WR ER Part-A Power Transmission Limited

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

B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016

CIN : U42202DL2025GOI445359

Ref: PG_ WRERA/TL/ **Dated: 07.07.2026**

To,

The Secretary,

Central Electricity Regulatory Commission,

7th Floor, Tower B, World Trade Centre,

Nauroji Nagar, New Delhi-110029

Sub.: **Petition under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to Transmission License to WR ER Part A Power Transmission Limited (a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)**

Sir,

Three copies (1 original + 2 copies) of the petition for the above subject matter have been enclosed and e-filing has been done on CERC website. As per the public notice issued on 28.08.2010 by the Hon'ble Commission, the amount of Rs.1,00,000/- (Rupees One Lakh only) for filing the petition is being paid through RTGS and in accordance with the Regulations 12(2), Payment of Fees Regulations 2012. Form-1 duly filled in against the aforementioned petition is also enclosed herewith.

Electronic Copies of the petition are being forwarded to the CTUIL (Nodal Agency) and to the Bid Process Coordinator and beneficiaries of the Western Region and Eastern Region and DICs as party to the Petition based on the list of the beneficiaries furnished by the CTUIL. The complete petition along with Annexures is posted on the website: **www.powergrid.in/subsidiaries**.

Thanking You,

Yours faithfully,

MAYANK SINGH

Digitally signed by MAYANK SINGH
Date: 2026.07.07 17:55:25 +05'30'

(Mayank Singh)

Project In-charge

WR ER Part A Power Transmission Limited

Email : regulatory@powergrid.in

Enclosures: As above

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

Petition under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to Transmission License to WR ER Part A Power Transmission Limited (a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

PETITION NO. :

WR ER Part A Power 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 (Commercial & RC), Power Grid Corporation of India Limited,
Floor No. 02, Tower-01, IRCON International Tower,
Plot No. 16, Institutional Area, Sector-32, Gurgaon-122003

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

PETITION NO. :……..…….

IN THE MATTER OF

Petition under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to Transmission License to WR ER Part A Power Transmission Limited(a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

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Address for correspondence: C/o ED (Commercial & RC), Power Grid Corporation of India Limited, Floor No. 02, Tower-01, IRCON International Tower, Plot No. 16, Institutional Area, Sector-32, Gurgaon-122003 …..**PETITIONER**

VERSUS

Central Transmission Utility of India Limited,

Floor No. 02, Tower-01, IRCON International Tower,

Plot No. 16, Institutional Area, Sector-32,

Gurgaon-122003

& Ors. .....**RESPONDENT(S)**

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19	Power of Attorney		

FILED BY

MAYANK SINGH Digitally signed by MAYANK SINGH Date: 2026.07.07 17:58:14 +05'30'

(Mayank Singh)
Project In-charge,
WR ER Part A Power Transmission Limited

Place: Raigarh

Date: 07.07.2026

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

PETITION NO. :……..…….

IN THE MATTER OF

Petition under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to Transmission License to WR ER Part A Power Transmission Limited(a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

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VERSUS

Central Transmission Utility of India Limited,

Floor No. 02, Tower-01, IRCON International Tower,

Plot No. 16, Institutional Area, Sector-32,

Gurgaon-122003

& Ors. ...**RESPONDENT(S)**

To,

The Secretary

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI-400005

Sir,

The petition filed under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to the Transmission System being established by the WR ER Part A Power Transmission Limited (A 100% wholly owned subsidiary of Power Grid Corporation

of India Limited) for which transmission charges are determined through transparent process of bidding in accordance with the guidelines issued by the Central Government, may please be registered.

Petitioner: WR ER Part A Power Transmission Limited

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

MAYANK SINGH

Digitally signed by MAYANK SINGH
Date: 2026.07.07 17:59:22 +05'30'

Represented by Mayank Singh

Project In-charge

WR ER Part A Power Transmission Limited

Place: Raigarh

Date: 07.07.2026

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI

PETITION NO. :……..…….

IN THE MATTER OF

Petition under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to Transmission License to WR ER Part A Power Transmission Limited(a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

MEMO OF AUTHORISATION

WR ER Part A Power Transmission Limited **….. PETITIONER**

I, Mayank Singh, the petitioner abovenamed do hereby nominate, appoint and constitute, to act, plead and appear on my/our behalf in the aforesaid matter.

1. Mayank Singh, Project In-charge
2. A Jagannath Rao, Chief General Manager
3. Ashish Agrawal, Sr Dy General Manager
4. Prashant Kumar, Dy General Manager
5. Abhijit Daimari, Dy General Manager

IN WITNESS WHEREOF I/We have set and subscribed my/our hands to this writing on this 7th day of July 2026.

FILED BY

MAYANK SINGH

Digitally signed by MAYANK SINGH
Date: 2026.07.07 17:59:50 +05'30'

(Mayank Singh)
Project In-charge,
WR ER Part A Power Transmission Limited

Place: Raigarh

Date: 07.07.2026

BEFORE THE HON'BLE MAHARASHTRA ELECTRICITY COMMISSION,

NEW DELHI

PETITION NO. :……..…….

IN THE MATTER OF

Petition under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to Transmission License to WR ER Part A Power Transmission Limited(a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

WR ER Part A Power Transmission Limited

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VERSUS

Central Transmission Utility of India Limited,

Floor No. 02, Tower-01, IRCON International Tower,

Plot No. 16, Institutional Area, Sector-32,

Gurgaon-122003

& Ors. ....**RESPONDENT(S)**

MEMO OF PARTIES

WR ER Part A Power 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 (Commercial & RC), Power Grid Corporation of India Limited, Floor No. 02, Tower-01, IRCON International Tower, Plot No. 16, Institutional Area, Sector-32, Gurgaon-122003 ….**PETITIONER**

VERSUS

1. **Central Transmission Utility of India Limited**,

Floor No. 02, Tower-01, IRCON International Tower,
Plot No. 16, Institutional Area, Sector-32,
Gurgaon-122003
Email: ctu@ctuil.in

2. **REC Power Development and Consulting Limited**
D- Block, REC Corporate Headquarter,
Plot No. I-4, Sector-29, Gurugram (Haryana)-122001,
Email: co@repdcl.in

3. **Adani Power Limited**
KP Epitome,
Near DAV International School,
Makarba, Ahmedabad, Gujarat -382421
Email: abhishek.tyagi@adani.com

4. **Korba Power Limited**
KP Epitome,
Near DAV International School,
Makarba, Ahmedabad, Gujarat -382421
Represented by its General Manager
Email: chaturanan.das@adani.com

5. **North Bihar Power Distribution Company Limited**
Vidyut Bhawan, Bailey Road,
Patna - 781001, Bihar
Email: dgmnbpdcl@gmail.com

6. **South Bihar Power Distribution Company Limited**
Vidyut Bhawan, Bailey Road,
Patna - 781001, Bihar
Email: gmfasbpdcl@gmail.com

7. **West Bengal State Electricity Distribution Company Limited**
   Bidyut Bhawan, Bidhan Nagar,
   Block DJ, Sector-II, Salt Lake City,
   Kolkata - 700 091, West Bengal

8. **Grid Corporation of Orissa Ltd. (GRIDCO)**
   Shahid Nagar,
   Bhubaneswar - 751 007, Odisha
   Email: sarojgridco1964@gmail.co.in

9. **Damodar Valley Corporation**
   DVC Tower, Maniktala
   Civic Centre, VIP Road,
   Kolkata - 700 054, West Bengal
   Email: supriyo.bhowmick@dvc.gov.in

10. **Power Department, Govt. of Sikkim**,
    Gangtok – 737 101, Sikkim
    Email: sigpra04@gmail.com

11. **Jharkhand Bijli Vitran Nigam Ltd**
    Engineering Building, H.E.C., Dhurwa,
    Ranchi – 834 004, Jharkhand
    Email: cecr2018@gmail.com

12. **Madhya Pradesh Power Management Company Ltd.**
    14, Shakti Bhawan, Rampur, Jabalpur - 482008
    Email: anurag.naik@mppmcl.com&comml.deptt@mppmcl.com

13. **Maharashtra State Electricity Distribution Co. Ltd.**
    Prakashgad, Plot No G-9, A K Marg, Bandra (East), Mumbai-400 051
    Email: ceppmsedcl@gmail.com

14. **Gujarat Urja Vikas Nigam Ltd**.
Sardar Patel Vidyut Bhawan, Race Course Road, Vadodara - 390 007
Email: decsp.guvnl@gebmail.com

15. **Electricity Department of Goa**
Vidyut Bhawan, Govt. of Goa, Panaji, Goa - 403 001
Email: cee-elec.goa@nic.in

16. **DNHDD Power Distribution Corporation Limited**
Vidyut Bhawan, 66kv Road, Near Secretariat, Amli, Silvassa - 396 230
Email: bhavikshah@torrentpower.com

17. **Chhattisgarh State Power Distribution Company Limited**
P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh-492 013
Email: cecomcseb@rediffmail.com

18. **Heavy Water Board**
O Floor, Vikram Sarabhai Bhavan, Trombay,
Anushaktinagar, Mumbai - 400094 , Maharashtra
Email: dksingh@mum.hwb.gov.in

19. **Chhattisgarh State Power Distribution Company Limited**
P.O. Sunder Nagar, Dangania, Raipur, Chhattisgarh-492 013
Email: cecomcseb@rediffmail.com

20. **Bhabha Atomic Research Centre**
Anushakti Nagar, Mumbai, Maharashtra-400085
Email: electricitybill@barctara.gov.in

21. **GMR Warora Energy Limited**
Plot B-1,GMR Warora Energy Ltd, Mohabala MIDC Growth Centre,
Post – Warora, Dist – Chandrapur, Maharashtra-442907
Email: pramod.khandelwal@gmrgroup.in

22. **ACB India Limited**

7th Floor, Corporate Tower, Ambience Mall,
NH-8, Gurgaon-122 001(Haryana)
Email: acbpower@acbindia.com

23. **Torrent Power Limited**

Naranpura Zonal Office, Sola Road,
Ahmedabad-380013
Email: satyanarayansoni@torrentpower.com

24. **Thermal Powertech Corporation India**

6-3-1090, Clock C, Level 2, TSR Towers,
Rajbhavan Road, Somajiguda , Hyderabad-500082, Telangana
Email: oa_commercial.seil@sembcorp.com

25. **Tata Steel Limited**

Gyanendra Karan LIG (R) - 186, Adityapur-2
Jamshedpur- 831013, Jharkhand
Email: i.section@tatasteel.com

26. **HVDC Bhadrawati, PGCIL**

PGCIL RHQ, WR-I, Sampriti Nagar,
Off National Highway No. 8,
Taluka : Kamrej,PO: Uppalwadi,
Nagpur-440026 Maharashtra
Email: wr1commercial@powergrid.co.in

27. **HVDC Vindhyachal, PGCIL**

PGCIL RHQ, WR-I, Sampriti Nagar,
Off National Highway No. 8,
Taluka : Kamrej,PO: Uppalwadi,
Nagpur-440026 Maharashtra
Email: wr1commercial@powergrid.co.in

28. **HVDC Champa PGCIL**
PGCIL RHQ, WR-I, Sampriti Nagar,
Off National Highway No. 8,
Taluka : Kamrej,PO: Uppalwadi,
Nagpur-440026 Maharashtra
Email: wr1commercial@powergrid.co.in

29. **West Central Railway Head Office**
General Manager's Office,Electrical Branch,
Jabalpur– 482 001
Email: dyceetrdwcr@gmail.com

30. **Western Railway**
PCEE Office, 5th Floor, Churchgate New station building,
Churchgate, Mumbai-400020, Maharashtra
Email:dyceetrdwrhq@gmail.com

31. **DB Power Limited- Untied**
3rd Floor, Naman Corporate Link,
Opp. Dena Bank, C-31, G Block , Bandra Kurla Complex,
Bandra (East) , Mumbai, Maharashtra – 400051
Email: sales@dbpower.in

32. **Chhattisgarh State Power Trading Co. Ltd.**
2nd floor Vidyut Sewa Bhawan
Raipur, Chhattisgarh - 492010
Email: ce.techcell@gmail.com

33. **TRN Energy Private Ltd-Untied**
7th Floor, Ambience Office Block
Gurugram
Email:acbpower@acbindia.com

34. **Adani Power (Mundra) Limited**
Adani Corporate House, Shantigram,
Near Vaishnavdevi Circle, S G Road,
Ahmedabad - 382421
Email: hitesh.modi@adani.com

35. **Raigarh HVDC Station**
RPT HVDC Office, Hebbal,
Bangalore – 560094
Email: pkmahalik@powergridindia.com

36. **Arcelor Mittal Nippon Steel India Ltd.**
27,AMNS House, 2TH KM Surat
Hazira road, Hazira-394270, Gujarat
Email: naresh.yadav@amns.in

37. **Central Railway**
Electrical Branch (HQ), 2nd Fl., Parcel Office Bldg.,
Mumbai, Maharashtra - 400001
Email: cesecrly@gmail.com

38. **MPSEZ Utilities Ltd.**
3rd Floor, Adani Corporate House,
Ahmedabad- 382421
Email: rajesh.sirigirisetty@adani.com

39. **NTPC Vidyut Vyapar Nigam Limited**
Core-5, NTPC Scope Complex, 7 Institutional Area,
Lodhi Road, New Delhi, Delhi - 110003
Email: anuraggupta@ntpc.co.in

40. **Dans Energy Pvt.Ltd.**
10th Floor, Building 8, Tower-C,DLF Cyber City, Phase-II,

Gurgaon, Haryana – 122002

Email: vijay.kumar@dansenergy.com

41. **South Eastern Railway**

11 Garden Reach Rd, South Eastern Railway,

West Bengal-700043

Email: eemsergrc@gmail.com

42. **HVDC Alipurduar, POWERGRID**

P.O./Vill – Topsikhata, Alipurduar,

Dist. - Alipurduar, West Bengal – 736121

Email: himadri.bose@powergrid.in

43. **Shiga Energy Private Limited**

10th Floor, Building No-8,Tower-C,

DLF Cyber City, Phase-II,

Gurgaon, Haryana – 122002

Email: vijay.kumar@dansenergy.com

44. **Sembcorp Energy India Limited**

5th Floor, Tower A, Building No.7,

DLF Cybercity, Gurgaon -122002

Email: oa_commercial.seil@sembcorp.com

….**RESPONDENTS**

FILED BY

MAYANK SINGH

Digitally signed by MAYANK SINGH
Date: 2026.07.07 18:00:20 +05'30'

(Mayank Singh)

Project In-charge

WR ER Part A Power Transmission Limited

Place: Raigarh

Date: 07.07.2026

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION NO.:.....

IN THE MATTER OF

Petition under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to Transmission License to WR ER Part A Power Transmission Limited (a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

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.....PETITIONER

VERSUS

Central Transmission Utility of India Limited,
Floor No. 02, Tower-01, IRCON International Tower,
Plot No. 16, Institutional Area, Sector-32,
Gurgaon-122003
& Ors.

....RESPONDENT(S)

06 JUL 2026

AFFIDAVIT

I, Shri Mayank Singh, son of Ramadhar Singh Yadav, presently residing at 765/400 kV Kotra Pooling Station, Vil.:Tarkela, P.O.:Tarkela, Dist.:Raigarh, Chhattisgarh-496001 do hereby solemnly affirm and state as follows:

1. I am the Authorised Signatory of the Petitioner Company in the above matter and I am duly authorized by the Petitioner 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 petition, are true to my knowledge and belief based on the information received and I believe them to be true.

MAYANK SINGH
Digitally signed by MAYANK SINGH
Date: 2026.07.07 18:01:30 +05'30'

3. I say that there are no proceedings pending in any court of law/ tribunal or arbitrator or any other authority, wherein the Petitioner 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.

मयंक सिंह

DEPONENT

MAYANK K SINGH Digitally signed by MAYANK SINGH Date: 2026.07.07 18:01:53 +05'30'

Place: Raigarh

Date: 06.07.2026

VERIFICATION:

I, the Deponent above named hereby solemnly hereby affirms that the contents of my above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from. Verified by me on this the 6th day of July, 2026 at Raigarh.

मयंक सिंह

DEPONENT

MAYANK K SINGH Digitally signed by MAYANK SINGH Date: 2026.07.07 18:02:20 +05'30'

Saleinnly Affirned of Sworn before me the with in named
मेरे समक्ष इस दस्तावेज पर संबंधित व्यक्ति ने पढ़कर / पढ़ाकर शपथपूर्वक कथन आप कहा और इस दस्तावेज पर हस्ताक्षर / अंगुठा किया।

Lal Bhadur Patel
NOTARY
District Raigarh

मयंक सिंह

06 JUL 2026

इस दस्तावेज के निष्पादन कर्ता
को उनके कहने पर हमारा दी गई
Nitin Kumar Sahoo.
दस्तावेज पहचानकर्ता
नाम पिता का नाम एवं पता
निशेष कुमार आई / अलंब कुमार आई
विवेक पटेलपाली, पो.रायगढ़, कोतरा पोड़ 496001 छत्तीसगढ़

BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION
NEW DELHI

PETITION NO.:…….

IN THE MATTER OF

Petition under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and Conditions for Grant of Transmission License and other related matters) Regulations, 2024 with respect to Transmission License to WR ER Part A Power Transmission Limited(a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

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VERSUS

Central Transmission Utility of India Limited,
Floor No. 02, Tower-01, IRCON International Tower,
Plot No. 16, Institutional Area, Sector-32,
Gurgaon-122003
& Ors. ....**RESPONDENT(S)**

PETITION

MOST RESPECTFULLY SHOWETH:

I. INTRODUCTION

1. The present petition is being filed by WR ER Part A Power Transmission Limited("**WRERAPTL**" / "**Applicant**" / "**Petitioner**") under Section 14 & 15 of the Electricity Act, 2003 read with Central Electricity Regulatory Commission (Procedure, Terms and

Conditions for Grant of Transmission License and other related matters) Regulations, 2024 seeking grant of a Transmission Licence to the petitioner for implementation of intra-State transmission system forming part of the "**WR–ER Inter-Regional Network Expansion Scheme – Part A**", ("**the Project**") under Tariff Based Competitive Bidding under Section 63 of the Act on a Build, Own, Operate and Transfer ("**BOOT**") basis.

2. The details regarding Transmission Project for which the present transmission licence is sought and Scheduled Commercial Operation Date ("**SCOD**") are set out as below:

S. No	Name of the Transmission Element	Scheduled COD	% 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.	Establishment of 3x1500MVA, 765/400kV S/s at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor	24 months (30.06.2028)	6.92%	Elements at a), b) & c) can be commissioned together
b.	Extension at Raigarh (Kotra)-II 765/400kV S/s (ATS incl. terminal bays identified for 2X800 MW Raigarh TPS of M/s APL)	24 months (30.06.2028)	6.45%	Elements at a), b) & c) can be commissioned together
c.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line at Raigarh (Kotra)-II S/s	24 months (30.06.2028)	8.13%	Elements at a), b) & c) can be commissioned together
d.	Installation of new 765/400kV, 1x1500MVA (3x500MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	24 months (30.06.2028)	2.29%	Element at d) can be commissioned independently

S. No	Name of the Transmission Element	Scheduled COD	% 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
e.	Establishment of 2x1500MVA, 765/400kV S/s at Jamshedpur (New) in Jharkhand	30 months (30.12.2028)	10.17%	Elements at e), f) & g) can be commissioned together
f.	LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New)	30 months (30.12.2028)	11.40%	Elements at e), f) & g) can be commissioned together
g.	LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New)	30 months (30.12.2028)	8.52%	Elements at e), f) & g) can be commissioned together
h.	Extension at Raigarh (Kotra)-II S/s 765/400kV S/s	36 months (30.06.2029)	0.91%	Elements at h), i), j), k), l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f) & g)
i.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765kV D/c line	36 months (30.06.2029)	1.05%	Elements at h), i), j), k), l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f) & g)
j.	Raigarh (Tamnar)-Raigarh(Kotra)-II S/s 765kV D/c line	36 months (30.06.2029)	5.26%	Elements at h), i), j), k), l) & m) can be commissioned together subject to

S. No	Name of the Transmission Element	Scheduled COD	% 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
				prior commissioning of a), b), c), e), f) & g)
k.	Extension at Raigarh (Tamnar) 765/400kV S/s	36 months (30.06.2029)	2.15%	Elements at h), i), j), k), l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f) & g)
l.	Extension at Jamshedpur (New) 765/400kV S/s	36 months (30.06.2029)	2.82%	Elements at h), i), j), k), l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f) & g)
m.	Raigarh(Tamnar) - Jamshedpur – (New) - 315km 2186.51 36 months 765kV D/c line	36 months (30.06.2029)	33.93%	Elements at h), i), j), k), l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f) & g)

SCOD for the Project : 36 months from the date of SPV transfer, i.e. **30.06.2029**.

3. The transmission project was envisaged and approved in various meetings for execution under the Tariff Based Competitive Bidding ("**TBCB**") framework, the details of which are given below:-

Sl.No.	Particulars of meeting	Remarks
i	Special Joint TCC & ERPC meeting dated 11.08.2025	The initial scheme for "WR-ER Inter-Regional Network Expansion Scheme Part-A" was approved

Sl.No.	Particulars of meeting	Remarks
ii	55th WRPC meeting dated 08.08.2025	The initial scheme for "WR-ER Inter-Regional Network Expansion Scheme Part-A" was approved
iii	32nd NCT meeting dated 12.08.2025	Scope of the project was modified with few additions like 3rd ICT at Medinipur (Element-d of above table) with overall completion timeline of 24 months
iv	35th NCT meeting dated 19.11.2025	▪ Modification in the scheme with the space requirement for future expansion of 1150 kV and HVDC at Raigarh (Kotra)-II was removed from the scope ▪ SCOD of the elements were revised and the completion timeline of the project was revised from 24 months to 36 months

All the relevant extracts of aforesaid meetings are enclosed and marked as **Annexure-1.**

4. Pursuant to the aforesaid approval of the Project by the National Committee on Transmission, Ministry of Power, Government of India, vide Gazette notification no. S.O. 4221(E) [CG-DL-E-23092025-266305] dated 17.09.2025 vide which MoP has notified REC Power Development and Consulting Limited ("**RECPDCL**" / "**Respondent No. 2**") as the Bid Process Coordinator ("**BPC**") for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish the instant project through Tariff Based Competitive Bidding process on build, own, operate and transfer basis.. Copy of the said notification is enclosed and marked as **Annexure-2.**

5. In furtherance of the aforesaid Government Decision, RECPDCL, in its capacity as the duly appointed BPC, issued the Request for Proposal dated 02.01.2026 ("**RFP**") inviting bids for development of the Project through the TBCB process in accordance with the TBCB Guidelines and the Guidelines for Encouraging Competition in Development of Transmission Projects issued by the Ministry of Power under Section 63 of the Act, as amended from time to time.

6. In terms of the RFP, the Project was to be implemented through a Special Purpose Vehicle ("**SPV**") structure. Accordingly, the Petitioner was incorporated by RECPDCL as the SPV for the purpose of implementation of the Project, and bidders were required to acquire 100% of the equity shareholding of the Petitioner, together with all its assets and liabilities, and to undertake the development, financing, construction, operation and maintenance of the Project. Accordingly, a company under the Companies Act 2013 by the name "**WR–ER Inter-Regional Network Expansion Scheme – Part A**" having its registered office at New Delhi was incorporated on 06.11.2025 by RECPDCL as its wholly owned subsidiary to initiate the activities for execution of the Project and subsequently to act as Transmission Service Provider (TSP).

7. Pursuant to the bidding process conducted by RECPDCL in accordance with the RFP, including the e-reverse auction held on 11.06.2026, Power Grid Corporation of India Limited ("**POWERGRID**") emerged as the Successful Bidder for the Project, having quoted the lowest levelised (uniform) Annual Transmission Charges, and was accordingly issued a Letter of Intent dated 16.06.2026 ("**LoI**") by RECPDCL.

8. In accordance with the RFP and the LoI, the Petitioner, which had been incorporated by RECPDCL as the SPV for implementation of the Project, was transferred to the Successful Bidder.

9. Accordingly, on 30.06.2026, RECPDCL, POWERGRID and the Petitioner executed the Share Purchase Agreement ("**SPA**"). In addition, the Transmission Service Agreement ("**TSA**") was signed between the Petitioner and CTUIL, pursuant to which 100% of the equity shareholding of the Petitioner stood transferred to POWERGRID, and the Petitioner became the duly appointed Transmission Service Provider ("**TSP**") for the Project.

10. Further, Clause 2.15.4 of the RFP required that, upon completion of the acquisition of the Petitioner by the Successful Bidder under the SPA, the Petitioner, as the duly appointed TSP, is required to apply to the Appropriate Commission for grant of a Transmission Licence within five (5) working days.

11. The present Petition is therefore being filed strictly in compliance with the said contractual and statutory requirement.

II. DESCRIPTION OF THE PARTIES

12. The Applicant/Petitioner, i.e., WRERAPTL, is a company incorporated under the Companies Act, 2013 as a SPV under the TBCB framework for the exclusive purpose of development, construction, ownership, operation and maintenance and transfer of the Project, which is an Inter-State transmission system.

13. Respondent No. 1, Central Transmission Utility of India Limited ("CTUIL"), is a Government Company and has been notified by the Ministry of Power, Government of India, vide Gazette Notification dated 09.03.2021 as the Central Transmission Utility ("CTU") under Section 38 of the Electricity Act, 2003. CTUIL is responsible for discharging all functions of the CTU, including undertaking transmission of electricity through the inter-State transmission system, and planning and coordination relating to such system, as specified under the Act. CTUIL is also the Nodal Agency as per the RFP and TSA of the instant project.

14. Respondent No. 2, REC Power Development and Consulting Limited (RECPDCL), was incorporated on 12.07.2007 as a wholly owned subsidiary of Power Finance Corporation Limited (PFC), a Schedule-A, Maha-Ratna Public Sector Enterprise. RECPDCL was appointed by the Government of India vide Gazette notification no. S.O. 4221(E) [CG-DL-E-23092025-266305] dated 17.09.2025 as the BPC for selection of the TSP for the Project through the TBCB process.

