - XIX Issue	24-Jul-06	9.25%	24-Jul-21	41.25	Simple	CRISIL AAA/Stable
INE752E07BC1	Bond - XX Issue	7-Sep-06	8.93%	7-Sep-21	125	Simple	CRISIL AAA/Stable
INE752E07BZ2	Bond - XXI Issue	11-Oct-06	8.73%	11-Oct-21	42.5	Simple	CRISIL AAA/Stable
INE752E07CL0	Bond - XXII Issue	7-Dec-06	8.68%	7-Dec-21	57.5	Simple	CRISIL AAA/Stable
INE752E07CX5	Bond - XXIII Issue	9-Feb-07	9.25%	9-Feb-22	25.63	Simple	CRISIL AAA/Stable
INE752E07DJ2	Bond - XXIV Issue	26-Mar-07	9.95%	26-Mar-22	66.63	Simple	CRISIL AAA/Stable
INE752E07DU9	Bond - XXV Issue	12-Jun-07	10.10%	12-Jun-21	88.75	Simple	CRISIL AAA/Stable

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INE752E07DV7	Bond - XXV Issue	12-Jun-07	10.10%	12-Jun-22	88.75	Simple	CRISIL AAA/Stable
INE752E07EG6	Bond - XXVI Issue	7-Mar-08	9.30%	7-Mar-22	83.25	Simple	CRISIL AAA/Stable
INE752E07EH4	Bond - XXVI Issue	7-Mar-08	9.30%	7-Mar-23	83.25	Simple	CRISIL AAA/Stable
INE752E07ES1	Bond - XXVII Issue	31-Mar-08	9.47%	31-Mar-22	58.75	Simple	CRISIL AAA/Stable
INE752E07ET9	Bond - XXVII Issue	31-Mar-08	9.47%	31-Mar-23	58.75	Simple	CRISIL AAA/Stable
INE752E07FD0	Bond - XXVIII Issue	15-Dec-08	9.33%	15-Dec-21	200	Simple	CRISIL AAA/Stable
INE752E07FF8	Bond - XXVIII Issue	15-Dec-08	9.33%	15-Dec-22	200	Simple	CRISIL AAA/Stable
INE752E07FF5	Bond - XXVIII Issue	15-Dec-08	9.33%	15-Dec-23	200	Simple	CRISIL AAA/Stable
INE752E07FP4	Bond - XXIX Issue	12-Mar-09	9.20%	12-Mar-22	108.13	Simple	CRISIL AAA/Stable
INE752E07FQ2	Bond - XXIX Issue	12-Mar-09	9.20%	12-Mar-23	108.13	Simple	CRISIL AAA/Stable
INE752E07FR0	Bond - XXIX Issue	12-Mar-09	9.20%	12-Mar-24	108.13	Simple	CRISIL AAA/Stable
INE752E07GA4	Bond - XXX Issue	29-Sep-09	8.80%	29-Sep-21	194.38	Simple	CRISIL AAA/Stable
INE752E07GB2	Bond - XXX Issue	29-Sep-09	8.80%	29-Sep-22	194.38	Simple	CRISIL AAA/Stable
INE752E07GC0	Bond - XXX Issue	29-Sep-09	8.80%	29-Sep-23	194.38	Simple	CRISIL AAA/Stable
INE752E07GD8	Bond - XXX Issue	29-Sep-09	8.80%	29-Sep-24	194.38	Simple	CRISIL AAA/Stable
INE752E07GM9	Bond - XXXI Issue	25-Feb-10	8.90%	25-Feb-22	170.63	Simple	CRISIL AAA/Stable
INE752E07GN7	Bond - XXXI Issue	25-Feb-10	8.90%	25-Feb-23	170.63	Simple	CRISIL AAA/Stable
INE752E07GO5	Bond - XXXI Issue	25-Feb-10	8.90%	25-Feb-24	170.63	Simple	CRISIL AAA/Stable
INE752E07GP2	Bond - XXXI Issue	25-Feb-10	8.90%	25-Feb-25	170.63	Simple	CRISIL AAA/Stable
INE752E07GY4	Bond - XXXII Issue	29-Mar-10	8.84%	29-Mar-22	86.25	Simple	CRISIL AAA/Stable
INE752E07GZ1	Bond - XXXII Issue	29-Mar-10	8.84%	29-Mar-23	86.25	Simple	CRISIL AAA/Stable
INE752E07HA2	Bond - XXXII Issue	29-Mar-10	8.84%	29-Mar-24	86.25	Simple	CRISIL AAA/Stable
INE752E07HB0	Bond - XXXII Issue	29-Mar-10	8.84%	29-Mar-25	86.25	Simple	CRISIL AAA/Stable
INE752E07HJ3	Bond - XXXIII Issue	8-Jul-10	8.64%	8-Jul-21	240	Simple	CRISIL AAA/Stable
INE752E07HK1	Bond - XXXIII Issue	8-Jul-10	8.64%	8-Jul-22	240	Simple	CRISIL AAA/Stable
INE752E07HL9	Bond - XXXIII Issue	8-Jul-10	8.64%	8-Jul-23	240	Simple	CRISIL AAA/Stable
INE752E07HM7	Bond - XXXIII Issue	8-Jul-10	8.64%	8-Jul-24	240	Simple	CRISIL AAA/Stable
INE752E07HN5	Bond - XXXIII Issue	8-Jul-10	8.64%	8-Jul-25	240	Simple	CRISIL AAA/Stable
INE752E07HV8	Bond - XXXIV Issue	21-Oct-10	8.84%	21-Oct-21	290.63	Simple	CRISIL AAA/Stable
INE752E07HW6	Bond - XXXIV Issue	21-Oct-10	8.84%	21-Oct-22	290.63	Simple	CRISIL AAA/Stable
INE752E07HX4	Bond - XXXIV Issue	21-Oct-10	8.84%	21-Oct-23	290.63	Simple	CRISIL AAA/Stable
INE752E07HY2	Bond - XXXIV Issue	21-Oct-10	8.84%	21-Oct-24	290.63	Simple	CRISIL AAA/Stable
INE752E07HZ9	Bond - XXXIV Issue	21-Oct-10	8.84%	21-Oct-25	290.63	Simple	CRISIL AAA/Stable
INE752E07IG7	Bond - XXXV Issue	31-May-11	9.64%	31-May-21	163.13	Simple	CRISIL AAA/Stable
INE752E07IH5	Bond - XXXV Issue	31-May-11	9.64%	31-May-22	163.13	Simple	CRISIL AAA/Stable

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INE752E07II3	Bond - XXXV Issue	31-May-11	9.64%	31-May-23	163.13	Simple	CRISIL AAA/Stable
INE752E07IJ1	Bond - XXXV Issue	31-May-11	9.64%	31-May-24	163.13	Simple	CRISIL AAA/Stable
INE752E07IK9	Bond - XXXV Issue	31-May-11	9.64%	31-May-25	163.13	Simple	CRISIL AAA/Stable
INE752E07IL7	Bond - XXXV Issue	31-May-11	9.64%	31-May-26	163.13	Simple	CRISIL AAA/Stable
INE752E07IR4	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-21	206	Simple	CRISIL AAA/Stable
INE752E07IS2	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-22	206	Simple	CRISIL AAA/Stable
INE752E07IT0	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-23	206	Simple	CRISIL AAA/Stable
INE752E07IU8	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-24	206	Simple	CRISIL AAA/Stable
INE752E07IV6	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-25	206	Simple	CRISIL AAA/Stable
INE752E07IW4	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-26	206	Simple	CRISIL AAA/Stable
INE752E07IX2	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-27	206	Simple	CRISIL AAA/Stable
INE752E07IY0	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-28	206	Simple	CRISIL AAA/Stable
INE752E07IZ7	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-29	206	Simple	CRISIL AAA/Stable
INE752E07JA8	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-30	206	Simple	CRISIL AAA/Stable
INE752E07JH3	Bond - XXXVII Issue	26-Dec-11	9.25%	26-Dec-21	166.25	Simple	CRISIL AAA/Stable
INE752E07JI1	Bond - XXXVII Issue	26-Dec-11	9.25%	26-Dec-22	166.25	Simple	CRISIL AAA/Stable
INE752E07JJ9	Bond - XXXVII Issue	26-Dec-11	9.25%	26-Dec-23	166.25	Simple	CRISIL AAA/Stable
INE752E07JK7	Bond - XXXVII Issue	26-Dec-11	9.25%	26-Dec-24	166.25	Simple	CRISIL AAA/Stable
INE752E07JL5	Bond - XXXVII Issue	26-Dec-11	9.25%	26-Dec-25	166.25	Simple	CRISIL AAA/Stable
INE752E07JM3	Bond - XXXVII Issue	26-Dec-11	9.25%	26-Dec-26	166.25	Simple	CRISIL AAA/Stable
INE752E07JN1	Bond - XXXVIII Issue	9-Mar-12	9.25%	9-Mar-27	855	Simple	CRISIL AAA/Stable
INE752E07JO9	Bond - XXXIX Issue	29-Mar-12	9.40%	29-Mar-27	1,800.00	Simple	CRISIL AAA/Stable
INE752E07JU6	Bond - XL Issue	28-Jun-12	9.30%	28-Jun-21	333.13	Simple	CRISIL AAA/Stable
INE752E07JV4	Bond - XL Issue	28-Jun-12	9.30%	28-Jun-22	333.13	Simple	CRISIL AAA/Stable
INE752E07JW2	Bond - XL Issue	28-Jun-12	9.30%	28-Jun-23	333.13	Simple	CRISIL AAA/Stable
INE752E07JX0	Bond - XL Issue	28-Jun-12	9.30%	28-Jun-24	333.13	Simple	CRISIL AAA/Stable
INE752E07JY8	Bond - XL Issue	28-Jun-12	9.30%	28-Jun-25	333.13	Simple	CRISIL AAA/Stable
INE752E07JZ5	Bond - XL Issue	28-Jun-12	9.30%	28-Jun-26	333.13	Simple	CRISIL AAA/Stable
INE752E07KA6	Bond - XL Issue	28-Jun-12	9.30%	28-Jun-27	333.13	Simple	CRISIL AAA/Stable
INE752E07KG3	Bond - XLI Issue	19-Oct-12	8.85%	19-Oct-21	236.88	Simple	CRISIL AAA/Stable
INE752E07KH1	Bond - XLI Issue	19-Oct-12	8.85%	19-Oct-22	236.88	Simple	CRISIL AAA/Stable
INE752E07KI9	Bond - XLI Issue	19-Oct-12	8.85%	19-Oct-23	236.88	Simple	CRISIL AAA/Stable
INE752E07KJ7	Bond - XLI Issue	19-Oct-12	8.85%	19-Oct-24	236.88	Simple	CRISIL AAA/Stable
INE752E07KK5	Bond - XLI Issue	19-Oct-12	8.85%	19-Oct-25	236.88	Simple	CRISIL AAA/Stable
INE752E07KL3	Bond - XLI Issue	19-Oct-12	8.85%	19-Oct-26	236.88	Simple	CRISIL AAA/Stable

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INE752E07KM1	Bond - XLI Issue	19-Oct-12	8.85%	19-Oct-27	236.88	Simple	CRISIL AAA/Stable
INE752E07KN9	Bond - XLII Issue	13-Mar-13	8.80%	13-Mar-23	1990	Simple	CRISIL AAA/Stable
INE752E07KS8	Bond - XLIII Issue	20-May-13	7.93%	20-May-21	260.5	Simple	CRISIL AAA/Stable
INE752E07KT6	Bond - XLIII Issue	20-May-13	7.93%	20-May-22	260.5	Simple	CRISIL AAA/Stable
INE752E07KU4	Bond - XLIII Issue	20-May-13	7.93%	20-May-23	260.5	Simple	CRISIL AAA/Stable
INE752E07KV2	Bond - XLIII Issue	20-May-13	7.93%	20-May-24	260.5	Simple	CRISIL AAA/Stable
INE752E07KW0	Bond - XLIII Issue	20-May-13	7.93%	20-May-25	260.5	Simple	CRISIL AAA/Stable
INE752E07KX8	Bond - XLIII Issue	20-May-13	7.93%	20-May-26	260.5	Simple	CRISIL AAA/Stable
INE752E07KY6	Bond - XLIII Issue	20-May-13	7.93%	20-May-27	260.5	Simple	CRISIL AAA/Stable
INE752E07KZ3	Bond - XLIII Issue	20-May-13	7.93%	20-May-28	260.5	Simple	CRISIL AAA/Stable
INE752E07LB2	Bond - XLIV Issue	15-Jul-13	8.70%	15-Jul-23	1322	Simple	CRISIL AAA/Stable
INE752E07LC0	Bond - XLIV Issue	15-Jul-13	8.70%	15-Jul-28	1322	Simple	CRISIL AAA/Stable
INE752E07LH9	Bond - XLV Issue	28-Feb-14	9.65%	28-Feb-22	166.6	Simple	CRISIL AAA/Stable
INE752E07LI7	Bond - XLV Issue	28-Feb-14	9.65%	28-Feb-23	166.6	Simple	CRISIL AAA/Stable
INE752E07LJ5	Bond - XLV Issue	28-Feb-14	9.65%	28-Feb-24	166.6	Simple	CRISIL AAA/Stable
INE752E07LK3	Bond - XLV Issue	28-Feb-14	9.65%	28-Feb-25	166.6	Simple	CRISIL AAA/Stable
INE752E07LL1	Bond - XLV Issue	28-Feb-14	9.65%	28-Feb-25	166.6	Simple	CRISIL AAA/Stable
INE752E07LM9	Bond - XLV Issue	28-Feb-14	9.65%	28-Feb-27	166.6	Simple	CRISIL AAA/Stable
INE752E07LN7	Bond - XLV Issue	28-Feb-14	9.65%	28-Feb-28	166.6	Simple	CRISIL AAA/Stable
INE752E07LO5	Bond - XLV Issue	28-Feb-14	9.65%	28-Feb-29	166.6	Simple	CRISIL AAA/Stable
INE752E07LQ0	Bond - XLVI Issue	4-Sep-14	9.30%	4-Sep-24	1454	Simple	CRISIL AAA/Stable
INE752E07LR8	Bond - XLVI Issue	4-Sep-14	9.30%	4-Sep-29	1454	Simple	CRISIL AAA/Stable
INE752E07LV0	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-21	220	Simple	CRISIL AAA/Stable
INE752E07LW8	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-22	220	Simple	CRISIL AAA/Stable
INE752E07LX6	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-23	220	Simple	CRISIL AAA/Stable
INE752E07LY4	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-24	220	Simple	CRISIL AAA/Stable
INE752E07LZ1	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-25	220	Simple	CRISIL AAA/Stable
INE752E07MA2	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-26	220	Simple	CRISIL AAA/Stable
INE752E07MB0	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-27	220	Simple	CRISIL AAA/Stable
INE752E07MC8	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-28	220	Simple	CRISIL AAA/Stable
INE752E07MD6	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-29	220	Simple	CRISIL AAA/Stable
INE752E07MF1	Bond - XLVIII Issue	23-Jan-15	8.20%	23-Jan-22	645	Simple	CRISIL AAA/Stable
INE752E07MG9	Bond - XLVIII Issue	23-Jan-15	8.20%	23-Jan-25	645	Simple	CRISIL AAA/Stable
INE752E07MH7	Bond - XLVIII Issue	23-Jan-15	8.20%	23-Jan-30	645	Simple	CRISIL AAA/Stable
INE752E07MJ3	Bond - XLIX Issue	9-Mar-15	8.15%	9-Mar-25	435	Simple	CRISIL AAA/Stable

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INE752E07MK1	Bond - XLIX Issue	9-Mar-15	8.15%	9-Mar-30	435	Simple	CRISIL AAA/Stable
INE752E07MN5	Bond - L Issue	27-May-15	8.40%	27-May-21	244	Simple	CRISIL AAA/Stable
INE752E07MO3	Bond - L Issue	27-May-15	8.40%	27-May-22	244	Simple	CRISIL AAA/Stable
INE752E07MP0	Bond - L Issue	27-May-15	8.40%	27-May-23	244	Simple	CRISIL AAA/Stable
INE752E07MQ8	Bond - L Issue	27-May-15	8.40%	27-May-24	244	Simple	CRISIL AAA/Stable
INE752E07MR6	Bond - L Issue	27-May-15	8.40%	27-May-25	244	Simple	CRISIL AAA/Stable
INE752E07MS4	Bond - L Issue	27-May-15	8.40%	27-May-26	244	Simple	CRISIL AAA/Stable
INE752E07MT2	Bond - L Issue	27-May-15	8.40%	27-May-27	244	Simple	CRISIL AAA/Stable
INE752E07MU0	Bond - L Issue	27-May-15	8.40%	27-May-28	244	Simple	CRISIL AAA/Stable
INE752E07MV8	Bond - L Issue	27-May-15	8.40%	27-May-29	244	Simple	CRISIL AAA/Stable
INE752E07MW6	Bond - L Issue	27-May-15	8.40%	27-May-30	244	Simple	CRISIL AAA/Stable
INE752E07MZ9	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-21	250	Simple	CRISIL AAA/Stable
INE752E07NA0	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-22	250	Simple	CRISIL AAA/Stable
INE752E07NB8	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-23	250	Simple	CRISIL AAA/Stable
INE752E07NC6	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-24	250	Simple	CRISIL AAA/Stable
INE752E07ND4	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-25	250	Simple	CRISIL AAA/Stable
INE752E07NE2	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-26	250	Simple	CRISIL AAA/Stable
INE752E07NF9	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-27	250	Simple	CRISIL AAA/Stable
INE752E07NG7	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-28	250	Simple	CRISIL AAA/Stable
INE752E07NH5	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-29	250	Simple	CRISIL AAA/Stable
INE752E07NI3	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-30	250	Simple	CRISIL AAA/Stable
INE752E07NK9	Bond - LII Issue	23-Dec-15	8.32%	23-Dec-25	466	Simple	CRISIL AAA/Stable
INE752E07NL7	Bond - LII Issue	23-Dec-15	8.32%	23-Dec-30	466	Simple	CRISIL AAA/Stable
INE752E07NO1	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-22	333	Simple	CRISIL AAA/Stable
INE752E07NP8	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-23	333	Simple	CRISIL AAA/Stable
INE752E07NQ6	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-24	333	Simple	CRISIL AAA/Stable
INE752E07NR4	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-25	333	Simple	CRISIL AAA/Stable
INE752E07NS2	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-26	333	Simple	CRISIL AAA/Stable
INE752E07NT0	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-27	333	Simple	CRISIL AAA/Stable
INE752E07NU8	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-28	333	Simple	CRISIL AAA/Stable
INE752E07NV6	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-29	333	Simple	CRISIL AAA/Stable
INE752E07NW4	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-30	333	Simple	CRISIL AAA/Stable
INE752E07NX2	Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-31	333	Simple	CRISIL AAA/Stable
INE752E07NY0	Bond - LIV Issue	15-Jul-16	7.97%	15-Jul-21	1000	Simple	CRISIL AAA/Stable
INE752E07NZ7	Bond - LIV Issue	15-Jul-16	7.97%	15-Jul-26	1000	Simple	CRISIL AAA/Stable

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INE752E07OA8	Bond - LIV Issue	15-Jul-16	7.97%	15-Jul-31	1000	Simple	CRISIL AAA/Stable
INE752E07OB6	Bond - LV Issue	21-Sep-16	7.55%	21-Sep-31	1240	Simple	CRISIL AAA/Stable
INE752E07OC4	Bond - LVI Issue	18-Oct-16	7.36%	18-Oct-26	1065	Simple	CRISIL AAA/Stable
INE752E07OD2	Bond - LVII Issue	21-Dec-16	7.20%	21-Dec-21	2120	Simple	CRISIL AAA/Stable
INE752E07OE0	Bond - LVIII Issue	9-Mar-17	7.89%	9-Mar-27	2060	Simple	CRISIL AAA/Stable
INE752E07OF7	Bond- LIX Issue	19-Jun-17	7.30%	19-Jun-27	3070	Simple	CRISIL AAA/Stable
INE752E07OG5	Bond- LX Issue	9-Aug-17	7.20%	9-Aug-27	3060	Simple	CRISIL AAA/Stable
INE752E08502	Bond- LXI Issue	12-Dec-17	7.74%	12-Dec-28	600	Simple	CRISIL AAA/Stable
INE752E08510	Bond- LXI Issue	12-Dec-17	7.74%	12-Dec-29	600	Simple	CRISIL AAA/Stable
INE752E08528	Bond- LXI Issue	12-Dec-17	7.74%	12-Dec-30	600	Simple	CRISIL AAA/Stable
INE752E08536	Bond- LXI Issue	12-Dec-17	7.74%	12-Dec-31	600	Simple	CRISIL AAA/Stable
INE752E08544	Bond- LXI Issue	12-Dec-17	7.74%	10-Dec-32	600	Simple	CRISIL AAA/Stable
INE752E07OH3	Bond- LXII Issue	7-Jan-19	8.36%	7-Jan-29	2000	Simple	CRISIL AAA/Stable
INE752E08551	GoI Fully Serviced Bond	14-Feb-19	8.24%	14-Feb-29	3487.5	Simple	CRISIL AAA/Stable
INE752E08569	Bond- LXIII Issue	15-Jul-19	7.34%	15-Jul-24	600	Simple	CRISIL AAA/Stable
INE752E08577	Bond- LXIII Issue	15-Jul-19	7.34%	15-Jul-29	600	Simple	CRISIL AAA/Stable
INE752E08585	Bond- LXIII Issue	15-Jul-19	7.34%	15-Jul-34	600	Simple	CRISIL AAA/Stable
INE752E08593	Bond- LXIV Issue	25-Oct-19	7.49%	25-Oct-24	756	Simple	CRISIL AAA/Stable
INE752E08601	Bond- LXIV Issue	25-Oct-19	7.49%	25-Oct-29	756	Simple	CRISIL AAA/Stable
INE752E08619	Bond- LXIV Issue	25-Oct-19	7.49%	25-Oct-34	1008	Simple	CRISIL AAA/Stable
INE752E08627	Bond- LXV Issue	8-Jan-20	6.35%	14-Apr-23	200	Simple	CRISIL AAA/Stable
INE752E08635	Bond- LXVI Issue	8-Jan-20	7.38%	12-Apr-30	500	Simple	CRISIL AAA/Stable
INE752E08643	Bond- LXVII Issue	15-Apr-20	6.85%	15-Apr-25	2800	Simple	CRISIL AAA/Stable
INE752E08650	Bond- LXVIII Issue	5-Aug-20	6.28%	11-Apr-31	500	Simple	CRISIL AAA/Stable

#The borrowing programme pertains to fiscal 2017. Of the total Rs 26,000 crore, Rs 14,000 crore was to be raised as bonds against which Rs 13481 crore has already been raised under Series LIII, LIV, LV, LVI, LVII and LVIII. The remaining Rs 12,000 crore was to be raised as long-term loans.

^The borrowing programme pertains to fiscal 2018. Of the total Rs 26,000 crore, Rs 14,000 crore was to be raised as bonds against which Rs 9130 crore has already been raised under Series LIX, LX and LXI. The remaining Rs 12,000 crore was to be raised as long-term loans.

@ The borrowing programme pertains to fiscal 2019. Of the total Rs 30,000 crore, Rs 20,000 crore was to be raised as bonds, against which Rs 5487.5 crore was raised under Series LXII and GOI Fully Serviced Bond. The remaining Rs 10,000 crore was to be raised as long-term loans.