15. Respondent Nos. 3 to 44 are the DICs and beneficiaries of Western Region and Eastern Region, which are the beneficiaries of the Project.

III. JURISDICTION

16. This Hon'ble Commission has jurisdiction to entertain and decide the present Petition since the Project constitutes an inter-State transmission system, and as such, within the territorial jurisdiction of this Hon'ble Commission.

17. Under Sections 14, 15 and 79 of the Act, this Hon'ble Commission is the Appropriate Commission empowered to grant licences to entities seeking to act as inter-State transmission, and the present Petition has been filed in accordance with Section 15 of the Act.

18. The Project, being an inter-state transmission system falling in the states of Chhattisgarh, Jharkhand and Odisha, falls squarely within the statutory functions of this Hon'ble Commission under Section 30 of the Act relating to development and facilitation of inter-State transmission.

19. In addition, this Hon'ble Commission exercises jurisdiction over the present Petition under the Transmission Licence Regulations, which govern the manner, form and procedure for grant of transmission licences.

20. Accordingly, the present Petition is fully maintainable before this Hon'ble Commission under the Act read with the Transmission Licence Regulations.

IV. FACTUAL BACKGROUND

21. The relevant facts for the kind consideration of this Hon'ble Commission are as follows:

22. From operational feedback of Grid-India and further system studies, it was observed that Ranchi-Dharamjaygarh 765 kV 2XS/C line, Ranchi-Sipat 400 kV D/C and Ranchi New-New PPSP 400 kV D/C lines are getting critically loaded with N-1 contingencies in high solar scenarios when thermal generations are backed down in ER. In order to relieve the critical loading on the said lines, an additional 765 kV corridor between ER and WR was identified to relieve the loading of various 765kV and 400 kV lines in the WR-ER corridor and nearby 400 kV corridors in the peak solar scenario in 2028-29 timeframe.

    Further, in order to facilitate evacuation of power from 2X800 MW Raigarh TPS of Adani Power Limited at Raigarh (Kotra-II), Korba Power Limited (2X660 MW) at Champa and Korba Power Limited (2X800 MW) at Dharamjaygarh, two new 765/400 kV ISTS substations at Raigarh (Kotra-II) in WR and Jhamshedpur (New) in ER along with WR-ER inter-regional link and associated transmission lines have been planned. This scheme shall also facilitate additional drawl of power from ISTS by West Bengal and Odisha during peak solar generation.

23. Based on the deliberations held in the 36th Consultation Meetings for Evolving Transmission Schemes in Western Region and 43rd Consultation Meetings for Evolving Transmission Schemes in Eastern Region, the subject transmission scheme - "WR-ER Inter-Regional Network Expansion Scheme (Part-A)" was approved in Special Joint TCC & ERPC meeting dated

11.08.2025, 55th WRPC meeting dated 08.08.2025. The proposal was then deliberated and approved in the 32nd NCT meeting held on 12.08.2025.

24. Pursuant to the aforesaid approval of the Project by the National Committee on Transmission, Ministry of Power, Government of India, vide Gazette notification no. S.O. 4221(E) [CG-DL-E-23092025-266305] dated 17.09.2025 has notified REC Power Development and Consulting Limited ("**RECPDCL**" / "**Respondent No. 2**") as the Bid Process Coordinator ("**BPC**") for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish the instant project through Tariff Based Competitive Bidding process on build, own, operate and transfer basis. A copy of the notification is enclosed and marked as **Annexure-2.**

25. However, the scheme was rediscussed in the 35th NCT meeting held on 19.11.2025, wherein revised completion schedule of the elements and foregoing the space requirement for future expansion of 1150 kV and HVDC at Raigarh (Kotra)-II were agreed..

Post the said modifications, the final scope of the transmission scheme "WR-ER Inter-Regional Network Expansion Scheme (Part-A)" is as follows:

Sl. No.	**Scope of the Transmission Scheme**	**Capacity (MVA)/ Line length (km)/ Nos.**	**Implementation timeframe**
1.	Establishment of 3x1500 MVA, 765/400kV S/s at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor **Additional space for future expansion:** - 765 kV bus sectionaliser bay: 1 set (to establish Sec-II) - 400 kV bus Sectionaliser bay :1 set (to establish Sec-II) - 765/400 kV, 5x1500 MVA (15x 500 MVA single phase units) ICTs along with associated ICT bays o 765 kV side: - 1 No. on Bus Sec-I & 4 Nos. on Bus Sec-II) o 400 kV side: - 1 Nos. on Bus Sec-I & 4 Nos. on Bus Sec-II)	**Common Transmission System Augmentation:** - 765 kV, 2x330 MVAr bus reactor (7x110 MVAr single phase units) - 420kV, 125MVAr bus reactor: 2 Nos. - 765kV Bus reactor bays: 2 Nos. - 400kV Bus reactor bays: 2 Nos. - 765kV line bays: 4 Nos. (for termination of LILO of Dharamjaygarh (Sec-B)–Jharsuguda (Sec-A) 765kV D/c line) - 765kV,240MVAr (3x80 MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Kotra)-II – Jharsuguda (Sec-A) 765kV D/c	24 months

Sl. No.	Scope of the Transmission Scheme	Capacity (MVA)/ Line length (km)/ Nos.	Implementation timeframe
	- 765 kV, 2x330 MVAr (6x110 MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) - 420 kV, 2x125 MVAr bus reactor along with associated bay (2 on Bus Sec-II) - 765 kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. (2 Nos. on Sec-I for scope at Sl. 8 and 6 on Bus Sec-II for future lines) - 400 kV line bays (along with space for switchable line reactor) for future lines: 14 Nos. (6 on Bus Sec-I; 8 on Bus Sec-II) - 400/220 kV ICT along with bays: 6 Nos. - 220 kV line bays: 12 Nos.(6 Nos. on Bus Sec-I and 6 on Bus Sec-II) - 220 kV Sectionalization bay: 1 set - 220 kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) - 220 kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II)	section along with 1x80MVAr 765kV spare reactor	
2.	Extension at Raigarh (Kotra)-II 765/400 kV S/s	**ATS incl. terminal bays identified for 2x800MW Raigarh TPS of M/s APL (appl. No.2200001709):** - 765/400 kV, 3x1500 MVA ICT (10x500 MVA single phase units) - 765kV ICT bays: 3 Nos. - 400kV ICT bays: 3 Nos. - 400kV line bays: 2 Nos.[for interconnection of 2x800MW Raigarh TPS of M/s APL to Raigarh (Kotra)- II 400 kV D/c line. DTL line under scope of M/s APL]	24 months

Sl. No.	Scope of the Transmission Scheme	Capacity (MVA)/ Line length (km)/ Nos.	Implementation timeframe
3.	LILO of Dharamjaygarh (Sec-B)– Jharsuguda (Sec- A) 765 kV D/c line at Raigarh (Kotra)-II S/s	- LILO length ~40 km	24 months
4.	Installation of new 765/400 kV, 1x1500 MVA (3x500 MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	- 765/400kV, 1x1500MVA (3x500 MVA single phase units) ICT: 1 no. - 765kV ICT bay: 1 no. - 400kV ICT bay: 1 no	24 months
5.	Establishment of 2x1500 MVA, 765/400 kV S/s at Jamshedpur (New) in Jharkhand **Additional space for future expansion:** - 765kV bus sectionaliser bay: 1 set (to establish Sec-II) - 400kV bus sectionaliser bay :1 set (to establish Sec-II) - 220kV bus sectionaliser bay: 1 set (to establish Sec-II) - 220kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) - 220kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) - 765/400 kV, 4x1500 MVA (12x500MVA single phase units) ICTs along with associated ICT bays at both voltage levels - 765kV side: - 1 No. on Bus Sec-I & 3 Nos. on Bus Sec-II - 400kV side: - 1 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II - 400/220kV, 6x500MVA ICTs along with associated ICT bays at both voltage levels - 400kV side: - 3 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) - 220kV side: - 3 Nos. on Bus Sec-I &	- 765/400kV, 2x1500MVA ICT (7x500MVA single phase units) - 765kV, 2x330MVAr bus reactor (7x110MVAr single phase units including one spare unit) - 420kV, 125MVAr bus reactor: 2 Nos. - 765kV ICT bays: 2 Nos. - 765kV Bus reactor bays: 2 Nos. - 400kV ICT bays: 2 Nos. - 400kV Bus reactor bays: 2 Nos. - 765kV line bays: 4 Nos. (for termination of LILO of Ranchi (New)–Medinipur 765kV D/c line) - 400kV line bays: 4 Nos. [for termination of LILO of Ranchi (New) – New PPSP 400kV D/c line]	30 months

Sl. No.	Scope of the Transmission Scheme	Capacity (MVA)/ Line length (km)/ Nos.	Implementation timeframe
	3 Nos. on Bus Sec-II) - 765kV, 2x330MVAr (6x110MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) - 420kV, 2x125MVAr bus reactor along with associated bay (on Bus Sec- II) - 765kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. (2 Nos. on Bus Sec-I and 6 on Bus Sec-II) - 400kV line bays (along with space for switchable line reactor) for future lines: 10 Nos. (2 Nos. on Bus Sec-I and 8 on Bus Sec-II) - 220kV line bays for future lines: - 12 Nos. (6 Nos. on Bus Sec-I and 6 on Bus Sec-II)		
6.	LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New)	- 51 km and 49 km	30 months
7.	LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) - Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose - Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage)	- 63 km Twin Moose - 63 km Twin HTLS	30 months
8.	Extension at Raigarh (Kotra)-II S/s 765/400kV S/s	- 765 kV line bays: 2 nos. (for termination of Raigarh (Tamnar)– Raigarh (Kotra)-II 765kV D/c line)	36 months
9.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh(Kotra)– Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form	- 10 km (Route length)	36 months

Sl. No.	Scope of the Transmission Scheme	Capacity (MVA)/ Line length (km)/ Nos.	Implementation timeframe
	at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line		
10.	Raigarh (Tamnar)[@]- Raigarh(Kotra)-II S/s 765 kV D/c line	- 50km	36 months
11.	Extension at Raigarh (Tamnar) 765/400 kV S/s	- 765 kV, 330 MVAr (3x110 MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) - Jamshedpur (New) 765 kV D/c line along with 1x110 MVAr 765 kV spare reactor	36 months
12.	Extension at Jamshedpur (New) 765/400kV S/s	- 765 kV line bays: 2 nos. (for termination of Jamshedpur (New) – Tamnar 765kV D/c line) - 765 kV, 330 MVAr (3x110 MVAR single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c line	36 months
13.	Raigarh (Tamnar)[@] – Jamshedpur (New) 765kV D/c line	- 315km	36 months

Note:

1. *[@]4 Nos. 765kV line bays vacated at Raigarh (Tamnar) S/s after bypass arrangement mentioned at Sl. No. 9 of the scope of works [i.e. bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c at Raigarh (Tamnar)] to be utilized for termination of 765kV lines at Raigarh (Tamnar) S/s i.e. 2 nos. for Raigarh (Tamnar) – Raigarh (Kotra-II) 765kV D/c proposed line and 2 nos. for Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c proposed line.*

2. *After the implementation of subject bypassing arrangement at the outskirts of Raigarh (Tamnar) S/s, the existing unutilized portions of Raigarh (Kotra) – Raigarh (Tamnar) and Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line sections at Raigarh (Tamnar) end may be utilized for termination of proposed 765kV D/c lines under the subject scheme i.e. proposed 765kV D/c lines may be terminated at bypassing points. This shall ensure utilization of existing ISTS transmission infrastructure. However, if the said existing ISTS transmission line sections remain unutilized at Raigarh (Tamnar) end, due to any reason, the same shall be dismantled by the TSP of the subject scheme and cost of scrapped assets may be adjusted under subject transmission scheme. In both cases (viz. utilization of existing line sections or its scrapping),*

the original tariff of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c line shall remain unaffected. Also, TSP of Raigarh (Tamnar) S/s shall provide space for above scope of work at the existing Raigarh (Tamnar) S/s free of cost.

3. *TSP shall implement Inter-tripping scheme on Dharamjaygarh (Sec-B) – Raigarh (Kotra)-II 765 kV D/c line (for tripping of the switchable line reactor at Dharamjaygarh (Sec-B) end along with the main line breaker).*
4. *TSP of the subject scheme shall implement Inter-tripping scheme on Raigarh (Kotra) II – Jharsuguda 765 kV D/c line (for tripping of the switchable line reactor at Raigarh (Kotra)-II end along with the main line breaker).*
5. *LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 765kV D/c line and one circuit of Jamshedpur (New) – Medinipur 765kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
6. *LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 400kV D/c line and one circuit of Jamshedpur (New) – New PPSP 400kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
7. *M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) shall provide space for above scope of work at the existing Jeerat (New) S/s free of cost.*
8. *Line lengths mentioned above are tentative. Exact line length shall be ascertained after detailed survey.*

All the relevant extracts of said ERPC, WRPC and NCT meetings are enclosed and marked as **Annexure-1.**

26. Meanwhile, in furtherance of the aforesaid Government decisions, RECPDCL, in its capacity as the duly appointed BPC, issued the Request for Proposal dated 02.01.2026 ("**RFP**"), together with the Global Invitation and advertisements, inviting bids for development of the Project through the TBCB process in accordance with the TBCB Guidelines and the Guidelines for Encouraging Competition in Development of Transmission Projects issued by the Ministry of Power under Section 63 of the Act, as amended from time to time. Under the RFP, the successful bidder was required to acquire 100% of the equity shareholding of the Petitioner, being the SPV incorporated for the Project.

    Copy of relevant extract of RFP dated 02.01.2026 along with the Global Invitation and advertisements is annexed herewith and marked as **Annexure-3 (Colly).**

27. On 08.01.2026, PFFCL, in its capacity as the duly appointed BPC, formally informed this Hon'ble Commission of the initiation of the TBCB process for selection of the TSP for the

Project, by issuance of a Global Invitation in national and international newspapers in terms of Clause 4.2 of the TBCB Guidelines. A copy of the said letter is annexed herewith and marked as Annexure-4.

28. On the same date i.e. 08.01.2026, PFFCL also formally informed Ministry of Power, that the TBCB process for the Project had been initiated by issuance of the Global Invitation and RFP and requested Ministry of Power to publish the RFP notice and RFP documents on its website. A copy of the said letter is annexed herewith and marked as Annexure-5.

29. A company under the Companies Act 2013 by the name "WR-ER Inter-Regional Network Expansion Scheme (Part-A)" having its registered office at New Delhi was incorporated on 06.11.2025 by RECPDCL as its wholly owned subsidiary to initiate the activities for execution of the Project and subsequently to act as Transmission Service Provider (TSP). Further, bidding process was conducted by RECPDCL and POWERGRID emerged as the Successful bidder. The following were the final timelines involved in the bidding process:

Date	Event
22.04.2026	Submission of Bid (Online submission of Bid through electronic bidding portal)
11.06.2026	Electronic reverse auction (Financial Bid – Final Offer) for the Qualified Bidders
16.06.2026	Selection of Successful Bidder and issue of LOI
30.06.2026	Signing of RFP Project Documents and transfer of WR-ER Inter-Regional Network Expansion Scheme (Part-A)

A copy of the Certificate of Incorporation of **WR ER Part A Power Transmission Limited** is annexed herewith and marked as **Annexure-6.**

30. On 20.02.2026, in furtherance of the RFP and in accordance with Clause 1.6.2.1(5) thereof, RECPDCL issued a letter to POWERGRID communicating the tentative Acquisition Price payable by the Selected Bidder for acquisition of 100% equity shareholding of the Petitioner, together with all its assets and liabilities.

A copy of the letter dated 20.02.2026 issued by PFFCL to POWERGRID is annexed herewith and marked as **Annexure-7.**

31. In furtherance of the RfP and in compliance with Clause 1.6.2.1 thereof, which mandates the BPC to obtain approval under Section 68 of the Act for laying of overhead transmission lines, the Petitioner (then wholly owned by PFFCL) approached Ministry of Power for said approval. Thereafter, approval under Section 68 of the Electricity Act, 2003 was accorded, which is annexed herewith and marked as **Annexure-8**.

32. Subsequently, e-Reverse Auction for the project was conducted on 11.06.2026 in accordance with the RfP and the TBCB Guidelines, wherein POWERGRID emerged as the Successful Bidder having quoted the lowest final quoted (uniform) Annual Transmission Charges.

33. After completion of the e-Reverse Auction and verification of the bid documents submitted by POWERGRID, the Bid Evaluation Committee ("**BEC**") constituted under the TBCB Bidding framework evaluated the bids in accordance with the "Tariff Based Competitive Bidding Guidelines for Transmission Service" and the "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by the MoP under Section 63 of the Electricity Act, 2003.

34. Thereafter, on 12.06.2026, the Bid Evaluation Committee issued its Certificate confirming the following:-

(i) the entire bidding process for the Project had been conducted in compliance with the applicable TBCB Guidelines,

(ii) POWERGRID, having quoted the lowest Annual Transmission Charges of Rs.7,701.00 million pursuant to the e-Reverse Auction, had emerged as the Successful Bidder, and

(iii) the quoted tariff discovered through e-reverse bidding process was acceptable.

A copy of the Bid Evaluation Committee Certificate dated 12.06.2026 is annexed herewith and marked as **Annexure-9**.

35. On 16.06.2026, upon completion of the e-Reverse Auction and evaluation of bids in accordance with the RFP, PFFCL issued the LoI to POWERGRID, declaring it as the Successful Bidder for the Project under Clause 3.6.1 of the RFP, with the Quoted Annual Transmission Charges of Rs. 7,701.00 million.

A copy of the LoI dated 16.06.2026 issued by PFFCL to POWERGRID is annexed herewith and marked as **Annexure-10**.

36. On 30.06.2026, Ministry of Power officially approved the sale and transfer of the project to the POWERGRID.

A copy of the approval of MoP dated 30.06.2026, POWERGRID is annexed herewith and marked as **Annexure-11**.

37. On 30.06.2026, in accordance with the RFP and the LoI, PFFCL, POWERGRID and the Petitioner executed the SPA and in addition the TSA was signed between the Petitioner and CTUIL, pursuant to which 100% of the equity shareholding of the Petitioner stood transferred to POWERGRID, and the Petitioner became the duly appointed TSP for the Project. Copies of the SPA and TSA dated 30.06.2026 are annexed herewith and marked as **Annexure-12** and **Annexure-13** respectively.

V. GROUNDS

Re. Compliance with Statutory Framework under the Act

38. The Petitioner submits that it is fully entitled, both in law and on facts, to be granted a transmission licence under Sections 14 and 15 of the Act. The Petitioner is the SPV incorporated exclusively for implementation of the Project and has been selected as the TSP pursuant to a TBCB process conducted under Section 63 of the Act, which has been adopted by the GoM for development of the Project.

39. Section 14 of the Act contemplates that a transmission licence shall be granted to any person who is duly authorised to establish, operate and maintain a transmission system. In the present case, the Petitioner derives its authority directly from the outcome of a statutorily governed competitive bidding process, conducted under Section 63 of the Act and implemented through the Govt. of India decision dated 17.09.2025. The Petitioner is therefore not merely an applicant, but the legally selected entity vested with the responsibility to execute the Project.

40. Further, Section 79(1)(e) of the Act vests this Hon'ble Commission with exclusive jurisdiction to grant licences for intra-State transmission systems. The Project, being part of intra-State

transmission network, squarely falls within the territorial and subject matter jurisdiction of this Hon'ble Commission.

Re. Compliance with Tariff Based Competitive Bidding (TBCB) Framework

41. The Project has been awarded strictly in accordance with the TBCB Guidelines issued by the MoP under Section 63 of the Act, pursuant to a transparent and competitive bidding process conducted by PFFCL, the duly notified Bid Process Coordinator under the Govt. of India decision dated 17.09.2025.

42. The entire bidding process, including issuance of the RFP, conduct of e-reverse auction, declaration of POWERGRID as the successful bidder, and issuance of the Letter of Intent dated 16.06.2026, was carried out strictly in accordance with the RFP and the applicable TBCB Guidelines.

43. In accordance with Clause 1.5 of the RFP, the Petitioner SPV was acquired by POWERGRID pursuant to execution of the SPA dated 30.06.2026, and the TSA was simultaneously executed, thereby vesting all rights, obligations and project implementation responsibilities in the Petitioner as the TSP.

Re. Compliance with CERC Transmission Licence Regulations, 2024

44. Regulation 5 of the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of Transmission Licence and other related matters) Regulations, 2024 requires that an petition for grant of transmission licence be made in Form-I and be accompanied by the prescribed affidavit and documents. The present Petition has been filed strictly in the said format.

A true copy of the duly completed Form-I, together with all enclosures thereto, is annexed herewith and marked as **Annexure-14**.

45. The said Form-I encloses and certifies all information and documents required under the Regulations, including the project maps and layouts, technical description of the transmission system, corporate documents of the Applicant, financial and promoter details, and proof of payment of licence processing fee. Accordingly, the Petitioner has fully complied with Regulation 4 read with Schedule-I of the Transmission Licence Regulations.

46. The Petitioner shall publish a notice of its petition for grant of licence in Form-II of the Transmission Licence Regulations in atleast two leading daily digital newspapers, one in English language and another in the Indian language of the State or Union Territory where an element of the project or concerned transmission line is situated or proposed to be situated within 03 working days of filing the petition, inviting comments from the general public in compliance with Regulations 5(5) of the said Regulations.

Re. The Petitioner is a Fit and Proper Entity to Hold the Licence

47. The Petitioner is a project-specific SPV, fully owned and controlled by POWERGRID. The financial, technical and managerial capability of POWERGRID has already been evaluated and accepted by PFFCL during the TBCB process, and therefore stands conclusively established for the purposes of grant of licence.

48. Grant of the transmission licence will enable timely execution of the Project and is therefore squarely in public interest, grid security, and the objectives of the Act.

49. In accordance with Section 5(3) of the License Regulations, a copy of the present Petition is being simultaneously served upon CTUIL, being the nodal agency, for its comments and recommendations. A copy of the present petition is also being served upon PFFCL, the Bid Process Coordinator, to enable it to place on record its confirmation in respect of the Tariff Based Competitive Bidding process undertaken for the Project.

50. The Petition along with annexures and enclosures has been hosted on the website of the Applicant i.e. **www.powergrid.in** to facilitate access to the Petition by any person through the internet.

51. The Applicant/Petitioner shall publish the requisite Notices in the newspapers as per the Transmission Licence Regulations and after publication of the same, the Applicant/Petitioner shall place a copy of the said publications before this Hon'ble Commission.

52. In view of the above, it is humbly submitted that the Applicant/Petitioner fulfils the eligibility criteria for grant of transmission licence as stipulated in Section 14 and 15 of the Act and the Transmission License Regulations and therefore, this Hon’ble Commission may kindly grant the prayers, as prayed for.

53. The present Petition is filed *bona fide* and in the interest of justice.

PRAYER

54. The Applicant/Petitioner hereby humbly prays the Hon'ble Commission to:

(a) Grant a Transmission Licence under Sections 14 and 15 of the Electricity Act, 2003 in favour of the Applicant, WR ER Part A Power Transmission Limited, to build, own, operate and transfer of the "WR–ER Inter-Regional Network Expansion Scheme – Part A", being the Inter-State transmission system; and

(b) Direct issuance of the Transmission Licence in the prescribed Form-III of the Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of Transmission Licence and other related matters) Regulations, 2024, subject to the general and specific conditions contained therein; and/or

(c) Condone any minor, inadvertent or procedural defects or omissions, if any, in the present Petition and permit the Applicant to place on record such additional documents, information or clarifications as this Hon'ble Commission may require from time to time in the interest of justice; and

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

WR ER Part A Power Transmission Limited

Petitioner

MAYANK SINGH
Digitally signed by MAYANK SINGH
Date: 2026.07.07 18:03:57 +05'30'

Represented by Mayank Singh

Project In-charge

WR ER Part A Power Transmission Limited

Place: Raigarh

Date: 07.07.2026

FORM-I

1. Particulars of the Applicant

S.No.	Particulars	Details
I	Name of the Applicant	**WR ER Part A Power Transmission Limited**
II	Status	Public Limited Company
III	Address	B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi 110 016
IV	Name, Designation & Address of the contact person	Sh. Mayank Singh Project Incharge, WR ER Part A Power Transmission Limited (100% wholly owned subsidiary of Power Grid Corporation of India Limited) C/o ED (Commercial & RC), Power Grid Corporation of India Limited, Floor No. 02, Tower-01, IRCON International Tower, Plot No. 16, Institutional Area, Sector-32, Gurgaon-122003
V	Contact Tele. No.	
VI	Fax No.	0124-2822062
VII	Email ID	regulatory@powergrid.co.in
VIII	Place of Incorporation / Registration	New Delhi, India
IX	Year of Incorporation / Registration	2025
X	Copies of the following documents are enclosed:	
a.	Certificate of Registration	Enclosed
b.	Copy of Power of Attorney	Enclosed

2. Particulars of the Project:

(a) Transmission Line :

S.No.	Name (end points location)	Voltage class (kV)	Length (km)	Type (S/C or D/C)
1	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec A) 765 kV D/c line at Raigarh (Kotra) II S/s	765 kV	40	D/C
2	LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New)	765 kV	51 & 49	D/C
3	LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New)	400 kV	63 & 63	D/C
4	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV	765 kV	10	D/C

S.No.	Name (end points location)	Voltage class (kV)	Length (km)	Type (S/C or D/C)
	D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765kV D/c line			
5	Raigarh (Tamnar) - Raigarh (Kotra)-II S/s 765kV D/c line	765 kV	50	D/C
6	Raigarh (Tamnar) – Jamshedpur (New) S/s 765kV D/c line	765 kV	315	D/C

(b) Sub-stations :

S. No.	Name of substation	Voltage Level	Transformer	Reactive Compensation	No. of bays
1	Raigarh (Kotra)-II S/s	765 kV	• 765/400 kV, 1500 MVA ICTs (10x500MVA single phase units) – 3 Nos.	• 765 kV, 330 MVAr bus reactor – 2 Nos. (7x110 MVAr single phase units) • 765kV, 240 MVAr (3X80 MVAr) switchable line reactor (with 1x80 MVAr 765kV spare reactor) – 1 No.	• 765 kV Bus Reactor bays – 2 Nos. • 765 kV line bays – 6 Nos. • 765 kV ICT bays – 3 Nos.
		400 kV		420kV, 125MVAr bus reactor – 2 Nos	• 400 kV Bus Reactor bays – 2 Nos. • 400 kV ICT bays – 3 Nos. • 400kV line bays: 2 Nos.(Extension portion)
2	Jeerat (New) S/s (PMJTL)	765 kV	• 765/400 kV, 1500 MVA (3x500 MVA single phase units) ICT – 1 No.		• 765 kV ICT bays – 1 No.
		400 kV			• 400 kV ICT bays – 1 No.
3	Jamshedpur (New) S/s	765 kV	• 765/400 kV, 1500 MVA ICTs (7x500MVA	• 765 kV, 330 MVAr bus reactor – 2 Nos.	• 765 kV ICT bays – 2 Nos.