^^The borrowing programme pertains to fiscal 2020. Of the total Rs 10,000 crore, Rs 5020 crore was raised as bonds under Series LXIII, LXIV, LXV and LXVI

&The borrowing programme pertains to fiscal 2021. Of the total Rs 10,000 crore, Rs 3300 crore has been raised as bonds under Series LXVII and LXVIII

^^ The borrowing programme pertains to fiscal 2022

** Short term debt and commercial paper borrowing will cumulatively not exceed Rs 9,000 crore at any point*

Annexure - Details of Rating Withdrawn

ISIN	Name of Instrument	Date of Allotment	Coupon Rate (%)	Maturity Date	Complexity Level	Issue Size (Rs Cr)
INE752E07AP5	Bond - XVIII Issue	9-Mar-06	8.15%	9-Mar-21	Simple	83.25
INE752E07BA5	Bond - XIX Issue	24-Jul-06	9.25%	24-Jul-20	Simple	41.25
INE752E07BN8	Bond - XX Issue	7-Sep-06	8.93%	7-Sep-20	Simple	125
INE752E07BY5	Bond - XXI Issue	11-Oct-06	8.73%	11-Oct-20	Simple	42.5
INE752E07CK2	Bond - XXII Issue	7-Dec-06	8.68%	7-Dec-20	Simple	57.5
INE752E07CW7	Bond - XXIII Issue	9-Feb-07	9.25%	9-Feb-21	Simple	25.63
INE752E07DI4	Bond - XXIV Issue	26-Mar-07	9.95%	26-Mar-21	Simple	66.63
INE752E07DT1	Bond - XXV Issue	12-Jun-07	10.10%	12-Jun-20	Simple	88.75

INE752E07EF8	Bond - XXVI Issue	7-Mar-08	9.30%	7-Mar-21	Simple	83.25
INE752E07ER3	Bond - XXVII Issue	31-Mar-08	9.47%	31-Mar-21	Simple	58.75
INE752E07FC2	Bond - XXVIII Issue	15-Dec-08	9.33%	15-Dec-20	Simple	200
INE752E07FO7	Bond - XXIX Issue	12-Mar-09	9.20%	12-Mar-21	Simple	108.13
INE752E07FZ3	Bond - XXX Issue	29-Sep-09	8.80%	29-Sep-20	Simple	194.38
INE752E07GL1	Bond - XXXI Issue	25-Feb-10	8.90%	25-Feb-21	Simple	170.63
INE752E07GX6	Bond - XXXII Issue	29-Mar-10	8.84%	29-Mar-21	Simple	86.25
INE752E07HI5	Bond - XXXIII Issue	8-Jul-10	8.64%	8-Jul-20	Simple	240
INE752E07HU0	Bond - XXXIV Issue	21-Oct-10	8.84%	21-Oct-20	Simple	290.63
INE752E07IF9	Bond - XXXV Issue	31-May-11	9.64%	31-May-20	Simple	163.13
INE752E07IQ6	Bond - XXXVI Issue	29-Aug-11	9.35%	29-Aug-20	Simple	206
INE752E07JG5	Bond - XXXVII Issue	26-Dec-11	9.25%	26-Dec-20	Simple	166.25
INE752E07JT8	Bond - XL Issue	28-Jun-12	9.30%	28-Jun-20	Simple	333.13
INE752E07KF5	Bond - XLI Issue	19-Oct-12	8.85%	19-Oct-20	Simple	236.88
INE752E07LG1	Bond - XLV Issue	28-Feb-14	9.65%	28-Feb-21	Simple	166.6
INE752E07LU2	Bond - XLVII Issue	20-Oct-14	8.93%	20-Oct-20	Simple	220
INE752E07MM7	Bond - L Issue	27-May-15	8.40%	27-May-20	Simple	244
INE752E07MY2	Bond - LI Issue	14-Sep-15	8.40%	14-Sep-20	Simple	250
INE752E07NJ1	Bond - LII Issue	23-Dec-15	8.32%	23-Dec-20	Simple	466
INE752E07NN3	(LTBP) Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-21	Simple	333
INE752E07NM5	(LTBP) Bond - LIII Issue	25-Apr-16	8.13%	25-Apr-20	Simple	333

Annexure – List of entities consolidated

Name of entities	Extent of consolidation	Rationale for consolidation
Powergrid Vizag Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid NM Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Unchahar Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Kala Amb Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Jabalpur Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Warora Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Parli Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Southern Interconnector Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Medinipur Jeerat Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Mithilanchal Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Varanasi Transmission System Ltd	Full	Strong managerial, operational and financial linkages
Powergrid Vemagiri Transmission Ltd	Full	Strong managerial, operational and financial linkages
Powerlinks Transmission Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
Torrent Power Grid Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
Jaypee Powergrid Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
Parbati Koldam Transmission Company Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
Teesta Valley Power Transmission Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
North East Transmission Company Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
National High Power Test Laboratory Private Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
Kalinga Bidyut Prasaran Nigam Pvt Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
Bihar Grid Company Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
Cross Border Power Transmission Company Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
RINL Powergrid TLT Pvt Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation
Power Transmission Company Nepal Ltd	Equity method	Joint Venture/Associate - Proportionate consolidation

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Annexure - Rating History for last 3 Years

	Current			2021 (History)		2020		2019		2018		Start of 2018
Instrument	Type	Outstanding Amount	Rating	Date	Rating	Date	Rating	Date	Rating	Date	Rating	Rating
Fund Based	LT	23000.0	CRISIL		--	05-06-20	CRISIL	30-10-19	CRISIL	03-04-18	CRISIL	CRISIL

Facilities			AAA/Stable				AAA/Stable		AAA/Stable		AAA/Stable	AAA/Stable
			--		--	25-02-20	CRISIL AAA/Stable	11-07-19	CRISIL AAA/Stable		--	--
			--		--		--	29-05-19	CRISIL AAA/Stable		--	--
			--		--		--	26-04-19	CRISIL AAA/Stable		--	--
Non-Fund Based Facilities	ST	2700.0	CRISIL A1+		--	05-06-20	CRISIL A1+	30-10-19	CRISIL A1+	03-04-18	CRISIL A1+	CRISIL A1+
			--		--	25-02-20	CRISIL A1+	11-07-19	CRISIL A1+		--	--
			--		--		--	29-05-19	CRISIL A1+		--	--
			--		--		--	26-04-19	CRISIL A1+		--	--
Bond	LT	38499.42	CRISIL AAA/Stable		--	05-06-20	CRISIL AAA/Stable	30-10-19	CRISIL AAA/Stable	03-04-18	CRISIL AAA/Stable	Withdrawn
			--		--	25-02-20	CRISIL AAA/Stable	11-07-19	CRISIL AAA/Stable		--	--
			--		--		--	29-05-19	CRISIL AAA/Stable		--	--
			--		--		--	26-04-19	CRISIL AAA/Stable		--	--
Commercial Paper	ST	9000.0	CRISIL A1+		--	05-06-20	CRISIL A1+	30-10-19	CRISIL A1+	03-04-18	CRISIL A1+	CRISIL A1+
			--		--	25-02-20	CRISIL A1+	11-07-19	CRISIL A1+		--	--
			--		--		--	29-05-19	CRISIL A1+		--	--
			--		--		--	26-04-19	CRISIL A1+		--	--
Long-Term Borrowing Programme	LT	111334.0	CRISIL AAA/Stable		--	05-06-20	CRISIL AAA/Stable	30-10-19	CRISIL AAA/Stable	03-04-18	CRISIL AAA/Stable	CRISIL AAA/Stable
			--		--	25-02-20	CRISIL AAA/Stable	11-07-19	CRISIL AAA/Stable		--	--
			--		--		--	29-05-19	CRISIL AAA/Stable		--	--
			--		--		--	26-04-19	CRISIL AAA/Stable		--	--
Short Term Debt	ST	9000.0	CRISIL A1+		--	05-06-20	CRISIL A1+	30-10-19	CRISIL A1+	03-04-18	CRISIL A1+	CRISIL A1+
			--		--	25-02-20	CRISIL A1+	11-07-19	CRISIL A1+		--	--
			--		--		--	29-05-19	CRISIL A1+		--	--
			--		--		--	26-04-19	CRISIL A1+		--	--
Short Term Debt (Including Commercial Paper)	ST		--		--		--		--		--	CRISIL A1+

All amounts are in Rs.Cr.

Annexure - Details of various bank facilities

Current facilities			Previous facilities		
Facility	**Amount (Rs.Crore)**	**Rating**	**Facility**	**Amount (Rs.Crore)**	**Rating**
Bank Guarantee	**1100**	**CRISIL A1+**	**Bank Guarantee**	**1100**	**CRISIL A1+**
Cash Credit	**3000**	**CRISIL AAA/Stable**	**Cash Credit**	**3000**	**CRISIL AAA/Stable**
Letter of Credit	**1600**	**CRISIL A1+**	**Letter of Credit**	**1600**	**CRISIL A1+**
Proposed Long Term Bank Loan Facility	**20000**	**CRISIL AAA/Stable**	**Proposed Long Term Bank Loan Facility**	**6800**	**CRISIL AAA/Stable**
Total	**25700**	**-**	**Total**	**12500**	**-**

Criteria Details

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI 459

Links to related criteria
Criteria for Rating power transmission projects
CRISILs Criteria for rating short term debt
CRISILs Criteria for Consolidation
CRISILs Bank Loan Ratings

Media Relations	Analytical Contacts	Customer Service Helpdesk
Saman Khan Media Relations **CRISIL Limited** D: +91 22 3342 3895 B: +91 22 3342 3000 saman.khan@crisil.com **Naireen Ahmed** Media Relations **CRISIL Limited** D: +91 22 3342 1818 B: +91 22 3342 3000 naireen.ahmed@crisil.com	Manish Kumar Gupta Senior Director **CRISIL Ratings Limited** B:+91 124 672 2000 manish.gupta@crisil.com Nitesh Jain Director **CRISIL Ratings Limited** D:+91 22 3342 3329 nitesh.jain@crisil.com Gaurav Chaturvedi Senior Rating Analyst **CRISIL Ratings Limited** D:+91 22 3342 3225 Gaurav.Chaturvedi@crisil.com	Timings: 10.00 am to 7.00 pm Toll free Number:1800 267 1301 For a copy of Rationales / Rating Reports: CRISILratingdesk@crisil.com For Analytical queries: ratingsinvestordesk@crisil.com

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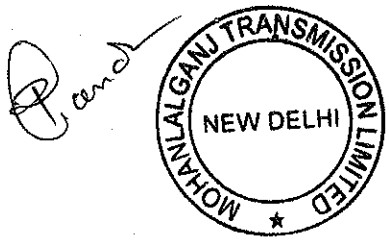
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Annexure-9 - Enclosure-9

Organizational & Managerial Capability



Managerial Capability

Rajiv Gandhi
Project Incharge

Mr. Rajiv Gandhi, age 51 years, is an Electrical Engineering Graduate from Delhi College of Engineering (DCE) and also holds a Post Graduate Diploma in Management from Management Development Institute (MDI), Gurgaon.

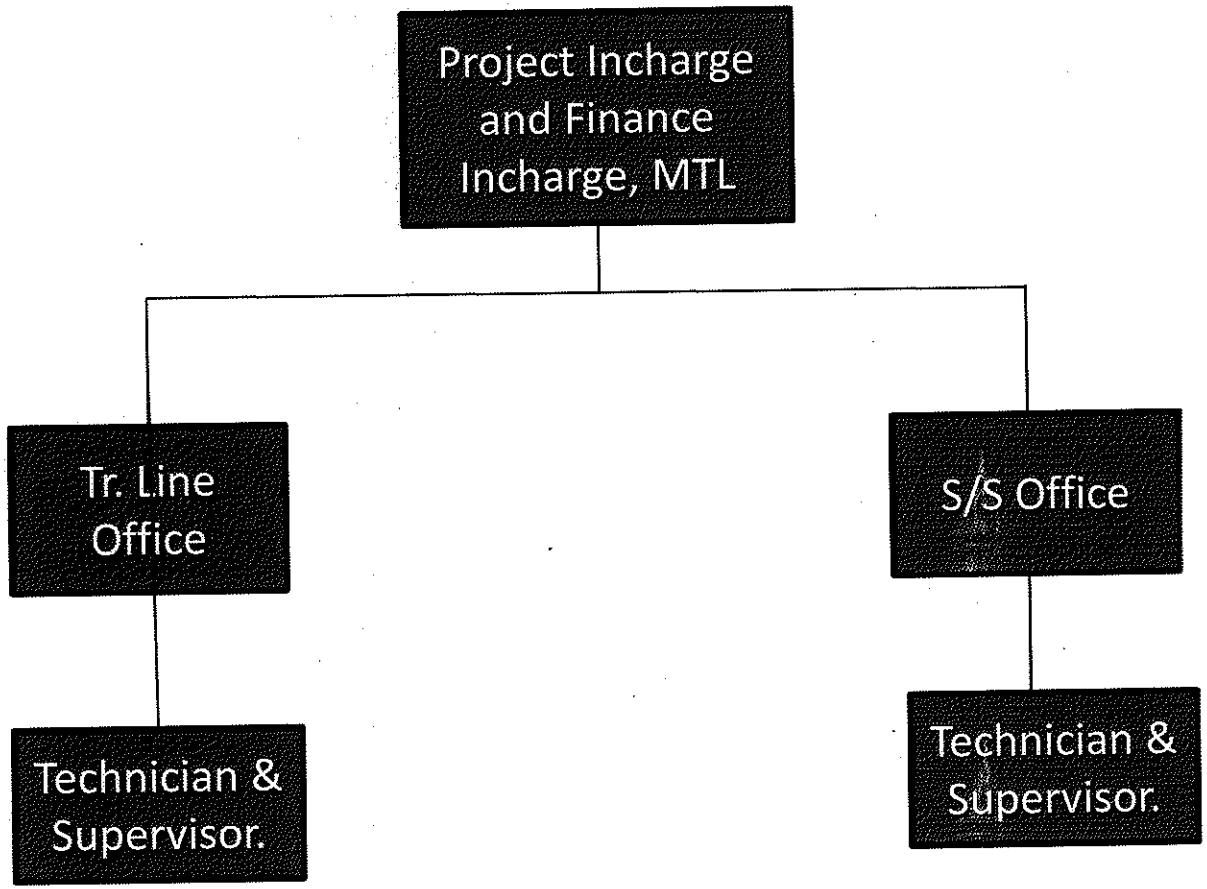
He started his career in 1992 with Batliboi & Co. Ltd, New Delhi as a Project Engineer. Subsequently he joined POWERGRID in 1993 as an Executive Engineer Trainee. During his career of 29 years in Power Transmission industry, he has gained wide experience in Engineering , Technology Development, Costing , Project Management and Bidding of Transmission Line Projects.

Gulab Chand
Finance Incharge

Mr Gulab Chand, age 48 years, Cost Management Accountant and hold a B.Com.(P) degree from Delhi University. He has 20 years of experience in Finance and Accounts. He started his career with POWERGRID in 2001. He has wide experience in the areas of Accounting, Budgeting, Auditing, Taxation, Bills Payments and Data preparation for CERC Petition for tariffs.

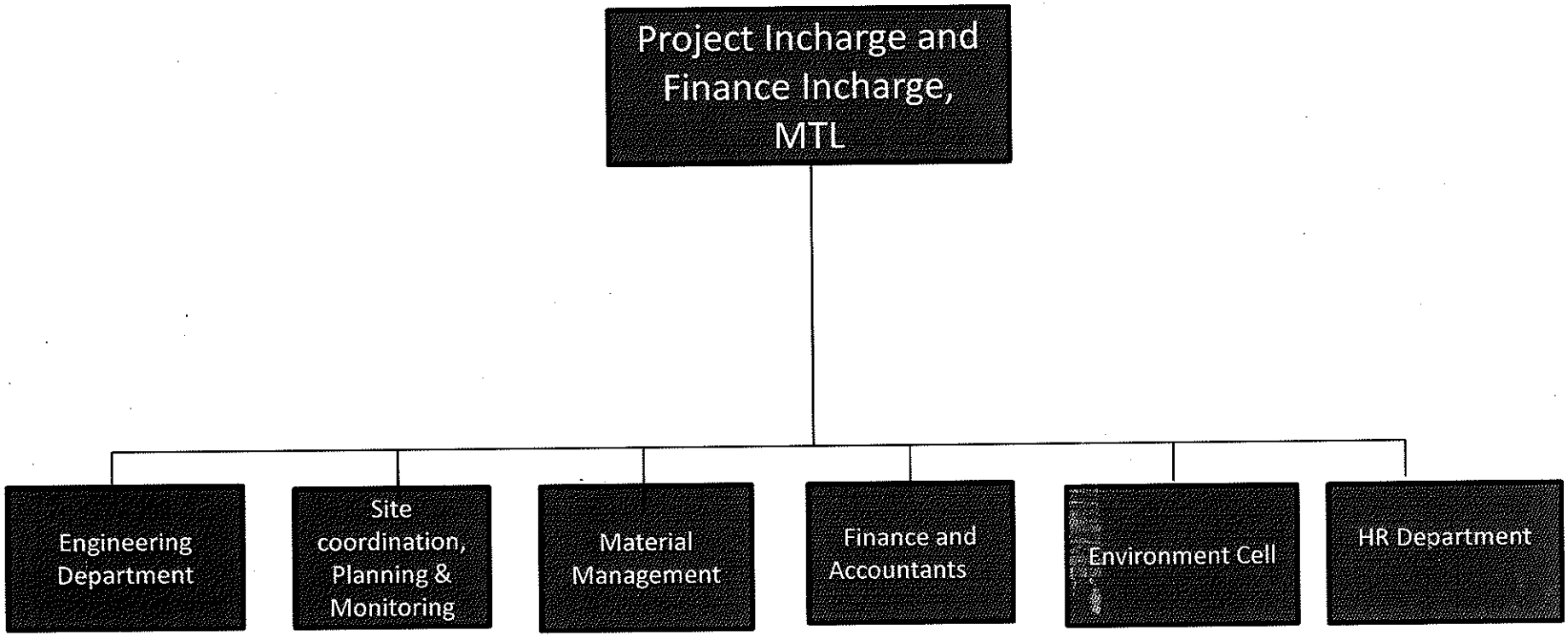
All other personnel shall be deployed during the progress of the Project.

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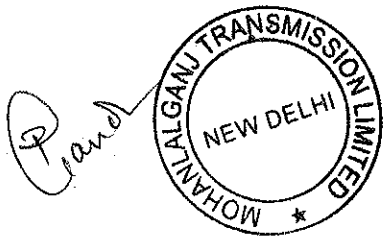
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Annexure-9 - Enclosure-10

Approach & Methodology



Approach & Methodology

(Project Execution and Operation)

Power Grid Corporation of India Ltd.

1. Brief history of the Company

POWERGRID was incorporated on 23rd October 1989 with the objective to address the need for creating a National Power Grid by taking over the transmission assets and manpower from the power sector entities such as, NTPC, NHPC, NEEPCO, NLC, NPC, THDC and CEA.

POWERGRID is a Schedule-„A" listed Maharatna CPSE in Transmission Sector under the administrative control of the Ministry of Power with 51.34 % as on 30th April 2022 shareholding by the Government of India.

2. Vision / Mission

The Vision is to be "World class, Integrated, Global Transmission Company with Dominant Leadership in Emerging Power Markets with World Class Capabilities". This will be achieved by setting superior standards in capital project management and operations for the industry and ourselves; leveraging capabilities to consistently generate maximum value for all stakeholders in India and in emerging and growing economies; inspiring, nurturing and empowering the next generation of professionals; achieving continuous improvements through innovation and state of the art technology; committing to highest standards in health, safety, security & environment.

3. Business Operations

3.1. POWERGRID is engaged in transmission of electric power through its Inter-State Transmission System by way of construction, operation and maintenance of Extra High Voltage (400kV and above) Alternative Current and High Voltage Direct Current Transmission lines & Sub-stations. POWERGRID with its Corporate Centre at Gurgaon is having 10 Regional Head Quarters and other establishments located in various parts of the Country.

3.2. **Other Areas of Operation:** The company has 23 Wholly Owned (100% ownership) Subsidiary companies and 11 Joint Ventures with strategic partners. POWERGRID has diversified into Telecom and Consultancy business and is providing transmission related services to more than 150 domestic clients and International clients with Global footprints in 21 countries catering more than 25 clients.

3.3. **POWERGID Transmission Network:** POWERGRID operates about 1,72,557 Circuit km of transmission lines and 265 Substations with a transformation capacity of about 4,76,772 MVA as on April 2022. Transmission system availability has been consistently maintained at more than 99% at par with international utilities, by deploying best Operation and Maintenance practices.

4. Performance

POWERGRID performance has been consistently rated as "Excellent" by Govt. of India since signing of its first MoU in 1993-94.

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5. Operational Excellence

POWERGRID operates about 1,72,557 Circuit km of transmission lines and 265 Substations Substations with a transformation capacity of about 4,76,772 MVA as on April 2022. POWERGRID has maintained the transmission system's availability at over 99% consistently.

6. Project Implementation

In order to extract the maximum commercial benefits by implementing the transmission projects within the timelines, detailed planning is done to handle complex geographical as well as socio-economic issues. Integrated Project Management and Control Systems (IPMCS) and Enterprise Resource Planning (ERP) are some of the tools used for planning & implementation of the projects. Besides regular project review meetings at different levels of the management, have helped to identify any hindrances well in advance to enable timely corrective actions.

7. Manpower in Different Categories:

POWERGRID has a dedicated & skilled staff totalling about 8534 employees (including 4,410 Executives, 2237 Supervisors and 1887 Workmen). POWERGRID's human capital comprises of talented professionals broadly in the field of Engineering (Electrical, Electronics, Telecom, Information Technology, Civil, Mechanical, Industrial Engg.), Management (Finance & Accounts, Human Resources), Legal, & Public Relations selected through open competition on All India basis and from the Premiere Technology & Management Institutes of the Country.

8. Organizational set up

Mohanlalganj Transmission Limited shall give due importance and the basic structure of organization with a view to achieve the following objectives:

i) To group related functions together to have clearly defined 'Roles' for the relevant 'functional heads'.

ii) To have well defined 'Responsibility & Authority' centers in the structure.

iii) To have well defined 'communication channels' and optimum 'span of control' in the organization.

iv) To have optimum manpower.

v) To have decentralization of activities as far as possible.

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At the first level in the organization, Corporate Centre will be planning, monitoring and controlling the objectives and activities of the organization. At the second level, the Regional HQ will be playing the role of controlling the activities in the regions and will report to Corporate Centre. At the third level in the structure, the Substation Group will be controlling the activities of the respective Substation and associated lines under that Group and will report to the Regional HQ. The Group will consist of basic working units such as substation Construction/maintenance, line construction/maintenance. The Groups will have both service and technical functions, to cater to the basic functional requirements. The actual deployment of the manpower shall however depend on the progress and stage of the work.

9. Project Management

The project of transmission system will be planned, implemented, monitored and controlled through well-established practices of Project Management.

Project Management shall use PERT/CPM technique as the basic management tool. For effective project planning and review, three tier level of planning and review have been adopted.

Level-I :

Planning is done by the Monitoring Group, a central planning cell, which is in the form of an overall project schedule called the Master Network, for the project which forms the basis for all subsequent planning and monitoring of the activities. This covers broadly all the packages of project and indicates activities of engineering, contracts, manufacturing, erection and commissioning. The Master Network is prepared using computerized techniques which subsequently helps in comparing the actual progress of the project with the scheduled progress. This gives indication of the likely critical areas and helps in preventing the same, thereby resulting in smoother implementation. The Master Network also acts as a source for the planning to be done at Level - II & Level - III.

Overall Project Schedule (L1) is furnished at **Annexure-10 (AA4)**

Level-II :

Planning is done package-wise and is worked out and finalized with the respective contractor/vendor during the pre-award stage. Level II networks are made within the milestones identified in the project Master Network (L-I).

Level-III :

Plans deal with elaborate schedules and weekly/monthly rolling plans which are prepared for activities of engineering, supply (as the case may be) & field activities. These form the basis of monitoring by the various functions.

The system envisages monthly review of the level II programs with contractors and at field on a weekly basis.

10. Project Implementation Review

The holding company of MTL has a team of dedicated experts in the field of substation and Transmission Line Engg. equipped with state-of-the-art technology, software capabilities and computer aided facilities for Planning, Design, Operation and Maintenance of transmission system. It has a well-established system of continuous feedback from the field and upgrades the system accordingly.

The holding company of MTL has developed a project monitoring system matching with the organization structure, complexity / intricacies involved in the project implementation and

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Management information system. The system calls for increasing details of planning in all facets of functioning such as engineering, contracts, site and corresponding levels of monitoring and control; for generating a management summary report to the top management. This management summary report highlights the project completion trends, actions being taken/to be taken for the attention of the top management on exceptional basis of critical areas.

11. Quality Management:

The MTL shall ensure that the Project is designed, built and completed in a good workman like manner using sound engineering and construction practices, and using only materials and equipment that are new and of international utility grade quality such that, the useful life of the Project will be till the Expiry Date.

The TSP shall ensure that design, construction and testing of all equipment, facilities, components and systems of the Project shall be in accordance with Indian Standards and Codes issued by Bureau of Indian Standards and only in Transmission Service Agreement Mohanlalganj Transmission Limited. In case they are not applicable under certain conditions, the other equivalent internationally recognized Standards and Codes shall be followed.

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Annexure-10

Detailed Project Report

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ATTESTED TRUE COPY
Attested from Pg 667 to 707
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

Detailed Project Report

"Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose/equivalent HTLS on Monopole) at 400kV GIS Substation Sector 123 Noida"

1. Project Details

1.1 Introduction

U.P Power Transmission Corporation Ltd. (UPPTCL) vide its letter no. 55/ PS/ DIR(W&P) /PTCL /Mohanlalganj dated February 09, 2021 has appointed PFC Consulting Limited to be the Bid Process Coordinator (BPC) for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish transmission system for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose/equivalent HTLS on Monopole) at 400kV GIS Substation Sector 123 Noida" through tariff based competitive bidding process.

That a company under the Companies Act 2013 by the name "**Mohanlalganj Transmission Limited (MTL)"** having its registered office at New Delhi has been incorporated on 08.06.2021 by PFC Consulting Limited as its wholly owned subsidiary to initiate the activities for execution of the Project and subsequently to act as Transmission Service Provider (TSP) after being acquired by the successful bidder selected through Tariff Based Competitive Bidding process.

PFC Consulting Limited (hereinafter referred to as BPC) invited bids for selection of Transmission Service Provider (TSP) on the basis of international competitive bidding in accordance with the "Tariff Based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by Government of India, Ministry of Power under section – 63 of The Electricity Act, 2003 and as amended.

BPC vide Letter of Intent dated 12.05.2022 notified Power Grid Corporation of India Ltd. (POWERGRID) as successful Bidder. Accordingly, TSP will establish the Transmission System as mentioned below for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose/equivalent HTLS on Monopole) at 400kV GIS Substation Sector 123 Noida" (hereinafter referred to as 'Project') on build, own, operate & maintain basis:

1.2 Project Scope

Scope of the Project as mentioned in Bidding Documents and amendment thereafter is as follows:



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Sl. No.	Name of the Transmission Element	Completion Target
A. Construction of 400/220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-		
(1)	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132 kV Feeder bay - 04 nos.	18 months
(2)	LILO of Sarojani Nagar (400kV) - Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)	
(3)	LILO of Lucknow (PGCIL) 400 kV - Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)	
B. Construction of LILO Line:-		
(1)	LILO of 765 kV Ghatampur - Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing	15 months
(2)	LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur	9 months
C. Construction of LILO lines on Monopole		
(1)	LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA guideline of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida	9 months

Note:

i. *UPPTCL to provide adequate land for construction of 400/220/132kV GIS substation at Mohanlalganj (Lucknow) and shall be handed over to TSP as is where basis at free of cost.*

ii. *GIS Bay (if any) for completion of diameter in one and half breaker scheme shall also be in the scope of the TSP.*

In case of GIS substation where the bus scheme is One & Half breaker scheme, the diameters (diameter is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling of 2 numbers feeders) shall be complete with feeder/line side isolator to be used for any future line with switchable line reactor bay and GIS duct of the future bay shall be brought outside the GIS hall/building with extension interface module suitably.

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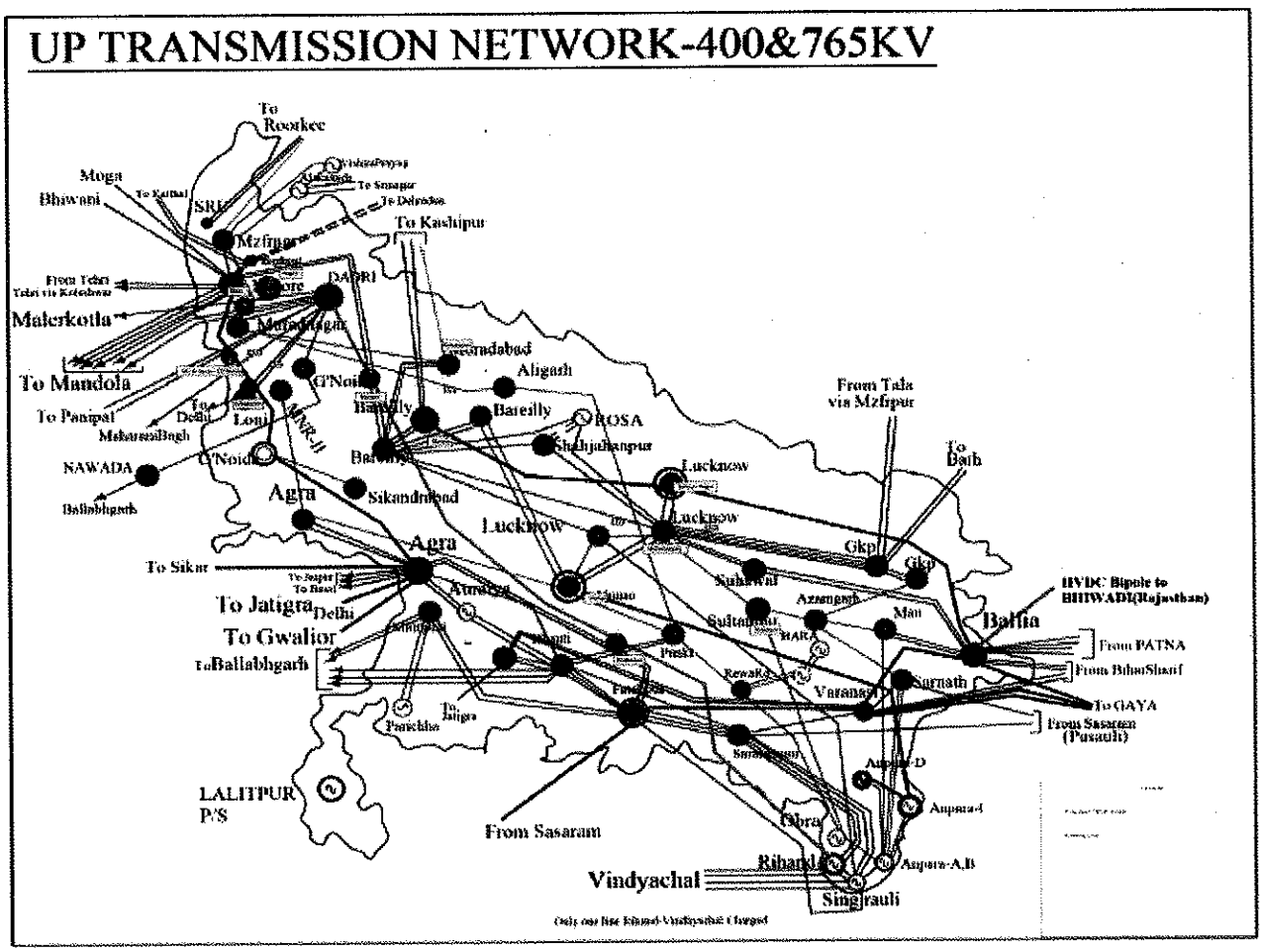
1.3 Project Description

The proposed Transmission System shall be utilized to meet the power requirement of State of Uttar Pradesh and the surplus power, if any, shall be fed into Northern Grid to meet the power requirement of other states in Northern Region.
The Transmission System proposed to be implemented is divided into three parts i.e. Construction of 400/220/132 kV GIS substation, Mohanlalganj with associated lines, 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose/equivalent HTLS on Monopole) at 400kV GIS Substation Sector 123 Noida with associated lines.

1.4 Transmission Grid Map

Transmission Grid Map indicating the location of the Project is enclosed for information and reference.

GRID MAP OF THE PROJECT



2. Estimated Project Cost:

The estimated Project cost of the project is about Rs. 949.07 Cr as per the estimate provided as part of the bidding acquisition process. The actual cost may however be known after completion of the Project.

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3. Project approval and Payment of Transmission Charges

3.1 Vide Energy Department letter dated 21.05.2022 approval of the Government under Section 68 of the Electricity Act, 2003 for the subject project has been furnished by BPC (Copy of approval u/s 68 is enclosed at **Annexure – AA1**).

3.2 Payment of Transmission Charges

As per the Schedule -1 of Transmission Service Agreement (TSA) provided by BPC, Transmission Charges are payable to TSP by Long Term Transmission Customers (LTTCs) in proportion mentioned therein. Details of the Long Term Transmission Customers along with the percentage share of Transmission Charges as provided in the bidding document are as below:

Sl. No.	Name of the Long Term Transmission Customer	Address of Registered Office	Allocated Project Capacity (in MW)
1.	Pashchimanchal Vidyut Vitran Nigam Ltd.	Hydel Colony, Victoria Park, Meerut-250001 E-mail:- md@pvvnl.org Fax: 0121-2666062	31%
2.	Purvanchal Vidyut Vitran Nigam Ltd.	Vidhut Nagar, Bhikharipur, P.O. DLW, Varanasi- 221010 E-mail:- mdpurvanchalvvnl@gmail.com Fax; 0542-2319158 Phone; 0542-2318437	24%
3.	Dashinanchal Vidhyut Vitran Nigam Ltd.	Urja Bhawan, Nh-2 9 Agra-Delhi bypass Road0 Sikandra, Agra-282002 E-mail:- dvvnlmd@gmail.com Fax: 0562-2605465 Phone; 0562-2605699	22%
4.	Madhyanchal Vidyut Vitran Nigam Ltd.	4A, Ghokle Marg, Lucknow – 226001 E-mail:- md.mvvnl2010@gmail.com Fax: 0522-2208737	19%
5.	Kanpur Electricity Supply Co. Ltd.	Kesa House, 14/17 Civil lines, Kanpur-208001 E-mail:- md@kesco.co.in Phone: 0512-2530832	4%

Element wise percentage of Transmission Charges for each element of the Project is mentioned in Schedule -3 of TSA. 36 year Transmission Charges as quoted shall be payable from the Scheduled COD, which shall be 18 months from the Actual Effective date i.e. 30.05.2022



3.3 About Holding Company POWERGRID

Since its formation, POWERGRID has commissioned many large size and difficult transmission projects. Majority of such projects have been completed on or ahead of schedule. MTL is 100% subsidiary of POWERGRID.

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As on 30th April 2022, POWERGRID operates about 1,72,557 Circuit km of transmission lines and 265 Substations with a transformation capacity of about 4,76,772 MVA. POWERGRID has maintained the transmission system's availability at over **99%** consistently.

In recognition of POWERGRID's excellence in areas of its operations as above, POWERGRID has been rated as "Excellent" many times since 1993-94 in achieving the MoU targets with Ministry of Power. POWERGRID is also a recipient of Prime Minister's MoU Award consecutively for many years for being amongst top ten PSUs.

4. Geographical Information

Climate of Uttar Pradesh

The climate of Uttar Pradesh varies from Temperate in Eastern Uttar Pradesh to Extreme hot in Western UP to Semi-Arid in Bundelkhand and Agra zone. Therefore, it is extremely difficult to categorize it a particular climatic frame. Nevertheless, summers are very hot and winters are bit chilly.

Weather in summer

It is very hot in the summers across the Uttar Pradesh but there is a slight fall in temperature as we move from western UP towards East. Summer season persists from April to August. The daytime temperature remains very high and usually touches around 45°C in Western Uttar Pradesh and Agra zone where as it remains around 42°C in Eastern Utter Pradesh. Night are relatively cooler typical of extreme climate and the temperature comes down to as low as 28 °C because of the cool breeze. Dew is very common in all the parts of Uttar Pradesh.

Weather in winter

Winters in Uttar Pradesh are a lot cooler with day temperature pleasant around 24°C and nights are chilly with temperature getting as low as 2 to 4°C across the state. Earlier Eastern regions were comparatively warmer but due to persistent change in the weather trends, even these areas fall under intense cold wave. Cities like Allahabad and Varanasi are continuously seeing mercury dipping to freezing point. The winter falls around Mid-November and continue till February end.

Weather in monsoon

As Uttar Pradesh stretches from North India towards Eastern India, the rainfall varies considerably. While the South West monsoon is very moderate in Western Uttar Pradesh it rains very heavily in short spells as far as Oudh and Eastern regions are concerned. The average annual rainfall varies from 105-110 centimeters in places like Allahabad, Varanasi and Azamgarh to as low as 45-50 centimeters in Agra, Ghaziabad and Meerut. Relative humidity in semi-arid regions such as Agra, Firozabad and Dadri is very high to the point where it becomes uncomfortable. The western disturbance too brings fair amount of rainfall. Approximate average annual rainfall in the state is around 65-70 centimeters.

Agriculture

Agriculture in Uttar Pradesh has a significant history. Agriculture is demographically the broadest economic sector in Uttar Pradesh. It has always played a significant role in improving the social as well as economic fabric of India. Uttar Pradesh is one of the major contributors to the national food grain stock. The fertile region of the Indo - Gangetic plain is contributing a lot in the agricultural development of the state. The densely populated sugar producing district of

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Uttar Pradesh is Lakhimpur Kheri. 78% of national livestock population comes from this place.

Uttar Pradesh is a great producer of food grains in India since the 1950s. Its high-yielding varieties of seed, availability of fertilizers and irrigation usage helps a great deal in contributing in India's agriculture.

As compared to the other regions in the state, Western Uttar Pradesh is highly advanced in terms of agriculture. Pulses, wheat, rice, potatoes and oil seeds are the major agricultural products produced in the state. The most important cash crop throughout Uttar Pradesh is Sugarcane. As far as horticulture is concerned, Uttar Pradesh is an important state. Intensive plant cultivation is practiced all around the state. Apples and mangoes are highly produced.

Around 15% of India's livestock population is supported by the state. In the year 1961, 21% of the total livestock were buffaloes, 15% were cattle, 13% goats and 8% others. 14% increase in overall livestock population was seen in the years between 1951-56. Agriculture is also the leading occupation in Uttar Pradesh. The water sources include rivers, canals, lakes, streams and tanks.

Rainfall and soil Type

Primarily a summer phenomenon, the Bay of Bengal branch of the Indian Monsoon is the major bearer of rain in most parts of U.P. It is the South-West Monsoon which brings most of the rain here, although rain due to the western disturbances and North-East Monsoon also contribute small quantities towards the overall precipitation of the state. The rain in U.P. can vary from an annual average of 170 cm in hilly areas to 84 cm in Western U.P. Given the concentration of most of this rainfall in the 4 months of Monsoon period, excess rain can lead to floods and shortage to droughts. As such these two phenomenon's of floods and droughts are a common recurrence in the state soils. Much of the area of Uttar Pradesh is covered by a deep layer of alluvium spread by the slow-moving rivers of the Ganges system. Those extremely fertile alluvial soils range from sandy to clayey loam. The soils in the southern part of the state are generally mixed red and black or red-to-yellow.

5. Methodology for Route Identification and Maps

As per survey report of BPC, all the Survey of India TOPO sheets were geo-referenced with respect to Latitude Longitude of TOPO sheets under following projection system to keep uniformity with respect to GPS co-ordinates:

- Projection : UTM
- Spheroid : WGS84
- Datum : WGS84
- Zone : 43 & 44
- North or South : North.

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Based on the information provided by the BPC as per their survey report details of infrastructural along the routes are as follows:

LILO of Sarojani Nagar (400kV) - Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)				
Sr. No.	**Description**	**Alt-1 (Red)**	**Alt-2 (Blue)**	**Alt-3 (Green)**
1	BEE Line	29.681 kms		
2	Line Length	36.208 km	36.803 km	39.594 km
3	a) Angle Points	43	52	47
4	Reserve Forest	NIL	NIL	NIL

5	Wildlife	NIL	NIL	NIL
6	Power Line crossings (132 kV & above)	4	4	4
7	Railway crossings	1	1	1
8	Road Crossing	2	2	2
	a) N.H	2	2	2
	b) SH	0	0	0
9	River crossings	NIL	NIL	NIL

LILO of Lucknow (PG) 400 kV - Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)				
Sr. No.	**Description**	**Alt-1 (Red)**	**Alt-2 (Blue)**	**Alt-3 (Green)**
1	BEE Line	4.795 kms		
2	Line Length	5.394 km	5.642 kms	5.471kms
3	Angle Points	12	12	12
4	Reserve Forest	NIL	NIL	NIL
5	Wildlife	NIL	NIL	NIL
6	Power Line (132 kV & above)	NIL	NIL	NIL
7	Railway crossings	NIL	NIL	NIL
8	Road Crossing	NIL	NIL	NIL
	a) N.H	0	0	0
	b) SH	0	0	0
9	River crossings	NIL	NIL	NIL

LOOP IN of Under Construction 765 kV Ghatampur - Hapur (WUPPTCL) line at 765 kV GIS Rampur with River crossing				
Sr. No.	**Description**	**Alt-1 (Red)**	**Alt-2 (Blue)**	**Alt-3 (Green)**
1	BEE Line	107.325 kms		
2	Line Length	118.156 kms	118.484 kms	119.349 kms
3	a) Angle Points	79	99	92
	Reserve Forest	NIL	NIL	NIL
	Wildlife	NIL	NIL	NIL
6	Power Line (132 kV & above)	15	17	15
7	Railway crossings	2	3	2
8	Road Crossing	4	3	4
	a) N.H	3	3	3
	b) SH	1	0	1

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9	River crossings	2	2	2

LOOP OUT of Under Construction 765 kV Ghatampur - Hapur (WUPPTCL) line at 765 kV GIS Rampur with River crossing				
Sr. No.	**Description**	**Alt-1 (Red)**	**Alt-2 (Blue)**	**Alt-3 (Green)**
1	BEE Line	107.325 kms		
2	Line Length	115.248 kms	118.484 kms	119.349 kms
3	a) Angle Points	92	99	92
4	Reserve Forest	NIL	NIL	NIL
5	Wildlife	NIL	NIL	NIL
6	Power Line (132 kV & above)	21	17	15
7	Railway crossings	2	3	2
8	Road Crossing	4	3	4
	a) N.H	3	3	3
	b) SH	1	0	1
9	River crossings	2	2	2

LILO of one circuit 400 kV Bareilly (PG) - Moradabad D/C line on 765 kV GIS S/S Rampur				
Sr. No.	**Description**	**Alt-1 (Red)**	**Alt-2 (Blue)**	**Alt-3 (Green)**
1	BEE Line	2.242 kms		
2	Line Length	2.547 kms	2.605 kms	2.563 kms
3	a) Angle Points	6	6	8
4	Reserve Forest	NIL	NIL	NIL
5	Wildlife	NIL	NIL	NIL
6	Power Line (132 kV & above)	NIL	NIL	NIL
7	Railway crossings	NIL	NIL	NIL
8	Road Crossing	NIL	NIL	NIL
	a) N.H	0	0	0
	b) SH	0	0	0
9	River crossings	NIL	NIL	NIL

LILO of one circuit (on monopole or any other suitable lattice structure) of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida (using ACSR Quad Moose or equivalent HTLS conductor)				
Sr. No.	**Description**	**Alt-1 (Red)**	**Alt-2 (Blue)**	**Alt-3 (Green)**

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1	BEE Line	4.628 kms		
2	Line Length	5.536 kms	8.846 kms	8.247 kms
3	a) Angle Points	28	41	44
4	Reserve Forest	NIL	NIL	NIL
5	Wildlife	NIL	NIL	NIL
6	Power Line (132 kV & above)	1	2	1
7	Railway crossings	NIL	NIL	NIL
8	Road Crossing	2	2	2
	a) N.H	1	1	1
	b) SH	1	1	1
9	River crossings	NIL	NIL	2

Maps of the proposed area of license showing the route of the transmission line(s), locations of sub-stations as provided as part of the bidding documents is enclosed and marked as **Annexure- AA2**

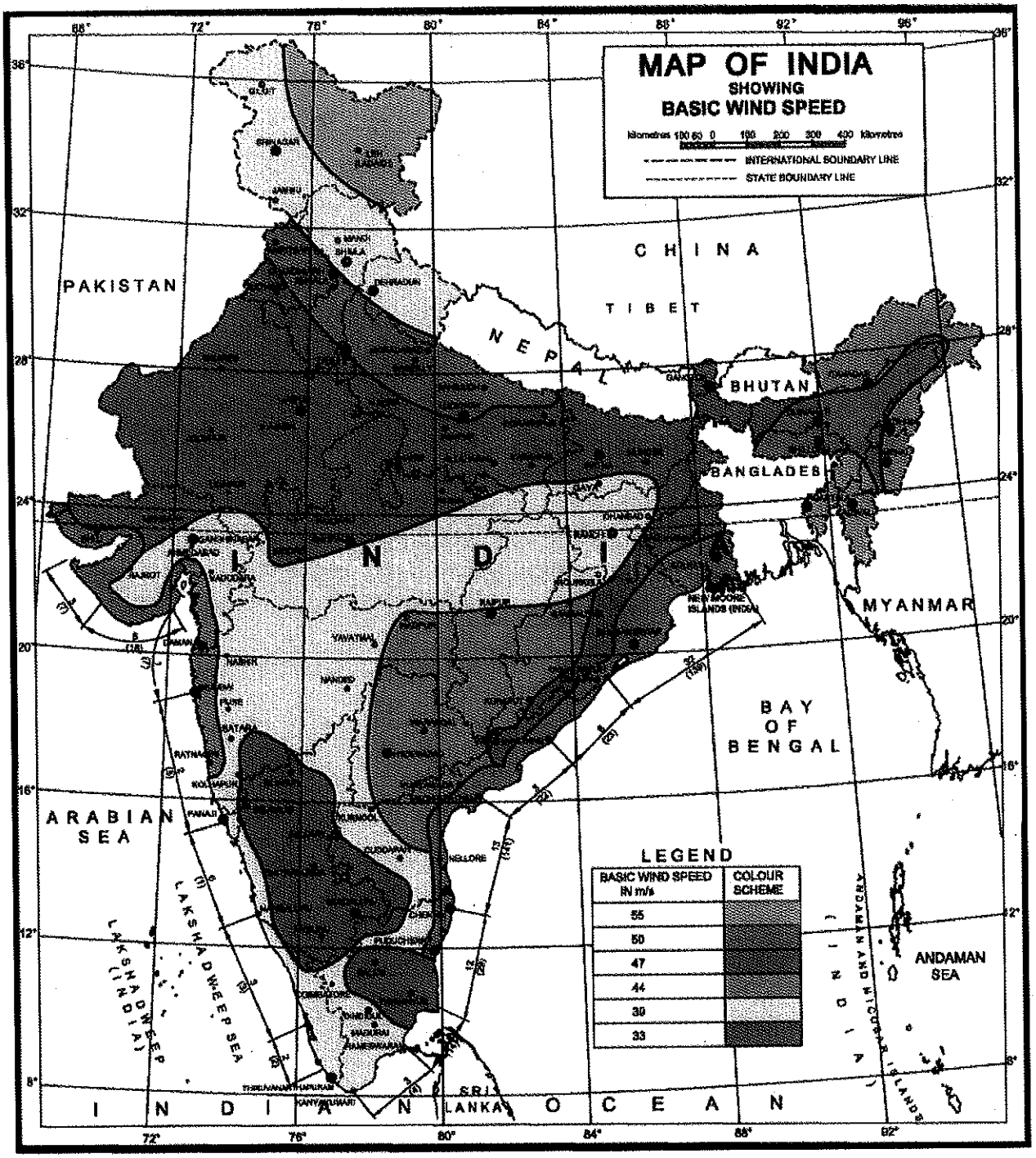
The actual route may however vary and shall be known after the detailed survey.

6. Wind Zone Details

6.1 The proposed line routes are passing through Lucknow, Unnao, Gautam Buddha Nagar, Gaziabad, Rampur, Badaun and Aligarh districts of Uttar Pradesh which falls under Wind Zone-V (50 m/s) as per wind map given in National Building Code 2016, Vol.1 given below:

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62 Selection Criteria For Transmission Line Route

1 The alignment of the transmission line should be most economical from the point of view of construction and maintenance.

2 The alignment of the transmission line selected should be the shortest possible one.

3 Routing of transmission line through protected/reserved forest area should be avoided. In case it is not possible to avoid the forests or areas having large trees completely, and then keeping in view of the overall economy, the route should be aligned in such a way that cutting of trees are minimum.

4 The route should have minimum crossings of Major rivers, Railway lines, National/State highways, overhead EHV power line and communication lines.

5 The number of angle points shall be kept to a minimum.

6 Marshy and low lying areas, river beds and earth slip zones shall be avoided to minimize risk to the foundations.

7 It would be preferable to utilize level ground for the alignment.

8 Crossing of power lines shall be optimized. Alignment will be kept at a minimum distance of 300 m from power lines to avoid induction problems on the lower voltage lines.

9 Crossing of communication line shall be minimized and it shall be preferably at right angle. Proximity and parallelism with telecom lines shall be eliminated to avoid danger of induction to them.

10 Areas subjected to flooding such as Nalla shall be avoided.

11 Restricted areas such as civil and military airfield shall be avoided. Care shall also be taken to avoid aircraft landing approaches.

12 All alignment should be easily accessible both in dry and rainy seasons to enable maintenance throughout the year.

13 Certain areas such as quarry sites, tea, tobacco and saffron fields and rich plantations, gardens & nurseries which will present the Owner problems in acquisition of right of way and way leave clearance during construction and maintenance should be avoided.

14 Angle points should be selected such that shifting of the point within 100 m radius is possible at the time of construction of the line.

15 The line routing should avoid large habitations, densely populated areas, Forest, Animal/Bird sanctuary, reserve coal belt areas, oil pipe line/underground inflammable pipe lines etc. to the extent possible.

16 The areas requiring special foundations and those prone to flooding should be avoided.

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7. Legal Framework

It is proposed to execute the above entire transmission scheme as per provisions contained in Transmission Service Agreement signed between LTTCs and TSP and in accordance with the "Tariff Based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by Government of India, Ministry of Power, Indian Electricity Act, 2003 and the rules made there-under.

The following Regulatory and Government approval shall be taken:

- Transmission License from Uttar Pradesh Electricity Regulatory Commission (UPERC)
- Adoption of Tariff from UPERC
- Authorization under Section 164 as per the EA 2003
- Or any other such approval required from Govt. or its authorized Agency.

8. Management Arrangements

8.1 Organizational set up

Mohanlalganj Transmission Limited shall give due importance and the basic structure of organization with a view to achieve the following objectives:

i) To group related functions together to have clearly defined 'Roles' for the relevant 'functional heads'.
ii) To have well defined 'Responsibility & Authority' centers in the structure.
iii) To have well defined 'communication channels' and optimum 'span of control' in the organization.
iv) To have optimum manpower.
v) To have decentralization of activities as far as possible.

At the first level in the organization, Corporate Centre will be planning, monitoring and controlling the objectives and activities of the organization. At the second level, the Regional HQ will be playing the role of controlling the activities in the regions and will report to Corporate Centre. At the third level in the structure, the Substation Group will be controlling the activities of the respective Substation and associated lines under that Group and will report to the Regional HQ. The Group will consist of basic working units such as substation Construction/maintenance, line construction/maintenance. The Groups will have both service and technical functions, to cater to the basic functional requirements. The actual deployment of the manpower shall however depend on the progress and stage of the work.

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8.2 Project Management

The project of transmission system will be planned, implemented, monitored and controlled through well-established practices of Project Management.

Project Management shall use PERT/CPM technique as the basic management tool. For effective project planning and review, three tier level of planning and review have been adopted.

Level-I :

Planning is done by the Monitoring Group, a central planning cell, which is in the form of an overall project schedule called the Master Network, for the project which forms the basis for all subsequent planning and monitoring of the activities. This covers broadly all the packages of project and indicates activities of engineering, contracts, manufacturing, erection and

commissioning. The Master Network is prepared using computerized techniques which subsequently helps in comparing the actual progress of the project with the scheduled progress. This gives indication of the likely critical areas and helps in preventing the same, thereby resulting in smoother implementation. The Master Network also acts as a source for the planning to be done at Level - II & Level - III.

Overall Project Schedule (L1) is furnished at **Annexure-AA3**

Level-II :

Planning is done package-wise and is worked out and finalized with the respective contractor/vendor during the pre-award stage. Level II networks are made within the milestones identified in the project Master Network (L-I).

Level-III :

Plans deal with elaborate schedules and weekly/monthly rolling plans which are prepared for activities of engineering, supply (as the case may be) & field activities. These form the basis of monitoring by the various functions.

The system envisages monthly review of the level II programs with contractors and at field on a weekly basis.

8.3 Project Implementation Review

The holding company of MTL has a team of dedicated experts in the field of substation and Transmission Line Engg. equipped with state-of-the-art technology, software capabilities and computer aided facilities for Planning, Design, Operation and Maintenance of transmission system. It has a well-established system of continuous feedback from the field and upgrades the system accordingly.

The holding company of MTL has developed a project monitoring system matching with the organization structure, complexity / intricacies involved in the project implementation and Management information system. The system calls for increasing details of planning in all facets of functioning such as engineering, contracts, site and corresponding levels of monitoring and control; for generating a management summary report to the top management. This management summary report highlights the project completion trends, actions being taken/to be taken for the attention of the top management on exceptional basis of critical areas.

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8.4 Quality Management:

The MTL shall ensure that the Project is designed, built and completed in a good workman like manner using sound engineering and construction practices, and using only materials and equipment that are new and of international utility grade quality such that, the useful life of the Project will be till the Expiry Date.

The TSP shall ensure that design, construction and testing of all equipment, facilities, components and systems of the Project shall be in accordance with Indian Standards and Codes issued by Bureau of Indian Standards ~~and only~~ in Transmission Service Agreement Mohanlalganj Transmission Limited. In case they are not applicable under certain conditions, the other equivalent internationally recognized Standards and Codes shall be followed.

9.0 Time Frame

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Transmission system for the Project is scheduled to be commissioned as per the conditions of

TSA subject to compliance of other obligations by statutory authorities including BPC, Energy Department of Govt. of UP etc.

10.0 Technical Specifications

A. Specific Technical Requirements For Transmission Lines

1.0 The Tower shall be fully galvanized using mild steel or/ and high tensile steel sections. Bolts and nuts with spring washer are to be used for connection.

2.0 IS Steel section of tested quality in conformity with IS 2062:2011, grade E 250 (Designated Yield Strength 250 MPa) and/or grade E 350 (Designated Yield Strength 350 MPa) are to be used in towers, extensions, gantry structures and stub setting templates. However, use of steel grade having designated yield strength more than 350 MPa is not permitted. The steel used for fabrication of towers shall be manufactured by primary steel producers only. In case of pole structure, steel of maximum yield strength up to 450 MPa can be used.

3.0 Towers shall be designed as per IS-802:2015. However, drag coefficient for design of tower may be considered as per IS802:1995.

As per Clause 12.1.2.1 b) 2) of IS 802:2015, Under security condition for tension and dead end towers, the transverse loads due to line deviation shall be the component of 100 percent mechanical tension of conductor and ground wire/ OPGW corresponding to 100% of design wind pressure at everyday temperature or 36% design wind pressure at minimum temperature after accounting for drag coefficient and gust response factor.

Transmission Service Provider (TSP) may adopt any additional loading/ design criteria for ensuring reliability of the line, if so desired and/ or deemed necessary.

Transmission line shall be designed considering wind zones as specified in wind map given in National Building Code 2016, Vol.1. The developer shall also make his own assessment of local wind conditions and frequent occurrences of high intensity winds (HIW) due to thunderstorms, dust-storms, downburst etc. along the line route and wherever required, higher wind zone than that given in wind map shall be considered for tower design for ensuring reliability of line.

765 kV towers, triple and quadruple circuit towers and towers with more than two sub-conductors per phase up to 400 kV shall be designed for reliability level 2.

i) For power line crossing of 400kV or above voltage level, large angle & dead end towers (i.e. D/DD/QD) shall be used on either side of power line crossing (i.e D/DD/QD-D/DD/QD arrangement).

ii) For power line crossing of 132kV and 220kV voltage level, angle towers (B/C/D/DB/DC/DD/QB/QC/QD) shall be used on either side of power line crossing depending upon the merit of the prevailing site condition and line deviation requirement.

iii) For power line crossing of 66 kV and below voltage level, suspension/tension towers shall be provided on either side of power line crossing depending upon the merit of the prevailing site condition and line deviation requirement.

iv) For crossing of railways, national highways and state highways, transmission line with large angle & dead end towers (i.e. D/DD/QD) shall be used on either side of crossing.