S. No.	Name of substation	Voltage Level	Transformer	Reactive Compensation	No. of bays
			single phase units) – 2 Nos.	(7x110 MVAr single phase units) • 765kV, 330 MVAr switchable line reactor – 2 No. (6x110MVAr single phase units)	• 765 kV Bus Reactor bays – 2 Nos. • 765 kV line bays – 6 Nos.
		400 kV		• 420kV, 125MVAr bus reactor – 2 Nos.	• 400 kV ICT bays – 2 Nos. • 400 kV Bus Reactor bays – 2 Nos. • 400kV line bays: 4 Nos.
4	Raigarh (Tamnar)	765 KV	--	• 765kV, 330 MVAr (3x110 single phase units) switchable line reactor along with 1x110 MVAr 765kV spare reactor) – 2 No.	Switching equipment for line reactors – 2 Nos

a) Remarks: Application is being filed for grant of a fresh license

b) Scheduled COD of the project: 36 months from date of acquisition i.e. 01.07.2029

c) Agreements with CTU (Nodal Agency) for the Project: Transmission Service Agreement (TSA) is enclosed as Annexure-12 to the instant petition.

3. Quoted transmission charges : Rs.7701.00 millions per annum

4. (a) Approval of Central Government as per Electricity (Transmission System Planning, Development and Recovery of Inter-state Transmission Charges) Rules, 2021 } Copy of Gazettee notification is enclosed as Annexure-1 to the petition

(b) Evaluation report (if made public) by the Bid Process Coordinator } Certificate of Bid Evaluation Committee as furnished by BPC is enclosed Annexure-9 to the petition

5. List of documents enclosed:

a) Certificate of Registration, MoA & AoA

b) Certificate of Bid Evaluation Committee as furnished by BPC

c) Copy of Power of Attorney

Signature of the Applicant

MAYANK SINGH

Digitally signed by MAYANK SINGH
Date: 2026.07.07 18:02:59 +05'30'

Represented by Mayank Singh

Project In-charge

WR ER Part A Power Transmission Limited

Place: Raigarh

Date: 07.07.2026

सत्यमेव जयते

भारत सरकार / Government of India

विद्युत मंत्रालय / Ministry of Power

पूर्वी क्षेत्रीय विद्युत समिति / Eastern Regional Power Committee

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No. ERPC/TCC&ERPC/2025/ 995 **Date: 12.08.2025**

To/सेवा में

As per List Attached/ संलग्न सूची के अनुसार।

Subject: Minutes of Special Joint TCC & ERPC Meeting held on 11.08.2025 through online mode (MS Team) - reg.

विषय: 11.08.2025 को ऑनलाइन मोड (एमएस टीम) के माध्यम से आयोजित विशेष संयुक्त टीसीसी और ईआरपीसी बैठक के कार्यवृत्त - संबंध में।

Sir,

The minutes of **Special Joint TCC & ERPC Meeting** held on 11th August, 2025 through online mode is enclosed for your kind information and necessary action, please.

कृपया 11 अगस्त, 2025 को ऑनलाइन मोड के माध्यम से आयोजित विशेष संयुक्त टीसीसी और ईआरपीसी बैठक का विवरण आपकी जानकारी और आवश्यक कार्रवाई के लिए संलग्न है।

This issues with the approval of Chairperson, ERPC.
यह अध्यक्ष, ईआरपीसी के अनुमोदन से जारी किया गया है।

Yours faithfully/ आपका विश्वासी

Mondal 12.8.2025

(N. S. Mondal / एन.एस. मंडल)
Member Secretary / सदस्य सचिव

Encl: As above

संलग्न: जैसा कि ऊपर बताया गया है

MAYANK SINGH
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Date: 2026.07.07 18:04:30 +05'30'

ERPC Members

1. **Chairperson ERPC & CMD, West Bengal State Electricity Distribution Company Ltd.,** Vidyut Bhavan, 7th Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091.
2. Managing Director, West Bengal State Electricity Transmission Company Ltd., Vidyut Bhavan, 8th Floor, Block- DJ, Sector-II, Bidhannagar, Kolkata-700091.
3. Chairman & Managing Director, West Bengal Power Development Corporation Ltd., Bidyut Unnayan Bhavan, 3/C, Block LA, Sector-III, Bidhannagar, Kolkata-700098.
4. Managing Director, DPL, Durgapur, West Bengal - 713201.
5. Principal Chief Engineer-cum-Secretary, Energy & Power Department, Govt. of Sikkim, Kazi Road, Gangtok – 737101, Sikkim.
6. Member (GO&D), Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi-110066.
7. Chairman, GRIDCO Ltd., Janpath, Bhubaneshwar-751022.
8. Chairman-cum-Managing Director, Odisha Power Transmission Corporation Ltd., Janpath, Bhubaneswar- 751022.
9. Chairman-cum-Managing Director, OHPC Ltd., Orissa State Police Housing & Welfare Corporation Bldg. Vanivihar, Janpath, Bhubaneswar- 751022.
10. Managing Director, OPGC Ltd., Zone-A, 7th Floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023.
11. Chairman-cum-Managing Director, Jharkhand Urja Vikas Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
12. Chairman-cum-Managing Director, Jharkhand Urja Utpadan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
13. Managing Director, Jharkhand Urja Sancharan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
14. Managing Director, Jharkhand Bijli Vitaran Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi- 834004.
15. Managing Director, Tenughat Vidyut Nigam Ltd., Hinoo, Doranda, Ranchi – 834002
16. Chairman-cum- Managing Director, Bihar State Power Holding Company Ltd., Vidyut Bhavan, Bailey Road, Patna-800001.
17. Managing Director, Bihar State Power Transmission Company Limited, Vidyut Bhavan, Bailey Road, Patna- 800001.
18. Managing Director, North Bihar Power Distribution Company Limited, Vidyut Bhavan, Bailey Road, Patna- 800001.
19. Chairman, Damodar Valley Corporation, DVC Towers, VIP Road, Kolkata -700054.
20. Director (Finance), NTPC Ltd., Core-7, SCOPE Complex, Lodhi Road, New Delhi -110003.
21. Director (Technical), NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad, Haryana-121003.
22. Director (Operations), Power Grid Corporation of India Ltd., Saudamini, Plot No. 2, Sector-29, Gurgaon-122001.
23. Executive Director, ERLDC, GRID-INDIA, 14 Golf Club Road, Tollygunge, Kolkata – 700033.
24. Director(SO), GRID-INDIA, B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016
25. COO, CTUIL, Saudamini, 1st Floor, Plot-1, Sector-29, Gurgaon-122001
26. Director (C&O), PTC India Ltd., 2nd floor, NBCC Tower,15 Bhikaji Cama Place, New Delhi-110066.
27. Managing Director (Generation), CESC Ltd., CESC House, 1 Chowringhee Square, Kolkata-700001.
28. Chief Executive Officer, Maithon Power Ltd., Village-Dambhui, P.O. Barbindia, Dist.-Dhanbad, Jharkhand- 828205.

29. V.P (Plant Head), GMR Kamalanga Energy Ltd., AT/PO-Kamalanga, PS-Kantabania, Via-Meramundali, Dist.- Dhenkanal, Odisha-759121.
30. Chief Executive Officer, Jindal India Thermal Power Limited, Plot No-12, Sector-B1, Local Shopping Complex, Vasant Kunj, New Delhi-110070.
31. Managing Director, Sikkim Urja Limited, 2nd Floor, Vijaya Building, 17 Barakhamba Road, New Delhi- 110001.
32. CEO, BRBCL, Nabinagar, Dist- Aurangabad, Bihar-824303.
33. CEO, NTPC Vidyut Vyapar Nigam Ltd., Scope Complex, Core-5, 1st and 2nd Floor, Lodhi Road, New Delhi-110003.
34. Director, JSW (Utkal) Ltd., at-Sahajbahal, P.O-Charpali-Barpali, Via-Bandhabahal, Dist: Jharsuguda, Odisha-768211.
35. COO, East North Interconnection Co. Ltd. (Indi Grid), 101, Windsor, CST Raod, Santacurz East, Mumbai-400098.

TCC Members

1. **Chairperson TCC & Director (R&T), West Bengal State Electricity Distribution Company Ltd.,** Vidyut Bhavan, 7th Floor, Block- DJ, Sector-II, Bidhannagar, Kolkata-700091.
2. Director (Operations), West Bengal State Electricity Transmission Company Ltd., Vidyut Bhavan, 8th Floor, Block-DJ, Sector-II, Bidhannagar, Kolkata-700091.
3. Director (O&M), WBPDCL, Bidyut Unnayan Bhavan, 3C, Block-LA, Sector-III, Bidhannagar, Kolkata- 700098.
4. Addl General Manager(I/C), DPL, Durgapur, West Bengal - 713201.
5. Principal Chief Engineer-II, Energy & Power Dept., Govt. of Sikkim, Kazi Road, Gangtok-737101.
6. Chief Engineer (GM), CEA, Sewa Bhawan, R.K. Puram, New Delhi-110066.
7. Managing Director, GRIDCO Ltd., Janpath, Bhubaneswar-751022.
8. Director (Operation), Odisha Power Transmission Corporation Ltd., Janpath, Bhubaneswar - 751022.
9. Director (Operation), Orissa Power Generation Corporation Ltd, Zone-A, 7th floor, Fortune Towers, Chandrasekharpur, Bhubaneswar-751023.
10. Director (Operation), Orissa Hydro Power Corporation Ltd, Orissa State Police Housing & Welfare Corporation Building, Vanivihar Chowk, Janpath, Bhubaneswar-751022.
11. Executive Director (Tech),, Jharkhand Urja Utpadan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
12. Director (Project), Jharkhand Urja Sancharan Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi- 834004.
13. Chief Engineer (S&D-JBVNL), Jharkhand Urja Vikas Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
14. Chief Engineer (S&D), Jharkhand Bijli Vitaran Nigam Limited, Engineering Building, HEC, Dhurwa, Ranchi-834004.
15. General Manager, Tenughat TPS, Lalpania, Dist- Bokaro, Jharkhand-829149.
16. Chief Engineer (Commercial), Bihar State Power Holding Company Ltd., Vidyut Bhavan, Bailey Road, Patna-800001.
17. Director (Project), South Bihar Power Distribution Company Limited, Vidyut Bhavan, Bailey Road, Patna-800001.
18. Executive Director (Commercial), Damodar Valley Corporation, DVC Tower, VIP Road, Kolkata-700054.
19. Regional Executive Director (ER-I), NTPC Ltd., ER-I Head Quarter, Near Urja Auditorium, Shastri Nagar, Patna-800023.
20. Regional Executive Director (ER-II), NTPC Ltd., 3rd Floor, OLIC Building, Plot No.N-17/2, Nayapalli, Bhubaneswar-751012.
21. HOD (O&M), NHPC Ltd., NHPC Office Complex, Sector-33, Faridabad-121003, Haryana.
22. Executive Director (ER-I), Power Grid Corporation of India Ltd, Board Colony, Shastri Nagar, Patna- 800023.
23. Executive Director (ER-II), Power Grid Corporation of India Ltd, CF-17, Action Area-I, Newtown, Rajarhat, Near Axis Mall, Kolkata-700091.
24. Executive Director (Odisha Project), Power Grid Corporation of India Ltd, Plot No-4, Unit 41, Niladri Vihar, Chandrasekharpur, Bhubaneswar, Odisha-751021.
25. Executive Director, ERLDC, GRID-INDIA, 14 Golf Club Road, Kolkata –700 033.
26. Head, National Load Dispatch Center, GRID-INDIA, B-9 Qutab Institutional Area, Katwaria Sarai,New Delhi-110016.
27. COO, CTUIL, Saudamini, 1st Floor, Plot-1, Sector-29, Gurgaon-122001.
28. Director (Marketing), PTC India Ltd., NBCC Tower, 15 Bhikaji Cama Place, New Delhi-110066.
29. Vice President (System Operation), CESC Ltd, CESC House, 1 Chowringhee Square, Kolkata-700001.

30. Station Head & General Manager (O&M), Maithon Power Ltd., Village-Dambhui, P.O. Barbindia, Dist.- Dhanbad, Jharkhand-828205.
31. GM (Head-Electrical), GMR Kamalanga Energy Ltd., AT/PO-Kamalanga, PS-Kantabania, Via-Meramundali, Dist.- Dhenkanal, Odisha-759121.
32. Chief Operating Officer, Jindal India Power Limited, Plot No-12, Sector-B1, Local Shopping Complex, Vasant Kunj, New Delhi-110070.
33. Managing Director, Sikkim Urja Limited, 2nd Floor, Vijaya Building, 17 Barakhamba Road, New Delhi- 110001.
34. CEO, BRBCL, Nabinagar, Dist- Aurangabad, Bihar-824303.
35. Chief General Manager, NTPC Vidyut Vyapar Nigam Limited, SCOPE Complex, Core-3, 7th Floor, Lodhi Road, New Delhi-110003
36. Head Regulatory, East North Interconnection Co. Ltd. (Indi Grid), 101, Windsor, CST Raod, Santacurz East, Mumbai-400098. Alokendra.ranawat@indigrid.com
37. Director, JSW (Utkal) Ltd., at-Sahajbahal, P.O-Charpali-Barpali, Via-Bandhabahal, Dist: Jharsuguda, Odisha-768211

Non-Member Participants

1. Managing Director, DANS Energy Pvt Ltd, DLF Cyber City, Phase-II, Gurgaon – 122 002

2. Director, Shiga Energy Pvt. Ltd., 5th Floor, DLF Building No. 8, Tower-C, DLF Cyber City, Phase-II, Gurgaon – 122002

3. Vice President, Greenko Energies Pvt. Ltd. Greenko Hub, 13, Hitech City, Madhapur, Hyderabad-500081. (For Sneha Kinetic PPL and GI Hydro Pvt. Ltd.)

4. CEO, Rongnichu HEP, MBPCL, Sikkim-737102.

5. Managing Director, Adhunik Power & Natural Resources Ltd., Lansdowne Towers, 5th Floor, 2/1A Sarat Bose Road, Kolkata-700020.

6. Senior Vice President, Sikkim Power Transmission Limited, New Delhi-110066

7. CEO, Alipurduar Transmission Limited, 101, Part-III, G.I.D.C Estate, Gandhinagar, Gujarat-382028.

8. Vice President, North Karanpura Trasnmission Ltd., Adani Corporate House, 3rd Floor, South Wing, Shantigram, SG Highway, Near Vasihnodevi Circle, Ahmedabad-382421.

9. CEO, SJVN Thermal Pvt Ltd, 169. Pataliputra Colony, Patna-800013

10. CEO, JSW Ind-Bharath Energy (Utkal) Ltd, Jharsguda, Odisha-768211

11. Managing Director (Generation), Haldia Energy Limited, 2A, Lord Sinha Road, First Floor, Kolkata - 700 071

12. Managing Director, India Power Corp. Ltd., Plot No. X1- 2 & 3, Block-EP, Sector – V, Salt Lake City, Kolkata – 700 091

13. CEO, Cross Boarder Power Transmission Limited, Ambience Mall Complex, Gurgaon, Haryana-122001

14. MD, Tata Steel UISL, Jamshedpur, Jharkhand-831001

15. The Head Power Transmission Darbhanga Motihari Transmission Co. Ltd. Essel Infraproject Ltd., 6th Floor, Plot No.19, Noida-201301, U.P.

16. Project Director-O&M/AM, Odisha Generation Ph-II Transmission Ltd., O&M Head office, Tulip-634, New Minal Residency, J.K.Road, Near Ayodha Bypass, Bhopal-462023, M.P.

17. Head (Asset Management/O&M), Purulia & Kharagpur Transmission Co. Ltd., Tulip-634, New Minal Residency, J.K.Road, Near Ayodhya Bypass, Bhopal-462023, M.P.

18. Chief-Power Management, Rashmi Group, 'Premlata' 5th floor, 39, Shakespeare Sarani Kolkata- 17

Minutes of the Special Joint TCC & ERPC Meeting held on 11.08.2025 through Online mode

List of participants enclosed in Annexure – I.

CMD WBSEDCL & Chairperson, ERPC chaired the meeting.

MS, ERPC welcomed all the participants of the special joint TCC & ERPC meetings held on 11.08.2025 through online platform. The agenda of the meeting was forwarded by CTU on 30th July 2025 for deliberation in ERPC forum at the earliest, accordingly a CCM was convened on 05.08.2025. He briefed the details of the scheme in connection with the agenda point - "WR-ER Inter-Regional Network Expansion Scheme Part-A." which is primarily to facilitate inflow of RE power from WR to ER and to facilitate connectivity of proposed generating stations of APL at Raigarh area of Chattisgarh. He requested all states to provide their observations on the scheme.

Representatives of West Bengal, Odisha, Bihar and Jharkhand gave their concurrence to the proposed scheme. No representative of Sikkim was available in the meeting. On enquiry from WBSEDCL, CTU clarified that HTLS reconductoring from LILO point to new PPSP is not a part of the proposed scheme and shall be considered as a separate scheme (Part-B) with matching timeframe. Since the proposed scheme is likely to be implemented through TBCB route the reconductoring of existing line might be taken up by existing transmission licensee, however, cost sharing shall be done on user based of AC component incompliance with the extant CERC Sharing of Transmission Charges & Losses Regulation.

On query from Bihar on financial implication on the state after implementation of the scheme it was clarified that the additional cost shall be levied on user based as per present cost sharing mechanism.

MS, ERPC pointed out that there are many existing inter-regional transmission lines in ER-WR which are presently under-utilised. As an example, one circuit of 765 kV D/C Raipur-Jharsuguda line remained out most of the times for voltage regulation. Two 765 kV D/C Dharamjaygarh – Jharsuguda line is also lightly loaded at present. He suggested that CTU should explore options for better utilisation of these lines. CTU agreed to look into the issue. He also pointed out that present transmission capacity between ER and WR is around 25000 MW whereas presently, around 6000-7000 MW is being transmitted. It is observed that considerable amount of power from WR to NR is wheeled through ER. He opined that suitable transmission schemes may be planned for transmission of power through shortest route to minimize Transmission loss and associated cost. He further suggested that downward transmission of power beyond Jamshedpur towards load centres in West Bengal may also be planned as and when required by WBSETCL.

As no further views on the proposed scheme was received from any of the members, the scheme was accepted and recommended by ERPC to NCT.

Meeting ended with a vote of thanks to the Chair.

Annexure - I (Attendance)

Name	Email
ERPC Kolkata	ERPC@KolkataMST.onmicrosoft.com
OPTCL HQ (Unverified)	
Director (operation) OPTCL (Unverified)	
ARVIND KUMAR (Unverified)	
Rakesh Kumar Singh	Rakesh.Singh@energy-sel.com
Rakesh Kumar (Unverified)	
Shouvik Banerjee (Unverified)	
Dir (O) BSPTCL (Unverified)	
SLDC,ODISHA (Unverified)	
WBSETCL (Unverified)	
WBSETCL (Unverified)	
Dir (O) (Unverified)	
dpL (Guest) (Unverified)	
WBSEDCL HQ (Unverified)	
Pratham Kumar ERPC (Unverified)	
anita prasad (Unverified)	
BSP TCL	
GM(CP), OPTCL (Unverified)	
SLDC,ODISHA (Unverified)	
MS ERPC (Unverified)	
eee (Unverified)	
S K Dash (External)	sudipdash@tatapower.com
eee (Unverified)	
Vijay Kumar Dy General Manager (NHPC) (Unverified)	
SLDC RANCHI (Unverified)	
Prabhat Kumar	pk@sikkimurjalimited.in
Arvind Kumar (Unverified)	
Sandip Pal	
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P L Sahoo GM GRIDCO (Unverified)	
Deepak kumar (Unverified)	
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Anita Prasad	
Shouvik Banerjee	
B B Mehta Odisha (Unverified)	

Shouvik Banerjee (Unverified)	
Amit Prakash Rashmi Group (Unverified)	
Member(Go&D) (External)	Member.god@ceaindia.onmicrosoft.com
GRIDCO (Unverified)	
Ashish kr Sharma	
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Amit Kumar {अमित कुमार} (External)	emailamit0014@powergrid.in
Rajesh Kumar {राजेश कुमार} (External)	rajeshkumar@powergrid.in
Arvind Kumar ED C&R JBVNL (Unverified)	
Alok Pratap Singh (External)	apsingh@erldc.onmicrosoft.com
Meeting Guest (Unverified)	
Switchyard Control Room DPL (External)	ecr@dpl.net.in
SLDC,ODISHA (Unverified)	
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SASWAT RANJAN (Unverified)	



भारत सरकार
Government of India
केन्द्रीय विद्युत प्राधिकरण
Central Electricity Authority
पश्चिम क्षेत्रीय विद्युत समिति
Western Regional Power Committee
एफ-3, एमआयडीसी क्षेत्र, अंधेरी पुर्व मुंबई
F-3, MIDC Area, Andheri (East), Mumbai – 400093

No. CEA-GO-31-07(03)/7/2025-WRPC (C No.16392) Dated: 13.08.2025

सेवा में,

To,

संलग्न सूची के अनुसार
As per enclosed list

विषय: पश्चिमी क्षेत्रीय विद्युत समिति (डब्ल्यूआरपीसी) की 55वीं बैठक का कार्यवृत्त-तत्संबंधी।

Sub: Minutes of 55th meeting of Western Regional Power Committee (WRPC)-reg.

महोदय/महोदया

Sir/ Madam,

कृपया 08 अगस्त, 2025 को सुबह 11:00 बजे वीडियो कॉन्फ्रेंस के माध्यम से आयोजित 55वीं तकनीकी समन्वय समिति (टीसीसी) और पश्चिमी क्षेत्रीय विद्युत समिति (डब्ल्यूपीआरसी) की बैठक के कार्यवृत्त संलग्न हैं।

Please find enclosed herewith the Minutes of the 55th Technical Coordination Committee (TCC) & Western Regional Power Committee (WPRC) Meeting held on 08th August, 2025 through Video Conference at 11:00 AM.