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4.0 The conductor configuration shall be as follows:

For transmission lines with ACSR conductor:

Transmission line	ACSR Conductor specified	Sub-conductor Spacing
765kV S/C (Quad Bersimis) transmission lines	Bersimis: Stranding 42/4.57 mm-Al + 7/2.54 mm-Steel, 725sq mm, Total Sectional Area, 35.05 mm diameter	457 mm
400kV D/C (Quad Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	457 mm
400kV D/C (Twin Moose) transmission lines	Moose: Stranding 54/3.53mm-Al + 7/3.53 mm-Steel, 597sq mm, Total Sectional Area, 31.77mm diameter	450 mm

Note: The transmission lines shall have to be designed for a maximum operating conductor temperature of 85 deg C for ACSR only.

For transmission lines with HTLS conductor:

400kV D/C (Twin HTLS) Transmission lines	HTLS: type- INVAR/ GAP/ Composite core/ ACSS or any other equivalent, 1596 Ampacity or higher, minimum 28.62 mm diameter, maximum 0.05552 (Ω/km) DC resistance at 20°C	450 mm

5.0 The required phase to phase spacing and horizontal spacing for 765kV & 400 kV D/C line shall be governed by the tower design as well as minimum live metal clearances for 765kV and 400kV voltage level respectively under different insulator swing angles.

a) For 765 kV transmission lines:

The minimum live metal clearances for 765 kV line may be considered as follows:

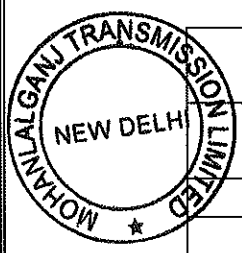
(i) Under stationary conditions

From tower body:

For 765 kV S/C : 5.6 m

(ii) Under swing conditions for 'I' String for outer phases:

A (0°) Type tower & Jumper (Without Pilot) for C & D type tower



Wind pressure Condition	Minimum electrical clearance
a) Swing angle (0°)	5.6 m (For S/C) 6.1 m (For D/C)
b) Swing angle (25°)	4.4 m
c) Swing angle (55°)	1.3 m

B (0°-5°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (20°)	5.6 m
b) Swing angle (41°)	4.4 m
c) Swing angle (64°)	1.3 m

Under swing conditions for 'I' Pilot String for 4x50 Kg counter weight on outer phases:

C (0°-30°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (15°)	5.6 m
b) Swing angle (25°)	4.4 m
c) Swing angle (40°)	1.3 m

D (30°-60°) Type tower

Wind pressure Condition	Minimum electrical clearance
a) Swing angle (20°)	5.6 m
b) Swing angle (30°)	4.4 m
c) Swing angle (40°)	1.3 m

'V' String (Tower type A & B) Central phase and V-Pilot for towers D (Central phase)

To boom frame steel	5.1 m
To window frame	5.6 m

However the phase to phase spacing for 765kV line shall not be less than 15m.

b) **<u>For 400 kV transmission lines:</u>**
The minimum live metal clearances for 400kV D/C transmission lines may be considered as follows:

(i) Under stationary conditions
From tower body:
For 400 kV D/C : 3.05 m

(ii) Under swing conditions:

Wind pressure Condition	Minimum electrical clearance
a) Nil	3.05 m
b) Swing angle (22°)	3.05 m
c) Swing angle (44°)	1.86 m

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However, the phase to phase spacing for 400kV D/C line shall not be less than 8.0 m.

6.0 The minimum ground clearance for 765 kV transmission lines shall be 18 m, for 400 kV D/C transmission lines shall be 8.84 m so that maximum electric field does not exceed 10kV/m within the ROW and does not exceed 5kV/m at the edge of the ROW as per international guidelines.

7.0 The minimum mid span separation between earth wire and conductor shall be 9.0 m for 765 kV line & 9.0 m for 400 kV D/C transmission lines. Shielding angle shall not exceed 20 deg for 765 kV S/C line & 400 kV D/C line D/C transmission lines. Shielding angle shall not exceed 10 deg for 765 kV D/C line.

8.0 Transposition is to be done for all transmission lines whose length is greater than 100 km.

9.0 The switching impulse withstands voltage (wet) for 765 kV line shall be 1550 kVp and 400 kV line shall be 1050 kVp. Lightning impulse withstand voltage (dry) for 765 kV line shall be 2400kVp & for 400kV line shall be 1550 kVp.

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10.0 The Fault current for design of line shall be 50 kA for 1 sec for 765 kV, 63 kA for 1 sec for 400 kV.

11.0 The lines shall be designed for very heavy pollution level (creepage of 31mm/kV as per IEC-60815). Silicone rubber polymer insulators shall be used for the transmission lines.

12.0 Each tower shall be earthed such that tower footing resistance does not exceed 10 ohms. Pipe type or Counterpoise type earthing shall be provided in accordance with relevant IS. If the value (before stringing) has been recorded higher than 10 ohm, earthing shall be changed to Counterpoise type. Additional earthing shall be provided on every 7 to 8 kms distance at tension tower for direct earthing of both shield wires.

13.0 The required grade of concrete and mix design for foundation of transmission line tower shall be as per relevant IS.

14.0 Technical specification for 400kV line on Monopole

i) **Monopoles/ lattice Type Towers :**

400 kV Double Circuit (PA, PB, PC & PD) with Quad Moose/equivalent HTLS Conductor
400 kV Double Circuit (DA, DB, DC & DD) with Quad Moose/equivalent HTLS Conductor

Classification of Monopole/Towers
The Pole for 400 kV Lines are classified as given below:-
a) For Suspension Pole PA (0-2 deg.)
Normal Span : 200m
Wind Span : 200m
Weight Span : 300m

b) For Tension Pole PB (2-15 deg.)
Normal Span : 200m
Wind Span : 200m
Weight Span : 300m

c) For Tension Pole PC (15-30 deg.)
Normal Span : 200m
Wind Span : 200m
Weight Span : 300m

d) For Tension Pole PD (30-60 deg.)
Normal Span : 200m
Wind Span : 200m
Weight Span : 300m

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ii) **Broken wire Conditions**:

For Suspension pole (PA)	:	One Earthwire or One Conductor broken at a time, whichever is more stringent for a particular section.
For Tension pole (PB)	:	One Earthwire and any One Conductor broken or any two conductor broken at a time on same side, whichever is more stringent for a particular section.

For Tension pole (PC)	:	One Earthwire and any One Conductor broken or any two conductor broken at a time on same side, whichever is more stringent for a particular section.
For Tension pole (PD)	:	One Earthwire and any Two Conductor broken or any Three conductor broken at a time on same side, whichever is more stringent for a particular section. To be designed for dead end condition also.

Code Reference

Load Calculation : IS 802

Sag & Clearance : IS 5613 CBIP Manual

Reliability level 2 as per CEA guidelines and IS802 shall be applicable for lattice type structure with Quad Moose conductor. Reliability level 1 as per IS 802 and CEA guidelines shall be applicable for pole structure with HTLS conductor.

Deflection Criteria: 5% of height of pole @ ultimate load conditions and 1.5% of the height of pole @ everyday condition (safety normal)

iii) **Ground Clearance**

The minimum ground clearance from the bottom conductor shall not be less than 8840 mm for 400KV lines at the maximum sag conditions i.e. at 85° C and still air.

An allowance of 150mm shall be provided to account for errors in stringing. Conductor creep shall be compensated by over tensioning the conductor at a temperature of 26°C lower than the stringing temperature for ACSR ,MOOSE conductor.

iv) **Electrical System Data for 400 kV line:**

1.	Nominal Voltage	kV	400
2.	Maximum system voltage	kV	420
3.	BIL (Impulse)	kV (Peak)	1550
4.	Power frequency withstand voltage (Wet)	kV (rms)	680
5.	Switching surge withstand voltage (Wet)	kV (rms)	1050
6.	Minimum Corona extinction voltage at 50 Hz AC system under dry condition	kV (rms) phase to earth	320 (Min)
7.	Radio interference voltage at one MHz for phase to earth voltage of 305 KV under dry condition.	Micro Volts	1000 (Max)

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v) **Details of line Material:**

Conductor, Earth wire & OPGW:

Sl. No.	Description	Conductor		Earthwire	OPGW (tentative)
1.	Type	ACSR 'MOOSE' conductor	HTLS Conductor	7/3.66mm GS Earthwire	24 fibre OPGW
2.	Stranding and wire		INVAR/ GAP/		

	diameter		Composite core/ ACSS or any other equivalent, 1596 Ampacity or higher, minimum 28.62 mm diameter, maximum 0.05552 (Ω/km) DC resistance at 20°C (Conductor spacing = 450 mm for Twin bundle)		
	Aluminium	54/3.53		-	
	Steel	7/3.53		7/3.66	
3.	Conductor per phase	4		NA	NA
4.	Spacing between conductor of same phasc(sub conductor spacing)(mm)	457mm for Quad bundle		NA	NA
5.	Configuration	Vertical (for D/C with 8000 mm min. inter phase spacing)		One continuously to run horizontally on top of the towers and conductors	One continuously to run on top of the towers and conductors
6.	Overall Diameter (mm)	31.77		11.5 (for both 24 and 48 fibers)	≈ 583
7.	Unit mass (kg/km)	2004		583	≈ 583
8.	Min. UTS (kN)	161.6		68.4	Equivalent to earth wire

Polymer Insulator:

S. No.	Type of String	*Size of Composite Insulator (Core dia x Nominal length) (mm)	Minimum Creepage Distance (mm) per unit	No. of individual Units per String (Nos.)	Electro-Mechanical Strength of Insulator Unit (kN)	Mechanical Strength of Insulator String along with Hardware Fittings (kN)
FOR 400kV AC TRANSMISSION LINES WITH QUAD MOOSE CONDUCTOR						
1.	Single 'I' Suspension	20x3335	13020	1x1	120	120
2.	Single Tension	20x3335	13020	1x1	120	1x120
3.	Quadruple Tension	24x3910	13020	4x1	160	4x160

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vi) **Railway Crossings**

All the railway crossings coming en-route the transmission line shall be identified by the Contractor. At the time of detailed survey, the railway crossings shall be finalized as per the regulation laid down by the Railway Authorities. The following are the important features of the prevailing regulations (revised in 1987).

a) The crossings shall be supported on PD type pole or DD type tower on either side depending on the merits of each case.

b) The crossing shall normally be at right angle to the railway track.

c) The minimum distance of the crossing pole/tower shall be at least equal to the height of the pole/tower plus 6 meters away measured from the centre of the nearest railway track.
d) No crossing shall be located over a booster transformer, traction switching station, traction sub-station or a track cabin location in an electrified area.

Minimum ground clearance for crossing railways shall be as per latest Railway guidelines/ Regulation. The crossing span will be limited to 300 meters.

vii) **Power line Crossings (For Monopoles)**
Where the line is to cross over another line of 132 kV or above voltage level, PD type pole or DD type tower with suitable extensions shall be used, depending upon merit of the prevailing site condition. For line crossing lower than 132 kV voltage level, suspension/tension pole, towers with suitable extension may be used depending upon the merit of the prevailing sire condition. Provisions to prevent the possibility of it coming into contact with other overhead lines shall be made in accordance with the Indian Electricity Rules, 1956 as amended up-to-date. In order to reduce the height of the crossing pole/tower, it may be advantageous to remove the ground-wire of the line to be crossed (if this is possible and permitted by the PURCHASER of the line to be crossed).

Minimum clearance in meters between lines when crossing each other:

Sr. No.	Nominal System Voltage	110-132kV	220kV	400kV	765kV
a.	110-132KV	3.05	4.58	5.49	7.94
b.	220KV	4.58	4.58	5.49	7.94
c.	400KV	5.49	5.49	5.49	7.94
d.	765KV	7.94	7.94	7.94	7.94

B. Specific Technical Requirements For Substation

The proposed 400kV Mohanlalganj (2x500 + 2x200 MVA) sub-station shall be gas insulated type generally confirming to the requirement of CEA regulation for construction of sub-station.

1.0 Salient features of 400/220/132 KV GIS Substation Equipment and Facilities
The design and specification of substation equipment are to be governed by the following factors:

2.0 Insulation Coordination
400 KV System would be designed to limit the Switching overvoltage to 2.5 p.u. and is expected to decay to 1.5 p.u. in 5 to 6 cycles. Consistent with these values and protective levels provided by lightning arrestors, the following insulation levels are proposed to be adopted for 400kV, 220kV and 132kV systems:

S.No.	Particulars	400 KV	220kV	132kV
a.	Impulse withstand voltage for - Transformer and reactors - for Other Equipment	 1300 kVp 1425 kVp	 950 kVp 1050 kVp	 650 kVp 650 kVp
b.	Switching surge withstand voltage	1050 kVp	-	-
c.	Minimum creepage distance	13020 mm	7595 mm	4495 mm
d.	Max. fault current	63 kA	40 kA	40 kA
e.	Duration of fault	1 Sec	1 Sec	3 Sec
f.	Corona extinction voltage	320 kV rms	156 kV rms	105 kV rms

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3.0 Switching Schemes

It is essential that the system should remain secured even under conditions of major equipment or bus-bar failure. Sub-stations being the main connection points have large influence on the security of the system as a whole. The selection of the bus switching scheme is governed by the various technical and other related factors. One & Half breaker bus scheme has been considered for 400kV substations and Double main bus scheme has been considered for 220kV & 132kV side due to their merits in terms of reliability, security, operational flexibility and ease of maintenance of equipment.

Substation	400kV side	220kV side	132kV side
400/220/132kV, 2X 500 MVA, 2X 200 MVA GIS Substation at Mohanlalganj	One & Half Breaker	Double Main	Double Main

4.0 Substation Equipment and Facilities

The switchgear shall be designed and specified to withstand operating conditions and duty requirements. All equipment shall be designed considering the transmission line capacity.

Current rating for various feeders & bus bar are as follows:-

S.No.	Description of bay	400 kV	220 kV	132 kV
1	Bus Bar	4000A	3000A	2000A
2	Line bays	3150A	2000A	1600A
3	ICT bays	2000A	2000A	1600A
4	Bus Reactor bays	2000A	NA	NA
5	Bus coupler bays	4000A (not applicable)	3000A	2000A

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4.1. 400/220/132kV GIS Substation Equipment

GIS (Gas Insulated Switchgear) shall be indoor type and in accordance to IEC: 62271-203. The switchgear shall be designed and specified to withstand operating conditions and duty requirements. All the switchgear such as Circuit Breaker, isolator, earth switch including CT, PT etc. shall be GIS type. Surge Arrestors used for transformer/Reactor connections will be AIS or GIS type. 400kV scheme shall be designed in such a way that it shall be possible to use line reactors (if provided) as bus reactors, in case of outage of line, to control bus voltage. Local control cabinets (LCC) shall be provided as per requirement. The alarm & annunciation of GIS equipment shall be wired to SCADA System.

4.1.1. Circuit Breakers

GIS Circuit breakers shall in general be of C2-M2 class and comply to IEC- 62271-100. The rated break time shall not exceed 40 ms for 420kV and 60 ms for 245kV and 145kV circuit breakers. 420 kV & 245 kV Circuit breakers shall be provided with single phase and three phase auto reclosing. The Circuit breakers controlling 420 KV lines wherever required shall be provided with pre insertion closing resistor of about 400 ohms with 8 ms insertion time or Controlled Switching Device (CSD) for lines longer than 100 km. The short line fault capacity shall be same as the rated capacity and this is proposed to be achieved without use of opening resistors. Control switching device shall be provided in Circuit breaker of switchable line reactor and in Main & Tie circuit breakers of Transformers, line with non-switchable line reactors, and Bus reactors. Further, it shall be possible to use line reactors as bus reactors, in case of outage of line.

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4.1.2. Isolators

The isolators shall comply to IEC 62271-102 in general. Isolators shall be motor operated. Earth switches are provided at various locations to facilitate maintenance. Main blades and earth blades shall be interlocked and interlock shall be fail safe type. All earth switches shall be motor operated type.

4.1.3. Current Transformers

Current Transformers shall comply with IEC 60044-1 in general. All ratios shall be obtained by secondary taps. Generally, Current Transformers (CT) shall have five cores (four for protection and one for metering) whereas; CT in Tie bays shall have six cores (four for protections & two for metering) suitably distributed on both sides of CB. The burden and knee point voltage shall be in accordance with the requirements of the system including possible feeds for telemetry. Accuracy class for protection core shall be PS and for metering core it shall be 0.2S.

4.1.4. Voltage Transformers

The voltage transformers shall conform to IEC-60044-2. Voltage transformers shall be of the electromagnetic type with SF6 gas insulation. The earth end of the high voltage winding and the ends of the secondary winding shall be brought out in the terminal box. The voltage transformers shall be located as a separate bay module and will be connected phase to ground and shall be used for protection, metering and synchronization. The voltage transformers shall be of inductive type, nonresistant and shall be contained in their own-SF6 compartment, separated from other parts of installation. The voltage transformers shall be effectively shielded against high frequency electromagnetic transients. The voltage transformers shall have three secondary windings. The voltage transformer should be thermally and dielectrically safe when the secondary terminals are loaded with the guaranteed thermal burdens. The accuracy class for core - I & II for 400 kV shall be 0.5/3P and for 220 kV shall be 3P. The accuracy of 0.2 on secondary III should be maintained throughout the entire burden range up to 50VA on all the three windings without any adjustments during operation.

4.1.5. SF6 to Air Bushing

Outdoor bushings, for the connection of conventional external conductors to the SF6 metal enclosed switchgear, shall be provided. Bushings shall generally be in accordance with the requirements of IEC -60137. The creepage distance over the external surface of outdoor bushings shall not be less than 31 mm/kV and in highly polluted area it shall not be less than 31mm/kV. SF6 to air Bushing shall be of Polymer/ composite type and shall be robust and designed for adequate cantilever strength to meet the requirement of seismic condition. The electrical and mechanical characteristics of bushings shall be in accordance with IEC:60137. Polymer/ composite insulator shall be seamless sheath of a silicone rubber compound. The housing & weather sheds should have silicon content of minimum 30% by weight. It should protect the bushing against environmental influences, external pollution and humidity. The hollow silicone composite insulators shall comply with the requirements of the IEC publications IEC 61462 and the relevant parts of IEC62217.

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4.1.6. Capacitor Voltage Transformers

Voltage transformers shall comply to IEC 60044-2 & IEC-6044-5 in general. These shall have three secondaries out of which two shall be used for protection and one for metering. Accuracy class for protection core shall be 3 P and for metering core shall be 0.2S. The voltage transformers on lines shall be suitable for Carrier Coupling. The Capacitance of CVT shall be 4400/8800 pF depending on PLCC requirements.

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4.1.7. Surge Arresters

Station class current limiting, heavy duty gapless type Surge arresters conforming to IEC 60099-4 in general shall be provided.

The rated voltage of Surge arrester and other characteristics are chosen in accordance with system requirements. Surge arresters shall be provided near line entrances, transformers so as to achieve proper insulation coordination. Surge arresters shall be providing with porcelain/polymer housing.

4.1.8. Power Transformers

Codes And Standards

The latest revisions of the following Codes and Standards shall be applicable for the equipment/material covered in this Specification. In case of conflict, the manufacturer may propose equipment/material conforming to one group of Industry Codes and Standards quoted hereunder without jeopardizing the requirement of this specification:

IEC60044	Instruments transformers
IEC60076	Power transformers
IEC60137	Insulating bushing for alternating voltages above 1000 V
IEC60214	On-load tap-changers
IEC60273	Characteristics of indoor and outdoor post insulators for systems with nominal voltages greater than 1000V
IEC 60282-2	High-voltage fuses
IEC60289	Reactors
IEC60529	Degrees of protection provided by enclosures (IP Code)
IEC60815	Guide for the selection of insulators in respect of polluted conditions
IEC60947	Low-voltage switchgear and control gear

Design and Construction Requirements

Core

1. The core shall be assembled with oriented grain steel, cold rolled sheet, and treated with an insulating layer heat and oil resistant.
2. The core supports shall be designed to counter the effects of marine and overland transport under poor conditions. The air core reactance of the core shall be less than 20%.
3. The Contractor shall provide a description of construction details of the proposed core or shell design.

Over Fluxing

The transformer shall withstand without injurious heating combined voltage and frequency fluctuations which produce the following overfluxing conditions and give desired performance:

- 105% for 10minutes
- 125% for 1minute
- 140% for 5seconds

Bidder shall provide the overvoltage withstand time for 150% and 170% over fluxing

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(a) Transformer shall conform to IEC 60076 in general. The transformer and all its accessories including bushing/ built in CTs etc. shall be designed to withstand thermal and mechanical stresses caused by symmetrical or asymmetrical faults on any terminals.

Mechanical strength of the transformer shall be such that it can withstand 3-phase and 1- phase through fault for transformer rated voltage applied to HV and/ or IV terminals of transformer. The short circuit shall alternatively be considered to be applied to each of the HV, IV and tertiary (LV) transformer terminals. Tertiary is not considered to be connected to source.

Core shall be constructed from high grade, non-ageing cold rolled super grain oriented silicon steel laminations (HI-B or better grade). The maximum flux density in any part of the core and yoke at the rated MVA, voltage and frequency shall not exceed 1.9 Tesla at all tap positions during 10% continuous over voltage condition. Transformers shall withstand without damage and over-heating due to over fluxing conditions of 110% for continuous, 125% for 1 minute and 140% for 5seconds.
All the windings shall be capable of withstanding the Dielectric, mechanical and thermal stresses which may be caused by switching, dead short circuit on its terminals. Transfer surge at tertiary shall not exceed 250kVp during impulse and switching impulse from HV & IV Terminals. The tertiary windings shall be suitable for connection of reactors or capacitors which would be subjected to frequent switching and shall be suitable for connection to LT Transformer for auxiliary supply. The air core reactance of HV winding of transformer shall not be less than 20% for 400kV class Transformer. External or internal reactors shall not be used to achieve the specified HV/LV and IV/LV impedances.

Transformers shall be fitted with two cooler banks, each capable of dissipating 50 per cent of the loss at continuous maximum rating. Transformer shall be capable of operating at full load for 20 minutes in the event of failure of the oil circulating pump or blowers associated with one cooler bank and for at least ten (10) minutes in the event of total failure of power supply to cooling fans and oil pumps, without winding hot spot temperature exceeding 140 deg C. Transformer shall be designed so that tank hotspot shall not exceed 130 deg C, considering maximum ambient temperature of 50°C.

The transformer shall be complete with all required accessories, Bushing CTs, Neutral CT (outdoor type), cooler control cabinet, individual and common marshalling box, RTCC etc. as required for satisfactory operations of transformer. The transformer shall be provided with IEC 61850 compliant digital RTCC relay having automatic voltage regulating features to operate OLTC including parallel operation of transformers. Neutral of the transformer shall be solidly grounded.

HV and IV bushing shall be RIP (Resin Impregnated Paper)/RIS (Resin Impregnated Synthetic) with composite insulator type. LV bushing shall be OIP/ RIP/ RIS. 36kV Neutral bushing shall be solid porcelain or oil communicating type.

The major technical particulars/ parameters of transformer are given below:

(A) 500MVA, 400/220/33kV, 3-Phase Auto transformer (applicable standard: IEC-60076)

Sl. No.	Description	Unit	Technical Parameters
1.	Rated Capacity: HV/IV/LV (Tertiary)	MVA	500/ 500/ 167 (Active loading of tertiary: 5 MVA)
2.	Voltage ratio (Line to Line)		400/220/33
3.	Frequency	Hz	50
4.	No. of Phase	Nos	3
5.	Vector Group (unless specified differently elsewhere)		YNa0d11
6.	Cooling		ONAN/ ONAF/ (OFAF or ODAF) OR

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			ONAN/ ONAF1/ONAF2
7.	Rating at different cooling above	%	60/80/100
8.	Type of Transformer		Constant Ohmic impedance type
9.	Impedance at 75 Deg C		
a)	HV – IV (with tolerance as per IEC)	%	At Max./ Principal/ Min. Voltage Tap: 10.3/12.5/15.4
b)	HV – LV	%	At Principal tap(minimum) : 60
c)	IV – LV	%	At Principal tap (minimum):
			45
10.	Losses		
a)	Maximum No-Load Loss at rated voltage and frequency	kW	90
b)	Maximum Load Loss at rated current and 75°C	kW	500
c)	Max I2R loss at rated current and frequency and at 75°C for HV and IV windings	kW	375
d)	Maximum Auxiliary Loss at rated voltage and frequency	kW	15
11.	Max. Temperature rise over 50 deg C ambient Temp	Deg. C	Top oil: 50 & Winding: 55
12.	Windings		
i)	Insulation Level (LI/SI/PF)		kVp/ kVp/ kVrms
	HV		1300/1050/570
	IV		950/-/395
	LV		250/-/95
	Neutral		95/-/38
ii)	Tan delta of winding	%	< 0.5
13.	Tap Changer & Tappings		OLTC with range □ 10% for HV variation in the step of 1.25%, 17 steps, on 220kV side of series winding
14.	Maximum Partial discharge (PD) level at 1.58*Ur/√3	pC	100
15.	Noise level at rated voltage and at principal tap at no load and all cooling active	dB	< 80
16.	Bushing		
i)	Rated voltage (HV/IV/LV/Neutral)	kV	420/245/52/36
ii)	Rated current(Min.) HV/IV/LV/Neutral	A	1250/2000/3150/2000
iii)	Insulation Level (LI/SI/PF)		kVp/ kVp/ kVrms
	HV		1425/ 1050/ 630
	IV		1050/ -/ 460
	LV		250/ -/ 95
	Neutral		170/ -/ 75
iv)	Tan delta of bushings HV/IV/LV	%	< 0.4
v)	Max. PD of bushings at level @ 1.5 pu	pC	100

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17.	Insulating Oil		virgin high grade inhibited, conforming to IEC-60296

(B) Main Parameters Of 200 MVA, 220/132/11kV Transformer

1.	Normal continuous ratings MVA	ONAN/ONAF/OFAF 120/160/200 MVA
2.	Maximum continuous capacity	200 MVA
3.	Phases	3(three)
4.	Other Parameters	
a)	Normal ratio of transformation	220/132/11 KV
b)	Rated Frequency	50 C/s ± 5%
c)	Rated Voltage of HV winding	220 KV
d)	Rated Voltage of IV winding	132 KV
e)	Rated voltage of tertiary winding	11 KV
5.	Rated Current :	
a)	Rated line current of HV winding	525 Amp
b)	Rated line current of IV winding	875 Amp
c)	Rated line current of tertiary winding	3150Amp (for 60MVA)
d)		
6.	Phase Connections	
a)	Series winding	Auto Star
b)	Common winding	Auto star
c)	Tertiary winding	Delta
d)	Vector group reference	YNa0d11
e)	Reference voltage group and terminal marking	HV/IV/Tertiary
f)	Polarity	Subtractive
g)	Type of cooling	ONAN/ONAF/OFAF
h)	D.C. Voltage for relays etc. (as required)	110V/220V D.C.
7	Maximum Temperature rise	
a)	Of oil by thermometer	45°C
b)	Of winding by resistance	50°C. (ONAN/ONAF) 55°C. (OFAF)
c)	By hot spot temperature indicator	66°C
8	Limit for hot spot temperature for which the transformer is designed	140°C
9	Temperature gradient between winding & Oil	20°C average
10	Voltage to earth for which the star point will be insulated	95 kVp 38KV rms
11	Maximum flux density in iron at normal voltage, frequency and ratio	
a)	Core	1.53 tesla
b)	Yoke	1.53 tesla
12	Over voltage operating capacity and duration	
a)	110% of rated voltage	Continuous
b)	125% of rated voltage	For 60 Sec

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c)	140% of rated voltage	For 5 Sec

13 Positive Sequence impedance on rated MVA base at rated current & frequency at 75 deg.C winding temperature at:

a)	HV to IV % impedance at tap no.1 at 100% rating	11%
b)	HV to IV% impedance at tap no.13 (normal tap)	10%
c)	HV to IV% impedance at Tap no.17 at 100% rating	11%
d)	HV to tertiary	60%(min.)
e)	IV to tertiary	50%(min.)

(Offers with lower% impedance will not be considered)
Note: No reactor either inside or outside the tank shall be used to achieve above %age impedance value.

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a)	Location of tap changer	IV side
b)	Voltage variation	-5% to+15%
c)	Step Voltage	1.25%
d)	Vector group	YNa0d11

15	Type of transformer	Core

16 Maximum Permissible Losses of Transformers

a)	Max. No Load Loss at rated voltage and frequency	35 kW
b)	Max. Load Loss at rated current and frequency and at 75°C for HV and IV windings, at principal tap position	260 kW
c)	Max I2R loss at rated current and frequency and at 75°C	190 kW
d)	Max. Auxiliary Loss at rated voltage and frequency	8 kW

17	Rail Gauge	1676 mm 3048 mm

18 Core:

a)	Material of core lamination	CRGO Silicon Steel
b)	Thickness of coal plate	0.27
c)	Whether core plates or grain oriented, cold rolled	Yes

19	KVA capacity of the auxiliary winding	60,000 KVA
20	System short circuit level and duration for which transformer shall be capable to withstand thermal & dynamic stress	40 KA for 3 sec

21 Percentage impedance

a)	HV to IV % impedance at tap no.1 at 100%rating	11%(+/-ISTol)
b)	HVtoIV%impedanceattapno.13(normal tap) at 100% Rating	10%(+/-ISTol)
c)	HV to IV% impedance at Tap no. 17 at 100% rating	11%(+/-ISTol)
d)	HV to tertiary	60%(min.)
e)	IV to tertiary	50%(min.)

(Offers with lower% impedance will not be considered)
Note: No reactor either inside or outside the tank shall be used to achieve above %age impedance value.

4.1.9. 400kV 125, 3-Phase Shunt Reactors

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Reactor shall conform to IEC 60076-6 in general. The reactor shall be designed to withstand the over-voltages repeatedly without risk of failure at 1.05 Ur continuously, 1.25 Ur for 1 minute and 1.50 Um for 5 seconds (where Ur is 420kV). The reactors shall be designed for switching surge overvoltage of 2.5 p.u. and temporary overvoltage of 2.3p.u. for few cycles followed by power frequency overvoltage up to 1.5 p.u. The reactor must withstand the stress due to above transient dynamic conditions which may cause additional current flow as a result of changed saturation characteristics/slope beyond 1.5 p.u. voltage.

The reactor shall be of either gapped core type or magnetically shielded air core type (shell type) construction. The impedance ratio (X0/X1) specified shall be achieved by adopting either single phase construction in separate tanks or three phase with 3 limb or 5 limb core construction. In case of coreless construction, a magnetic shield shall be provided around the coreless coils and non-magnetic material sheet shall form the central core to minimize the vibrations. Core shall be constructed from state of the art low loss electrical steel laminations of conventional grade (as per BIS)/ regular grade as per IEC) or better.

Shunt Reactors shall be capable of operating continuously at a voltage 5% higher than their rated voltage without exceeding winding and tank hot spot temperature 140 Deg and 130 Deg Celsius respectively, considering maximum ambient temperature as 50 Deg C.

The reactor shall be complete with all required accessories, Bushing CTs, individual marshalling box etc. as required for satisfactory operations of reactor. HV and Neutral bushings shall be RIP (resin impregnated paper condenser) with composite insulator type.

The Technical Particulars/ Parameters of Shunt Reactor are given below:

The Technical Particulars/ Parameters of 420kV, 3-Phase Shunt Reactor			
Sl. No.	**Description**	**Unit**	**Parameters**
1.	Rated Voltage, Ur (1p.u)	kV	420
2.	Rated Capacity at 420 kV	MVAR	125
3.	Cooling System		ONAN
4.	Permissible current unbalance among different phases	%	±2
5.	Crest value of Third Harmonic content in phase current at rated voltage with sinusoidal waveform	%	≤ 3% of the crest value of fundamental
6.	Range of constant Impedance		Up to 1.5 p.u. voltage
7.	Tolerance on current	%	0 to +5%
8.	Ratio of zero sequence reactance to positive reactance (X0/X1)	Range	0.9 - 1.0
9.	Max. Temperature rise over 50 deg C Ambient Temp at rated voltage	Deg.C	Top oil: 40 & Winding: 45
10.	Losses for 420kV, 3-phase Reactor		
	Maximum Load Loss at rated voltage, frequency and 750C (for 125 MVAR)	kW	160
	I^2R losses	kW	90
11.	Windings		
a)	Insulation level (LI/SI/PF)		kVp/ kVp / kVrms
i)	HV		1300/1050/-
ii)	Neutral		550/-/230
b)	Tan delta of windings	%	< 0.5
12.	Maximum partial discharge (PD) level at 1.58 Ur/ √3	pC	100

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13.	Vibration at rated voltage and frequency		≤ 200 microns peak to peak
14.	Noise level at rated V &F	dB	<80
15.	Bushing		
a)	Rated voltage: HV / Neutral	kV	420/145
b)	Rated current (Min.) HV / Neutral	A	800/800
c)	Insulation level (LI/SI/PF)		kVp/ kVp/ kVrms
i)	HV		1425/1050/695
ii)	Neutral		650/-/305
d)	Tan delta of bushings : HV / Neutral (at ambient temperature)	%	< 0.4
e)	PD of bushings at level Um (Um=420kV)	pC	<10
16.	Insulating Oil		virgin high grade inhibited, conforming to IEC-60296

4.1.10. Protection and Control

The protective relaying system proposed to be provided for transmission lines, auto-transformers, reactors and bus bars to minimize the damage to the equipment in the events of faults and abnormal conditions, is dealt in this section. All main protective relays shall be numerical type with IEC 61850 communication interface. All numerical relays shall have built in disturbance recording feature.

a) Transmission Line Protection

400 kV, 220 kV and 132 kV lines shall have MAIN-I numerical three zone distance protection scheme with carrier aided inter-tripping feature. 400 kV, 220 kV and 132 kV lines shall also have MAIN-II numerical distance protection scheme like Main-I but from different make that of MAIN-I. Line Current Differential as Main–I & Main-II may be considered, for short lines (line length below 30 km) having Fibre Optic communication link. In case of loop in loop out of transmission lines, the existing protection scheme shall be studied and suitable up-gradation (if required) shall be carried out.

All 400 kV lines shall also be provided with two stages over voltage protection. Further, all 400, 220 & 132kV lines shall be provided with single and three phase auto-reclosing facility to allow reclosing of circuit breakers in case of transient faults. These lines shall also be provided with distance to fault locators to identify the location of fault on transmission lines.

b) Auto Transformer Protection

These shall have the following protections:

- Numerical Differential protection
- Numerical Restricted earth fault protection
- Numerical Over-current and earth fault protection on HV & MV side
- Numerical Over fluxing protection on HV & MV side
- Numerical Overload alarm

Besides these, power transformers shall also be provided with BUCHOLZ relay, protection against high oil and winding temperature and pressure relief device etc.

c) 420kV Reactor Protection

Reactor shall be provided with the following protections:

- Numerical Differential protection

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- Numerical Restricted earth fault protection

Besides these, reactors shall also be provided with Bucholz relay, protection against oil and winding temperatures & pressure relief device etc.

d) Numerical Bus Bar Protection

The high speed bus bar differential protection, which is essential to minimize the damage and maintain system stability at the time of bus bar faults, shall be provided for 400kV, 220kV and 132kV buses. Duplicated busbar protection is envisaged for 400kV bus-bar protection. Bus bar protection scheme shall be such that it operates selectively for each bus and incorporate necessary features required for ensuring security. The scheme shall have the provision for future expansion. For existing substations, the existing bus bar protection shall be augmented wherever required.

e) Numerical Local Breaker Back up Protection

This shall be provided for each 420 kV, 245 kV and 145 kV breakers and will be connected to de-energize the affected stuck breaker from both sides.

f) Substation Automation System

For all the new substations, state of art Substation Automation System (SAS) conforming to IEC-61850 shall be provided. The distributed architecture shall be used for Substation Automation system, where the controls shall be provided through Bay control units. The Bay control unit is to be provided bay wise for voltage level 132kV and above. All bay control units as well as protection units are normally connected through an Optic fiber high speed network. The control and monitoring of circuit breaker, dis-connector, re- setting of relays etc. can be done from Human Machine Interface (HMI) from the control room. SAS shall be equipped with the facility of remote operation and by providing remote HMI and suitable communication link, the substation can be controlled from a remote location. Necessary gateway & modems (as required) shall be provided to send data to RLDC/ SLDC.

The functions of control, annunciation, disturbance recording, event logging and measurement of electrical parameters shall be integrated in Substation Automation System. The Automation System shall be provided with the facility of communication and control for remote end operation. In existing Substations where Substation automation is not provided, control functions shall be done through control panels.

g) Time Synchronization Equipment

Time synchronization equipment complete in all respect including antenna, cable, processing equipment required to receive time signal through GPS or from National Physical Laboratory(NPL) through INSAT shall be provided. This equipment shall be used to synchronize SAS & IEDs etc.

4.1.11. Control Concept

All the EHV breakers in substation/switching stations shall be controlled and synchronized from the switchyard control room and remote control centre. Each breaker would have two sets of trip circuits which would be connected to separately fused DC supplies for greater reliability. All the isolators shall have control from remote/local whereas the earth switches shall have local control only.

4.1.12. PLCC

Power line carrier communication (PLCC) equipment complete for speech transmission line, tele-protection commands and data channels shall be provided on each 400 KV, 220 kV and 132 kV transmission line. The protections for transmission line and the line compensating equipment shall have hundred percent back up communication channels. The PLCC equipment shall in brief include the following:-

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Coupling device, line traps, carrier terminals, protection couplers, HF cables, PABX and maintenance and testing instruments.

A telephone exchange (PABX) of 24 lines shall be provided at new substations as means of effective communication among various buildings of the substation, remote end substations and with control centres (RLDC/SLDC) etc.

Coupling devices shall be suitable for 4400pF 400kV , 220 kV and 132 kV CVT. Phase to phase coupling for 400 kV line , 220 kV and 132 kV single circuit line shall be provided. For D/c line Inter circuit coupling can be provided. The pass band of coupling devices shall have sufficient margin for adding communication channel in future if required. Necessary protection devices for the safety of personnel and low voltage part against power frequency voltages and transient over voltage shall also be provided.

The line traps shall be broad band tuned suitable for blocking the complete range of carrier frequencies. Line Trap shall have the necessary protective devices such as lightning arresters for the protection of tuning device and shall be equipped with corona rings. Decoupling network consisting of line traps and coupling capacitors may also be required at certain substation in case of extreme frequency congestion.

The carrier terminals shall be of single side-band (SSB) amplitude modulation (AM) type and shall have 4 kHz band width. PLCC Carrier terminal & Protection coupler shall be considered at both ends of line.

Wherever Fiber Optic/ OPGW based telecommunication terminal equipment (i.e. SDH/MUX) are being provided; the same shall be utilized for Data, Voice and line protection applications. For protection purposes, both end Digital Protection Couplers (DPCs) shall be included at both ends. However, for line protection application, back up communication channel/ link may be considered as per requirement so as to take care of OPGW/Telecommunication equipment outage.

Addition/ Modification/ shifting/ re-commissioning etc. as required of PLCC due to LILO of transmission lines shall be covered under the scope according to element wise detailed given below:-

S.No.	Detail of element (line)	Coverage under the scope
1	LILO of Sarojini Nagar (400KV)-Unnao (765KV) S/C line at 400KV Mohanlalganj S/S	Addition/ Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.
2	LILO of 400KV Lucknow (PGCIL)-Sultanpur 400KV S/C line at 400KV Mohanlalganj S/S.	Addition/ Modification/ shifting/ re-commissioning of PLCC shall be covered.
3	LILO of 765KV Ghatampur- Hapur (WUPPTCL) line at 765KV Rampur S/S.	PLCC panel shall be provided by respective S/S owner and Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.
4	LILO of 400KV Bareilly (PG)-Moradabad D/C lines at 765KV Rampur S/S.	PLCC panel shall be provided by respective S/S owner and Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.
5	LILO of 400KV Atour-Indirapuram (WUPPTCL) D/C line at 400KV GIS S/S sector 123 Noida.	PLCC panel shall be provided by respective S/S owner and Modification/ shifting/ re-commissioning of PLCC shall be covered under the scope.

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PLCC equipment for the transmission lines at serial 01 & 02 covered under the package (Consisting of one set of analog PLCC channel along with circuit protection coupler and one set of Digital Protection Coupler for both ends of one line segment due to LILO of existing line) shall be provided by the bidder. All other associated equipment for ends cabling, coupling device and HF cable shall also be provided by the bidder. 48 V DC Power supply for PLCC panels shall be provided by the respective substation bay owner. The wave traps, CVT's required for communications from PLCC shall be provided by respective substation owner.

4.1.13. Substation Support Facilities

Certain facilities required for operation & maintenance of substations as described below shall be provided in new substation. In existing substation, these facilities have already been provided and would be extended/ augmented, wherever required.

4.1.14. AC & DC Power Supplies

For catering to the requirements of three phase & single phase AC supply and DC supply for various substation equipment, the following arrangement is envisaged:-

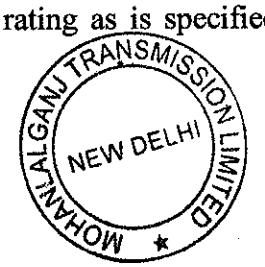
i) For LT Supply at each new Substation, two (2) nos. 630 kVA LT Transformers shall be provided out of which one shall be connected with SEB supply and other one shall be connected to tertiary of 400/220 kV transformer.

ii) SEB supply at 33kV level shall be connected to 630kVA LT transformer through 33kV AIS equipment i.e. LA, CT, PT, Isolators and breaker whereas tertiary supply of 400/220kV transformer shall be connected to LT transformer through 72.5kV AIS equipment.

iii) 2 Nos. batteries of 220V for control & protection and 2 Nos. 48V batteries for PLCC/ Communication equipment shall be provided at each new Substation. Each battery bank would have a float-cum-boost charger. Battery shall be of VRLA type.

iv) Suitable AC & DC distribution boards and associated LT Switchgear would be provided at new Substations. For Substation Extensions, existing facilities shall be augmented as required. For new substations following switch boards with minimum rating as is specified here under shall be considered with duplicate supply

a) 415V Main switch board – 1no.
b) AC distribution board – 1no.
c) Main lighting distribution board –1no.
d) Emergency lighting distribution board –1no.
e) 220 volt DC distribution board –2nos.
f) 48 volt DC distribution board –2nos.



v) In new Substations, one No. 250 KVA DG set shall be provided for emergency applications Sizing of Auxiliary system (like battery, charger, LT switchgear) may be done considering future bay requirements to avoid replacement in future with higher sizes.

4.1.15. Fire Fighting System

Fire fighting system in general conforms to fire insurance regulations of India. The fire fighting system is proposed with both AC motor & diesel engine driven pumps housed in a fire fighting pump house building along with water storage tank of adequate capacity. Automatic heat actuated emulsifying system is proposed for transformers & reactors. In addition for alarm system based on heat/smoke detectors are proposed to be installed at sensitive points in a substation e.g. Cable Vault, Control Room building and other buildings etc. Further, adequate water hydrants and portable fire extinguishers shall be provided in the substations. At existing substations the fire fighting systems if already available, would be extended for meeting the additional requirements.

4.1.16. Oil evacuating, filtering, testing & filling apparatus

To monitor the quality of oil for satisfactory performance of transformers, shunt reactors and for periodical maintenance necessary oil evacuating, filtering, testing and filling apparatus would be provided at new substations. Oil tanks of adequate capacities for storage of transformer oil would be provided.

4.1.17. Illumination

Adequate normal & emergency AC & DC illumination shall be provided in the control room, GIS hall & other buildings of the substation. The switchyard shall also be provided with adequate illumination. The entire control room building, fire fighting pump house lighting shall be done by LED based low power consumption luminaries

4.1.18. Control Room

Substation control room would be provided to house substation work station for station level control (SAS) along with its peripheral and recording equipment, AC & DC distribution boards, DC batteries & associated battery chargers, Fire Protection panels, Telecommunication panels & other panels as per requirements. Air conditioning will be provided in the building as functional requirements.

4.1.19. GIS Hall

The Gas Insulated Switchgear (GIS) of each voltage and other associated equipment shall be housed separately inside the GIS building. The panels i.e. Bay level units, bay mimic, relay and protection panels, RTCC panels, PLCC panels etc. are to be placed in a separate room in the GIS building. The size of the room shall be such that all the panels for the future bays/ diameters shall be accommodated in the above room. The panel room shall be air-conditioned. Further, the temperature of the room shall be monitored through substation automation system by providing necessary temperature transducers. Ventilation system of suitable capacity shall be provided for each GIS hall.

One EOT Crane, for each GIS hall, of suitable capacity shall be provided for erection & Maintenance of largest GIS component/ assembly and all plant installed in the GIS switchgear room. The crane shall be capable of fulfilling all special requirements for erection & maintenance of GIS equipment. The capacity of the crane shall be sized to lift the heaviest GIS switchgear component.

UHF sensors in GIS for PD (Partial Discharge) detection:

Adequate number of UHF sensors shall be provided in the offered GIS for detection of Partial discharge (of 5 pC and above as per IEC 60270). The number and location of these sensors shall be based on laboratory test on typical design of GIS as per recommendations of CIGRE Document No. 654 (Application Guide for sensitivity verification for UHF Partial discharge detection system for GIS).



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C. Specific Technical Requirement For Communication

In order to meet the requirement for grid management and operation of substations, Transmission Service Provider (TSP) shall conform to the following requirements.

On 765 kV S/C and 400 kV D/C transmission lines one earth wire and one OPGW containing 24 fibers is to be installed by the TSP in place of conventional earth wire during the construction of line for grid management and substation operation purpose by STU/CTU and 48 fibers to be installed on LILO lines. The installation of OPGW shall be done from gantry of one substation up to gantry of another substation and shall be terminated in a joint box by the TSP at both ends.

On 220 kV and 132 kV D/C lines one OPGW containing 24 fibers is to be installed in place of conventional earth wire for grid management and substation operation purpose by STU/ CTU and 48 fibers to be installed on LILO lines.

765 kV, 400 kV & 220 kV System Parameters

S. No.	Description of parameters	765 kV System	400 kV System	220 kV System
1.	System operating voltage	765 kV	400 kV	220 kV
2.	Maximum operating voltage of the system	800 kV	420 kV	245 kV
3.	Rated frequency	50 HZ	50 HZ	50 HZ
4.	No. of phase	3	3	3
5.	Rated Insulation levels			
	i. Full wave impulse withstand voltage (1.2/50 micro sec.)	2100 kVp	1550 kVp	1050 kVp
	ii. Switching impulse withstand voltage (250/2500 micro sec.) dry and wet	1550 kVp	1050 kVp	-
	iii. One minute power frequency dry withstand voltage (rms)	830 kV	630 kV	-
	iv. One minute power frequency dry and wet withstand voltage (rms)	-	-	460 kV
6.	Corona extinction voltage	508 kV	320 kV	156 kV
7.	Max. radio interference voltage for frequency between 0.5 MHz and 2 MHz at 508 kV rms for 765 kV system, 266kV rms for 400kV system and156kV rms for 220 kV system	2500 micro-volts	1000 micro-volts	1000 micro-volts
8.	Minimum Creepage distance for switchyard equipment (25mm/kV)	20000 mm	10500 mm	6125 mm
9.	Min. Clearances			
	i. Phase to phase	7600mm	4000mm	
		(for conductor - conductor configuration) 9400 mm (for rod- conductor configuration)	(for conductor - conductor configuration) 4200 mm (for rod - conductor configuration)	2100 mm
	ii. Phase to earth	4900mm (for conductor-		

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S. No.	Description of parameters	765 kV System	400 kV System	220 kV System
		structure) 6400mm (for rod-structure)	3500 mm	2100mm
	iii. Sectional clearances	10300mm	6500mm	5000mm
10.	Rated short circuit current for 1 sec. duration	40kA/ 50kA (as applicable)	40kA/ 50kA/ 63kA (as applicable)	40kA/ 50kA (as applicable)
11.	System neutral earthing	Effectively earthed	Effectively earthed	Effectively Earthed
12.	DC Voltage	220V	220V	110V

132 kV, 66 kV, 33 kV & 11 kV System

Sl. No.	Description of parameters	132 kV System	66 kV System	33 kV System	11kV System
1.	System operating voltage	132 kV	66 kV	33 kV	11 kV
2.	Maximum operating voltage of the system (rms)	145 kV	72.5 kV	36 kV	12 kV
3.	Rated frequency	50 Hz	50 Hz	50 Hz	50 Hz
4.	No. of phase	3	3	3	3
5.	Rated Insulation levels				
i)	Full wave impulse withstand voltage (1.2/50 micro sec.)	650 kVp	325 kVp	170 kVp	75 kVp
ii)	One minute power frequency dry and wet withstand voltage (rms)	275 kV	140 kV	70 kV	28 kV
6.	Corona extinction voltage	105 kV	-	-	-
7.	Max. radio interference voltage				
	for frequency between 0.5 MHz and 2 MHz at 92 kV rms for132 kV system	500 micro-volts	-	-	-
8.	Minimum creepage distance (25mm/kV)	3625mm	1813mm	900mm	300mm
9.	Min. Clearances				
i)	Phase to phase	1300mm	750mm	320mm	280mm
ii)	Phase to earth	1300mm	630mm	320mm	140mm
iii)	Sectional clearances	4000mm	3000mm	3000mm	3000mm
10.	Rated short circuit current for 1 sec. Duration	31.5 kA	31.5 kA	25 kA	25 kA
11.	System neutral earthing	Effectively earthed	Effectively earthed	Effectively earthed	Effectively earthed

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Note:

1. The above parameters are applicable for installations up to an altitude of 1000m above mean sea level. For altitude exceeding 1000m, necessary altitude correction factor shall be applicable.
2. The insulation and RIV levels of the equipment shall be as per values given in the respective chapter of the equipment.

11.0 Risk Analysis

11.1 Revenue Risk

Subject to provisions of Transmission Service Agreement (TSA), the Long Term Transmission Customers(LTTCs) shall pay to the TSP, in Indian Rupees, on monthly basis, the Monthly Transmission Charges from the date on which an Element(s) has achieved COD until the Expiry Date of this Agreement, unless terminated earlier, in line with the provisions of the TSA.

Quote:



10.11 Payment Security Mechanism:

10.11.1Establishment of Letter of Credit:

(a) Not later than one (1) Month prior to the Scheduled COD of the first Element of the Project, each Long Term Transmission Customer shall, through a scheduled bank, open a Letter of Credit in favour of the TSP, to be made operative from a date prior to the Due Date of its first Monthly Transmission Charge Invoice under this Agreement and shall be renewed annually.

(b) The draft of the proposed Letter of Credit shall be provided by each Long Term Transmission Customer to the TSP not later than the Financial Closure of the Project and shall be mutually agreed between the Parties.

(c) The Letter of Credit shall have a term of twelve (12) Months and shall be for an amount:

i. for the first Contract Year or for each subsequent Contract Year, equal to one point one (1.1) times the estimated average Monthly Transmission Charges based on Target Availability of the Elements or Project with Scheduled COD in such Contract Year, as the case may be;

ii. Provided that, the TSP shall not make any drawl before the Due Date and shall not make more than one drawal in a month.

Provided further that if at any time, such Letter of Credit amount falls short of the amount specified in Article 10.11.1, otherwise than by reason of drawal of such Letter of Credit by the TSP, the relevant Long Term Transmission Customer shall restore such shortfall within seven (7) days.

(d) Long Term Transmission Customers shall cause the scheduled bank issuing the Letter of Credit to intimate the TSP, in writing regarding establishing of such Letter of Credit.

(e) In case of drawal of the Letter of Credit by the TSP in accordance with the terms of this Article 10.11.1, the amount of the Letter of Credit shall be reinstated within seven (7) days from the date of such drawal.

(f) If any Long Term Transmission Customer fails to pay a Monthly Transmission Charge Invoice / Supplementary Bill or part thereof within and including the Due Date, then, unless an Invoice Dispute Notice is received by the TSP as per the provisions of Article 10.9.2, the TSP may draw upon the Letter of Credit, and accordingly the bank shall pay without any reference or instructions from the Long Term Transmission Customers, an amount equal to such Monthly Transmission Charge Invoice/Supplementary Bill or part thereof plus Late Payment Surcharge, if applicable, in accordance with Article 10.8 above, by presenting to the scheduled bank issuing the Letter of Credit, the following documents:

i. a copy of the Monthly Transmission Charge Invoice/Supplementary Bill which has remained unpaid by such Long Term Transmission Customer;

ii. a certificate from the TSP to the effect that the Invoice at item (i) above, or specified part thereof, is in accordance with the Agreement and has remained unpaid beyond the Due Date; and

iii. calculations of applicable Late Payment Surcharge, if any.

Provided that failure on the part of the TSP to present the documents for negotiation of the Letter of Credit shall not attract any Late Payment Surcharge on the Long Term Transmission Customers.

(g) Each Long Term Transmission Customer shall ensure that the Letter of Credit shall be renewed not later than thirty (30) days prior to its expiry.

(h) All costs relating to opening and maintenance of the Letter of Credit shall be borne by the Long Term Transmission Customers. However, the Letter of Credit negotiation charges shall be borne and paid by the TSP.

(i) If a Long Term Transmission Customer fails to pay (with respect to a Monthly Bill or Supplementary Bill) an amount exceeding thirty percent (30%) of the most recent undisputed Monthly Bill, for a period of seven (7) days after the Due Date and the TSP is unable to recover the amount outstanding to the TSP through the Letter of Credit,

(i) the TSP shall issue a notice to such Long Term Transmission Customer within seven (7) days from such period, with a copy to each of the other Long Term Transmission Customers, highlighting the non-payment of such amount by such Long Term Transmission Customer;

(ii) If such Long Term Transmission Customer still fails to pay such amount within a period of thirty (30) days after the issue of notice by TSP as mentioned in (i) above, the TSP shall approach the RLDC / SLDC (as the case may be) requesting for the alteration of the schedule of dispatch of the lowest cost power of such Long Term Transmission Customer(s) from the Central Generating Stations / State Generating Stations (as the case may be), and the RLDC / SLDC shall continue to reschedule the lowest cost power till all the dues of the TSP are recovered;

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-Provided that in this case, the quantum of electricity and the corresponding period in which it would be rescheduled for dispatch shall be corresponding to the amount of default. This electricity will then be dispatched to other utilities by the concerned RLDC/SLDC, as the case may be, during the peak hours, i.e., 7pm to 10 pm. The price of this electricity will be determined as per the UI rate;

-Provided further that the revenue from such diverted power

would be used to pay the dues first of the generating company (which would include the capacity charges as well as the energy charges) and the remainder would be available for covering the default amount and the balance (if any), after recovering both the charges, would be paid to the defaulting Long Term Transmission Customer.