यह भी सूचित किया जाता है कि उपरोक्त बैठक के कार्यवृत्त और अनुलग्नक डब्ल्यूआरपीसी की वेबसाइट: wrpc.gov.in पर उपलब्ध हैं।

It is also intimated that the Minutes & Annexures of the above meeting is available on WRPC website: wrpc.gov.in

भवदीय/ Yours,

Signed by Deepak Sharma
Date: 14-08-2025 09:17:53

(दीपक शर्मा / Deepak Sharma)
सहायक सचिव /Assistant Secretary
Email ID: as-wrpc@nic.in
Tel: 022 2088 6456

संलग्नः ऊपरोक्त अनुसार
Encl: As above

WRPC Members List 2025-26			
Sr. No.	**Organisation**	**Details**	**Contact Details**
1	Chairman, WRPC	Shri Lokesh Chandra, IAS ACS, CMD, MSEDCL. Prakashgad, 6th Floor, Plot No G-9, Bandra (East), Mumbai: 400 051	Tel. 022-26474644 Fax 26478672 Fort.Tel.22619499 Fax.22650741 Email: md@mahadiscom.in mdmsedcl@gmail.com
2	Central Electricity Authority	Shri Hemant Jain Member (GO&D), Central Electricity Authority, Sewa Bhavan, R.K. Puram, New Delhi-110 066	Tel. 011-26104217 Fax. 011-26108834 Email: member.god@cea.nic.in
3	Chhattisgarh Transco	Shri R.K. Shukla Managing Director, CSPTCL, 2nd Floor, Vidyut Seva Bhavan, P.O.: Sunder Nagar, Danganiya, Raipur: 492 013 (CG)	Tel. 0771-2574500, 2574300 Fax. 0771-2262141 E-mail: mdtransco@cspc.co.in mdtransco.cg@gmail.com
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7	Gujarat Genco (GSECL)	Shri Somes Bandyopadhyay Managing Director, Gujarat State Electricity Corp. Ltd., Vidyut Bhavan, Race Course, Vadodara: 390 007 (Guj.)	Tel. No.: (0265) 2342491 Fax No.: (0265) 2344734 E-Mail : md.gsecl@gebmail.com
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9	Gujrat Discom: Paschim Gujarat Vij Co. Ltd. (Rotational)	Ms. Preeti Sharma Managing Director, Paschim Gujrat Vij Company Ltd., Paschim Gujrat Vij Seva Sadan, Off. Nana Mava Main Road, Laxminagar, Rajkot-360004.	Email id: md.pgvcl@gebmail.com Tel: 0281-2380425
10	Gujarat SLDC	Shri. Arjun Rathod Chief Engineer (LD), SLDC, Load Dispatch Centre, 132 kV S/S Premises, Gotri, Vadodara: 390 021	Tel. 0265 -2353171 , 2352103 Fax 0265 -2352019 , 2356469 E-mail: celd@gebmail.com
11	M.P. Transco	Shri Sunil Tiwari Managing Director, M.P.Power Transmission Co. Ltd. Shakti Bhavan, Rampur, Jabalpur: 482 008	Tel. 0761-2661234, Fax 0761-2664141 Email:- md@mptransco.nic.in

12	M.P.Genco.	Shri. Manjieet Singh, Managing Director, M.P. Power Gen. Com. Ltd. Shakti Bhavan, Viduyt Nagar,Rampur, Jabalpur: 482 008	Tel. 0761-2666150 Fax 0761-2665661 membergen@yahoo.com
13	MP Discom: (MP Madhya KVVCL - Rotational)	Shri K.C. Mishra General Manager (O&M) M.P. Madhya Kshetra Vidyut Vitaran Co. Ltd. Nishthaparisar, Govindpura Bhopal, Madhya Pradesh-462023.	Email id: mdcz.bhopal@mp.gov.in plm.mpcz@gmail.com
14	M.P. SLDC	Shri. Prdeep Sachan, Chief Engineer(LD), State Load Dispatch Centre, Nayagaon, Jabalpur: 482 008	Tel. 0761-2702740 Fax 0761-2970119,2664343 Email: ce.sldc@mptransco.nic.in
15	Maharashtra Transco	Shri Dinesh Waghmare, IAS, CMD, MSETCL, Prakashganga, Plot No.C-19, E-Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400051.	Tel. 022-26591253, 26598595 26598588 Fax 022- 26598595 Email: md@mahatransco.in Fort Fax No.22610063
16	Maharashtra Genco	Dr. P. Anbalagan, IAS CMD, MSPGCL, Prakashgad, 2nd Floor, Plot No G-9, Bandra (East), Mumbai: 400 051	Tel. 022-26476231 Fax 022-26471060, 26581400 E-mail : md@mahagenco.in
17	Maharashtra Discom.	Shri Lokesh Chandra, IAS ACS, CMD, MSEDCL. Prakashgad, 6th Floor, Plot No G-9, Bandra (East), Mumbai: 400 051	Tel. 022-26474644 Fax 26478672 Fort.Tel.22619499 Fax.22650741 Email: md@mahadiscom.in mdmsedcl@gmail.com
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19	Goa	Shri Stephen Fernandes Chief Electrical Engineer, Goa Electricity Department, Vidyut Bhawan, 3rd floor, Panaji – Goa: 403 001.	Tel. 0832-2224680 Fax.0832-2426986 E-mail: cee-elec.goa@nic.in aeipm@yahoo.com
20	UT of Daman & Diu and Dadra & Nagar Haveli	Shri Arun T. , IAS, Secretary (Power), Vidyut Bhavan, Near 66 kV Sub-Station, Kachigam, Daman 396 215	Tel. No.: 0260- 2231803 Email: secretarypower2020@gmail.com
21	Central Govt. Genco. (NTPC)	Shri Jaikumar Srinivasan Director (Finance), National Thermal Power Corp. Ltd., NTPC Bhavan, SCOPE Complex, 7 Institutional Area, Lodhi Road, New Delhi 110 003	Tel. 011-24360461 Email: df@ntpc.co.in
22	Central Govt. Genco. (NPCIL)	Shri Choudhary Nitin Ramchandra Outstanding Scientist,ED (Commercial), Nuclear Power Corp. of India Ltd., 12 N 24, 12th floor, North Wing, Vikram Sarabhai Bhawan,Anushakti Nagar, Mumbai: 400 094.	Tel. 022-25993330 Fax 022- 25993332 E-mail : df@npcil.co.in
23	C.T.U.	Shri Ashok Pal COO, CTUIL, Plot No.2, Sector – 29, Near Iffco Chowk, Gurgaon- 122 001 (Haryana).	E-mail: coo-ctu@ctuil.in

24	Powergrid	Sh. Naveen Srivastava Director (Operations), PGCIL, "Saudamini", Plot No.2, Sector – 29, Near Iffco Chowk, Gurgaon- 122 001 (Haryana).	Tel. 0124-2571801 Fax 0124-2571802 E-mail: naveensrivastava@powergrid.in
25	National LDC	Shri S. C. Saxena Director (Market Operation) NLDC, Grid Controller of India Limited B-9, Qutab Industrial Area, Katwaria Sarai, New Delhi-110 016	Tel.011-26852583, 40234651 011-26524525, 011-40234652 011-26852843 , Fax 011-26536901 E-mail:- scsaxena@grid-india.in cmd@posoco.in
26	Regional LDC	Shri Mahesh Mehendale Executive Director, Grid Controller of India Limited, WRLDC, F-3, MIDC Area, Marol, Andheri (East), Mumbai: 400 093	Tel. 022-28202691 Fax 022-28202630 Email: mehendale@posoco.in
27	Other Gencos- more than 1000MW (Trombay- TATA Power)	Ms. Anjali Pandey, President - Generation Business, The TATA Power Co. Ltd., Trombay Thermal Power Station-A, Mahul Road, Chembur, Mumbai 400071	Tel No. 022-67175404 Fax No. 022 6665 8801 Email: anjali.pandey@tatapower.com
28	Other Gencos. - more than 1000 MW (RGPPL)	Sh. Santosh Kumar Takhele, CEO, Ratnagiri Gas & Power Pvt.Ltd , Jubilee Tower, 5th Floor, B35-B36 ,Sector -1, Noida. 201 301(U.P)	Tel. 02359- 241073 Fax Email : sktakhele@ntpc.co.in hod-onm.nhdc@nhdcl.com
29	Other Gencos. - more than 1000 MW (NHDC)	Shri Rajeev Jain, MD NHDC Ltd., NHDC Parisar, Shyamala Hills, Bhopal – 462 013(M.P.)	Landline- 0755-4030001 Fax:- 0755-4030003 Email ID:- mdnhdc@nhdcl.com
30	Other Gencos- more than 1000MW (Torrent Power)	Shri Jigish Mehta Executive Director, Torrent Power Gen. Ltd., Sugen Mega Power Project, Off National Highway No.8,Taluka Kamrej, Dist Surat – 394155 (Gujarat).	Tel. 02621-261165 E-mail: jigishmehta@torrentpower.com
31	Other Gencos. - more than 1000 MW (Adani Power Ltd)	Shri Jayadeb Nanda, COO (O&M) Adani Power Ltd, 1st Floor, South Wing, Adani Corporate House, Shantigram, S.G.Highway, Ahmedabad – 382421(Gujarat).	Tel.079-25558818 Fax.079-25557176 E-mail : jayadeb.nanda@adani.com
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34	Other Gencos- More than 1000 MW (Rattan India Power Ltd)	Sh. Ravi Kumar VP & Station Head, RattanIndia Power Ltd., Plot No.D2 & D2, Part Additional Industrial Area, Nandgaonpeth, Amravati	E-mail: ravikumar.pakalapati@rattanindia.com amit.panchalwar@rattanindia.com
35	Other Gencos - more than 1000MW (Jaypee Nigrie STPR)	Shri M.V.R Reddy Chief of Project, 2x660 MW Jaypee Nigrie Super Thermal Power Plant Jaiprakash Power Ventures Limited VPO Nigrie Tehsil-Sarai Dist Singrauli (MP) Pincode: 486669	E-mail: mvr.reddy@jalindia.co.in
36	Other Gencos. More than 1000 MW (D.B.Power Ltd)	Shri Manu Namboothiri, Chief Operating Officer, D.B.Power Ltd., Village : Badadhra, Block & Tehsil : Dabhra, Dist : Janjgir, Champa, Chhattisgarh : 495695.	E-mail:- manu.namboothiri@dbpower.in
37	Other Gencos. More than 1000 MW (KSK Mahanadi Power Co.Ltd.)	G P Rao Project Head, Kored Infra Building, 1st & 2nd Floor, Plot No. -21, Road No. -9, Kakatiya Hills, Madhapur, Hyderabad-500081	E-mail : gprao@ksk.co.in v_gp.rao@jsw.in v_cn.singh@jsw.in
38	Other Gencos. More than 1000 MW (MB Power (MP)Ltd)	Sh. Abhishek Gupta Vice President – Thermal, MB Power(Madhya Pradesh)Ltd 239,Okhla Industrial Estate, Phase III, New Delhi -110020.	Tel.011-47624215 Fax.011-47624229 E-mail : satyendra.singh@hpppl.in
39	Other Gencos. More than 1000 MW (Sasan UMPP)	Shri Subrata Ghosh Project Head,Sasan UMPP, Sasan Power Ltd., Vill: Siddikhurd, P.O.Tiyra, The: Sasan, st:Waidhan,Singroli, Madhya Pradesh – 486 886.	Tel: 78223 05035 Fax: 7822 - 3025087 E-mail: subrata.ghosh@relianceada.com
40	Other Gencos. More than 1000 MW (RKM POWER Gen.)	Shri S.K Bhatnagar, Director & Plant Head, R.K.M. Powergen Pvt. Ltd., No.14, Dr. Giriappa Road, T. Nagar, Chennai 600 017	Tel. No.: 044-66291000 (Gen.No.) Fax : 044 -28158243 / 66291100 E-Mail: shailendra.bhatnagar@rkm.in
41	Other Gencos - more than 1000MW Adani Green Energy	Mr. Chaitanya Prasad Sahu, CEO, Adani Green Energy, Adani Corporate House, Shantigram, Near Vaishnodevi Circle, S.G. Highway, Ahmedabad 382 421 (Guj.)	Email ID: chaitanya.sahoo@adani.com
42	Other Gencos - more than 1000MW GIPCL	Sh. P. S. Goyal, General Manager, (RE-O&M), GIPCL, Ranoli, Vadodara Gujarat-391350	Email ID: psgoyal@gipcl.com
43	Other Gencos - more than 1000MW Bharat Aluminium Company Limited (BALCO)	Sh. Ashutosh Dwivedi, Bharat Aluminium Company Limited (BALCO) Balco Nagar, Parsabhata Gate, Chattisgarh dist- Korba Korba-495684	Email: ashutosh.dwivedi@vedanta.co.in north.aluminium@vedanta.co.in
44	Other Gencos - more than 1000MW Renew Power	Sh. Padmanava Swain	Email: padmanava.swain@renew.com

45	Other Gencos - more than 1000MW Avaada Energy	Shri Rajesh Bihari Dwivedi CEO, Avaada Energy,406, 4th Floor, Hubtown Solaries,N.S. Phadke Road, Andheri East, Mumbai - 400 069	Email: avaada@avaada.com
46	Other Gencos Under 1000MW (Rotational) Dhariwal Infrastructure Ltd.	Shri Pundlik Mahadeorao Wanwe Dhariwal Infrastructure Limited Plot No. C-6, Tadali Growth Centre, MIDC Tadali, Dist-Chandrapur Mharashtra-442406	Email: pundlik.wanwe@rpsg.in
47	Pvt. Distribution Company (Rotational)	Sh. Ramesh Sharma, CEO, Adani Electricity Mumbai Limited, 5th Floor, West Wing, Floor, Wockhardt Tower, BKC, Bandra (E), Mumbai – 400051.	Email Id: Ramesh.Sharma@adani.com
48	Private Transmission Licensee – (Rotational)	Sh. Tushar Savaliya, Head Operation- Power, Air Separation Unit and Transmission EPTCL, 27km Surat-Hazira Road, Hazira, Surat, Gujrat-394270	Email: tushar.savaliya@amns.in ashish.kakroo@amns.in
49	Electricity Traders (Rotational)	Sh. Nandan Singh Rawat, Shree Cement Limited, 101, Hans Bhawan, 1, B.S. Zafar Marg, New Delhi-110002	Email id: nandan.rawat@shreecement.com
50	Member Secretary, WRPC	Shri Deepak Kumar, MemberSecretary, WRPC, F-3, MIDC Area, Marol, Andheri(E), Mumbai -400093.	Tel. 022-28221636 Fax 022-28370193 Email : ms-wrpc@nic.in
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3	MS NERPC	Shri K. B. Jagtap Member Secretary, NERPC, Shillong	Fax: 0364-2534040 Email: ms-nerpc@gov.in
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5	NPC-CEA	Smt. Rishika Sharan, Chief Engineer , National Power Committee(NPC), 3rd Floor, NRPC Building,CEA, 18-A, SJSS Marg, Katwaria Saria, New Delhi.-110 016	Tel.No.011-26562022 E-mail :cenpccea@gmail.com; rishika_sh@yahoo.com
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7	MPPMCL	Shri Rajvarman Saxena CGM(Commercial), MPPMCL Shakti Bhawan, Rampur, Jabalpur.488 008	Email: Email: rajvarman.saxena@mppmcl.com comml.deptt@mppmcl.com
8	Powergrid	Shri Sanjay Kumar Singh, CGM, PGCIL	Email: singhsk@powergrid.in

TCC Member List 2025-26			
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3	Chhattisgarh Discom	Shri R.A. Pathak Director (Comml) CSPDCL, 4th floor,Vidyut Sewa Bhawan, Danganiya, Raipur: 492 013 (CG)	Tel. 0771-2574441 Fax 0771-2574442 Email: pathak63ra@gmail.com
4	Chhattisgarh Genco	Shri N.K.Bizora, Executive Director (O&M Gen.), CSPGCL, Vidyut Sewa Bhawan,5th Floor, P.O.Sunder Nagar, Danganiya, Raipur: 492 013 (CG)	Tel.0771-2574421 Fax.0771-2574425 E-mail:- ceonm.gen@cspc.co.in
5	Chhattisgarh SLDC	Shri K.S.Manothiya, E.D.(LD), SLDC Building, CSPTCL, P.O.Sunder Nagar, Danganiya, Raipur: 492 013 (CG)	Tel. 0771-2574172 Fax. 0771-2574174 E-mail:- celdcg@sldccg.com celdcg@sldccg.com ksmanothiyayks@gmail.com
6	Gujarat Genco - (GSECL)	Shri Somes Bandyopadhyay Managing Director, Gujarat State Electricity Corp. Ltd., Vidyut Bhavan, Race Course, Vadodara: 390 007 (Guj.)	Tel. 0265-6612101, 6612115(PA) Fax. 0265-2338848 ,2344734 E-mail : mdgsecl@gebmail.com
7	Gujarat Transco (GETCO)	Shri R. K. Patel Chief Engineer (R. & C.), GETCO, Sardar Patel Vidyut Bhawan, Race Course, Vadodara: 390 007	Tel. 0265 -2353171 , 2352103 Fax 0265 -2352019 , 2356469 E-mail: acerc.getco@gebmail.com
8	Gujrat Discom: Paschim Gujarat Vij Co. Ltd. (Rotational)	Ms. Preeti Sharma Managing Director, Paschim Gujrat Vij Company Ltd., Paschim Gujrat Vij Seva Sadan, Off. Nana Mava Main Road, Laxminagar, Rajkot-360004.	Email id: md.pgvcl@gebmail.com Tel: 0281-2380425
9	Gujarat SLDC	Shri. Arjun Rathod Chief Engineer (LD), SLDC, Load Dispatch Centre, 132 kV S/S Premises, Gotri, Vadodara: 390 021	Tel. 0265 -2353171 , 2352103 Fax 0265 -2352019 , 2356469 E-mail: celd@gebmail.com
10	M.P. Transco.	Shri Sunil Tiwari Managing Director, M.P.Power Transmission Co. Ltd. Shakti Bhavan, Rampur, Jabalpur: 482 008.	Tel. 0761- 2661234, Fax 0761-2664141 Email:- md@mptransco.nic.in
11	M.P. Genco.	Shri B.L. Newal, Executive Director (O&M –gen.) M.P. Power Gen. Com. Ltd. Shakti Bhavan, Viduyt Nagar, Rampur, Jabalpur: 482 008.	Tel. E-mail: cecomwz@gmail.com

12	MP Discom: (MP Madhya KVVCL -Rotational)	Shri S.K. Kushwaha Dy. General Manager (O&M) M.P. Madhya Kshetra Vidyut Vitaran Co. Ltd. Nishthaparisar, Govindpura Bhopal, Madhya Pradesh-462023.	Email id: mdcz.bhopal@mp.gov.in plm.mpcz@gmail.com
13	M.P. SLDC	Shri. Prdeep Sachan, Chief Engineer(LD), State Load Dispatch Centre, Nayagaon, Jabalpur: 482 008	Tel. 0761-2702740 Fax 0761-2970119,2664343 Email: ce.sldc@mptransco.nic.in
14	Maharashtra Transco.	Shri. Sandeep Kalantri, Director (Operations), MSETCL, Prakashganga, Plot No.C-19, E-Block, Bandra Kurla Complex, Bandra (East), Mumbai – 400051.	Tel. 022-26595404, 26595003, Fax. 022-26590383,26591254, Gen. 26598595, F. Tel.22621178, Fax. 22619699, E-mail-dirop@mahatransco.in
15	Maharashtra Genco	Shri Sanjay Marudkar Director (Operation) MSPGCL, Prakashgad, 2nd Floor,Plot No G-9, Bandra (E), Mumbai: 400 051	Tel. 022-26476909 Fax. 022-26474190 E-mail:-directorop@mahagenco.in
16	Maharashtra Discom.	Shri. Yogesh Madhukar Gadkari Director (Commercial) (I/C), MSEDCL, Prakashgad, 6th Floor, Plot No G-9, Bandra (East), Mumbai: 400 051	Tel. 022-26476743 Fax.26472976 Fort office Tel.022-22619277 Email:- directorcommsedcl@gmail.com
17	Maharashtra SLDC	Shri Shashank Jewalikar Executive Director, Load Dispatch Centre, Kalwa Thane Belapur Rd., P.O.- Airoli, Navi Mumbai:400 708	Tel. 022-27601762 Fax 022-27601769 E-mail:- cesldc@mahasldc.in
18	Goa	Shri Stephen Fernandes Chief Electrical Engineer, Goa Electricity Department, Vidyut Bhawan, 3rd floor, Panaji – Goa: 403 001.	Tel. 0832-2224680 Fax.0832-2426986 E-mail: cee-elec.goa@nic.in aeipm@yahoo.com
19	UT of Daman & Diu and Dadra & Nagar Haveli	Shri C.A. Parmar, Chief Engineer- DNHPDCL, Room No. 312, 3rd floor, Vidhyut Bhavan, 66 kV Road, Near Secretariat, Amali, Silvassa: 396 230	Tel. 0260-2406558 Email: caparmar1956@gmail.com
20	(a). Central Sector Genco. (NTPC WR-I)	Sh. Santosh Kumar Takhele Regional Executive Director WR-I HQ, NTPC, Samrudhhi Venture Park, Marol MIDC, Andheri (E), Mumbai	Phon No. 022-28306326 Email Id :-sktakhele@ntpc.co.in
21	(b). Central Sector Genco. (NTPC WR-II)	Shri E. Satya Phani Kumar, Regional Executive Director WR-II HQ, NTPC, Sector-24, New Raipur, Chhattisgarh	Tel. 022-28227762 Fax. 022-28259364 E-mail: esatyaphanikumar@ntpc.co.in
22	Central Govt. Genco. (NPCIL)	Shri Sandeep Sarwate, ACE (E & T), Nuclear Power Corp. of India Ltd, 9-N-33,Vikram Sarabhai Bhavan, Anushakti Nagar, Mumbai:400 094	Tel. 022-25991902 Fax.022- 25557890 E-mail:- ssarwate@npcil.co.in.

23	C.T.U.	Shri Ashok Pal COO, CTUIL, Plot No.2, Sector – 29, Near Iffco Chowk, Gurgaon- 122 001 (Haryana).	Email: coo-ctu@ctuil.in
24	Powergrid WR-I	Shri S Subramanian Executive Director, (WR-I), POWERGRID, Sampriti Nagar, Nari Ring Road, Nagpur -440 026	Tel. 0712-2641470 Fax.0712-2641471 E-mail:- subbu@powergrid.in
25	Powergrid WR-II	Shri Rajesh Kumar Executive Director(WR-II) PGCIL, Regional Head Quarters, Plot No. 54, Opp- Ambe Vidhyalay, Sama Sawali Rd., Vadodara 390 008	Tel. 0265-2487594 Fax. 0265-2488564 rajesh.kumar2@powergrid.in
26	National LDC	Smt. S. Usha Head of NLDC, Grid Controller of India Limited B-9, Qutab Industrial Area, Katwaria Sarai, New Delhi-110 016	Tel. 011-26852843 Fax 011-26536901 E-mail:- susha@grid-india.in cmd@posoco.in
27	Regional LDC	Shri Mahesh Mehendale, Executive Director, Grid Controller of India, WRLDC. F-3, MIDC Area, Marol, Andheri (East), Mumbai: 400 093	Tel. 022-28202691 Fax 022-28202630 Email: mehendale@posoco.in
28	Other Gencos. - more than 1000 MW (Tata Power-Trombay)	Shri Devanand Pallikuth Head - PSCC The Tata Power Company Ltd., Power System Control Centre, Trombay Thermal Power Station-A, Mahul Road, Chembur, Mumbai – 400 074.	Tel.67175371 Fax.67175385 E-mail: p.devanand@tatapower.com
29	Other Gencos. - more than 1000 MW (RGPPL)	Shri Santosh Kumar Takhele, CEO, Ratnagiri Gas & Power Pvt.Ltd , P.O.- Anjanvel, 415 634 (MH)	Tel. 02359- 241073 Fax Email : sktakhele@ntpc.co.in
30	Other Gencos. - more than 1000 MW (NHDC)	Sh. Sandeep Kumar Jain General Manager (O & M), NHDC Ltd., NHDC Office Complex, Shyamala Hills, Bhopal – 462013(M.P.)	Tel.0755-40300090 Email: skjain_nhdc@rediffmail.com hod-onm.nhdc@nhdcl.com
31	Other Gencos – more than 1000MW (Torrent Power Surat)	Shri Ambarish Modha General Manager (O), Sugen Mega Power Project, Off National Highway No.8,Taluka - Kamrej, District : Surat – 394 155	Tel.02621-261000/261663 Fax.02621-661151 E-mail: sugenoperations@torrentpower.com sugenschedule@torrentpower.com
32	Other Gencos – more than 1000MW (Adani Power Ltd.)	Shri Manoj K Taunk, Asso. Vice President (Protection & Metering), Adani Power Ltd, 1st Floor, South Wing, Adani Corporate House Shantigram,S.G.Highway, Ahmedabad – 382421(Gujarat).	Tel.079- 25557400 Fax.079- 25557176 E-mail:- manoj.taunk@adani.com
33	Other Gencos- more than 1000MW (JSW Energy Ltd.)	Shri Peddanna Ramayanam, M/s.JSW Energy Ltd., JSW Centre,Bandra Kurla Complex, Bandra (E), Mumbai 400 051	Tel.022- 42862041, 42868128 Fax. 022-4286 3000 Mobile. E-mail: peddanna.ramayanam@jsw.in

34	Other Gencos- more than 1000MW (Jindal Power Ltd.)	Shri Gajendra Rawat, Executive Vice President-Operations Jindal Power Limited, Tamnar, District:Raigarh, Chhattisgarh – 496 107.	Email: gajendrarawat@jindalpower.com
35	Other Gencos- More than 1000 MW (Rattan India Power Ltd.)	Sh. Ravi Kumar VP & Station Head RattanIndia Power Ltd., Power No.D2 & D2 Part Additional Industrial Area, Nandgaonpeth, Amravati -444 901.	E-mail: ravikumar.pakalapati@rattanindia.com amit.panchalwar@rattanindia.com
36	Other Gencos.- More than 1000 MW (Jaypee Nigrie)	Shri Navin Tinguria Vice President, 2x660 MW Jaypee Nigrie Super Thermal Power Plant Jaiprakash Power Ventures Limited VPO Nigrie Tehsil-Sarai Dist Singrauli (MP) Pincode: 486669	E-mail: navin.tinguria@jalindia.co.in
37	Other Gencos. More than 1000 MW (D.B.Power Ltd.)	Sh. Manu Namboothiri, D.B.Power Ltd., Village : Badadhra, Block & Tehsil : Dabadhra, Dist : Janjgir, Champa, Chhattisgarh : 495695.	manu.namboothiri@dbpower.in
38	Other Gencos. More than 1000 MW (KSK Mahanadi Power Co.Ltd.)	Shri G. P. Rao Project Head, Kored Infra Building, 1st & 2nd Floor, Plot No. -21, Road No. -9, Kakatiya Hills, Madhapur, Hyderabad-500081	E-mail:- gprao@ksk.co.in
39	Other Gencos. More than 1000 MW (MB Power (MP)Ltd)	Shri Rahul S.Sharma, GM - Business Development, MB Power(Madhya Pradesh)Ltd 239,Okhla Industrial Estate, Phase III, New Delhi -110020 .	Tel.011-47624100 Extn.496 E-mail:- sharma.rahul@hindustanpower.in hocontrolroom@hindustanpower.in
40	Other Gencos. More than 1000 MW (Sasan UMPP.)	Shri Prakash Chandra Upadhyay Operation Head, Sasan UMPP, Sasan Power Ltd., Vill: Siddikhurd, P.O.Tiyra, The: Sasan, Dist:Waidhan,Singroli, Madhya Pradesh – 486 886.	E-Mail: Prakash.c.upadhyay@relianceada.com
41	Other Gencos. More than 1000 MW (RKM Power Gen. Pvt. Ltd.)	Shri S.K Bhatnagar, Head Operations, R.K.M. Powergen Pvt. Ltd., No.14, Dr. Giriappa Road, T. Nagar, Chennai 600 017	Tel. No.: 044-66291000 (Gen.No.) Fax : 044 -28158243 / 66291100 E-Mail: shailendra.bhatnagar@rkm.in
42	Other Gencos - more than 1000MW Adani Green Energy	Mr. Rajesh Kumar Gupta, Associate VP, Adani Green Energy Adani Corporate House, Shantigram, Near Vaishnodevi Circle, S.G. Highway, Ahmedabad 382 421 (Gui.)	Email ID: rajesh.gupta@adani.com
43	Other Gencos - more than 1000MW GIPCL	Sh. S. Mani, Addl. General Manager (Commercial & Legal) , GIPCL, Ranoli, Vadodara Gujarat-391350	Email ID: svmani@gipcl. Com

44	Other Gencos - more than 1000MW Bharat Aluminium Company Limited (BALCO)	Sh. Sangeet Sahu, Bharat Aluminium Company Limited (BALCO) Balco Nagar, Parsabhata Gate, Chattisgarh dist- Korba Korba-495684	E-mail: sangeet.sahuu@vedanta.co.in north.aluminium@vedanta.co.in
45	Other Gencos - more than 1000MW Renew Power	Sh. Purnendu Chaubey	Email: purnendu.chaubey@renew.com
46	Other Gencos - more than 1000MW Avaada Energy	Shri Vivek Kumar Jain CEO, Avaada Energy,406, 4th Floor, Hubtown Solaries,N.S. Phadke Road, Andheri East, Mumbai - 400 069	Email: Vivek.jain@avaada.com avaada@avaada.com
47	Other Gencos Under 1000MW (Rotational) Dhariwal Infrastructure Ltd.	Shri Pundlik Mahadeorao Wanwe Dhariwal Infrastructure Limited Plot No. C-6, Tadali Growth Centre, MIDC Tadali, Dist-Chandrapur Maharashtra-442406	Email: pundlik.wanwe@rpsg.in
48	Pvt. Distribution Company (Rotational)	Sh. Suraj Phalak, CEO, Adani Electricity Mumbai Limited, 5th Floor, West Wing, Floor, Wockhardt Tower, BKC, Bandra (E), Mumbai – 400051.	Email Id: Suraj.Phalak@adani.com
49	Private Transmission Licensee – (Rotational)	Sh. Subir Kumar, Head-Central Electrical (Projects) EPTCL, 27km Surat-Hazira Road, Hazira, Surat, Gujrat-394270	Email: subir.kumar@amns.in ashish.kakroo@amns.in
50	Electricity Traders (Rotational)	Sh. Nandan Singh Rawat, Shree Cement Limited, 101, Hans Bhawan, 1, B.S. Zafar Marg, New Delhi-110002	Email id: nandan.rawat@shreecement.com
51	Member Secretary, WRPC	Shri Deepak Kumar, Member Secretary, WRPC, F-3, MIDC Area, Marol, Andheri(E), Mumbai -400093.	Tel. 022-28221636 Fax 022-28370193 Email : ms-wrpc@nic.in
SPECIAL INVITEE			
1	MS ERPC	Shri N.S. Mondal Member Secretary, ERPC, Kolkata	Tel: 033-24239652, 24239653 Email: mserpc-power@nic.in
2	MS SRPC	Shri Asit Singh Member Secretary, SRPC, Bengaluru	Tel: 080-22259343 Email: mssrpc@yahoo.com
3	MS NERPC	Shri K. B. Jagtap Member Secretary, NERPC, Shillong	Fax: 0364-2534040 Email: ms-nerpc@gov.in
4	MS NRPC	Sh. V. K. Singh Member Secretary, NRPC, New Delhi	Fax: 011-26868528, 26865206 Email: msnrpc1@yahoo.com ms-nrpc@nic.in
5	NPC-CEA	Smt. Rishika Sharan, Chief Engineer , National Power Committee(NPC), 3rd Floor, NRPC Building,CEA, 18-A, SJSS Marg, Katwaria Saria, New Delhi.-110 016	Tel.No.011-26562022 E-mail :cenpccea@gmail.com; rishika_sh@yahoo.com
6	GUVNL	Shri Jaiprakash Shivahare, Gujarat Urja Vikas Nigam Ltd, Sardar Patel Vidyut Bhawan, Race Course, Vadodara: 390 007.	E-mail:- coacom@gebmail.com

7	MPPMCL	Shri Rajvarman Saxena CGM(Commercial), MPPMCL Shakti Bhawan, Rampur, Jabalpur.488 008	Email: rajvarman.saxena@mppmcl.com comml.deptt@mppmcl.com
8	Powergrid	Shri Sanjay Kumar Singh, CGM, PGCIL	Email: singhsk@powergrid.in



भारत सरकार

Government of India

केन्द्रीय विद्युत प्राधिकरण

Central Electricity Authority

पश्चिम क्षेत्रीय विद्युत समिति, मुंबई

Western Regional Power Committee, MUMBAI

तक. सम. स. / प. क्षे. वि. स.