UnQuote:

In case any or all LTTCs fails to pay Monthly or Supplementary Bills, due for payment shall be dealt as per the provisions mentioned in the TSA.

11.2 Regulatory Risk

Grant of transmission license or adoption of tariff by the Commission

11.3 Environmental Risk

Transmission line projects are environmentally friendly and do not involve any disposal of solid effluents and hazardous substance in land, air and water. Moreover, in forest areas trees are felled below each conductor to facilitate stringing. On completion of construction only one such strip is maintained for O&M purpose. Therefore, the actual loss of forest is restricted to some selected area only. However, as per the requirement of Forest (Conservation) Act, 1980 approval of Ministry of Environment & Forests, Govt. of India for diversion of forest land shall be taken before construction of line and compensatory afforestation shall be done on double the area of degraded forest land to compensate the loss of vegetation, due to diversion of forest land if there is any after detailed survey.

11.4 Legal / Contractual Risks

The procurement practices are in line with best practices followed internationally. Further, requisite due diligence is carried out prior to award of contracts which inter-alia includes assessment of capacity and capability of bidders to perform the contract, thereby mitigating contractual risks.

The legal framework governing the contracts in India is well established and finally in place. As such, there is minimal probability of any legal risk.

11.5 Project Management Risks

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With the experience of the holding company in the area of construction of 400kV and 765kV long Inter-state Transmission lines and associated substations and also transmission projects situated in the state of Uttar Pradesh, the risks shall be mitigated.

With experienced pool of manpower in implementation of its projects, all efforts shall be made to achieve the target making probability of impact of Project Management Risks to minimal.

12. Operation and Maintenance of the Project

The MTL shall be responsible for ensuring that the Project is operated and maintained in accordance with the Indian Electricity Grid Code (IEGC) / State Grid Code (as applicable), Transmission License, directions of National Load Dispatch Centre / RLDC / SLDC (as

applicable), Prudent Utility Practices, other legal requirements including the terms of Consents, Clearances and Permits and is made available for use by the Transmission Customers as per the provisions of applicable regulations including but not limited to the Central Electricity Regulatory Commission (Open Access in Inter-state Transmission) Regulations, 2008, Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-state Transmission and related matters) Regulations, 2009, Uttar Pradesh Electricity Regulatory Commission (Terms and Conditions for Open Access) Regulations, 2004 (as the case may be), Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006, and the Central Electricity Authority (Grid Standards) of Operation and Maintenance of Transmission Lines Regulations, 2010 as amended from time to time and provisions of this Agreement

The SPV shall operate and maintain the Project in an efficient, coordinated and economical manner and comply with the directions issued by the National Load Dispatch Centre, RLDC or the SLDC, as the case may be, in line with the provisions of the Electricity Act 2003 and Rule 5 of the Electricity Rules, 2005, and as amended from time to time.

The TSP shall abide by the Safety Rules and Procedures during the Operation Period as mentioned in TSA.

13. O&M manuals

a) Adequate O & M manuals shall be kept at all required places as per the practice and policy of the company.

b) O & M manuals will be available to all concerned prior to commissioning of substations and transmission lines to avoid problems in preparation of commissioning documents as well as proper installation & commissioning of equipment.

14. Approval and Clearances

Following approval and clearances need to be obtained as per the from the various authorities at different stages of Project. Close follow up will be exercised for timely approval

Sl. No.	Statutory Clearances	Concerned Authority	Remarks
Required prior to Construction:			
1.	Approval Under Section 68 of E.A.2003	GOUP	Received
2.	Approval Under Section 164 of E.A.2003	GOUP	To be obtained
3.	Transmission License	UPERC	To be obtained
4.	Tariff Adoption	UPERC	To be obtained
Required during/after Construction:			
5	Forest Approval	MoEF	To be obtained during Construction. Required for particular stretch of line passing through forest.
6.	Aviation	AAI	Before Charging of Line, as required.
7.	PTCC Clearance	GOUP	Before Charging of Line.
8.	Power Line Crossing	Concern Utility	During Construction. Required for particular crossing span.
9.	Railway Crossing	Railway Authority	During Construction. Required for particular crossing span.

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10	National Highway Crossing	NHAI	During Construction. Required for particular crossing span.
11	Ministry of Defense	MoD	Before Charging of Line, as required.
12	Inland Waterway Authority of India Ministry of Shipping, GoI	IWAI	During Construction. Required for particular river
13	Final Charging Clearance approval	STU/SLDC/CEA	Before charging of system, as applicable
14	Renewal of Transmission License	SERC	Before completion of 25 years from Issuance of License

*GOUP- Government of Uttar Pradesh

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Annexure-10 (AA1)

Section -68 Approval

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ATTESTED TRUE COPY
Attested from Pg 708 to 712
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

समयबद्ध

संख्या–631/24–1–2022–108/2022

प्रेषक,

एम0 देवराज,
प्रमुख सचिव,
उ0प्र0 शासन।

सेवा में,

प्रबन्ध निदेशक,
उ0प्र0 पावर ट्रान्समिशन कारपोरेशन लि0,
शक्ति भवन, लखनऊ।

ऊर्जा अनुभाग–1 लखनऊः दिनांक 21 मई, 2022

विषयः– 400 के0वी0 जी0आई0सी0 उपकेन्द्र मोहनलालगंज लखनऊ (तत्सम्बधित 400 के0वी0 लाइनों सहित) तथा अन्य 765 के0वी0 एवं 400 के0वी0 लीलो लाइनों के निर्माण टी0बी0सी0बी0 पद्धति से कराये जाने हेतु विद्युत अधिनियम–2003 के सेक्सन–68 के तहत ओवर हेड लाइनों के निर्माण हेतु अनुमति प्रदान किये जाने के सम्बंध में।

महोदय,

उपर्युक्त विषयक अपने पत्र संख्याः–86/उ0प्र0पा0ट्रा0का0लि0/मोहनलालगज/सेक्सन–68/टी0बी0सी0बी0, दिनांक 13.05.2022 का संदर्भ ग्रहण करें।

2– इस सम्बंध में मुझे यह कहने का निदेश हुआ है कि प्रश्नगत प्रकरण में सम्यक विचारोपरान्त 400 के0वी0 जी0आई0सी0 उपकेन्द्र मोहनलालगंज लखनऊ (तत्सम्बधित 400 के0वी0 लाइनों सहित) तथा अन्य 765 के0वी0 एवं 400 के0वी0 लीलो लाइनों के निर्माण टी0बी0सी0बी0 पद्धति से कराये जाने हेतु विद्युत अधिनियम–2003 की धारा–68 की उपधारा–1 के अधीन निम्नलिखित कार्यों को सम्पादित कराये जाने हेतु **'मैसर्स मोहनलालगंज ट्रांसमिशन लिमिटेड'** को अधिकृत किया जाता हैः–

(अ) 400/220/132 के0वी0 जी0आई0एस0 उपकेन्द्र, मोहनलालगंज का निर्माण कार्य एवं सम्बन्धित लाइनों सहित :

क्र0सं0	पारेषण अवयवों का विवरण
1	2X500+2X200 एम0वी0ए0, 400/220/132 के0वी0, जी0आई0एस0 उपकेन्द्र मोहनलालगज (लखनऊ) का निर्माण (125 एम0वी0ए0आर0 बस रिएक्टर सहित):
	i 400 के0वी0, 500 एम0वी0ए0 आई0सी0टी0 'बे'– 02 नग
	ii 220के0वी0, 500 एम0वी0ए0 आई0सी0टी0 'बे'– 02 नग
	iii 220 के0वी0, 200 एम0वी0ए0 आई0सी0टी0 'बे'– 02 नग
	iv 132 के0वी0, 200 एम0वी0ए0 आई0सी0टी0 'बे'– 02 नग
	v 400 के0वी0, 125 एम0वी0ए0आर0 बस रिएक्टर 'बे'–01 नग
	vi 400के0वी0, फीडर 'बे'– 04 नग
	vii 220के0वी0 फीडर 'बे'– 06 नग
	vili 132के0वी0 फीडर 'बे'– 02 नग।
	भविष्य में विस्तार हेतु निम्नलिखित अतिरिक्त 'बे' का निर्माण
	i 400के0वी0. फीडर 'बे' – 02 नग
	ii 220के0वी0 फीडर 'बे' –– 04 नग

SE/PPO
23/5/22

Sr Adv(Law)

प्रबन्ध निदेशक
उ0प्र0 पा0 ट्रा0 का0 लि0

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

	iii 132 के0वी0 फीडर 'बे' – 04 नग
2	सरोजनीनगर (400 के0वी0) – उन्नाव (765 केवीव) 400 के0वी0 एस0सी0 लाइन का 400 के0वी0 जी0आई0एस0 उपकेन्द्र मोहनलालगंज पर लीलो (दिवन मूज कण्डक्टर पर)।
3	लखनऊ (पी0जी0) 400 के0वी0 – सुल्तानपुर (400 के0वी0) एस0सी0 लाइन का 400 के0वी0 जी0आई0एस0 उपकेन्द्र मोहनलालगंज पर लीलो (दिवन मूज कण्डक्टर पर)।

(ब) लीलो लाइनों का निर्माण

क०सं०	पारेषण अवयवों का विवरण
1	765 के0वी0 घाटमपुर – हापुड़ (डब्लू०यू०पी०पी०टी०सी०एल०) लाइन का 765 के0वी0 जी0आई०एस० उपकेन्द्र रामपुर पर लीलो (02 एकल पथ क्वाड बर्सिमिस) गंगा रीवर क्रासिंग सहित ।
2	400 के0वी0 बरेली (पी0जी0) – मुरादाबाद डी0सी0 लाइन के एक सर्किट का 765 के0वी0 जी0आई0एस0 उपकेन्द्र रामपुर पर लीलो।

(स) लीलो लाइनों का निर्माण मोनोपोल पर

क०सं०	पारेषण अवयवों का विवरण
1	400 के0वी0 अटौर (डब्लू०यू०पी०पी०टी०सी०एल०) – इन्दिरापुरम (डब्लू0यू०पी०पी०टी०सी०एल०) डी0सी0, क्वाड मूज लाइन के एक सर्किट का मोनोपोल (क्वाड मूज) पर 400के0वी0 जी0आई0एस0 उपकेन्द्र सेक्टर–123, नोएडा पर लीलो।

3– उपरोक्त अनुमोदन निम्नलिखित शर्तों एवं प्रतिबन्धों के अधीन होगा:–

(1) विद्युत अधिनियम 2003 जैसा कि समय समय पर संशोधित किया गया, के नियमों एवं विनियमों के अनुपालन सुनिश्चित किया जायेगा।

(2) ओबर हेड लाइनों के सम्बंध में भारतीय विद्युत नियमावली 1956, जब तक कि वह विद्युत अधिनियम, 2003 के अन्तर्गत बताये गये नियमों से प्रतिस्थापित न कर दी जाय, के द्वारा अधिष्ठापित नियमों का अनुपालन भी सुनिश्चित किया जाय।

(3) **'मैसर्स मोहनलालगंज ट्रांसमिशन लिमिटेड'** द्वारा टी0एस0पी0 के समस्त प्राविधानों का अनुपालन किया जायेगा और परियोजना का निर्माण कार्य परियोजना हेतु निर्धारित समयावधि तक पूर्ण किया जाय।

(4) शासन द्वारा परियोजना हेतु निर्धारित समयावधि पूर्ण होने से पूर्व एक माह की नोटिस देकर उपरोक्त अनुमोदन/अनुमति वापस लिया जा सकता है।

4– कृपया प्रकरण में तदनुसार अग्रेतर कार्यवाही सुनिश्चित करने का कष्ट करें।

भवदीय,

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

(एम0 देवराज)
प्रमुख सचिव।

PFC CONSULTING LTD.

पीएफसी कंसल्टिंग लिमिटेड
(पावर फाइनेंस कॉर्पोरेशन लिमिटेड की पूर्णतःस्वामित्वाधीन सहायक कंपनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)
CIN : U74140DL2008GOI175858

Ref.:04/ITP-45/2021-22/MTL

May 30, 2022

To
Principal Secretary (Energy),
Govt. of Uttar Pradesh,
Bapu Bhawan, Secretariat,
Lucknow, Uttar Pradesh-226001
Email: cmd@uppcl.org;

Sub: Prior approval of the Govt. for laying of overhead transmission lines under Section 68 of the Electricity Act, 2003 for the Transmission System for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida"

Ref: GoUP letter No. 631/24-1-2022-108/2022 dated 21.05.2022

Sir,

This is with reference to the Govt. of U.P. approval communicated vide letter dated 21.05.2022 referred above for laying of overhead transmission lines under Section 68 of the Electricity Act, 2003 for the subject transmission project.

It may be noted that one of the element in the scope of the subject transmission project was amended and the revised scope of the subject transmission project is as given below:

S. No.	Name of the Transmission Element
A)	**Construction of 400/ 220/132 kV GIS substation Mohanlalganj (Lucknow) with associated 400 kV Lines:-**
1.	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor) i. 400 kV 500 MVA ICT bay - 02 nos. ii. 220 kV 500 MVA ICT bay - 02 nos. iii. 220 kV 200 MVA ICT bay - 02 nos. iv. 132 kV 200 MVA ICT bay - 02 nos. v. 400 kV 125 MVAR Bus Reactor bay - 01 no. vi. 400 kV Feeder bay - 04 nos. vii. 220 kV Feeder bay - 06 nos. viii. 132kV Feeder bay - 02 nos. Construction of following extra bay for future extension i. 400 kV Feeder bay - 02 nos. ii. 220 kV Feeder bay - 04 nos. iii. 132kV Feeder bay - 04 nos.

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2.	LILO of Sarojninagar (400kV) - Unnao (765kV) 400 kV SC line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor)
3.	LILO of Lucknow (PG) 400 kV - Sultanpur (400kV) SC line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor)
B) Construction of LILO Line	
1.	LILO of 765 kV Ghatampur- Hapur (WUPPTCL) line on 765 kV GIS Rampur with River crossing
2.	LILO of one circuit 400 kV Bareilly (PG) - Muradabad DC line on 765 kV GIS S/S Rampur
C) Construction of LILO lines on Monopole	
1.	LILO of one circuit on monopole **or any other suitable lattice structure in compliance to related IS-802 of CEA guideline** of 400 kV Ataur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida

In view of above, it is requested that the approval under Section 68 of the Electricity Act, 2003 (as issued earlier) may be amended in line with the revised scope of the transmission project as mentioned above.

Thanking you,

Yours Sincerely,

(Sanjay Nayak)
General Manager

Copy to:

1. **Director (Work & Projects),** U.P. Power Transmission Corporation Limited, 7th Floor, Shakti Bhawan, 14 Ashok Marg, Lucknow, Uttar Pradesh - 226001

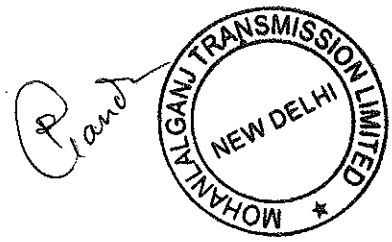
2. **Sh. Neeraj Swaroop, Superintendent Engineer,** U.P. Power Transmission Corporation Limited, 15th Floor, Shakti Bhawan Ext., 14 Ashok Marg, Lucknow, Uttar Pradesh – 226001

3. **Sh. B. Vamsi Rama Mohan, Chief General Manager,** Power Grid Corporation of India Limited, "Saudamini", Plot No. 2, Sector – 29, Gurgaon – 122001, Haryana

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Annexure-10 (AA2)

List of Long Term Transmission Customers



List of LTTCs as per Schedule -1 of Transmission Service Agreement (TSA)

Sl. No.	Name of the Long Term Transmission Customer	Address of Registered Office	Allocated Project Capacity (in MW)
1.	Pashchimanchal Vidyut Vitaran Nigam Ltd.	Hydel Colony, Victoria Park, Meerut-250001 E-mail:- md@pvvnl.org Fax: 0121-2666062	31%
2.	Purvanchal Vidyut Vitaran Nigam Ltd.	Vidhut Nagar, Bhikharipur, P.O. DLW, Varanasi- 221010 E-mail:- mdpurvanchalvvnl@gmail.com Fax; 0542-2319158 Phone; 0542-2318437	24%
3.	Dakshinanchal Vidhyut Vitaran Nigam Ltd.	Urja Bhawan, Nh-2 9 Agra-Delhi bypass Road0 Sikandra, Agra-282002 E-mail:- dvvnlmd@gmail.com Fax: 0562-2605465 Phone; 0562-2605699	22%
4.	Madhyanchal Vidyut Vitaran Nigam Ltd.	4A, Ghokle Marg, Lucknow – 226001 E-mail:- md.mvvnl2010@gmail.com Fax: 0522-2208737	19%
5.	Kanpur Electricity Supply Co. Ltd.	Kesa House, 14/17 Civil lines, Kanpur-208001 E-mail:- md@kesco.co.in Phone: 0512-2530832	4%

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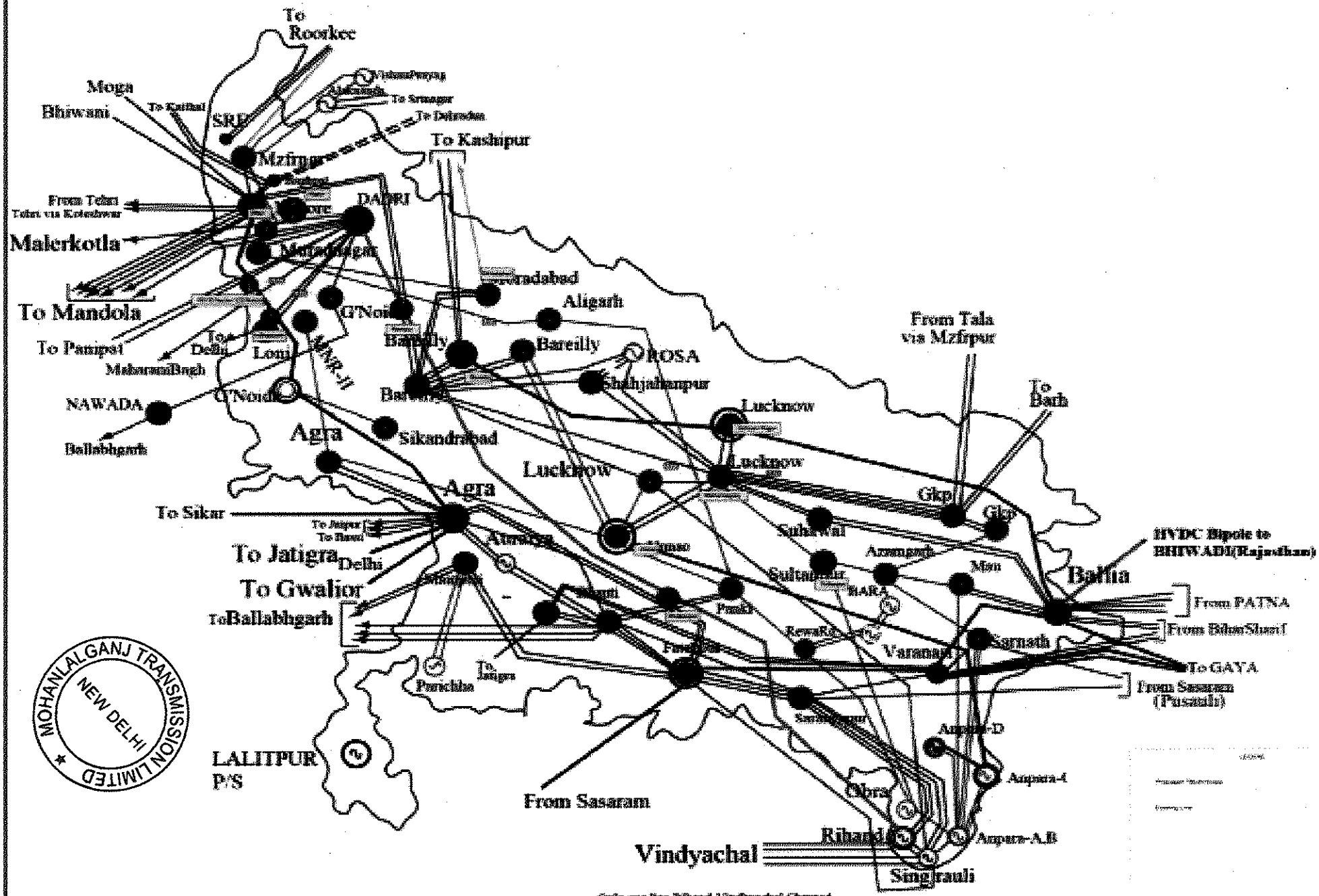
Annexure-10 (AA3)

Maps of the proposed area of licence showing the route of the transmission line

MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

ATTESTED TRUE COPY
Attested from pg 715 to 730
Authorised Signatory
MOHANLALGANJ TRANSMISSION LIMITED

UP TRANSMISSION NETWORK-400&765KV





As furnished by BPC

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NEW DELHI

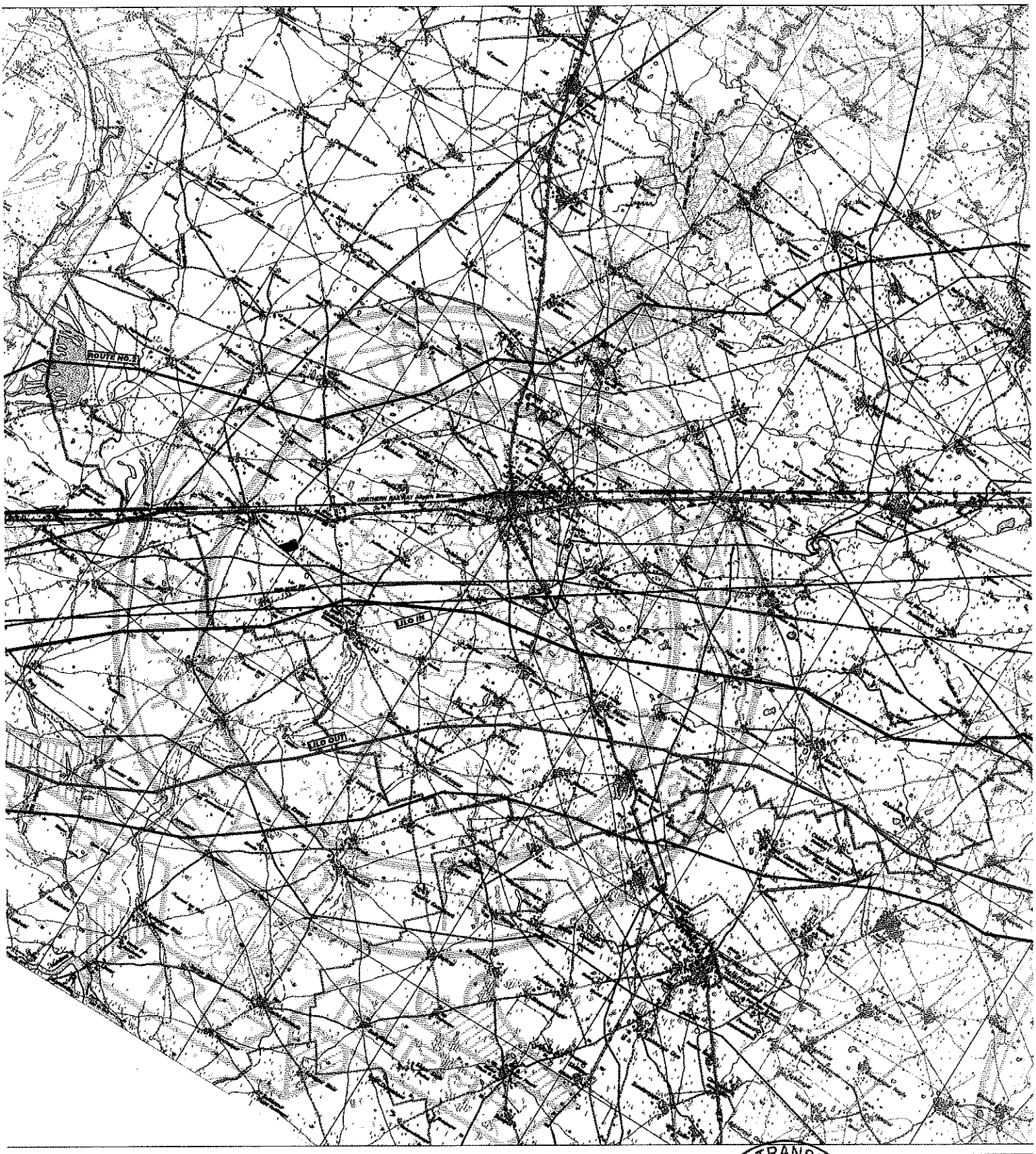
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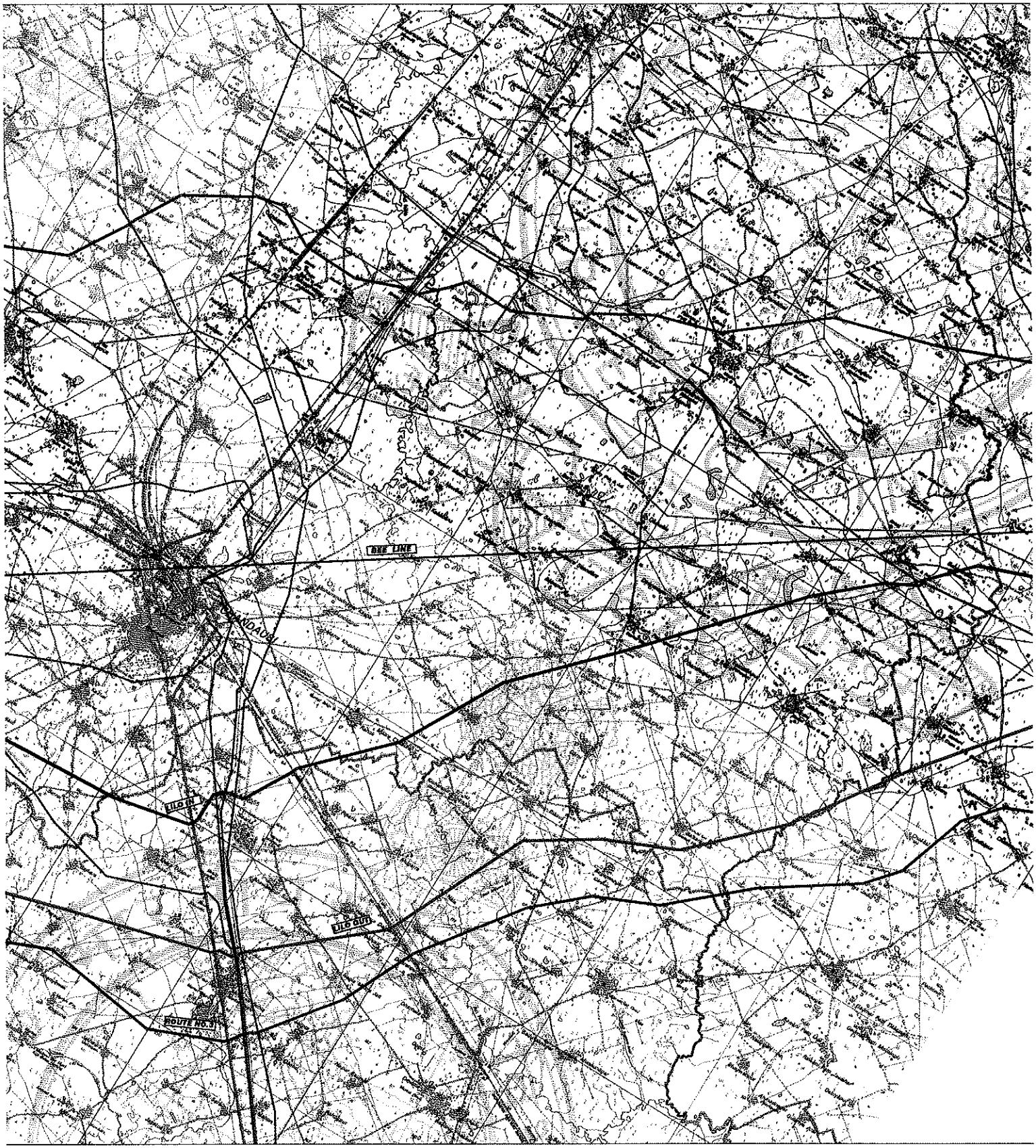