की दिनांक 08 अगस्त, 2025 को

वीडियो कॉन्फ्रेंसिंग के माध्यम से आयोजित

55वीं बैठक का कार्यवृत्त

Minutes of 55th Meeting of TCC/WRPC

held on 08th August, 2025

through **Video Conferencing**

Index

S. No.	Agenda Description
1.	New ISTS proposals costing more than 500 Crores.

Minutes of the 55th WRPC meeting

The 55th WRPC meeting, chaired by Chairperson WRPC & MD MSEDCL, Shri Lokesh Chandra, IAS, was held on 08th August 2025, through an online mode.

Shri Deepak Kumar, MS WRPC extended warm welcome to Chairperson WRPC & MD MSEDCL Shri Lokesh Chandra and intimated that the special meeting has been convened as per the mandate of MoP order on reconstitution of NCT, wherein it has been provided that the views of RPC are required for proposals costing more than Rs. 500 Crores before consideration by National Committee on Transmission.

Chairperson WRPC Shri Lokesh Chandra welcomed all the members and requested to commence the proceedings.

Item No. 1: New ISTS proposals costing more than 500 Crores.

(CTUIL)

CTUIL has submitted that the following network expansion scheme for implementation under ISTS and costing more than Rs. 500 Crores was deliberated and agreed in the 36th Consultation Meetings for Evolving Transmission Schemes in Western Region and 43rd Consultation Meetings for Evolving Transmission Schemes in Eastern Region. The total estimated cost of the scheme is Rs. 1007 Crores.

Sl.	Name of Scheme	State(s)	CMETS Meeting	Estimated Cost (₹ Cr.)
1	WR-ER Inter-Regional Network Expansion Scheme (Part-A)	Chhattisgarh, Jharkhand and Odisha	36th CMETS-WR held on 26.05.2025 to 28.05.2025 & 43rd CMETS-ER held on 29.05.2025	7037.27

2. Details of the above scheme are given below.

Sl. No.	Items	Details
1.	Name of scheme	WR-ER Inter-Regional Network Expansion Scheme (Part-A)
2.	Scope of the scheme	Brief scope of works is given below.

		i. Establishment of 2x1500MVA, 765/400kV new S/s at Jamshedpur (New) in Jharkhand. ii. Establishment of 3x1500MVA, 765/400kV new S/s at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor iii. Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765kV D/c line iv. LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line at Raigarh (Kotra) -II S/s v. Raigarh (Tamnar)@ - Raigarh (Kotra)-II S/s 765kV D/c line vi. 765kV, 330MVAr switchable line reactor along with associated bays in each line of Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c line at Raigarh (Tamnar) end vii. Raigarh (Tamnar)@ – Jamshedpur (New) 765kV D/c line viii. LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New) ix. LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) a) Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose b) Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage) x. Extension at Jamshedpur (New) 765/400kV (ISTS) substation for implementation of 2 nos. 400kV line bays [for termination of Jamshedpur – Balasore 400kV D/c (Quad) line] xi. Jamshedpur (New) – Balasore 400kV D/c (Quad) line *@4 Nos. 765kV line bays vacated at Tamnar S/s after bypass arrangement to be utilized for line termination at Tamnar S/s. [Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c]*

		Detailed scope of works is enclosed at **Appendix-A.**
3.	**Depiction of the scheme on Transmission Grid Map**	Refer **Annexure 1.1**.
4.	**Upstream/downstream system associated with the scheme**	**A.** Following ATS incl. terminal bays identified for Adani Power Limited (APL) (appl. No. 2200001709) under the subject transmission scheme is associated with 2x800MW Raigarh TPS of M/s APL: - 765/400kV, 3x1500MVA ICT (10x500MVA single phase units) - 765kV ICT bays: 3 nos. - 400kV ICT bays: 3 nos. - 400kV line bays: 2 nos. [for interconnection of 2x800MW Raigarh TPS of APL to Raigarh(Kotra)-II 400kV D/c line] **B.** Scope under OPTCL (STU of Odisha): OPTCL needs to implement 2 nos. 400kV line bays along with 1x80MVAr switchable line reactor at its planned Balasore 400/220kV S/s for termination of Jamshedpur (New) – Balasore 400kV D/c (Quad) line. Balasore (OPTCL) 400/220kV S/s is yet to be awarded. The expected commissioning schedule is Mar 2029 as per OPTCL.
5.	**Objective / Justification**	A joint study meeting was held on 20-01-2025, wherein an additional 765kV corridor between ER and WR was identified to relieve the loading of various 765kV and 400kV lines in the WR-ER and nearby 400kV corridors in the peak solar scenario in 2028-29 timeframe. It was observed that Ranchi – Dharamjaygarh 765kV 2XS/c line, Ranchi – Sipat 400kV D/c line and Ranchi New – New PPSP 400kV D/c lines are getting critically loaded under N-1 contingency. In order to relieve the critical loading on the above mentioned lines, a new ISTS 765/400kV S/s has been planned in Jamshedpur area through Tamnar (POWERGRID) – Jamshedpur (New) 765kV D/c line along with LILO of Ranchi (New) – Medinipur 765kV D/c existing line at Jamshedpur (New), LILO of Ranchi (New) – New PPSP 400kV D/c existing line at Jamshedpur (New) and Jamshedpur (New) – Balasore 400kV D/c (Quad) line. Subsequently, Adani Power Limited applied for grant of connectivity for 1600MW quantum for its 2x800MW Raigarh TPS on 29.01.2025 under GNA in Pussore, Raigarh, Chhattisgarh. Further, new connectivity/GNA applications have also been received in Chhattisgarh from:

		1. Korba Power Limited (Erstwhile Lanco Amarkantak) (2x660MW) which is proposed for grant at Champa 400kV Sec-B (with KSK 3x600MW Units & Lara-II (2x800MW) generating stations) 2. Korba Power Limited (2x800MW) which is proposed for grant at Dharamjaigarh 400kV Sec-B There is no margin for injection left at Raigarh(Kotra) substation for injection of power, as any injection at 400kV level of Raigarh(Kotra) S/s leads to N-1 non-compliance of 765/400kV ICTs [especially under Raigarh-Pugalur HVDC reverse power flow scenario (3000MW reversal)] and any additional interconnection of generation project shall lead to increase in fault level at Raigarh(Kotra) S/s beyond its design limits of 50kA. Further, there is no space available at Raigarh(Kotra) S/s for any augmentation. Moreover, overloading issues on Raigarh (Tamnar) – D'jaigarh (Sec-B) 765kV D/c line as well as Sipat – Ranchi 400kV D/c line are also being observed in the planning studies) and measures are being planned to alleviate the same. In order to alleviate overloading issues in WR – ER corridors and as well as to facilitate evacuation of power from 2x800MW Raigarh TPS of APL at Raigarh (Kotra)-II, Korba Power Limited (2x660MW) at Champa and & Korba Power Limited (2x800MW) at Dharamjaygarh Substation, subject scheme in WR as well as IR link between WR & ER have been planned. The said scheme has been agreed in the 36th CMETS-WR meeting held from 26.05.2025 to 28.05.2025 & in 43rd CMETS-ER held on 29th May 2025. There is Part-B of the scheme which includes reconductoring of LILO point to New PPSP line section of Ranchi (New) – New PPSP 400kV D/c line with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage level), which is being taken up separately with commissioning matching with Part-A of the scheme. Detailed scope of works is enclosed at Annexure 1.2.
6.	**Estimated Cost**	About ₹ 7037.27 Cr. (including Rs. 415.44 Cr as the cost of ATS identified for Adani Power Limited)
7.	**Impact on the total Annual Transmission Charges in % along with the existing ATC**	A. ATC (considering levelized tariff @15% of estimated cost): ₹ 1055.59Cr. B. Present ATC: ₹46084.29 Cr.* C. A/B: 2.29%

	Need of phasing, if any	Nil
9.	**Implementation timeframe**	**Element at Sl. No. i) to ix):** 24 months from date of allocation **Element at Sl. No. x) & xi):** 31-03-2029
10.	**Inclusion of any wild life/ protected area along the transmission line route**	No major NP, WLS, other protected areas observed. However, for details of other forest/protected areas survey is required to be done.
11.	**Deliberations with RPC along with their comments**	**RPCs may add their deliberations here.**
12.	**System Study for evolution of the proposal**	Refer **Annexure 1.3**.

**Total YTC allowed for June 2025, as per notification of transmission charges payable by DICs for billing month of August 2025 dated 25-07-2025 published on NLDC website (available @ https://webcdn.grid-india.in/files/grdw/2025/07/Notification%20of%20Transmission%20charges%20for%20DICs%20for%20the%20billing%20month%20of%20August,2025_725.pdf)*

3. In line with MoP office order no. 15/3/2018-Trans-Pt (5) dated 28.10.2021 regarding reconstitution of NCT, views of RPC are required for proposals costing more than Rs. 500 Crores before consideration by National Committee on Transmission. Further, Para 6 (3A) & Para 11 of MoP Gazette dated 03.12.2021 on resolution for establishment of WRPC stipulates the following:

> *"3A- To provide views on the inter-state transmission system planned by CTU within 45 days of receipt of the proposal by the concerned RPC. The views of RPC will be considered by National Committee on Transmission for sending their recommendation to Ministry of Power for approval of new inter-state transmission system."*

55th WRPC Discussions:

CTU explained that new connectivity applications have been received from APL Raigarh TPS for 1600MW (2x800MW), Korba Power Ltd. 1320MW (2x660MW) for connectivity at Champa 400kV & 1600MW (2x800MW) at Dharamjaigarh 400kV for which the system strengthening scheme has been formulated. Further, they stated that for 2028-29-time frame, it has been observed that the ER-WR corridor is critically loaded under N-1 contingency and accordingly a new 2x1500MVA, 765/400kV S/s at Jamshedpur (in Jharkhand), 3x1500MVA, 765/400kV Raigarh (Kotra)-II S/S (in Chattisgarh), and 765kV Raigarh (Tamnar)-Jamshedpur D/c line along with reconfiguration of the system has been planned.

Chairperson WRPC enquired about the mode of implementation of the proposed scheme. CTU replied that after the approval of WRPC & ERPC, the above proposal will be put up

to NCT and then, based on the cost of the projects and other aspects, NCT will recommend the mode of implementation to MoP. They further stated that schemes costing more than Rs. 500Cr, are generally implemented through TBCB.

Chairperson WRPC requested CTU to arrange a presentation on the system planned in the country for the next 5 years so that WRPC will be well informed about the developments and will be able to know the system requirements of WR. CTUIL agreed for the same.

WRPC approved the schemes and recommended for taking it up at NCT

****

Annexure 1.2

WR-ER Inter-Regional Network Expansion Scheme (Part-A)

Sl. No.	Scope of works	Capacity (MVA) / Line length (km)/ Nos.
1.	Establishment of new 2x1500MVA, 765/400kV S/s at Jamshedpur in Jharkhand **Additional space for future expansion**: - 765/400kV, 4x1500MVA (12x500MVA single phase units) ICTs along with associated ICT bays at both voltage levels - 400/220kV, 6x500MVA ICTs along with associated ICT bays at both voltage levels - 765kV, 2x330MVAr (6x110MVAr single phase units) bus reactor along with associated bay - 420kV, 2x125MVAr bus reactor along with associated bay - 765kV line bays (along with space for switchable line reactor) for future lines: 8 nos. - 400kV line bays (along with space for switchable line reactor) for future lines: 10 nos. - 220kV line bays for future lines: 12 nos. - 765kV bus sectionaliser bay: 1 set - 400kV bus sectionaliser bay: 1 set - 220kV bus sectionaliser bay: 1 set - 220kV bus coupler bay: 1 set - 220kV transfer bus coupler bay: 1 set	- 765/400kV, 2x1500MVA ICT (7x500MVA single phase units) - 765kV, 2x330MVAr bus reactor (7x110MVAr single phase units) - 420kV, 125MVAr bus reactor: 2 nos. - 765kV ICT bays: 2 nos. - 765kV Bus reactor bays: 2 nos. - 400kV ICT bays: 2 nos. - 400kV Bus reactor bays: 2 nos. - 765kV line bays: 6 nos. (2 nos for Jamshedpur – Tamnar 765kV D/c line and 4 nos for LILO of Ranchi (New) – Medinipur 765kV D/c line) - 400kV line bays: 4 nos. [for LILO of Ranchi (New) – New PPSP 400kV D/c line] - 765kV, 330MVAr (3x110MVAR single phase units) switchable line reactor along with associated bays in each circuit of Raigarh (Tamnar) – Jamshedpur 765kV D/c line
2.	Establishment of 3x1500MVA, 765/400kV S/s at Raigarh(Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor (on 765kV Bus section-II & 400kV Bus Section-II) **Additional space for future expansion**: - Creation of 1100kV level - 1100kV bus sectionaliser bay: 1 set (to establish Sec-I & Sec-II) - 400kV bus sectionaliser bay :3 sets (to establish Sec-I, Sec-III & Sec-IV)	**ATS incl. terminal bays identified for Adani Power Limited (appl. No.2200001709):** - 765/400kV, 3x1500MVA ICT (10x500MVA single phase units) - 765kV ICT bays: 3 nos. - 400kV ICT bays: 3 nos. - 400kV line bays: 2 nos. [for interconnection of 2x800MW Raigarh TPS of APL to Raigarh(Kotra)-II 400kV D/c line]

	- 1100/400kV, 6x3000MVA (19x1000 MVA single phase units) ICTs along with associated ICT bays. • 1100kV side: - 3 nos. on Bus Sec-I & 3 nos on Bus Sec-II) • 400kV side:- 3 nos. on Bus Sec-III & 3 nos. on Bus Sec-IV) - 1100kV line bays (along with space for switchable line reactor) for future lines: 12 nos. (6 nos. on Bus Sec-I & 6 nos. on Bus Sec-II) - 1200kV, 4x660MVAr (13 x 220MVAR single phase units) bus reactor along with associated bays (2 nos. on Bus Sec-I & 2 nos. on Bus Sec-II) - 765kV bus sectionaliser bay: 1 set (to establish Sec-I) - 765/400kV, 5x1500MVA (15 x 500 MVA single phase units) ICTs along with associated ICT bays • 765kV side: - 4 nos. on Bus Sec-I & 1 nos. on Bus Sec-II) • 400kV side: - 4 nos. on Bus Sec-I & 1 nos. on Bus Sec-II) - 765kV, 2x330MVAr (6 x 110MVAr single phase units) bus reactor along with associated bay (on Bus Sec-I) - 420kV, 6x125MVAr bus reactor along with associated bay (2 on Bus Sec-I; 2 on Bus Sec-III & 2 on Bus Sec-IV) - 765kV line bays (along with space for switchable line reactor) for future lines: 6 nos. (6 on Bus Sec-I) - 400kV line bays (along with space for switchable line reactor) for future lines: 10 nos. (6 on Bus Sec-I; 4 on Bus Sec-II, (6 on Bus Sec-III & 6 on Bus Sec-IV,) - Establishment of 6000 MW, ± 800 kV Raigarh (HVDC) [LCC] terminal station (4x1500 MW) along with associated interconnections with 400 kV HVAC Switchyard (2x1500 MW on 400 kV Sec-III along with associated 4 no. bays & 2x1500 MW on 400 kV Sec-IV along with associated 4 no. bays) & all associated equipment (incl. filters)/bus extension, etc.	**Common Transmission System Augmentation:** - 765kV, 2x330MVAr bus reactor (7x110MVAr single phase units) - 420kV, 125MVAr bus reactor: 2 nos. - 765kV Bus reactor bays: 2 nos. - 400kV Bus reactor bays: 2 nos. - 765kV line bays: 6 nos. (2 nos for Raigarh (Tamnar) - Raigarh(Kotra)-II 765kV D/c line and 4 nos. for LILO of LILO of D'jaygarh (Sec-B) – Jharsuguda 765kV D/c line 765kV D/c line) - 765kV, 240MVAr (3x80MVAr single phase units) switchable line reactor along with associated bays in each circuit of Raigarh (Kotra)-II – Jharsuguda-A 765kV D/c section along with 1x80MVAr 765kV spare reactor
3.	Bypassing of Raigarh (Tamnar) –	10km (Route length)

	Dharamjaygarh (Sec-B) 765kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765kV D/c line [Final length of Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765kV D/c line after bypassing~115km]	
4.	LILO of D'jaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line at Raigarh (Kotra)-II S/s	LILO length ~40 km
5.	Raigarh (Tamnar)@- Raigarh(Kotra)-II S/s 765kV D/c line	50km
6.	765kV, 330MVAr switchable line reactor along with associated bays in each line of Raigarh(Tamnar) – Jamshedpur 765kV D/c line at Raigarh(Tamnar) end	- 765kV, 330MVAr switchable line reactors – 2 Nos. - Switching equipment for line reactors – 2 Nos. - 765kV spare reactor: 1x110MVAr
7.	Raigarh(Tamnar)@ – Jamshedpur 765kV D/c line	315km
8.	LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New)	51km and 49km
9.	LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) (a) Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose (b) Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage)	63km Twin Moose 63km Twin HTLS
10.	Extension at Jamshedpur (New) 765/400kV (ISTS) substation	400kV line bays: 2 nos. [for Jamshedpur – Balasore 400kV D/c (Quad) line]
11.	Jamshedpur (New) – Balasore 400kV D/c (Quad) line	174km

Note:

1. *@4 Nos. 765kV line bays vacated at Raigarh (Tamnar) S/s after bypass arrangement to be utilized for line termination at Tamnar S/s. [Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765kV D/c]*

2. *TSP shall implement Inter-tripping scheme on D'jaygarh (Sec-B) – Raigarh (Kotra)-II 765 kV D/c line (for tripping of the switchable line reactor at D'jaygarh (Sec-B) end along with the main line breaker).*

3. *TSP of the subject scheme shall implement Inter-tripping scheme on Raigarh (Kotra)-II – Jharsuguda 765 kV D/c line (for tripping of the switchable line reactor at Raigarh (Kotra)-II end along with the main line breaker).*

4. *OPTCL shall implement 2 nos. 400kV line bays along with 1x80MVAr switchable line reactor at its planned Balasore 400/220kV S/s for termination of Jamshedpur (New) – Balasore 400kV D/c (Quad) line. Balasore (OPTCL) 400/220kV S/s is yet to be awarded. However, the expected commissioning schedule is 31-03-2029, as per OPTCL.*

Completion Schedule:

- **Elements at Sl. No. 1 to 9:** 24 months from date of allocation.
- **Elements as Sl. No. 10 & 11**: 31-03-2029.

सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केंद्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग- II
Power System Planning & Appraisal Division-II

सेवा में /To

As per list of Addresses

विषय: ट्रांसमिशन पर राष्ट्रीय समिति (एनसीटी) की बत्तीसवीं बैठक के संशोधित कार्यवृत्त ।

Subject: Revised minutes of the 32nd Meeting of the National Committee on Transmission (NCT)-reg.

महोदया (Madam) / महोदय (Sir),

The 32nd meeting of the National Committee on Transmission (NCT) was held 12th August, 2025 at New Delhi. The revised minutes of the meeting are attached herewith.

भवदीय / Yours faithfully

22-8-2025

(बी.एस.बैरवा / B.S. Bairwa)
मुख्य अभियन्ता एवं सदस्य सचिव,(एन.सी.टी.)/
Chief Engineer & Member Secretary (NCT)

प्रतिलिपि / Copy to:

Joint Secretary (Trans), Ministry of Power, New Delhi

List of Addresses:

1.	Chairperson, Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	2.	Member (Power Systems), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.
3.	Member (Economic & Commercial), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	4.	Director (Trans), Ministry of Power Shram Shakti Bhawan, New Delhi-110001.
5.	Sh, Abhay Bakre, Mission Director, MNRE Atal Akshay Urja Bhawan Opposite CGO Complex gate No. 2, Lodhi Road, New Delhi – 110003	6.	Chief Operating Officer, CTUIL, Floors Nos. 5-10, Tower 1, Plot Nos. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana - 122001.
7.	Sh. Rajnath Ram, Adviser (Energy), NITI Aayog, Parliament Street, New Delhi – 110 001.	8.	CMD, Grid Controller of India, B-9 (1st Floor), Qutub Institutional Area, Katwaria Sarai, New Delhi – 110016
9.	Sh. Ravinder Gupta Expert Member	10	Smt. Raheela Wani, TCC& Managing Director, JKPTCL, Office of Managing Director, Grid Station Complex, Janipur, Jammu/ PDD Complex Bemina Srinagar- 190010
11.	Member Secretary , Western Region Power Committee 2nd Floor, Vidyut Seva Bhavan, P.O.: Sunder Nagar, Danganiya, Raipur: 492 013	12.	Shri Shivdas.S, Chairperson (TCC) and Director (Transmission, System Operation & Planning), KSEBL Vydyuthi Bhavanam, Pattom, Thiruvananthapuram, Kerala- 695004
13.	Sh. Sabyasachi Roy, Director (Operations), WBSETCL	14.	Shri A T Mondal Chairman, NERPC & Hon'ble Power Minister, Govt. of Meghalaya NERPC Complex, Dong Parmaw, Lapalang, Shillong - 793006, Meghalaya
15.	Shri Santanu Basu (IAS) Chairperson, Eastern Regional Power Committee (ERPC) & CMD (WBSEDCL) 14, Golf Club Road, Tollygunge Kolkata-700033		

Special Invitee

1. Chief Engineer (PCD), CEA
2. CEO, RECPDCL
3. CEO, PFCCL

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from AIS to GIS shall lead to increase in estimated cost by additional ₹ 35 crore. It was explained that this additional cost will be about 1.08% of the original cost of the scheme for which NCT is empowered to approve.

3.3.4 After deliberations, NCT approved the modification of Change in Type of bay to be constructed at Shadnagar (TGTRANSCO) substation from AIS to GIS in the transmission scheme "Transmission System for Kurnool-IV REZ - Phase-II (3 GW) and para-9 of the transmission scheme may be updated as below:

Sl. No.	***Scope of the Transmission Scheme***	***Capacity /km***	***Schedule***
9.	Shadnagar – Shadnagar **GIS** (TGTRANSCO) 400 kV quad D/c line (about 50 kms) {TGTRANSCO to implement 400kV Shadnagar **GIS** (TGTRANSCO) substation in matching time frame}	~ 50 km 400kV **GIS** line bays – 2 Nos. (at Shadnagar **GIS** (TGTRANSCO))	30 months

4 New Transmission Schemes:

4.1 WR-ER Inter-Regional Network Expansion Scheme

4.1.1 Representative of CTUIL stated that to alleviate critical loading in the WR–ER transmission corridors under peak solar scenarios (2028–29), ensure N-1 reliability, and enable evacuation of power from upcoming generation projects in Chhattisgarh [in order to facilitate evacuation of power from 2x800MW Raigarh TPS of APL at Raigarh (Kotra)-II, Korba Power Limited (2x660MW) at Champa and & Korba Power Limited (2x800MW) at Dharamjaygarh Substation], two new 765/400 kV ISTS substations at Raigarh (Kotra-II) in WR and Jamshedpur (New) in ER along with WR – ER inter-regional link and associated transmission lines have been planned. The scheme addresses overloading issues on key 765 kV and 400 kV lines in WR & ER, mitigates critical loading and fault level constraints at existing Raigarh (Kotra).

4.1.2 It was also informed that, scheme was recommended in a Special Joint TCC and ERPC meeting of ERPC held on 11.08.2025 and 55th meeting of WRPC held on 08.08.2025

4.1.3 GRID-INDIA stated that, with the future generation envisaged in the Raigarh complex and anticipated power flow from NR to ER region, the utilization of Champa–Kurukshetra HVDC in the forward direction (WR->NR) could be limited during high VRE generation scenario in NR. Therefore, possibility of reverse power flow capability in HVDC Champa–Kurukshetra bipoles may be explored.

4.1.4 GRID-INDIA further added that, with the LILO of 765kV New Ranchi-Medinipur D/c and 400kV New Ranchi-New Purulia PSP D/c at Jamshedpur, low voltages in West Bengal and N-1 violation of 765/400 kV ICTs at New Jeerat is observed. Further, in

lean demand period high voltage is envisaged in Jamshedpur/Jeerat area. Accordingly, the following suggestions were made from voltage stability and reliability perspective in Kolkata / Jeerat area:

a) A new 765kV New Jamshedpur-New Jeerat D/C line along with Switchable L/R (with NGR) at both ends of 765kV New Jamshedpur-New Jeerat D/C for voltage regulation.
b) At 765 kV New Jamshedpur station, each circuit of the New Ranchi D/C to be kept in same dia of the Medinipur D/C, and each circuit of Tamnar D/C in the dia of the Jeerat D/C to enhance the reliability in the event of bus tripping.
c) Augmentation of transformation capacity at New Jeerat by adding one or more 1500 MVA 765/400kV ICTs.

4.1.5 Member (E&C), CEA stated that efforts should be made to make multiple packages of large scheme to encourage more participation from the bidders and to create wider competition in the market.

4.1.6 After deliberations, the transmission scheme "WR-ER Inter-Regional Network Expansion Scheme Part-A" and "WR-ER Inter-Regional Network Expansion Scheme Part-C" were recommended for implementation under TBCB mode while Transmission scheme "WR-ER Inter-Regional Network Expansion Scheme Part-B" was approved for implementation under RTM mode as follows:

(A) Summary of the transmission schemes is given below:

Sl. No.	**Name of the scheme and tentative implementation timeframe**	**Estimated Cost (₹ Crore)**	**Remarks**
1.	WR-ER Inter-Regional Network Expansion Scheme-**Part A**	6272.30 Cr.	Recommended under TBCB with RECPDCL as BPC
3.	WR-ER Inter-Regional Network Expansion Scheme-**Part B**	80.05 Cr.	Approved under RTM through M/s Purulia and Kharagpur Transmission Company Ltd. (owned by Indigrid)
2.	WR-ER Inter-Regional Network Expansion Scheme-**Part C**	912.6	Recommended under TBCB with RECPDCL as BPC
	Implementation timeframe: **Part A:** The implementation timeline is 24 months from the date of allocation. **Part B:** 24 months from date of allocation [matching with WR-ER Inter-Regional Network Expansion Scheme (Part-A)] **Part C:** 31.03.2029		

(B) Detailed scope of the scheme is given below:

a) **WR-ER Inter-Regional Network Expansion Scheme-Part A**

Sl. No.	Scope of works	Capacity (MVA) / Line length (km)/ Nos.	Estimated cost (₹ Cr.)
1.	Establishment of 2x1500MVA, 765/400kV S/s at Jamshedpur (New) in Jharkhand **Additional space for future expansion**: - 765/400kV, 4x1500MVA (12x500MVA single phase units) ICTs along with associated ICT bays at both voltage levels - 400/220kV, 6x500MVA ICTs along with associated ICT bays at both voltage levels - 765kV, 2x330MVAr (6x110MVAr single phase units) bus reactor along with associated bay - 420kV, 2x125MVAr bus reactor along with associated bay - 765kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. - 400kV line bays (along with space for switchable line reactor) for future lines: 10 Nos. - 220kV line bays for future lines: 12 Nos. - 765kV bus sectionaliser bay: 1 set - 400kV bus sectionaliser bay: 1 set - 220kV bus sectionaliser bay: 1 set - 220kV bus coupler bay: 2 set - 220kV transfer bus coupler bay: 2 set	- 765/400kV, 2x1500MVA ICT (7x500MVA single phase units) - 765kV, 2x330MVAr bus reactor (7x110MVAr single phase units) - 420kV, 125MVAr bus reactor: 2 Nos. - 765kV ICT bays: 2 Nos. - 765kV Bus reactor bays: 2 Nos. - 400kV ICT bays: 2 Nos. - 400kV Bus reactor bays: 2 Nos. - 765kV line bays: 6 Nos. (2 nos. for Jamshedpur – Tamnar 765kV D/c line and 4 nos for LILO of Ranchi (New) – Medinipur 765kV D/c line) - 400kV line bays: 4 Nos. [for LILO of Ranchi (New) – New PPSP 400kV D/c line] - 765kV, 330MVAr (3x110MVAR single phase units) switchable line reactor along with associated bays in each circuit of Raigarh (Tamnar) – Jamshedpur 765kV D/c line	788.05
2.	Establishment of 3x1500MVA, 765/400kV S/s (on 765kV Bus section-II & 400kV Bus Section-II) at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor (on 765kV Bus section-II & 400kV Bus Section-II)		-
2A	**Additional space for future expansion**:	**<u>Common Transmission System Augmentation:</u>**	518.85

Sl. No.	Scope of works	Capacity (MVA) / Line length (km)/ Nos.	Estimated cost (₹ Cr.)
	- Creation of 1100kV level - 1100kV bus sectionaliser bay: 1 set (to establish Sec-I & Sec-II) - 400kV bus sectionaliser bay :3 sets (to establish Sec-I, Sec-III & Sec-IV) - 1100/400kV, 6x3000MVA (19x1000 MVA single phase units) ICTs along with associated ICT bays. • 1100kV side: - 3 Nos. on Bus Sec-I & 3 nos. on Bus Sec-II) • 400kV side: 3 Nos. on Bus Sec-III & 3 Nos. on Bus Sec-IV) - 1100kV line bays (along with space for switchable line reactor) for future lines: 12 Nos. (6 Nos. on Bus Sec-I & 6 Nos. on Bus Sec-II) - 1200kV, 4x660MVAr (13 x 220MVAR single phase units) bus reactor along with associated bays (2 Nos. on Bus Sec-I & 2 Nos. on Bus Sec-II) - 765kV bus sectionaliser bay: 1 set (to establish Sec-I) - 765/400kV, 5x1500MVA (15 x 500 MVA single phase units) ICTs along with associated ICT bays • 765kV side: - 4 Nos. on Bus Sec-I & 1 Nos. on Bus Sec-II) • 400kV side: - 4 Nos. on Bus Sec-I & 1 Nos. on Bus Sec-II) - 765kV, 2x330MVAr (6 x 110MVAr single phase units) bus reactor along with associated bay (on Bus Sec-I) - 420kV, 6x125MVAr bus reactor along with associated bay (2 on Bus Sec-I; 2 on Bus Sec-III & 2 on Bus Sec-IV) - 765kV line bays (along with space for switchable line reactor) for future lines: 6 Nos. (6 on Bus Sec-I) - 400kV line bays (along with space for switchable line reactor) for future lines: 22 Nos. (6 on Bus Sec-I; 4 on Bus Sec-II, 6 on Bus Sec-III & 6 on	- 765kV, 2x330MVAr bus reactor (7x110MVAr single phase units) - 420kV, 125MVAr bus reactor: 2 Nos. - 765kV Bus reactor bays: 2 Nos. - 400kV Bus reactor bays: 2 Nos. - 765kV line bays: 6 Nos. (2 nos. for Raigarh (Tamnar) - Raigarh(Kotra)-II 765kV D/c line and 4 nos. for LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line 765kV D/c line) - 765kV, 240MVAr (3x80MVAr single phase units) switchable line reactor along with associated bays in each circuit of Raigarh (Kotra)-II – Jharsuguda (Sec—A) 765kV D/c section along with 1x80MVAr 765kV spare reactor	

Sl. No.	Scope of works	Capacity (MVA) / Line length (km)/ Nos.	Estimated cost (₹ Cr.)
	Bus Sec-IV) - Establishment of 6000 MW, ± 800 kV Raigarh (Kotra-II) (HVDC) [LCC] terminal station (4x1500 MW) along with associated interconnections with 400 kV HVAC Switchyard (2x1500 MW on 400 kV Sec-III along with associated 4 no. bays & 2x1500 MW on 400 kV Sec-IV along with associated 4 no. bays) & all associated equipment (incl. filters)/bus extension, etc.		
2B		**ATS incl. terminal bays identified for 2x800MW Raigarh TPS of M/s APL (appl. No.2200001709):** - 765/400kV, 3x1500MVA ICT (10x500MVA single phase units) - 765kV ICT bays: 3 Nos. - 400kV ICT bays: 3 Nos. - 400kV line bays: 2 Nos. [for interconnection of 2x800MW Raigarh TPS of M/s APL to Raigarh (Kotra)-II 400kV D/c line]	415.44
3.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765kV D/c line	10km (Route length)	65.47
4.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line at Raigarh (Kotra)-II S/s	LILO length ~40 km	523.87
5.	Raigarh (Tamnar)[@]- Raigarh(Kotra)-II S/s 765kV D/c line	50km	327.39
6.	765kV, 330MVAr switchable line reactor along with associated bays in each line of Raigarh(Tamnar) – Jamshedpur 765kV	- 765kV, 330MVAr switchable line reactors – 2 Nos. - Switching equipment for line	132.50

Sl. No.	Scope of works	Capacity (MVA) / Line length (km)/ Nos.	Estimated cost (₹ Cr.)
	D/c line at Raigarh(Tamnar) end	reactors – 2 Nos. - 765kV spare reactor: 1x110MVAr	
7.	Raigarh(Tamnar)[@] – Jamshedpur (New) 765kV D/c line	315km	2111.45
8.	LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New)	51km and 49km	709.05
9.	LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) (a) Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose (b) Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage)	63km Twin Moose 63km Twin HTLS	532.59
10.	Installation of new 765/400kV, 1x1500MVA (3x500MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	• 765/400kV, 1x1500MVA (3x500MVA single phase units) ICT: 1 no. • 765kV ICT bay: 1 no. • 400kV ICT bay: 1 no	147.64
		Total	**6272.30**

Note:

1. *[@]4 Nos. 765kV line bays vacated at Raigarh (Tamnar) S/s after bypass arrangement mentioned at Sl. No. 3 of the scope of works [i.e. bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c at Raigarh (Tamnar)] to be utilized for termination of 765kV lines at Raigarh (Tamnar) S/s i.e. 2 nos. for Raigarh (Tamnar) – Raigarh (Kotra-II) 765kV D/c proposed line and 2 nos. for Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c proposed line.*
2. *After the implementation of subject bypassing arrangement at the outskirts of Raigarh (Tamnar) S/s, the existing unutilized portions of Raigarh (Kotra) – Raigarh (Tamnar) and Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line sections at Raigarh (Tamnar) end may be utilized for termination of proposed 765kV D/c lines under the subject scheme i.e. proposed 765kV D/c lines may be terminated at bypassing points. This shall ensure utilization of existing ISTS transmission infrastructure. However, if the said existing ISTS transmission line sections remain unutilized at Raigarh (Tamnar) end, due to any reason, the same shall be*

dismantled by the TSP of the subject scheme and cost of scrapped assets may be adjusted under subject transmission scheme. In both cases (viz. utilization of existing line sections or its scarping), the original tariff of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c line shall remain unaffected.

Also, TSP of Raigarh (Tamnar) S/s shall provide space for above scope of work at the existing Raigarh (Tamnar) S/s free of cost.

3. *TSP shall implement Inter-tripping scheme on Dharamjaygarh (Sec-B) – Raigarh (Kotra)-II 765 kV D/c line (for tripping of the switchable line reactor at Dharamjaygarh (Sec-B) end along with the main line breaker).*
4. *TSP of the subject scheme shall implement Inter-tripping scheme on Raigarh (Kotra)-II – Jharsuguda 765 kV D/c line (for tripping of the switchable line reactor at Raigarh (Kotra)-II end along with the main line breaker).*
5. *LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 765kV D/c line and one circuit of Jamshedpur (New) – Medinipur 765kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
6. *LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 400kV D/c line and one circuit of Jamshedpur (New) – New PPSP 400kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
7. *M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) shall provide space for above scope of work at the existing Jeerat (New) S/s free of cost.*

b) WR-ER Inter-Regional Network Expansion Scheme-Part B

Sl. No.	Scope of works	Capacity (MVA) / Line length (km)/ Nos.	Estimated cost (₹ Cr.)	Remarks
1.	Reconductoring of LILO point to New PPSP line section of Ranchi (New) – New PPSP 400kV D/c line with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage level)	27 km	80.05	Approved under RTM through M/s Purulia and Kharagpur Transmission Company Ltd. (owned by Indigrid)
		Total	**80.05**	

S.N.	Region(s)	RECPDCL	PFCCL
1	LoI issued and SPV to be transferred	0	1
2	Bids Under Evaluation	2	1
3	RfP issued and bids to be submitted	4	7
4	RfP yet to be issued	3	2
5	RfP bid submission on hold	1	0
	TOTAL	**10**	**11**

5.2 Members noted the status of the schemes under bidding.

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Summary of the deliberations of the 32nd meeting of NCT held on 12.08. 2025

I. Modification in the earlier approved/notified communication schemes:

NCT approved the modification in the scheme "Transmission System for Kurnool-IV REZ – Phase-II" recommended in 28th NCT meeting as mentioned below:

S. No.	Original scope of the scheme at para-9 as	Modified scope of the scheme at para-9 as	Additional Estimated Cost (₹ Crs.)
9.	Shadnagar – Shadnagar (TGTRANSCO) 400 kV quad D/c line (about 50 kms) {TGTRANSCO to upgrade Shadnagar (TGTRANSCO) to 400 kV in matching time frame}	"Shadnagar – Shadnagar GIS S/s (TGTRANSCO) 400 kV quad D/c line (about 50 kms) {TGTRANSCO to upgrade Shadnagar GIS S/s (TGTRANSCO) to 400 kV in matching time frame} with 400 kV GIS line bays – 2 Nos. (at Shadnagar GIS S/s (TGTRANSCO))".	35.00

II. ISTS Transmission schemes, costing greater than ₹ 500 Crore, recommended by NCT to MoP under TBCB:

The ISTS transmission schemes recommended by NCT to MoP are given below:

Sl. No.	Name of Transmission Scheme	Implementation Mode	Tentative Implementation timeframe	BPC	Estimated Cost (₹ Crs.)

1.	WR-ER Inter-Regional Network Expansion Scheme-**Part A**	TBCB	24 months from the date of allocation	RECPDCL	6272.30
2.	WR-ER Inter-Regional Network Expansion Scheme-**Part C**	TBCB	By 31.03.2029	RECPDCL	912.00
3.	NERGS-III Siang Basin	TBCB	By 28.02.2029	PFCCL	1804.30
4.	Transmission system for integration of Kurnool-V REZs-Phase-I	TBCB	30 months from the date of SPV transfer	PFCCL	7187.00
5.	Transmission system for integration of Ananthapuram-III REZs-Phase-I	TBCB	30 months from the date of SPV transfer	PFCCL	4531.00
6.	Transmission system for proposed Green Hydrogen / Green Ammonia projects in Vizag area, Andhra Pradesh (Phase-I)" Tentative implementation timeframe:	TBCB	30 months from the date of SPV transfer	RECPDCL	8386.00

The broad scope of the above ISTS schemes to be notified in Gazette of India is as given below:

Sl. No.	**Name of Scheme & Tentative implementation timeframe**	**Broad Scope**	**Bid Process Coordinator**
1.	WR-ER Inter-Regional Network Expansion Scheme-**Part A** **Implementation Timeframe:** 24 months from the date of allocation	i. Establishment of 2x1500MVA, 765/400kV S/s at Jamshedpur (New) in Jharkhand ii. Establishment of 3x1500MVA, 765/400kV S/s (on 765kV Bus section-II & 400kV Bus Section-II) at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor (on	RECPDCL

		765kV Bus section-II & 400kV Bus Section-II) iii. Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765kV D/c line iv. LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line at Raigarh (Kotra)-II S/s v. Raigarh (Tamnar)@- Raigarh (Kotra)-II S/s 765kV D/c line vi. 765kV, 330MVAr switchable line reactor along with associated bays in each line of Raigarh(Tamnar) – Jamshedpur 765kV D/c line at Raigarh(Tamnar) end vii. Raigarh(Tamnar)@ – Jamshedpur (New) 765kV D/c line viii. LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New) ix. LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) (c) Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose (d) Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage) x. Installation of new 765/400kV, 1x1500MVA (3x500MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	

सत्यमेव जयते

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
केंद्रीय विद्युत प्राधिकरण
Central Electricity Authority
विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग- II
Power System Planning & Appraisal Division-II

सेवा में /To

As per list of Addresses

विषय: ट्रांसमिशन पर राष्ट्रीय समिति (एनसीटी) की पैंतीसवी बैठक का कार्यवृत्त ।

Subject: Minutes of the 35th Meeting of the National Committee on Transmission (NCT)-reg.

महोदया (Madam) / महोदय (Sir),

The 35th meeting of the National Committee on Transmission (NCT) was held on 19th November, 2025 at New Delhi. The minutes of the meeting are enclosed herewith.

भवदीय / Yours faithfully

02.12.2025

(बी.एस.बैरवा / B.S. Bairwa)
मुख्य अभियन्ता एवं सदस्य सचिव,(एन.सी.टी.)/
Chief Engineer & Member Secretary (NCT)

List of Addresses:

1.	Chairperson, Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	2.	Member (Power Systems), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.
3.	Member (Economic & Commercial), Central Electricity Authority Sewa Bhawan, R.K. Puram, New Delhi – 110 066.	4.	Joint Secretary (Trans), Ministry of Power Shram Shakti Bhawan, New Delhi-110001.
5.	Sh, Abhay Bakre, Mission Director, MNRE Atal Akshay Urja Bhawan Opposite CGO Complex gate No. 2, Lodhi Road, New Delhi – 110003	6.	Chief Operating Officer, CTUIL, Floors Nos. 5-10, Tower 1, Plot Nos. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana - 122001.
7.	Sh. Rajnath Ram, Adviser (Energy), NITI Aayog, Parliament Street, New Delhi – 110 001.	8.	CMD, Grid Controller of India, B-9 (1st Floor), Qutub Institutional Area, Katwaria Sarai, New Delhi – 110016
9.	Sh. Abhay Choudhary Expert Member	10.	Managing Director, Jammu Power Distribution Corporation Limited (JPDCL) Gladni Narwal, Jammu, Jammu & Kashmir, India - 180006
11.	Sh. S.R Narasimhan Expert Member	12.	Shri. Shivdas.S, Director (Transmission & System Operation) Vydyuthi Bhavanam, Pattom, Thiruvananthapuram, Kerala-695004
13.	Sh. Sabyasachi Roy, Director (Operations), WBSETCL	14.	Chairperson, North Eastern Region Power Committee Hon'ble Minister of Power, Govt. of Assam, Guwahati – 781 006
15.	Chairperson, Western Region Power Committee 2nd Floor, Vidyut Seva Bhavan, P.O. Sunder Nagar, Danganiya, Raipur: 492 013		

Special Invitee

i) Chief Engineer (PCD), CEA
ii) CEO, RECPDCL
iii) CEO, PFCCL

Minutes of the 35th meeting of National Committee on Transmission (NCT)

1. Modification in earlier approved transmission schemes

1.1. Review of transmission scheme "Transmission System for integration of Kurnool-V REZ Phase-I" and "Transmission System for integration of Ananthapuram-III REZ –Phase-I"

1.1.1. "Transmission System for integration of Kurnool-V REZ Phase-I" and "Transmission System for integration of Ananthapuram-III REZ –Phase-I" were recommended in the 32nd meeting of NCT held on 12.08.2025 for implementation under TBCB mode.

1.1.2. MoP vide order dated 17.09.2025 made following observations:

I. It has been observed that the transmission system for evacuation of 10.5 GW RE potential (7.5 GW at Kurnool-IV PS, 3 GW at Kurnool-III PS) and 7.5 GW RE potential (at Ananthapuram-II PS) has already been identified in Kurnool area and in Ananthapuram area respectively which is at various stages of implementation.

II. In order to ensure optimum utilization of the transmission lines, RE power from Kurnool-V REZ-Phase-I (4.5 GW) and from Ananthapuram-III REZ-Phase-I (4.5 GW) can be evacuated through the already identified transmission system in Kurnool area and in Ananthapuram area respectively during non-solar hours with implementation of co-located BESS.

1.1.3. Further, NCT was requested to review the scheme in light of the optimum utilization of the existing/under implementation transmission lines in those REZs.

1.1.4. In the 34th meeting of NCT, CTUIL was directed to take up with NTPC and Tata Power for optimization of connectivity quantum at Kurnool and Ananthapuram. CTUIL was also directed to take up with applicants requesting connectivity at Kurnool-V for shifting to Kurnool-III or Kurnool-IV with BESS for non-solar hour. Further, applicants requesting connectivity at Ananthapuram-III shall also be requested for shifting to Ananthapuram and Ananthapuram-II with BESS.

1.1.5. Representative of CTUIL stated matter has been taken up with all the concerned RE developers at Kurnool & Ananthapuram complexes for optimization of their connectivity as per the decision taken during the meeting held on 30.09.2025 under chairperson, CEA. Further, all the RE developers including NTPC and Tata Power were again requested to optimize their connectivity quantum as per the directions of the 34th NCT meeting. However, responses from the RE developers are awaited.

1.1.6. MD, NREDCAP stated that they have identified the location for Kurnool-V and the location for Ananthpuram-III is under finalization. He mentioned that the location details would be provided to CTUIL shortly.

1.1.7. Chairperson, NCT, emphasized that the connectivity quantum at these locations needs to be optimized and should be aligned with the Resource Adequacy Plan.

1.1.8. Representative of CTUIL stated that during the preliminary engineering, it was observed that space is available for 2 nos. of 400kV line bays at Nagarjunasagar, but

d) 220kV sub-stations of Srinagar Leh Transmission System (SL TS) are already successfully in operation in similar terrain and ambient temperature condition. No issue has been observed in the Control, Protection & Automation System at above sub-stations.

e) 220kV sub-stations are also under implementation at Diskit (Nubra) and Padum in Ladakh region.

f) Accordingly, the proposed scheme with EHVAC, with additional equipment's like SYNCON etc, is feasible and transmission system at the level of 220kV and below is already under operation in similar terrain and condition.

1.5.4. Representative of MNRE stated that they've sought certain information from CEA regarding optimal study and feasibility. On that, Chief Engineer, PSPA-I informed that reply will be provided shortly.

1.5.5. After deliberations, it was decided that MNRE will re-analyze the scheme, and also take up the matter with RE developers and get their feedback on the working of inverters in high altitude low temperature areas and on SynCons planned as part of developer's scope and implementation timeline. Based on the inputs, further discussion will be taken up in the next meeting of the NCT.

1.6. Modification in the proposal for "WR–ER Inter-Regional Network Expansion Scheme – Part A

1.6.1. The transmission scheme WR–ER Inter-Regional Network Expansion Scheme – Part A, with an estimated cost of ₹6,272.30 crore, was agreed in the 32nd meeting of the National Committee on Transmission (NCT) held on 12.08.2025 for implementation under TBCB, with RECPDCL designated as the BPC. The implementation timeline of the entire scheme was agreed as 24 months from the date of project allocation. The scheme is currently under the bidding process being conducted by the BPC.

1.6.2. Some potential bidders have raised the concerns of completing the entire project in 24 months citing the following constraints:

a) **Land Acquisition Challenges:**

- ✓ The project entails the acquisition of approximately 700-800 acres of land for the Kotra II sub-station at a single location, incorporating provisions for future requirements of 400kV/765kV/1100kV AC and 800kV HVDC systems.
- ✓ Acquiring a contiguous plot of approximately 2.5 km x 1.3 km at one location is highly challenging;
- ✓ Moreover, scope also required other land parcels at Jamshedpur (300 acres).
- ✓ Land acquisition itself is mammoth activity requiring at least 12-14 months out of the total proposed 24 months project completion period.

b) **Statutory clearances and approvals:**

- ✓ Transmission Line will be passing through 4 states (Chhattisgarh, Odisha, Jharkhand, and West Bengal), which includes multiple forest and Coal/ Minerals bearing areas clearances, which may delay the overall project, if any component approval delays.

- ✓ Forest and environmental clearances in these areas are known to take much longer time than normal timeframes.
- ✓ Past projects in the same corridor have faced substantial delays due to land acquisition bottlenecks and environmental (both forest and coal fields) issues.

c) **High Risk associated because of single integrated package:**

- ✓ The integrated 24-month completion requirement for the entire package is therefore likely to prove impractical, forcing bidders to factor in high contingencies for IDC, IEDC, penalties, and liquidated damages, which may in turn unduly inflate tariff bids and impose avoidable cost burdens on consumers and high chances of project get stalled.

1.6.3. It was deliberated that implementation timeframe of some elements of the scheme, for which anticipated timeline for completion is larger may be reviewed, however, the scheme need not be bifurcated as the whole scheme is required to reliably evacuate the power and address the overloading of inter-regional interconnections between ER and WR. Further, the land requirement may be considered at the time of approval of ±800kV HVDC and 1100 kV HVAC schemes. Accordingly, the additional land for establishment of ±800kV HVDC and 1100 kV HVAC schemes may be removed from the present scope of works.