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NEW DELHI

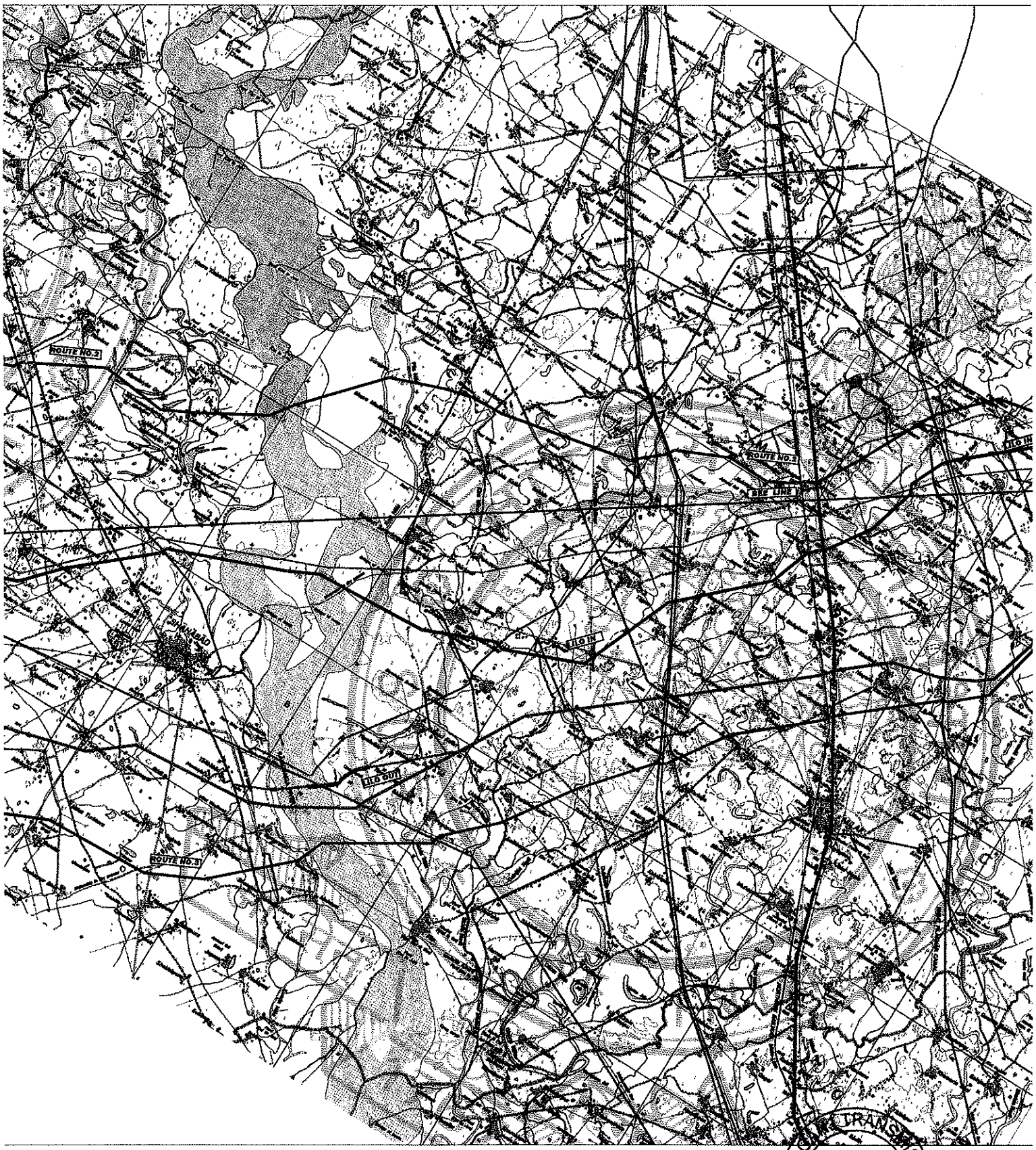


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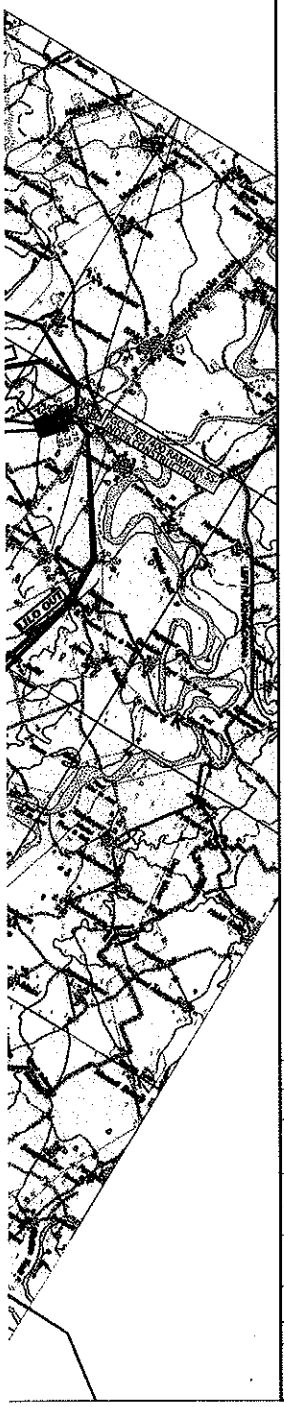
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ROUTE ON SOI MAPS

LILO of one ckt. of 400KV Bareilly (PGCIL) - Moradabad D/C Line at 765 GIS S/S RAMPUR



LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
Proposed route		River	
Roads Asphalted/metalled		Pond	
Roads unmetalled		Forest	
Cart-track		Development	
Railways broad gauge		Temple / Mosque / Grave	
Railways other gauge		Hutments	
Canal		Tree	
Stream / Nala / Drain		Wells - lined, unlined	
Contours with height	200	Borewells	
Power / Telephone line		Reserved/Protected forest	RF / PF
Scrub		Height triangulated	△200
Boundary State		Height point	200
Boundary District		Bench mark	BM 200
Boundary Mandal		Post office	PO
Towns / Villages		Police station	PS
EXST. EHV Transmission lines			

LEGEND - 1

SL No.	DESCRIPTION	ROUTE
1	BEE LINE OF LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE	
2	R -1 OF LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE	
3	R -2 OF LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE	
4	R -3 OF LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE	

CHECKED BY / DATE PFC | RECOMMENDED BY / DATE PFC | APPROVED BY / DATE PFC

PREPARED BY / DATE

REV. NO.	DATE	DESCRIPTION
00		

CLIENT: PFC CONSULTING LIMITED
(A Wholly Owned Subsidiary of Power Finance Corporation Limited)
New Delhi

CONSULTANT: M/s. PRASAD SURVEYORS
FL-1,Mudgal Niwas,Near Devdhar Hospital
Pimpri Pune -17,prasadsurveyors@gmail.com
PH.No-020-27416969

PROJECT: Services for survey and preparation of report for Transmission System for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO and other (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida".

DRAWING TITLE: LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE

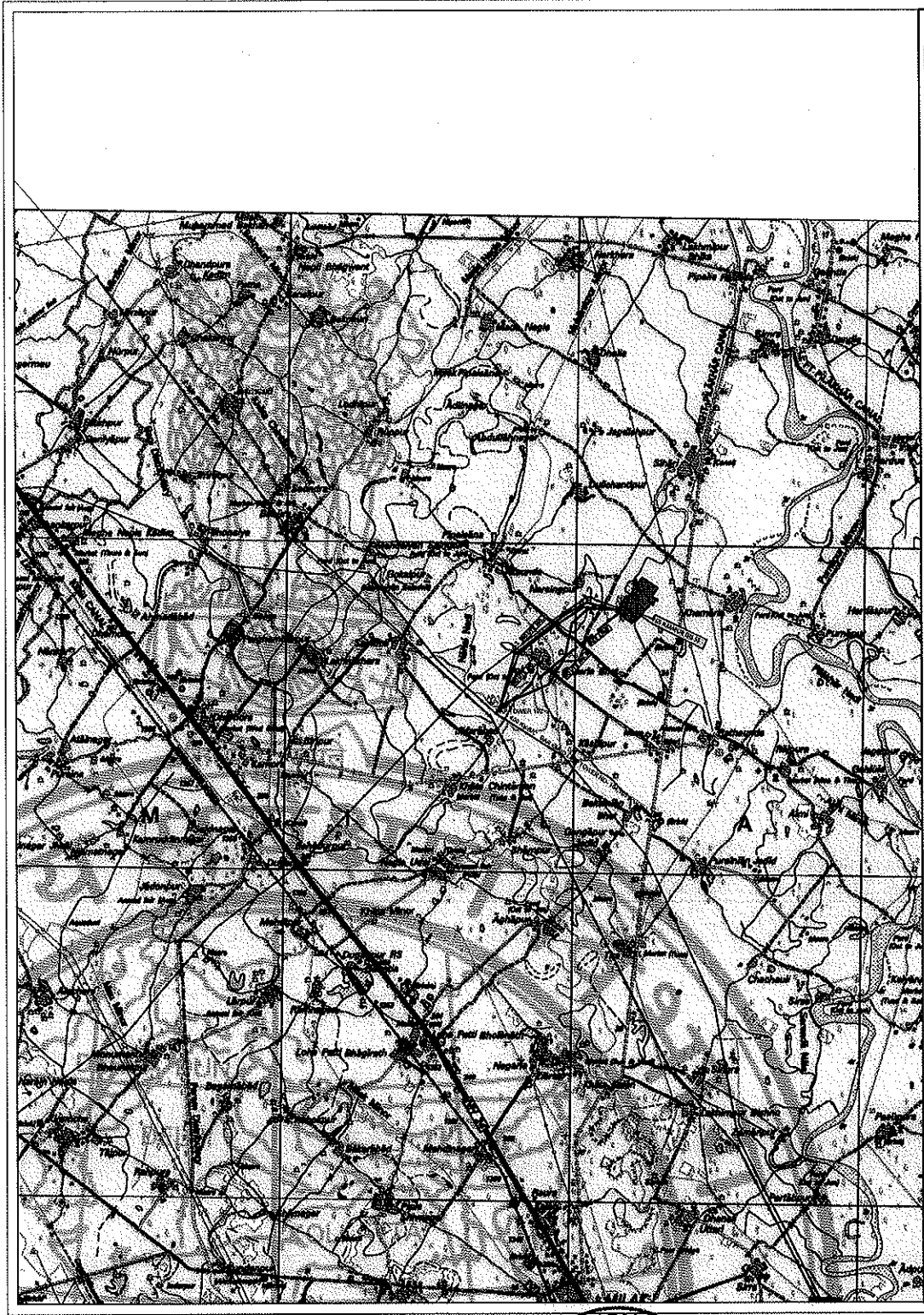
SCALE	DRG. No.	SHEET NO.
1:40,000	Ps/GHATAMPURTo HAPUR LILE AT 765RAMPUR	01 / 01

6/6

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MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

As furnished by BPC



ROUTE ON SOI MAPS

LILO of one ckt. of 400kV Bareilly (PGCIL) - Moradabad D/C Line at 765 GIS S/S RAMPUR

LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
Proposed route		River	
Roads Asphalt/Metalled		Pond	
Roads unmetalled		Forest	
Cutchroads		Development	
Railways broad gauge		Temple / Mosque / Grave	
Railways other gauge		Hutments	
Canal		Tree	
Stream / Nala / Drain		Wells - lined, unlined	
Contours with height		Barracks	
Power / Telephone line		Reserved/Protected forest	RF / PF
Aerials		Height triangulated	▲200
Boundary State		Height point	200
Boundary District		Bench-mark	BM 200
Boundary Mandal		Post office	PO
Towns / Villages		Police station	PS
EXIST. 33kV Transmission lines			

LEGEND - 1

SL. NO.	DESCRIPTION	ROUTE
1	86E LINE OF LILO OF ONE CKT. OF 400kV BAREILLY (PGCIL) - MORADABAD DC LINE AT 765 GIS 86 RAMPUR TRANSMISSION LINE	
2	R-1 OF LILO OF ONE CKT. OF 400kV BAREILLY (PGCIL) - MORADABAD DC LINE AT 765 GIS 86 RAMPUR TRANSMISSION LINE	
3	R-2 OF LILO OF ONE CKT. OF 400kV BAREILLY (PGCIL) - MORADABAD DC LINE AT 765 GIS 86 RAMPUR TRANSMISSION LINE	
4	R-3 OF LILO OF ONE CKT. OF 400kV BAREILLY (PGCIL) - MORADABAD DC LINE AT 765 GIS 86 RAMPUR TRANSMISSION LINE	

CHECKED BY / DATE	RECOMMENDED BY / DATE	APPROVED BY / DATE
PFC	PFC	PFC

PREPARED BY / DATE

REV. NO.	DATE	DESCRIPTION
00		

CLIENT: PFC CONSULTING LIMITED
(A Wholly Owned Subsidiary of Power Finance Corporation Limited)
New Delhi

CONSULTANT: M/s. PRASAD SURVEYORS
FL-1,Mudgal Niwas,Near Dewdhar Hospital
Pimpri Pune -17,prasadsurveyors@gmail.com
PH.No-020-27416909

PROJECT: Services for survey and preparation of report for Transmission System for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO and other (Quad Moose on Monopole) at 400kV GIS Substation, Sector 125 Noida".

DRAWING TITLE: LILO OF ONE CKT. OF 400kV BAREILLY (PGCIL) - MORADABAD DC LINE AT 765 GIS 86 RAMPUR TRANSMISSION LINE

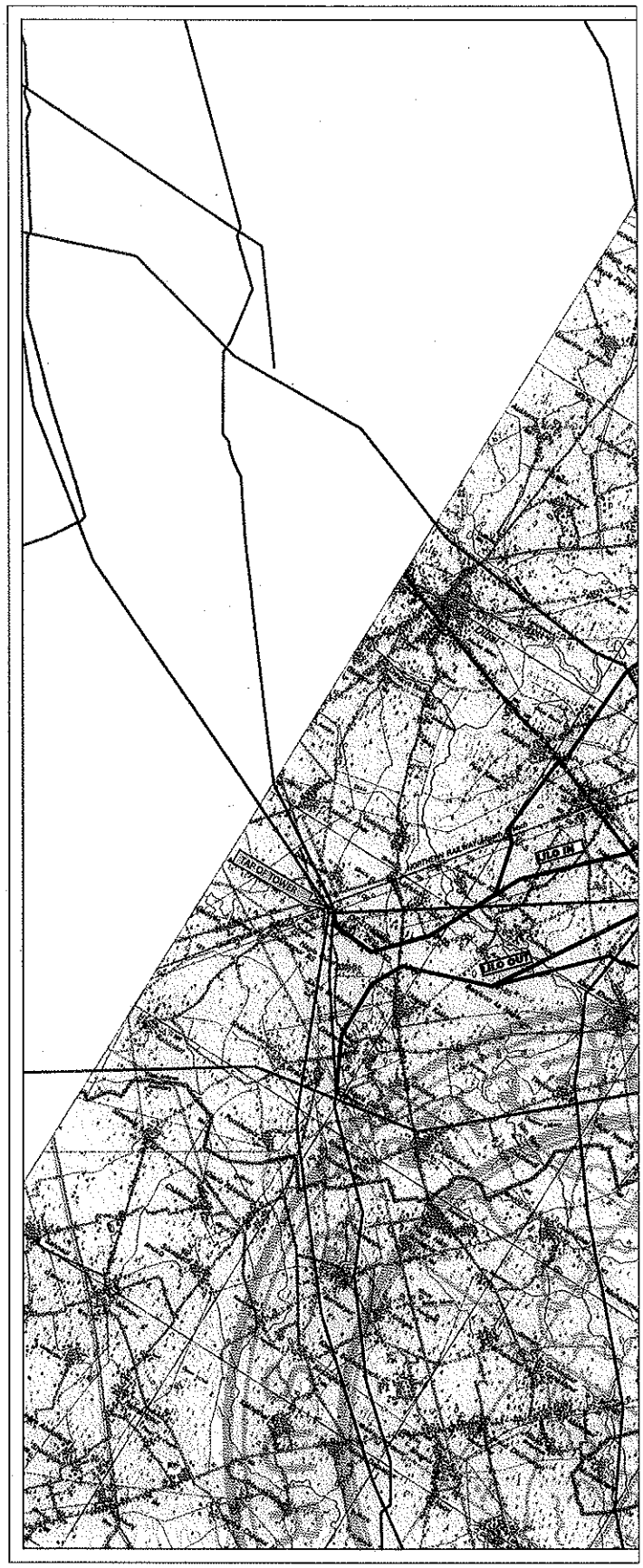
SCALE	DRG. No.	SHEET NO.
1:40,000	PARRAY BAREILLY (PGCIL) - MORADABAD DC AT 765 GIS 86 RAMPUR	01 / 01

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

1/1

As furnished by BPC

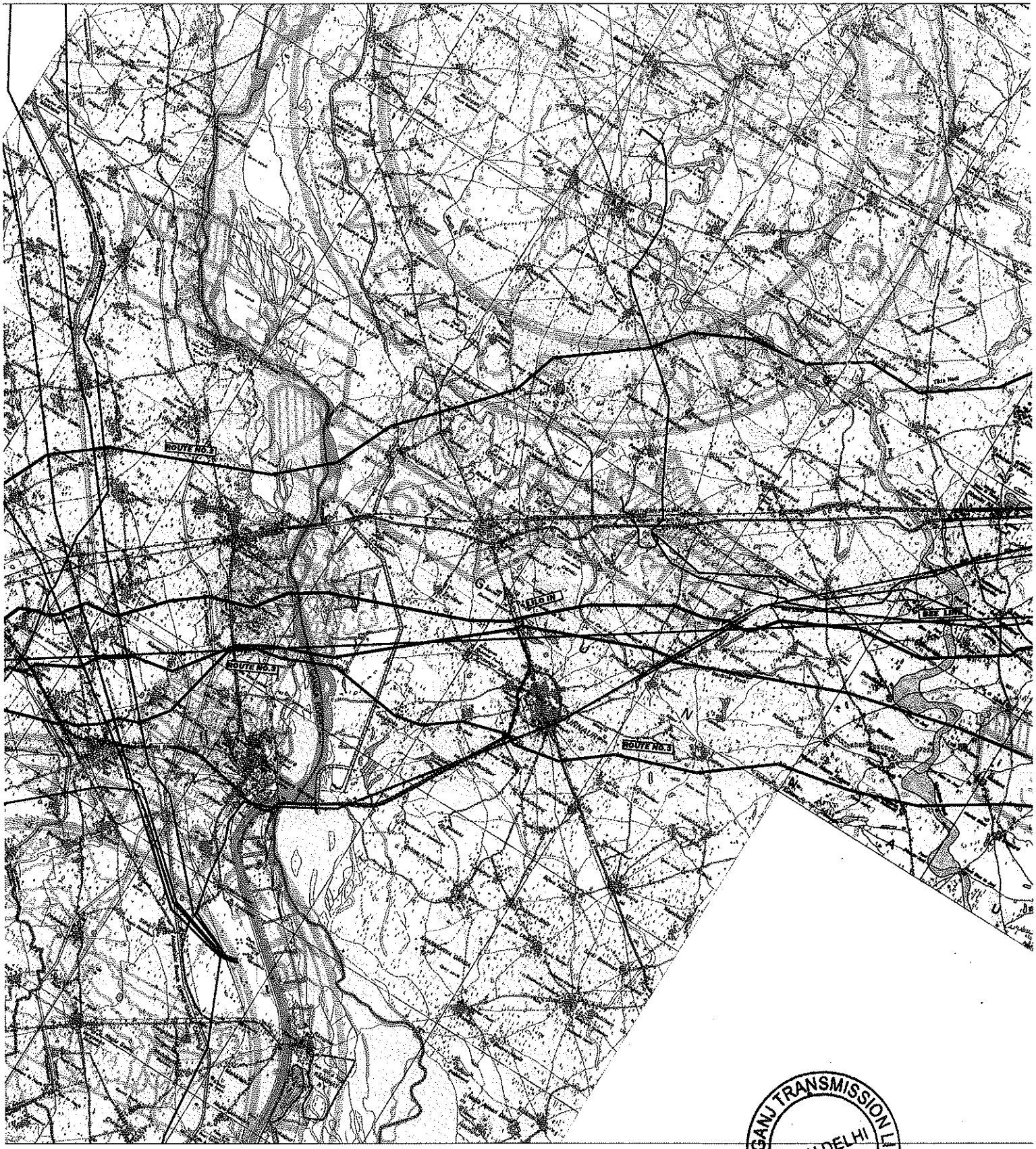
722



MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

As furnished by BPC

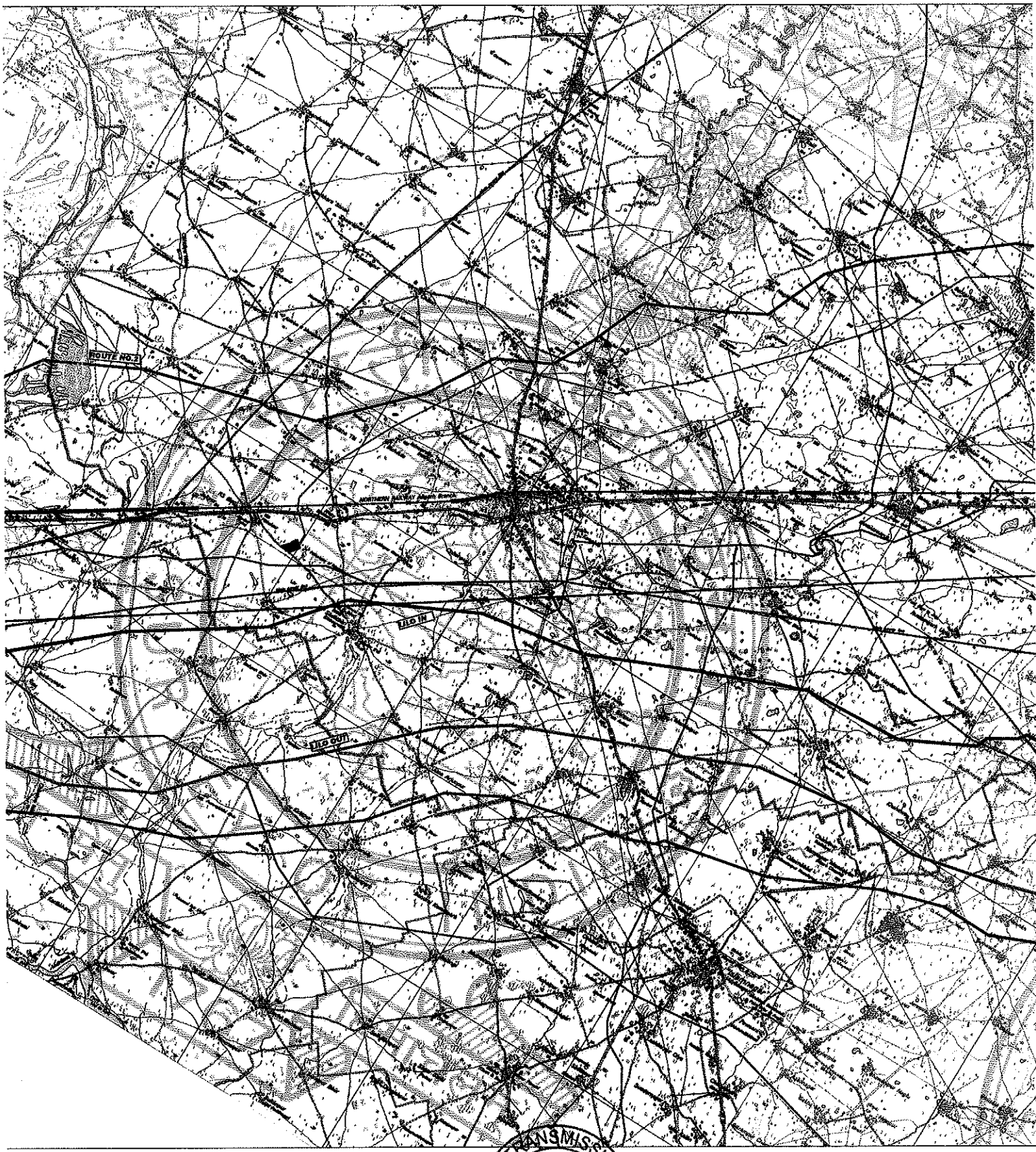
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MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