1.6.4. CTU stated that in the present timeframe, critical loading of the various lines in the ER – WR corridor under N-1 contingency viz. Ranchi (New) – Dharamjaigarh 765kV 2xS/c line, Ranchi – Sipat 400kV D/c line and Ranchi (New) - Purulia 400kV D/c line are observed in the solar hours. Some of these lines are also reported in the Grid-India operation feedback from Jan 2023 onwards. This scheme was planned for evacuation of power from generation projects in Kotra, Champa & Dharamajaigarh area and also to relieve the critical loading in the ER-WR corridor. Increasing the implementation timeframe of interregional corridor viz. Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c line may further aggravate the power flow in the existing ER-WR corridor during solar hours.

1.6.5. CTU further stated that interim arrangement for 1st unit of M/s APL (2x800MW) with LILO of one circuit of Raipur (PG) – Raigarh (PG) 400 kV (either ckt-3 D/c or ckt-4 D/c) line has already been agreed in the CEA meeting. The interim arrangement for evacuation of power from 2nd 800 MW unit of Raigarh TPP of APL was agreed to be reviewed in future depending upon the progress of final evacuation system (i.e. Raigarh (Kotra)-II and associated transmission system) and the 2nd 800MW unit of M/s Raigarh TPP of APL. Accordingly, additional interim arrangement may be planned at the time of commissioning of 2nd unit of M/s APL, as part system may not be sufficient for evacuation of entire power of APL during solar hours.

1.6.6. CTU informed that tentative location of HVDC station has been identified at Raigarh (Kotra)-II as one of the potential landing points for HVDC system from Rajasthan. If the HVDC and 1100kV station would be implemented at a different location, additional high-capacity interconnections need to be established between Kotra –II and new

HVDC/1100kV station which would increase the overall cost of the system. Accordingly, it would be prudent to acquire the entire land at Raigarh (Kotra)-II at one location to optimize the transmission scheme & avoid the interconnections between 765/400kV Raigarh (Kotra)-II S/s & proposed 1100/400kV & HVDC S/s.

1.6.7. Members opined that Raigarh (Kotra)-II S/s would be ready by 2027-28. However, 1100kV or HVDC may not be available by that timeframe. Therefore, it was felt prudent that 1100kV and HVDC establishment may be taken up after the scheme matures. Accordingly, space for future expansion at 1100kV and HVDC station at Raigarh (Kotra)-II may be dropped from the present scheme.

1.6.8. CTUIL stated that space for additional 400kV bays in each 400kV section of Raigarh (Kotra)-II S/s for interconnection with future 1100/400kV S/s near Raigarh (Kotra) need to be added to the scope of work. Modification in the scheme would result in increase of overall cost of the scheme from Rs. 6272.30 crore to Rs. 6444.08 crore, which is an increment of 2.74%.

1.6.9. After deliberations, NCT approved the following modifications in the "WR–ER Inter-Regional Network Expansion Scheme – Part A" scheme:

Sl. No.	Scope of the Transmission Scheme	Capacity (MVA) / Line length (km)/ Nos.	Estimated Cost	Implementation timeframe
1.	Establishment of 3x1500MVA, 765/400kV S/s at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor **Additional space for future expansion:** - 765kV bus sectionaliser bay: 1 set (to establish Sec-II) - 400kV bus sectionaliser bay :1 set (to establish Sec-II) - 765/400kV,	**Common Transmission System Augmentation:** - 765kV, 2x330MVAr bus reactor (7x110MVAr single phase units) - 420kV, 125MVAr bus reactor: 2 Nos. - 765kV Bus reactor bays: 2 Nos. - 400kV Bus reactor bays: 2 Nos. - 765kV line bays: 4 Nos. (for termination of	445.88	24 months

	5x1500MVA (15 x 500 MVA single phase units) ICTs along with associated ICT bays o 765kV side: - 1 No. on Bus Sec-I & 4 Nos. on Bus Sec-II) o 400kV side: - 1 Nos. on Bus Sec-I & 4 Nos. on Bus Sec-II) - 765kV, 2x330MVAr (6 x 110MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) - 420kV, 2x125MVAr bus reactor along with associated bay (2 on Bus Sec-II) - 765kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. (2 Nos. on Sec-I for scope at Sl. 8 and 6 on Bus Sec-II for future lines) - 400kV line bays (along with space for switchable line reactor) for future lines: 14 Nos. (6 on Bus Sec-I; 8 on Bus Sec-II) - 400/220 kV ICT	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line) - 765kV, 240MVAr (3x80MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Kotra)-II – Jharsuguda (Sec-A) 765kV D/c section along with 1x80MVAr 765kV spare reactor		

	along with bays: 6 Nos. - 220 kV line bays: 12 Nos.(6 Nos. on Bus Sec-I and 6 on Bus Sec-II) - 220 kV Sectionalization bay: 1 set - 220kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) - 220kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II)			
2.	Extension at Raigarh (Kotra)-II 765/400kV S/s	**ATS incl. terminal bays identified for 2x800MW Raigarh TPS of M/s APL (appl. No.2200001709):** - 765/400kV, 3x1500MVA ICT (10x500MVA single phase units) - 765kV ICT bays: 3 Nos. - 400kV ICT bays: 3 Nos. - 400kV line bays: 2 Nos. [for interconnection of 2x800MW Raigarh TPS of M/s APL to Raigarh (Kotra)-	415.44	24 months

		II 400kV D/c line. DTL line under scope of M/s APL.]		
3.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line at Raigarh (Kotra)-II S/s	- LILO length ~40 km	523.87	24 months
4.	Installation of new 765/400kV, 1x1500MVA (3x500MVA single phase units) ICT (3^{rd}) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	- 765/400kV, 1x1500MVA (3x500MVA single phase units) ICT: 1 no. - 765kV ICT bay: 1 no. - 400kV ICT bay: 1 no	147.64	24 months
5.	Establishment of 2x1500MVA, 765/400kV S/s at Jamshedpur (New) in Jharkhand **Additional space for future expansion:** - 765kV bus sectionaliser bay: 1 set (to establish Sec-II) - 400kV bus sectionaliser bay :1 set (to establish Sec-II) - 220kV bus sectionaliser bay:	- 765/400kV, 2x1500MVA ICT (7x500MVA single phase units) - 765kV, 2x330MVAr bus reactor (7x110MVAr single phase units including one spare unit) - 420kV, 125MVAr bus reactor: 2 Nos. - 765kV ICT bays: 2 Nos.	655.35	30 months

	1 set (to establish Sec-II) - 220kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) - 220kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) - 765/400kV, 4x1500MVA (12x500MVA single phase units) ICTs along with associated ICT bays at both voltage levels o 765kV side: - 1 No. on Bus Sec-I & 3 Nos. on Bus Sec-II) o 400kV side: - 1 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) - 400/220kV, 6x500MVA ICTs along with associated ICT bays at both voltage levels o 400kV side: - 3 No. on Bus Sec-I & 3 Nos. on Bus Sec-II) o 220kV side: - 3 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) - 765kV,	- 765kV Bus reactor bays: 2 Nos. - 400kV ICT bays: 2 Nos. - 400kV Bus reactor bays: 2 Nos. - 765kV line bays: 4 Nos. (for termination of LILO of Ranchi (New) – Medinipur 765kV D/c line) - 400kV line bays: 4 Nos. [for termination of LILO of Ranchi (New) – New PPSP 400kV D/c line]		

	2x330MVAr (6x110MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) - 420kV, 2x125MVAr bus reactor along with associated bay (on Bus Sec-II) - 765kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. (2 Nos. on Bus Sec-I and 6 on Bus Sec-II) - 400kV line bays (along with space for switchable line reactor) for future lines: 10 Nos. (2 Nos. on Bus Sec-I and 8 on Bus Sec-II) - 220kV line bays for future lines: 12 Nos. (6 Nos. on Bus Sec-I and 6 on Bus Sec-II)			
6.	LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New)	- 51km and 49km	734.63	30 months
7.	LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New)	- 63km Twin Moose - 63km Twin HTLS	548.89	30 months

	- Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose - Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage)			
8.	Extension at Raigarh (Kotra)-II S/s 765/400kV S/s	- 765kV line bays: 2 nos. (for termination of Raigarh (Tamnar) – Raigarh (Kotra)-II 765kV D/c line)	58.65	36 months
9.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765kV D/c line	- 10km (Route length)	67.78	36 months
10.	Raigarh (Tamnar)[@]- Raigarh(Kotra)-II	- 50km	338.96	36 months

	S/s 765kV D/c line			
11.	Extension at Raigarh (Tamnar) 765/400kV S/s	- 765kV, 330MVAr (3x110MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c line along with 1x110MVAr 765kV spare reactor	138.56	36 months
12.	Extension at Jamshedpur (New) 765/400kV S/s	- 765kV line bays: 2 nos. (for termination of Jamshedpur (New) – Tamnar 765kV D/c line) - 765kV, 330MVAr (3x110MVAR single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c line	181.92	36 months

13.	Raigarh(Tamnar)[@] – Jamshedpur (New) 765kV D/c line	- 315km	2186.51	36 months
		Total (Rs Cr)	**6444.08**	

Note:

1. *[@]4 Nos. 765kV line bays vacated at Raigarh (Tamnar) S/s after bypass arrangement mentioned at Sl. No. 9 of the scope of works [i.e. bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c at Raigarh (Tamnar)] to be utilized for termination of 765kV lines at Raigarh (Tamnar) S/s i.e. 2 nos. for Raigarh (Tamnar) – Raigarh (Kotra-II) 765kV D/c proposed line and 2 nos. for Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c proposed line.*
2. *After the implementation of subject bypassing arrangement at the outskirts of Raigarh (Tamnar) S/s, the existing unutilized portions of Raigarh (Kotra) – Raigarh (Tamnar) and Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line sections at Raigarh (Tamnar) end may be utilized for termination of proposed 765kV D/c lines under the subject scheme i.e. proposed 765kV D/c lines may be terminated at bypassing points. This shall ensure utilization of existing ISTS transmission infrastructure. However, if the said existing ISTS transmission line sections remain unutilized at Raigarh (Tamnar) end, due to any reason, the same shall be dismantled by the TSP of the subject scheme and cost of scrapped assets may be adjusted under subject transmission scheme. In both cases (viz. utilization of existing line sections or its scrapping), the original tariff of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c line shall remain unaffected.*

   Also, TSP of Raigarh (Tamnar) S/s shall provide space for above scope of work at the existing Raigarh (Tamnar) S/s free of cost.
3. *TSP shall implement Inter-tripping scheme on Dharamjaygarh (Sec-B) – Raigarh (Kotra)-II 765 kV D/c line (for tripping of the switchable line reactor at Dharamjaygarh (Sec-B) end along with the main line breaker).*
4. *TSP of the subject scheme shall implement Inter-tripping scheme on Raigarh (Kotra)-II – Jharsuguda 765 kV D/c line (for tripping of the switchable line reactor at Raigarh (Kotra)-II end along with the main line breaker).*
5. *LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 765kV D/c line and one circuit of Jamshedpur (New) – Medinipur 765kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
6. *LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 400kV D/c line and one circuit of Jamshedpur (New) – New PPSP 400kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*

7. *M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) shall provide space for above scope of work at the existing Jeerat (New) S/s free of cost.*
8. *Line lengths mentioned above are tentative. Exact line length shall be ascertained after detailed survey.*

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Summary of the deliberations of the 35th meeting of NCT held on 19.11. 2025

I. Modification in the earlier approved/notified communication schemes:

1. Review of transmission scheme "Transmission System for integration of Kurnool-V REZ Phase-I" and "Transmission System for integration of Ananthapuram-III REZ –Phase-I"

- NCT recommended that transmission scheme for Kurnool-V may be taken up for implementation with minor modification in transmission scheme and the transmission system for Ananthapuram-III shall be discussed again in the next NCT meeting. The estimated cost of the scheme is about Rs 7627 Cr. at May'25 price level. Details of the transmission scheme is given below.

Sl. No.	*Scope of the Transmission Scheme*	*Capacity /km*
1.	Establishment of 4x1500 MVA, 765/400 kV and 5x500 MVA, 400/220kV Kurnool-V Pooling Station near Kodumur in Kurnool district along with 2x330 MVAr (765 kV) bus reactors at Kurnool-V PS with provision of two (2) sections of 4500 MVA each at 400kV level **Future Space Provisions:** • 765/400kV, 1500 MVA, ICTs – 2 Nos. • 765kV ICT bays – 2 Nos. • 400kV ICT bays – 2 Nos. • 400/220kV, 500 MVA, ICTs – 13 Nos. • 400kV ICT bays – 13 Nos. • 220kV ICT bays – 13 Nos. • 765kV line bays – 8 Nos. (with provision for SLR) • 400kV line bays – 12 Nos. (with provision for SLR) • 220kV line bays – 19 Nos. • 220kV Bus Sectionalizer : 2 sets • 220 kV Bus Coupler (BC) Bay – 2 Nos. • 220 kV Transfer Bus Coupler (TBC) Bay – 2 Nos. • 400kV Bus Sectionalizer : 1 set	• 765/400kV, 1500 MVA, ICTs – 4 Nos. (13x500 MVA incl. 1 spare unit) • 765kV ICT bays – 4 Nos. • 400kV ICT bays – 4 Nos. • 765kV line bays – 6 Nos. (at Kurnool-V PS for termination of Kurnool-V – Shadnagar, Kurnool-V – Raichur New and Kurnool-V – Sagar 765kV D/c lines) • 765 kV, 330 MVAr Bus Reactor – 2 Nos. (7x110 MVAr inc. 1 switchable spare unit for both bus reactor and line reactor) • 765 kV Bus Reactor bays – 2 Nos. • 400/220kV, 500 MVA, ICTs – 5 Nos. • 400kV ICT bays – 5 Nos. • 220kV ICT bays – 5 Nos. • 220kV line bays – 6 Nos. • 220kV Bus Sectionalizer : 1 set • 220 kV Bus Coupler (BC) Bay – 2 Nos. • 220 kV Transfer Bus Coupler (TBC) Bay – 2 Nos.
2.	± 300 MVAr STATCOM at Kurnool-V PS	• 400kV bay – 1 no. • ± 300 MVAr STATCOM – 1 set
3.	Kurnool-V – Shadnagar 765 kV D/c line (about 240 km) with 240 MVAr SLR (convertible) at both ends on both circuits	~ 240 km • 765 kV line bays – 2 Nos. (at Shadnagar)

Sl.No.	Scope of the Transmission Scheme	Original scope of the Transmission Scheme	Revised scope of the Transmission Scheme
			additional land adjacent to Tumkur-II PS for STATCOM.
4	2 Nos. of 220kV line bay at Tumkur-II PS for termination of dedicated transmission lines of RE developers	• 220kV line bays – 2 Nos.	• No Change
5.	Augmentation of Tumkur-II PS by 400/220 kV, 3x500 MVA ICTs (8^{th} to 10^{th})	-	• 400/220kV, 500 MVA, ICTs – 3 Nos. • 400kV ICT bays – 3 Nos. • 220kV ICT bays – 3 Nos. • 220kV Bus Sectionalizer: 1 set • 220 kV Bus Coupler (BC) Bay – 1 No. • 220 kV Transfer Bus Coupler (TBC) Bay – 1 No.
6.	4 Nos. of 220kV line bay at Tumkur-II PS for termination of dedicated transmission lines of RE developers	-	• 220kV line bays – 4 Nos.

3. Modification in the proposal for "WR–ER Inter-Regional Network Expansion Scheme – Part A

- NCT approved the following modifications in the "WR–ER Inter-Regional Network Expansion Scheme – Part A" scheme:

Sl. No.	Scope of the Transmission Scheme	Capacity (MVA) / Line length (km)/ Nos.	Estimated Cost	Implementation timeframe
1.	Establishment of 3x1500MVA, 765/400kV S/s at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor **Additional space for future expansion:** - 765kV bus sectionaliser bay: 1 set (to establish Sec-II) - 400kV bus sectionaliser bay :1 set (to establish Sec-II) - 765/400kV, 5x1500MVA (15 x 500 MVA single phase units) ICTs along with associated ICT bays o 765kV side: - 1 No. on Bus Sec-I & 4 Nos. on Bus Sec-II) o 400kV side: - 1 Nos. on Bus Sec-I & 4 Nos. on Bus Sec-II) - 765kV, 2x330MVAr (6 x 110MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) - 420kV, 2x125MVAr bus reactor along with associated bay (2 on Bus Sec-II) - 765kV line bays (along with space for switchable line reactor)	**Common Transmission System Augmentation:** - 765kV, 2x330MVAr bus reactor (7x110MVAr single phase units) - 420kV, 125MVAr bus reactor: 2 Nos. - 765kV Bus reactor bays: 2 Nos. - 400kV Bus reactor bays: 2 Nos. - 765kV line bays: 4 Nos. (for termination of LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line) - 765kV, 240MVAr (3x80MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Kotra)-	445.88	24 months

	for future lines: 8 Nos. (2 Nos. on Sec-I for scope at Sl. 8 and 6 on Bus Sec-II for future lines) - 400kV line bays (along with space for switchable line reactor) for future lines: 14 Nos. (6 on Bus Sec-I; 8 on Bus Sec-II) - 400/220 kV ICT along with bays: 6 Nos. - 220 kV line bays: 12 Nos.(6 Nos. on Bus Sec-I and 6 on Bus Sec-II) - 220 kV Sectionalization bay: 1 set - 220kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) - 220kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II)	II – Jharsuguda (Sec-A) 765kV D/c section along with 1x80MVAr 765kV spare reactor		
2.	Extension at Raigarh (Kotra)-II 765/400kV S/s	**ATS incl. terminal bays identified for 2x800MW Raigarh TPS of M/s APL (appl. No.2200001709):** - 765/400kV, 3x1500MVA ICT (10x500MVA single phase units) - 765kV ICT bays: 3 Nos. - 400kV ICT	415.44	24 months

		bays: 3 Nos. - 400kV line bays: 2 Nos. [for interconnection of 2x800MW Raigarh TPS of M/s APL to Raigarh (Kotra)-II 400kV D/c line. DTL line under scope of M/s APL.]		
3.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line at Raigarh (Kotra)-II S/s	- LILO length ~40 km	523.87	24 months
4.	Installation of new 765/400kV, 1x1500MVA (3x500MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	- 765/400kV, 1x1500MVA (3x500MVA single phase units) ICT: 1 no. - 765kV ICT bay: 1 no. - 400kV ICT bay: 1 no	147.64	24 months
5.	Establishment of 2x1500MVA, 765/400kV S/s at Jamshedpur (New) in Jharkhand **Additional space for future expansion:** - 765kV bus sectionaliser bay: 1 set (to establish Sec-II) - 400kV bus sectionaliser bay :1 set (to establish Sec-II) - 220kV bus sectionaliser bay: 1 set	- 765/400kV, 2x1500MVA ICT (7x500MVA single phase units) - 765kV, 2x330MVAr bus reactor (7x110MVAr single phase units including one spare unit) - 420kV, 125MVAr bus	655.35	30 months

	(to establish Sec-II) - 220kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) - 220kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) - 765/400kV, 4x1500MVA (12x500MVA single phase units) ICTs along with associated ICT bays at both voltage levels o 765kV side: - 1 No. on Bus Sec-I & 3 Nos. on Bus Sec-II) o 400kV side: - 1 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) - 400/220kV, 6x500MVA ICTs along with associated ICT bays at both voltage levels o 400kV side: - 3 No. on Bus Sec-I & 3 Nos. on Bus Sec-II) o 220kV side: - 3 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) - 765kV, 2x330MVAr (6x110MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) - 420kV, 2x125MVAr bus reactor along with associated bay (on Bus Sec-II)	reactor: 2 Nos. - 765kV ICT bays: 2 Nos. - 765kV Bus reactor bays: 2 Nos. - 400kV ICT bays: 2 Nos. - 400kV Bus reactor bays: 2 Nos. - 765kV line bays: 4 Nos. (for termination of LILO of Ranchi (New) – Medinipur 765kV D/c line) - 400kV line bays: 4 Nos. [for termination of LILO of Ranchi (New) – New PPSP 400kV D/c line]		

	- 765kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. (2 Nos. on Bus Sec-I and 6 on Bus Sec-II) - 400kV line bays (along with space for switchable line reactor) for future lines: 10 Nos. (2 Nos. on Bus Sec-I and 8 on Bus Sec-II) - 220kV line bays for future lines: 12 Nos. (6 Nos. on Bus Sec-I and 6 on Bus Sec-II)			
6.	LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New)	- 51km and 49km	734.63	30 months
7.	LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) - Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose - Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage)	- 63km Twin Moose - 63km Twin HTLS	548.89	30 months
8.	Extension at Raigarh (Kotra)-II S/s 765/400kV S/s	- 765kV line bays: 2 nos. (for termination of	58.65	36 months

		Raigarh (Tamnar) – Raigarh (Kotra)-II 765kV D/c line)		
9.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765kV D/c line	- 10km (Route length)	67.78	36 months
10.	Raigarh (Tamnar)[@]- Raigarh(Kotra)-II S/s 765kV D/c line	- 50km	338.96	36 months
11.	Extension at Raigarh (Tamnar) 765/400kV S/s	- 765kV, 330MVAr (3x110MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c line along with 1x110MVAr 765kV spare reactor	138.56	36 months
12.	Extension at Jamshedpur (New) 765/400kV S/s	- 765kV line bays: 2 nos. (for termination of	181.92	36 months

		Jamshedpur (New) – Tamnar 765kV D/c line) - 765kV, 330MVAr (3x110MVAR single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c line		
13.	Raigarh(Tamnar)[@] – Jamshedpur (New) 765kV D/c line	- 315km	2186.51	36 months
		Total (Rs Cr)	**6444.08**	

Note:

1. *[@]4 Nos. 765kV line bays vacated at Raigarh (Tamnar) S/s after bypass arrangement mentioned at Sl. No. 9 of the scope of works [i.e. bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c at Raigarh (Tamnar)] to be utilized for termination of 765kV lines at Raigarh (Tamnar) S/s i.e. 2 nos. for Raigarh (Tamnar) – Raigarh (Kotra-II) 765kV D/c proposed line and 2 nos. for Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c proposed line.*
2. *After the implementation of subject bypassing arrangement at the outskirts of Raigarh (Tamnar) S/s, the existing unutilized portions of Raigarh (Kotra) – Raigarh (Tamnar) and Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line sections at Raigarh (Tamnar) end may be utilized for termination of proposed 765kV D/c lines under the subject scheme i.e. proposed 765kV D/c lines may be terminated at bypassing points. This shall ensure utilization of existing ISTS transmission infrastructure. However, if the said existing ISTS transmission line sections remain unutilized at Raigarh (Tamnar) end, due to any reason, the same shall be dismantled by the TSP of the subject scheme and cost of scrapped assets may be adjusted under subject transmission scheme. In both cases (viz. utilization of existing line sections or its scrapping), the original tariff of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c line shall remain unaffected.*

Also, TSP of Raigarh (Tamnar) S/s shall provide space for above scope of work at the existing Raigarh (Tamnar) S/s free of cost.