724 As furnished by BPC

2/6

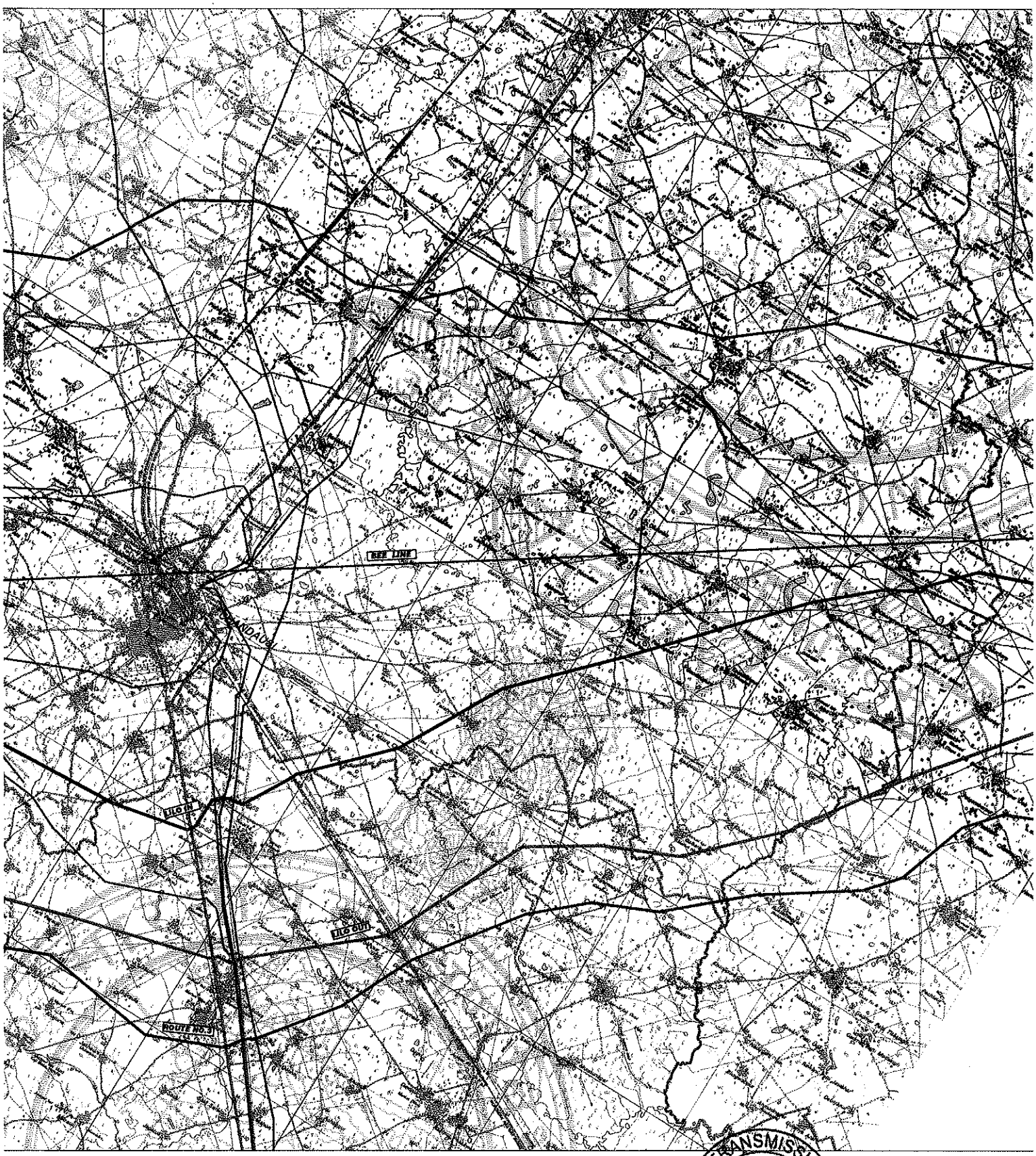


MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

725

As furnished by BPC

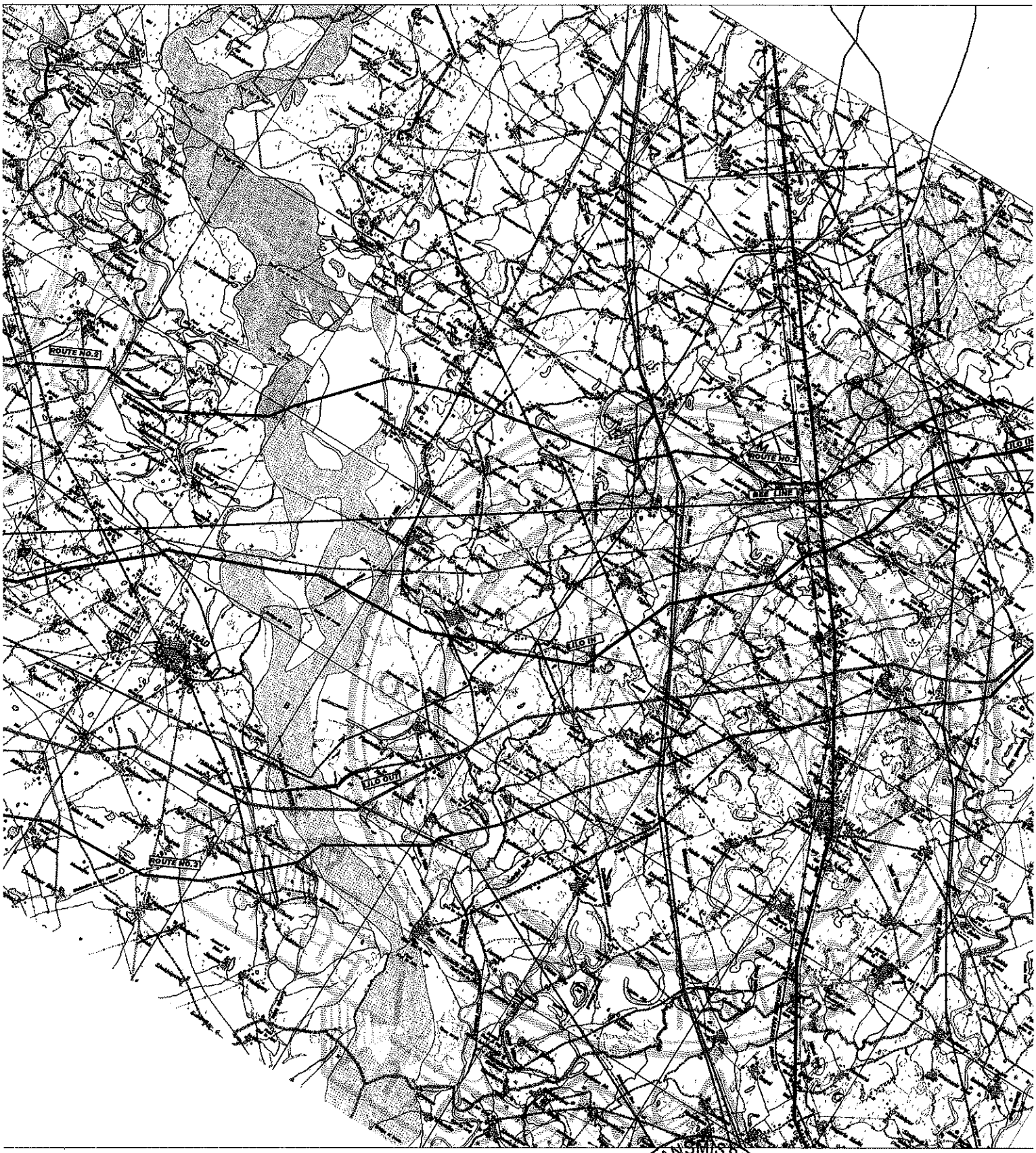
3/6



726

As furnished by BPC 4/6

MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI



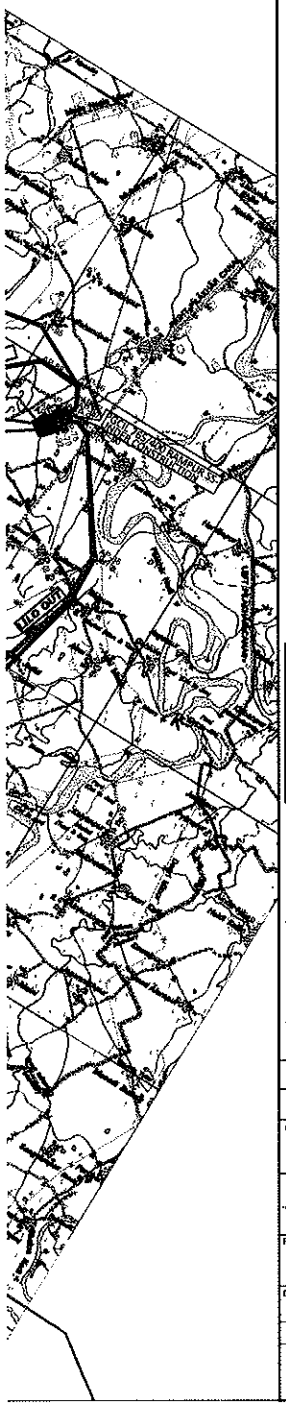
727

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MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

ROUTE ON SOI MAPS

LILO of one ckt. of 400KV Bareilly (PGCIL) - Moradabad D/C Line at 765 GIS S/S RAMPUR



LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
Proposed route		River	
Roads Asphalted/Metalled		Pond	
Roads unmetalled		Forest	
Cart-track		Development	
Railways broad gauge		Temple / Mosque / Grave	
Railways other gauge		Hutments	
Canal		Tree	
Stream / Nala / Drain		Wells - lined, usained	
Contours with height	200	Borewells	A
Power / Telephone line		Reserved/Protected forest	RF / PF
Scrub		Height triangulated	△200
Boundary State		Height point	200
Boundary, District		Benchmark	BM 200
Boundary Mandal		Post office	PO
Towns / Villages		Police station	PS
EXST. EHV Transmission lines			

LEGEND - 1

Sl. No.	DESCRIPTION	ROUTE
1	BEE LINE OF LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE	
2	R-1 OF LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE	
3	R-2 OF LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE	
4	R-3 OF LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE	

CHECKED BY / DATE	RECOMMENDED BY / DATE	APPROVED BY / DATE
PFC	PFC	PFC

PREPARED BY / DATE

REV. NO.	DATE	DESCRIPTION
00		

CLIENT: PFC CONSULTING LIMITED
(A Wholly Owned Subsidiary of Power Finance Corporation Limited)
New Delhi

CONSULTANT: M/s. PRASAD SURVEYORS
FL-1,Mudgal Niwas,Near Devdhar Hospital
Pimpri Pune -17,prasadsurveyors@gmail.com
PH.No-020-27416969

PROJECT	Services for survey and preparation of report for Transmission System for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO and other (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida".
DRAWING TITLE	LILO IN & OUT UNDER CONSTRUCTION 765KV SC GHATAMPUR TO HAPUR LILE AT 765RAMPUR GIS SSTRANSMISSION LINE

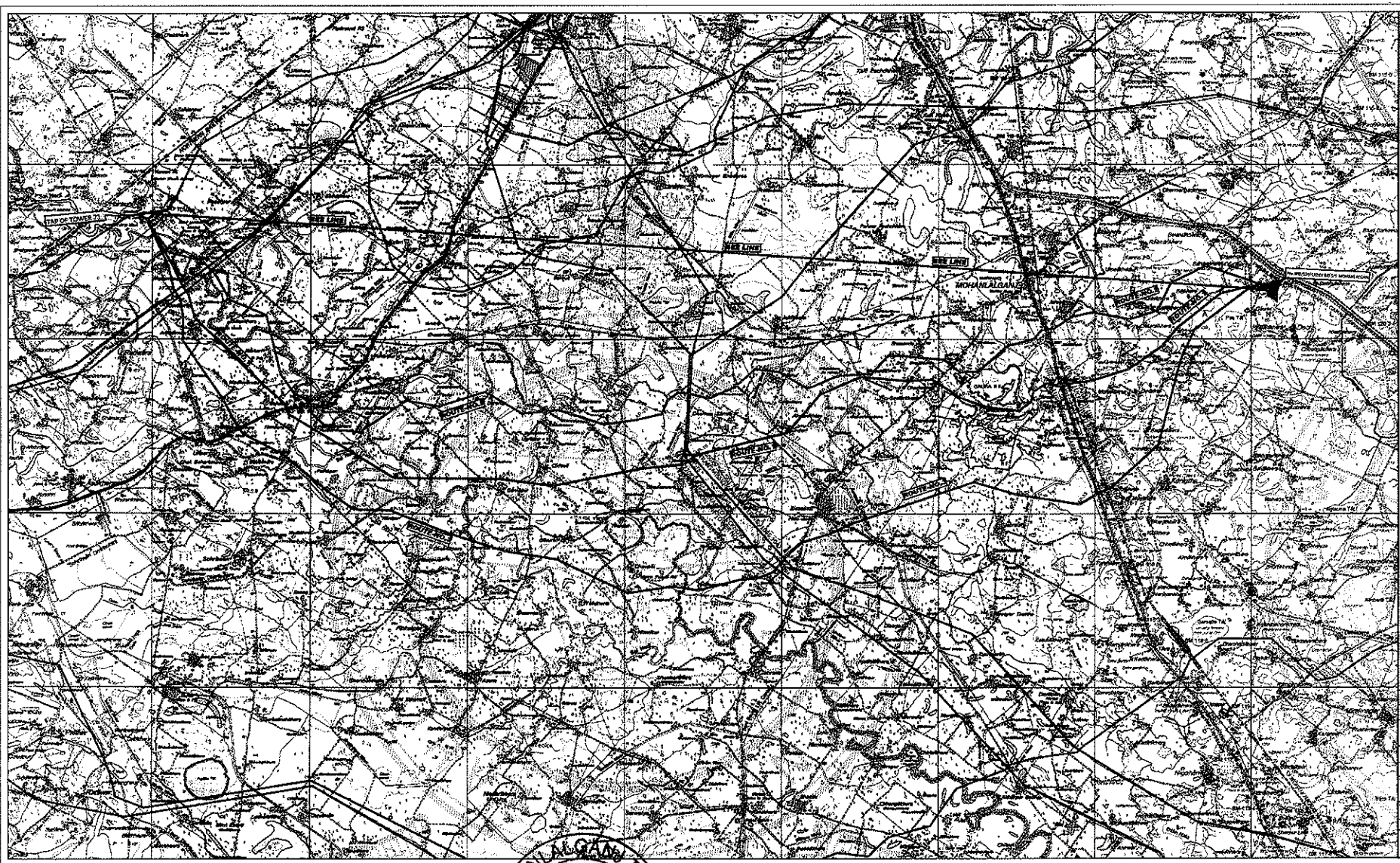
SCALE	DRG. No.	SHEET NO.
1:40,000	Pa/GHATAMPURTo HAPUR LILE AT 765RAMPUR	01 / 01

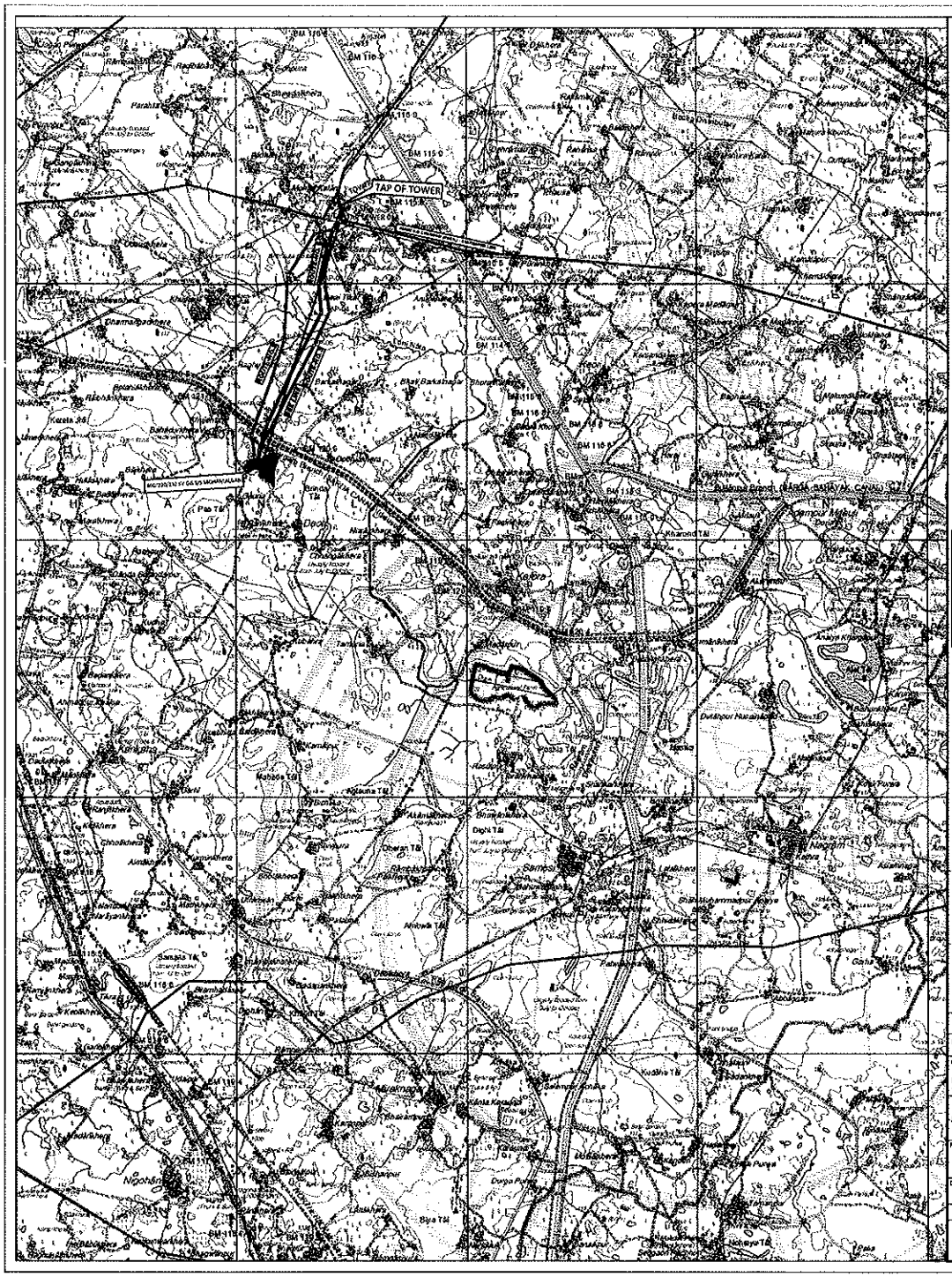
MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

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6/6

As furnished by BPC


MOHANLALGANJ
SEE LINE
SEE LINE
SEE LINE
ROUTE NO.
ROUTE NO.
ROUTE NO.



ROUTE ON SOI MAPS

400/220/132kV GIS Substation, Mohanlalganj, Lucknow, U.P. with associated 400kV Transmission Lines

LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL
Proposed route		River	
Roads Asphalted/Metalled		Pond	
Roads unmetalled		Forest	
Cart-track		Development	
Railways broad gauge		Temple / Mosque / Grave	
Railways other gauge		Hutments	
Canal		Tree	
Stream / Nala / Drain		Wells - In use / Unused	
Contour with interval		Bunds	
Power / Telephone line		Reserved/Protected forest	RF / PF
Scrub		Height elongated	⛰ 250
Boundary State		Height point	250
Boundary District		Benchmark	BM 205
Boundary Mandal		Post office	PO
Towns / Villages		Police station	PS
EXIST. 50HV transmission lines			

LEGEND - 1

Sl. No.	DESCRIPTION	ROUTE
1	BEE LINE of 400kV Lucknow (PGCIL) -Sultanpur S/C Line at 400kV Substation Mohanlalganj, Lucknow (Twin Moose). Transmission Line	
2	R-1 (LILO of 400kV Lucknow (PGCIL) -Sultanpur S/C Line at 400kV Substation Mohanlalganj, Lucknow (Twin Moose). Transmission Line	
3	R-2 (LILO of 400kV Lucknow (PGCIL) -Sultanpur S/C Line at 400kV Substation Mohanlalganj, Lucknow (Twin Moose). Transmission Line	
4	R-3 (LILO of 400kV Lucknow (PGCIL) -Sultanpur S/C Line at 400kV Substation Mohanlalganj, Lucknow (Twin Moose). Transmission Line	

CHECKED BY / DATE	RECOMMENDED BY / DATE	APPROVED BY / DATE
PFC	PFC	PFC

PREPARED BY / DATE
PRASADSURVEYORS

REV. NO.	DATE	DESCRIPTION
00		

CLIENT: PFC CONSULTING LIMITED
(A Wholly Owned Subsidiary of Power Finance Corporation Limited)
New Delhi

CONSULTANT: M/s. PRASAD SURVEYORS
Fl.-1, Mudgal Niwas, Near Devdhar Hospital
Pimpri Pune -17 prasadsurveyors@gmail.com
PH.No-020-27418969

PROJECT: Services for survey and preparation of report for Transmission System for "Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, 765kV & 400kV LILO lines at 765kV GIS Substation Raibareli and 400kV LILO and other (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida".

DRAWING TITLE: LILO of 400kV Lucknow (PGCIL) -Sultanpur S/C Line at 400kV Substation Mohanlalganj, Lucknow (Twin Moose).

SCALE	DRG. No.	SHEET NO.
1:40,000	Pa/lucknow(pgcil) To Sultanpur Mohanlalganj	01 /01

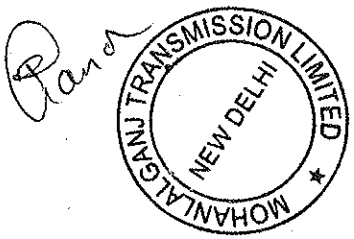
730

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MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Annexure-10 (AA4)

L1 Schedule



Construction of 400/220/132kV GIS Substation, Mohanlalganj (Lucknow) with associated 400kV lines, and other 765kV & 400kV LILO lines at 765kV GIS Substation Rampur and 400kV LILO (Quad Moose on Monopole) at 400kV GIS Substation Sector 123 Noida Substation, Simbhavali with associated Transmission lines

L1 Schedule

SN.	Description	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
A	Schedule																			
B	Project Start (Expected Acquisition of SPV)																			
C	Grant of Transmission License & Adoption of Transmission charges before UPERC & Authorization u/s Section 164, Electricity Act 2003		6 months																	
D	Financial Closure		6 months																	
E	Transmission lines																			
a	1. LILO of Sarojani Nagar (400kV) - Unnao (765kV) 400 kV S/C line on 400 kV GIS substation Mohanlalganj (on Twin Moose Conductor) 2.LILO of Lucknow (PGCIL) 400 kV - Sultanpur (400kV) S/C line on 400 kV GIS S/S Mohanlalganj (on Twin Moose Conductor) 3. LILO of 765 kV Ghatampur - Hapur (WUPPTCL) line on 765 kV GIS S/S Rampur with River crossing 4.LILO of one circuit 400 kV Bareilly (PGCIL) - Moradabad D/C line on 765 kV GIS S/S Rampur 5.LILO of one circuit on monopole or any other suitable lattice structure in compliance to related IS-802 of CEA guideline of 400 kV Atrur (WUPPTCL) – Indirapuram (WUPPTCL) D/C Quad Moose on 400 kV GIS S/S Sector-123, Noida																			
1	NOA		Within 30days of acquisition of SPV																	
2	*Supply*																			
i	*Line 1,2*					04 -15 months														
ii	*Line 3*					04 -12 months														
iii	*Line 4,5*				03 -07 months															
3	Foundation																			
i	*Line 1,2*						05-16 months													
ii	*Line 3*						05-13 months													
iii	*Line 4,5*					04-7.5 months														
4	Tower Erection																			
i	*Line 1,2*							07- 21.5 months												
ii	*Line 3*							07- 21.5 months												
iii	*Line 4,5*					4.5- 8 months														
5	Stringing																			
i	*Line 1,2*								07 - 17.5 months											
ii	*Line 3*								07 - 14.5 months											
iii	*Line 4,5*						5.5 - 8.5 months													
6	Testing & Commng.																			18
i	*Line 1,2*																			
ii	*Line 3*																15			
iii	*Line 4,5*										9									

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

SN.	Description	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
F	**Substations**																			
a	Construction of 400/220/132 kV GIS substation (2x500+2x200 MVA), Mohanlalganj (Lucknow) (including 125 MVAR Bus Reactor)																			
1	NOA (Award)		Within 30days of acquisition of SPV																	
2	Handing over of Substation Land		0-6 Months																	
3	Substation Civil works						05-14 Months													
4	Tower Supply & Erection work							06-14 Months												
5	Equipment Supply and Erection work								07- 15 Months											
6	C&R Panel, Automation & Cabling work													12-16 months						
7	Pre commissioning test														112.5-17.55 months					
8	Testing & Comming.																			18

Note: All activities mentioned above are wef Acquisition and subject to requisite clearances/ approvals as required for project execution

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MOHANLALGANJ TRANSMISSION LIMITED
NEW DELHI

Annexure-10 (AA5)

Approval and Clearances



Approval and Clearances

l. No.	Statutory Clearances	Concerned Authority	Remarks
Required prior to Construction :			
1.	Approval Under Section 68 of E.A.2003	GOUP	Received
2.	Approval Under Section 164 of E.A.2003	GOUP	To be obtained
3.	Transmission License	UPERC	To be obtained
4.	Tariff Adoption	UPERC	To be obtained
Required during/after Construction wherever applicable:			
5	Forest Approval	MoEF	To be obtained during Construction, if required. Required for particular stretch of line passing through forest.
6.	Aviation	AAI	Before Charging of Line, as required.
7.	PTCC Clearance	GOUP	Before Charging of Line.
8.	Power Line Crossing	Concern Utility	During Construction. Required for particular crossing span.
9.	Railway Crossing	Railway Authority	During Construction. Required for particular crossing span.
10	National Highway Crossing	NHAI	During Construction. Required for particular crossing span.
11	Ministry of Defense	MoD	Before Charging of Line, as required.
12	Inland Waterway Authority of India Ministry of Shipping, GoI	IWAI	During Construction. Required for particular
13	Final Charging Clearance approval	STU/SLDC/CEA	Before charging of system, as applicable
14	Renewal of Transmission License	SERC	Before completion of 25 years from Issuance of License

*GOUP- Government of Uttar Pradesh

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MOHANLALGANJ TRANSMISSION LIMITED NEW DELHI

Vakalatnama

BEFORE THE HON'BLE UTTAR PRADESH ELECTRICITY REGULATORY COMMISSION, LUCKNOW

APPLICATION No :..... of 2022

Mohanlalganj Transmission Limited
(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)
.....Applicant

Versus

Pashchimanchal Vidyut Vitran Nigam Limited (PVVNL) and Ors. .....Respondents

I/we the undersigned do hereby nominate and appoint **Sri Shubham Tripathi**, Lucknow Mobile No. 9198808888, to be counsel in the above matter and for me/us and on my/our behalf to appear, plead act and answer in the above Court or any other appellate Court or any Court to which the business is transfer in the above matter, and to sign and file petitions, statements accounts exhibits, compromises or other documents what so ever, in connection with the said matter arising there from and also to apply for and receive all documents, depositions etc. and to apply for issue of summons and other writs or subpoena and to apply for and get issued any arrest, attachment or other executions, warrant or order and to conduct any proceeding that may arise there out and to apply for and receive payment of any or all sums or submit the above matter to arbitration.

Provided, however, if any part of the Advocates fee remains unpaid before the first hearing of the case or if any hearing of the case be fixed beyond the limits of the town then, and in such an event my/our said advocate shall not be bound to appear before the court and if my/our said advocate depth appear in the said case he shall be entitled to an outstation fee and other expenses of traveling, lodging etc. Provided, also that if the case be dismissed by default, or if it be proceeded ex-part, the said advocate (s) shall not be held responsible for the same and all whatever my/our said advocate (s) shall lawfully do, I do hereby agree to and shall in future ratify and confirm.

Accepted: -

(SHUBHAM TRIPATHI), Advocate
Registration No. **UP/5555/2012**

Signature of Clients