3. *TSP shall implement Inter-tripping scheme on Dharamjaygarh (Sec-B) – Raigarh (Kotra)-II 765 kV D/c line (for tripping of the switchable line reactor at Dharamjaygarh (Sec-B) end along with the main line breaker).*
4. *TSP of the subject scheme shall implement Inter-tripping scheme on Raigarh (Kotra)-II – Jharsuguda 765 kV D/c line (for tripping of the switchable line reactor at Raigarh (Kotra)-II end along with the main line breaker).*
5. *LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 765kV D/c line and one circuit of Jamshedpur (New) – Medinipur 765kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
6. *LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 400kV D/c line and one circuit of Jamshedpur (New) – New PPSP 400kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
7. *M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) shall provide space for above scope of work at the existing Jeerat (New) S/s free of cost.*
8. *Line lengths mentioned above are tentative. Exact line length shall be ascertained after detailed survey.*

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

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विद्युत मंत्रालय

अधिसूचना

नई दिल्ली, 17 सितम्बर, 2025

का.आ. 4221(अ).— विद्युत अधिनियम, 2003 (2003 की सं. 36) की धारा 63 के अंतर्गत परिचालित दिशा-निर्देशों के पैरा 3 के उप-पैरा 3.2 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए केंद्र सरकार, राष्ट्रीय पारेषण समिति की 32वीं बैठक की सिफारिशों पर संबंधित बोली-प्रक्रिया समन्वयक (बीपीसी) के विवरण के साथ टीबीसीबी मोड के अंतर्गत निम्नलिखित पारेषण स्कीमों को अधिसूचित करती है: -

क्रम सं.	पारेषण स्कीम का नाम और कार्यक्षेत्र		
1.	पश्चिमी क्षेत्र-पूर्वी क्षेत्र अंतर-क्षेत्रीय नेटवर्क विस्तार स्कीम- भाग क संभावित कार्यान्वयन समय-सीमा: आवंटन की तारीख से 24 महीने बीपीसी: आरईसी पावर डेवलपमेंट एंड कंसल्टेंसी लिमिटेड कार्यक्षेत्र:		
	क्रम सं.	*कार्यों का कार्यक्षेत्र*	*क्षमता (एमवीए) / लाइन की लंबाई (किमी) / संख्या*

	1.	झारखंड के जमशेदपुर (न्यू) में 2x1500 एमवीए, 765/400 केवी एस/एस की स्थापना **भावी विस्तार हेतु अतिरिक्त स्थान:** ➢ दोनों वोल्टेज स्तरों पर संबद्ध आईसीटी बे के साथ 765/400 केवी, 4x1500 एमवीए (12x500 एमवीए सिंगल फेज यूनिट) आईसीटी ➢ दोनों वोल्टेज स्तरों पर संबद्ध आईसीटी बे के साथ 400/220 केवी, 6x500 एमवीए आईसीटी ➢ संबद्ध बे के साथ 765 केवी, 2x330 एमवीएआर (6x110 एमवीएआर सिंगल फेज यूनिट) बस रिएक्टर ➢ संबद्ध बे के साथ 420 केवी, 2x125 एमवीएआर बस रिएक्टर ➢ भविष्य की लाइनों के लिए 765 केवी लाइन बे (स्विचेबल लाइन रिएक्टर हेतु स्थान सहित): 8 ➢ भविष्य की लाइनों के लिए 400 केवी लाइन बे (स्विचेबल लाइन रिएक्टर हेतु स्थान सहित): 10 ➢ भविष्य की लाइनों के लिए 220 केवी लाइन बे: 12 ➢ 765 केवी बस सेक्शनलाइज़र बे: 1 सेट ➢ 400 केवी बस सेक्शनलाइज़र बे: 1 सेट ➢ 220 केवी बस सेक्शनलाइज़र बे: 1 सेट ➢ 220 केवी बस कपलर बे: 2 सेट ➢ 220 केवी ट्रांसफ़र बस कपलर बे: 2 सेट	• 765/400 केवी, 2x1500 एमवीए आईसीटी (7x500 एमवीए सिंगल फेज यूनिट) • 765 केवी, 2x330 एमवीएआर बस रिएक्टर (7x110 एमवीएआर सिंगल फेज यूनिट) • 420 केवी, 125 एमवीएआर बस रिएक्टर: 2 • 765 केवी आईसीटी बे: 2 • 765 केवी बस रिएक्टर बे: 2 • 400 केवी आईसीटी बे: 2 • 400 केवी बस रिएक्टर बे: 2 • 765 केवी लाइन बे: 6 (जमशेदपुर-तमनार 765 केवी डी/सी लाइन के लिए 2 और रांची (न्यू) – मेदिनीपुर 765 केवी डी/सी लाइन के एलआईएलओ के लिए 4) • 400 केवी लाइन बे: 4 [रांची (न्यू) – नई पीपीएसपी 400 केवी डी/सी लाइन के एलआईएलओ के लिए] • रायगढ़ (तमनार) – जमशेदपुर 765 केवी डी/सी लाइन के प्रत्येक सर्किट में संबंधित बे के साथ 765 केवी, 330 एमवीएआर (3x110 एमवीएआर सिंगल फेज यूनिट) स्विचेबल लाइन रिएक्टर
	2.	छत्तीसगढ़ के रायगढ़ (कोटरा)-II एस/एस में 2x330 एमवीएआर, 765 केवी बस रिएक्टर और 2x125 एमवीएआर, 420 केवी बस रिएक्टर (765 केवी बस सेक्शन-II और 400 केवी बस सेक्शन-II पर) के साथ 3x1500 एमवीए, 765/400 केवी एस/एस (765 केवी बस सेक्शन-II और 400 केवी बस सेक्शन-II पर) की स्थापना	

	2क.	<u>भावी विस्तार हेतु अतिरिक्त स्थान:</u> ➢ 1100 केवी स्तर का निर्माण ➢ 1100 केवी बस सेक्शनलाइज़र बे: 1 सेट (सेक्शन-I और सेक्शन-II की स्थापना हेतु) ➢ 400 केवी बस सेक्शनलाइज़र बे: 3 सेट (सेक्शन-I, सेक्शन-III और सेक्शन-IV की स्थापना हेतु) ➢ संबद्ध आईसीटी बे के साथ 1100/400 केवी, 6x3000 एमवीए (19x1000 एमवीए सिंगल फेज यूनिट) आईसीटी ➢ 1100 केवी साइड: बस सेक्शन-I पर 3 और बस सेक्शन-II पर 3) ➢ 400 केवी साइड: बस सेक्शन-III पर 3 और बस सेक्शन-IV पर 3) ➢ भविष्य की लाइनों के लिए 1100 केवी लाइन बे (स्विचेबल लाइन रिएक्टर हेतु स्थान सहित): 12 (बस सेक्शन -I पर 6 और बस सेक्शन -II पर 6) ➢ संबद्ध बे के साथ 1200 केवी, 4x660 एमवीएआर (13 x 220 एमवीएआर सिंगल फेज यूनिट) बस रिएक्टर (बस सेक्शन-I पर 2 और बस सेक्शन-II पर 2) ➢ 765 केवी बस सेक्शनलाइज़र बे: 1 सेट (सेक्शन-I स्थापित करने के लिए) ➢ संबद्ध आईसीटी बे के साथ 765/400 केवी, 5x1500 एमवीए (15 x 500 एमवीए सिंगल फेज यूनिट) आईसीटी • 765 केवी साईड: बस सेक्शन-I पर 4 और बस सेक्शन-II पर 1) • 400 केवी साईड: बस सेक्शन-I पर 4 और बस सेक्शन-II पर 1) • संबद्ध बे के साथ 765 केवी, 2x330 एमवीएआर (6 x 110 एमवीएआर सिंगल फेज यूनिट) बस रिएक्टर (बस सेक्शन-I पर) • संबद्ध बे के साथ 420 केवी, 6x125 एमवीएआर बस रिएक्टर (बस सेक्शन-I पर 2; बस सेक्शन-III पर 2 और बस सेक्शन-IV पर 2)	<u>सामान्य पारेषण प्रणाली संवर्धन:</u> • 765 केवी, 2x330 एमवीएआर बस रिएक्टर (7x110 एमवीएआर सिंगल फेज यूनिट) • 420 केवी, 125 एमवीएआर बस रिएक्टर: 2 • 765 केवी बस रिएक्टर बे: 2 • 400 केवी बस रिएक्टर बे: 2 • 765 केवी लाइन बे: 6 (रायगढ़ (तमनार) –रायगढ़ (कोटरा)-II 765 केवी डी/सी लाइन के लिए 2 और धरमजयगढ़ (सेक्शन-ख) –झारसुगुड़ा (सेक्शन-क) 765 केवी डी/सी लाइन के एलआईएलओ के लिए 4) • रायगढ़ (कोटरा)-II – झारसुगुड़ा (सेक्शन-क) 765 केवी डी/सी सेक्शन के प्रत्येक सर्किट में संबद्ध बे के साथ 1x80 एमवीएआर 765 केवी अतिरिक्त रिएक्टर सहित 765 केवी, 240 एमवीएआर (3x80 एमवीएआर सिंगल फेज यूनिट) स्विचेबल लाईन रिएक्टर

		➢ भविष्य की लाइनों के लिए 765 केवी लाइन बे (स्विचेबल लाइन रिएक्टर के लिए स्थान सहित): 6 (बस सेक्शन-I पर 6) ➢ भविष्य की लाइनों के लिए 400 केवी लाइन बे (स्विचेबल लाइन रिएक्टर के लिए स्थान सहित): 22 (बस सेक्शन-I पर 6; बस सेक्शन-II पर 4, बस सेक्शन-III पर 6 और बस सेक्शन-IV पर 6) ➢ 400 केवी एचवीएसी स्विचयार्ड (4 संबद्ध बे के साथ 400 केवी सेक्शन-III पर 2x1500 मेगावाट और 4 संबद्ध बे के साथ 400 केवी सेक्शन-IV पर 2x1500 मेगावाट) और सभी संबंधित उपकरणों (फ़िल्टर सहित)/ बस विस्तार आदि के साथ संबद्ध इंटरकनेक्शन सहित 6000 मेगावाट, ± 800 केवी रायगढ़ (कोटरा-II) (एचवीडीमी) [एलसीसी] टर्मिनल स्टेशन (4x1500 मेगावाट) की स्थापना	
	2ख.		**<u>मैसर्स एपीएल (आवेदन संख्या 2200001709) के 2x800 मेगावाट रायगढ़ टीपीएस के लिए पहचाने गए टर्मिनल बे सहित एटीएस:</u>** • 765/400 केवी, 3x1500 एमवीए आईसीटी (10x500 एमवीए सिंगल फेज यूनिट) • 765 केवी आईसीटी बे: 3 • 400 केवी आईसीटी बे: 3 • 400 केवी लाइन बे: 2 [मैसर्स एपीएल के 2x800 मेगावाट रायगढ़ टीपीएस के रायगढ़ (कोटरा)-II 400 केवी डी/सी लाइन से इंटरकनेक्शन के लिए]
	3.	रायगढ़ (तमनार) – धरमजयगढ़ (सेक्शन-ख) 765 केवी डी/सी लाइन और रायगढ़ (कोटरा) – रायगढ़ (तमनार) 765 केवी डी/सी लाइन का रायगढ़ (तमनार) एस/एस पर बाईपास कराना ताकि रायगढ़ (कोटरा) – धरमजयगढ़ (सेक्शन-ख) 765 केवी डी/सी लाइन बनाई जा सके	• 10 किमी (मार्ग की लंबाई)
	4.	रायगढ़ (कोटरा)-II एस/एस पर धरमजयगढ़ (सेक्शन-ख) – झारसुगुडा (सेक्शन-क) 765 केवी डी/सी लाइन का एलआईएलओ	• एलआईएलओ की लंबाई ~40 किमी

5.	रायगढ़ (तमनार)@ – रायगढ़ (कोटरा)-II एस/एस 765 केवी डी/सी लाइन	• 50 किमी
6.	रायगढ़ (तमनार) छोर पर रायगढ़ (तमनार) – जमशेदपुर 765 केवी डी/सी लाइन की प्रत्येक लाइन में संबद्ध बे के साथ 765 केवी, 330 एमवीएआर स्विचेबल लाइन रिएक्टर	• 765 केवी, 330 एमवीएआर स्विचेबल लाइन रिएक्टर – 2 • लाइन रिएक्टरों के लिए स्विचिंग उपकरण – 2 • 765 केवी अतिरिक्त रिएक्टर: 1x110 एमवीएआर
7.	रायगढ़ (तमनार)@ – जमशेदपुर (न्यू) 765 केवी डी/सी लाइन	• 315 किमी
8.	जमशेदपुर (न्यू) में रांची (न्यू) – मेदिनीपुर 765 केवी डी/सी लाइन का एलआईएलओ	• 51 किमी और 49 किमी
9.	जमशेदपुर (न्यू) में रांची (न्यू) – नई पीपीएसपी 400 केवी डी/सी लाइन का एलआईएलओ (क) जमशेदपुर (न्यू) से रांची (न्यू) की ओर एलआईएलओ सेक्शन को ट्विन मूस के साथ लागू करने की आवश्यकता है (ख) जमशेदपुर (न्यू) से नई पीपीएसपी की ओर एलआईएलओ सेक्शन को ट्विन एचटीएलएस (नाममात्र वोल्टेज पर एकल एचटीएलएस की 1574ए एम्पैसिटी) के साथ लागू करने की आवश्यकता है	• 63 किमी ट्विन मूस • 63 किमी ट्विन एचटीएलएस
10.	मैसर्स पावरग्रिड मेदिनीपुर जीरत ट्रांसमिशन लिमिटेड (पीएमजेटीएल) के जीरत (न्यू) एस/एस में दोनों छोर पर संबद्ध बे के साथ नए 765/400 केवी, 1x1500 एमवीए (3x500 एमवीए सिंगल फेज़ यूनिट) आईसीटी (तृतीय) की स्थापना	• 765/400 केवी, 1x1500 एमवीए (3x500 एमवीए सिंगल फेज़ यूनिट) आईसीटी: 1 • 765 केवी आईसीटी बे: 1 • 400 केवी आईसीटी बे: 1

टिप्पणी:

1. @कार्यों के कार्यक्षेत्र के क्रम संख्या 3 में उल्लिखित बाईपास व्यवस्था के बाद रायगढ़ (तमनार) एस/एस में खाली किए गए 4 765 केवी लाइन बे [अर्थात् रायगढ़ (तमनार) - धरमजयगढ़ (सेक्शन-ख) 765 केवी डी/सी लाइन और रायगढ़ (कोटरा) - रायगढ़ (तमनार) 765 केवी डी/सी को रायगढ़ (तमनार) में बाईपास करना] का उपयोग रायगढ़ (तमनार) एस/एस में 765 केवी लाइनों की समाप्ति के लिए किया जाएगा, अर्थात् रायगढ़ (तमनार) - रायगढ़ (कोटरा-II) 765 केवी डी/सी प्रस्तावित लाइन के लिए 2 और रायगढ़ (तमनार) - जमशेदपुर (न्यू) 765 केवी डी/सी प्रस्तावित लाइन के लिए 2।

2. रायगढ़ (तमनार) एस/एस के बाहरी इलाके में विषयगत बाईपास व्यवस्था के कार्यान्वयन के बाद, रायगढ़ (कोटरा) - रायगढ़ (तमनार) और रायगढ़ (तमनार) - धरमजयगढ़ (सेक्शन-ख) 765 केवी डी/सी लाइन सेक्शनों के रायगढ़ (तमनार) छोर पर मौजूदा अप्रयुक्त हिस्सों का उपयोग विषयगत स्कीम के तहत प्रस्तावित 765 केवी डी/सी लाइनों की समाप्ति के लिए किया जा सकता है अर्थात् प्रस्तावित 765 केवी डी/सी लाइनों को बाईपास बिंदुओं पर समाप्त किया जा सकता है। यह मौजूदा आईएसटीएस पारेषण अवसंरचना का उपयोग सुनिश्चित करेगा। हालांकि, यदि किसी कारण से रायगढ़ (तमनार) छोर पर उक्त मौजूदा आईएसटीएस पारेषण लाइन सेक्शन अप्रयुक्त रह जाते हैं, तो उन्हें विषयगत स्कीम के टीएसपी द्वारा समाप्त किया जाएगा और स्क्रैप की गई परिसंपत्तियों की लागत को

विषयगत पारेषण स्कीम के तहत समायोजित किया जा सकता है। दोनों ही मामलों में (अर्थात् मौजूदा लाइन सेक्शनों का उपयोग या उसकी स्क्रैपिंग), रायगढ़ (तमनार) - धरमजयगढ़ (सेक्शन-ख) 765 केवी डी/सी लाइन और रायगढ़ (कोटरा) - रायगढ़ (तमनार) 765 केवी डी/सी लाइन का मूल टैरिफ अप्रभावित रहेगा।

साथ ही, रायगढ़ (तमनार) एस/एस का टीएसपी मौजूदा रायगढ़ (तमनार) एस/एस में उपरोक्त कार्य के कार्यक्षेत्र के लिए निःशुल्क स्थान उपलब्ध कराएगा।

3. टीएसपी धरमजयगढ़ (सेक्शन-ख) - रायगढ़ (कोटरा)-II 765 केवी डी/सी लाइन पर इंटर-ट्रिपिंग स्कीम लागू करेगा (मुख्य लाइन ब्रेकर के साथ-साथ धरमजयगढ़ (सेक्शन-ख) छोर पर स्विचेबल लाइन रिएक्टर की ट्रिपिंग के लिए)।

4. विषयगत स्कीम का टीएसपी रायगढ़ (कोटरा)-II - झारसुगुड़ा 765 केवी डी/सी लाइन पर इंटर-ट्रिपिंग स्कीम लागू करेगा (मुख्य लाइन ब्रेकर के साथ-साथ रायगढ़ (कोटरा)-II छोर पर स्विचेबल लाइन रिएक्टर की ट्रिपिंग के लिए)।

5. रांची (न्यू) - मेदिनीपुर 765 केवी डी/सी लाइन का जमशेदपुर (न्यू) में एलआईएलओ इस प्रकार किया जाएगा कि रांची (न्यू) - जमशेदपुर (न्यू) 765 केवी डी/सी लाइन का एक सर्किट और जमशेदपुर (न्यू) - मेदिनीपुर 765 केवी डी/सी लाइन का एक सर्किट एक ही व्यास पर समाप्त हो। इसी प्रकार, दोनों लाइन सेक्शनों के दूसरे सर्किट को भी समान व्यास के बे में समाप्त किया जा सकता है।

6. जमशेदपुर (न्यू) में रांची (न्यू) - नई पीपीएसपी 400 केवी डी/सी लाइन का एलआईएलओ इस प्रकार किया जाएगा कि रांची (न्यू) - जमशेदपुर (न्यू) 400 केवी डी/सी लाइन का एक सर्किट और जमशेदपुर (न्यू) - नई पीपीएसपी 400 केवी डी/सी लाइन का एक सर्किट एक ही व्यास में समाप्त हो। इसी प्रकार, दोनों लाइन सेक्शनों के दूसरे सर्किट को भी समान व्यास के बे में समाप्त किया जा सकता है।

7. मैसर्स पावरग्रिड मेदिनीपुर जीरत ट्रांसमिशन लिमिटेड (पीएमजेटीएल) मौजूदा जीरत (न्यू) एस/एस में उपरोक्त कार्य के कार्यक्षेत्र के लिए निःशुल्क स्थान उपलब्ध कराएगा।

2. **पश्चिमी क्षेत्र-पूर्वी क्षेत्र अंतर-क्षेत्रीय नेटवर्क विस्तार स्कीम-भाग-ग**

संभावित कार्यान्वयन समय-सीमा: दिनांक 31.03.2029

बीपीसी: आरईसी पावर डेवलपमेंट एंड कंसल्टेंसी लिमिटेड

कार्यक्षेत्र:

क्रम सं.	*कार्यों का कार्यक्षेत्र*	*क्षमता (एमवीए)/ लाइन की लंबाई (किमी)/ संख्या*
1.	जमशेदपुर (न्यू) – बालासोर 400 केवी डी/सी (क्वाड) लाइन	• 174 किमी
2.	जमशेदपुर (न्यू) 765/400 केवी (आईएसटीएस) सबस्टेशन का विस्तार	• 400 केवी लाइन बे: 2 [जमशेदपुर – बालासोर 400 केवी डी/सी (क्वाड) लाइन के लिए]

टिप्पणी:

1.ओपीटीसीएल जमशेदपुर (न्यू) - बालासोर 400 केवी डी/सी (क्वाड) लाइन की समाप्ति के लिए अपने नियोजित बालासोर 400/220 केवी एस/एस पर 1x80 एमवीएआर स्विचेबल लाइन रिएक्टर के साथ 2 400 केवी लाइन बे लागू करेगा। बालासोर (ओपीटीसीएल) 400/220 केवी एस/एस का ठेका अभी दिया जाना बाकी है। हालाँकि, ओपीटीसीएल के अनुसार, अपेक्षित कमीशनिंग शेड्यूल 31-03-2029 है।

	2. जमशेदपुर (न्यू) एस/एस का टीएसपी [पश्चिमी क्षेत्र-पूर्वी क्षेत्र अंतर-क्षेत्रीय नेटवर्क विस्तार स्कीम-भाग क स्कीम के तहत कार्यान्वित किया जा रहा एक नया 765/400 केवी एस/एस] जमशेदपुर (न्यू) एस/एस में उपर्युक्त कार्य के लिए निःशुल्क स्थान उपलब्ध कराएगा।	
3.	**एनईआरजीएस-III सियांग बेसिन** **संभावित कार्यान्वयन समय-सीमा: 28.02.2029** **बीपीसी: पीएफसी कंसल्टिंग लिमिटेड** कार्यक्षेत्र:	

क्रम सं.	*कार्यों का कार्यक्षेत्र*	*क्षमता (एमवीए)/ लाइन की लंबाई (किमी)/ संख्या*
1.	अरुणाचल प्रदेश के काइंग में नए 2x500 एमवीए, 400/220 केवी जीआईएस पूलिंग स्टेशन की स्थापना **भावी विस्तार के लिए अतिरिक्त स्थान:** ➢ 220/400 केवी, 2x500 एमवीए आईसीटी, दोनों वोल्टेज स्तरों पर संबद्ध आईसीटी बे के साथ ➢ 420 केवी, 1x80 एमवीएआर बस रिएक्टर, संबद्ध बे के साथ ➢ भविष्य की लाइनों के लिए दस 400 केवी लाइन बे (स्विचेबल लाइन रिएक्टर के लिए स्थान के साथ) ➢ भविष्य की लाइनों के लिए आठ 220 केवी लाइन बे ➢ 400 केवी बस सेक्शनलाइज़र बे: 1 सेट ➢ 220 केवी बस सेक्शनलाइज़र बे: 1 सेट ➢ 220 केवी बस कपलर बे: 1	• 420 केवी, 80 एमवीएआर बस रिएक्टर: 2 • 400 केवी जीआईएस बस रिएक्टर बे: 2 • 400/220 केवी, 500 एमवीए आईसीटी: 2 • 400 केवी जीआईएस आईसीटी बे: 2 • 220 केवी जीआईएस आईसीटी बे: 2 • 220 केवी बस कपलर बे: 1 • 400 केवी जीआईएस लाइन बे: 2 [केइंग पीएस–निगलोक पीएस 400 केवी डी/सी (क्वाड) लाइन के लिए] • 220 केवी जीआईएस लाइन बे: 2 [प्रति सर्किट 1840ए या उससे अधिक के डीटीएल की समाप्ति के लिए] • जीआईएस बे के साथ 420 केवी, 50 एमवीएआर स्विचेबल लाइन रिएक्टर: 2 [केइंग पीएस – निगलोक पीएस 400 केवी डी/सी (क्वाड) लाइन के प्रत्येक सर्किट में एक]
2.	अरुणाचल प्रदेश के निगलोक में नए 400 केवी जीआईएस स्विचिंग स्टेशन की स्थापना (400/220 केवी स्तर और 6000 मेगावाट एलसीसी एचवीडीसी स्टेशन के प्रावधान के साथ) **भावी विस्तार के लिए अतिरिक्त स्थान:** ➢ 400 केवी एचवीएसी स्विचयार्ड के साथ संबद्ध इंटरकनेक्शन और सभी संबंधित उपकरणों (फ़िल्टर सहित)/ बस एक्सटेंशन आदि के साथ ± 800 केवी, 6000 मेगावाट, निगलोक (एचवीडीसी) [एलसीसी] टर्मिनल स्टेशन (4x1500 मेगावाट) की स्थापना	• 420 केवी, 80 एमवीएआर बस रिएक्टर: 2 • 400 केवी जीआईएस बस रिएक्टर बे: 2 • 400 केवी जीआईएस लाइन बे: 4 [केइंग पीएस – निगलोक पीएस 400 केवी डी/सी (क्वाड) लाइन के लिए 2 और निगलोक पीएस – गोगामुख 400 केवी डी/सी (क्वाड) लाइन के लिए 2] • जीआईएस बे सहित 420 केवी, 50 एमवीएआर स्विचेबल लाइन रिएक्टर: 2 [निगलोक पीएस – गोगामुख 400 केवी डी/सी (क्वाड) लाइन के प्रत्येक सर्किट में एक]

		➢ 400/220 केवी, 4x500 एमवीए आईसीटी, दोनों वोल्टेज स्तरों पर संबद्ध आईसीटी बे के साथ ➢ 420 केवी, 1x80 एमवीएआर बस रिएक्टर, संबद्ध बे के साथ ➢ भविष्य की लाइनों के लिए (स्विचेबल लाइन रिएक्टर के लिए स्थान के साथ) बारह 400 केवी लाइन बे ➢ भविष्य की लाइनों के लिए आठ 220 केवी लाइन बे ➢ 400 केवी बस सेक्शनलाइज़र बे: 1 सेट ➢ 220 केवी बस सेक्शनलाइज़र बे: 1 सेट ➢ 220 केवी बस कपलर बे: 2	
	3.	गोगामुख 400/220/132 केवी (आईएसटीएस) सबस्टेशन पर विस्तार	• 400 केवी लाइन बे: 2 [निगलोक पीएस - गोगामुख पीएस 400 केवी डी/सी (क्वाड) लाइन के लिए]
	4.	काइंग पीएस – निगलोक पीएस 400 केवी डी/सी (क्वाड) लाइन	• 100 किमी
	5.	निगलोक पीएस – गोगामुख 400 केवी डी/सी (क्वाड) लाइन	• 125 किमी
	टिप्पणी: गोगामुख 400/220/132 केवी (आईएसटीएस) एस/एस परियोजना, मैसर्स एनईआरईएस XVI पावर ट्रांसमिशन लिमिटेड (टेक्नो इलेक्ट्रिक एंड इंजीनियरिंग कंपनी लिमिटेड की पूर्ण स्वामित्व वाली सहायक कंपनी) द्वारा टीबीसीबी रूट के माध्यम से पूर्वोत्तर क्षेत्र विस्तार स्कीम-XVI (एनईआरईएस-XVI) स्कीम के अंतर्गत कार्यान्वित की जा रही है। टीएसए के अनुसार एससीओडी दिनांक 30-11-2026 है। मैसर्स एनईआरईएस XVI पावर ट्रांसमिशन लिमिटेड कार्यान्वयनाधीन 400/220/132 केवी गोगामुख एस/एस में उपर्युक्त कार्य का कार्यक्षेत्र के लिए निःशुल्क स्थान उपलब्ध कराएगा।		

2. बोली प्रक्रिया समन्वयक की नियुक्ति, विद्युत मंत्रालय द्वारा इस संबंध में जारी और समय-समय पर संशोधित दिशानिर्देशों में निर्धारित शर्तों के अध्यधीन होगी।

3. बीपीसी तकनीकी विकल्पों के माध्यम से मार्ग के अधिकार (आरओडब्ल्यू) की चौड़ाई में कमी की गणना के लिए सीईए की समिति की रिपोर्ट दिनांक 24.09.2024 के अनुसार आरओडब्ल्यू अनुकूलन सुनिश्चित करेंगे।

4. इसके अलावा, मार्ग को पीएम गति शक्ति पोर्टल पर सत्यापन और भौतिक सर्वेक्षण के बाद ही अंतिम रूप दिया जाना चाहिए।

[फा.सं. 15/3/2018-ट्रांस-भाग(4)]

नाओरेम इन्द्रकुमार सिंह, अवर सचिव (पारेषण)

MINISTRY OF POWER

NOTIFICATION

New Delhi, the 17th September, 2025

S.O. 4221(E).—In exercise of the powers conferred by sub-para 3.2 of Para 3 of the Guidelines circulated under Section 63 of the Electricity Act, 2003 (No. 36 of 2003), the Central Government, on the recommendations of 32nd meeting of National Committee on Transmission, hereby notifies the following transmission schemes under TBCB mode, with details of respective Bid-Process Coordinator (BPC): -

<table>
<tr><th>Sl. No.</th><th colspan="3">Name & Scope of the Transmission Scheme</th></tr>
<tr><td>1.</td><td colspan="3">WR-ER Inter-Regional Network Expansion Scheme-Part A

Tentative implementation timeframe: 24 months from the date of allocation

BPC: REC Power Development and Consultancy Limited

Scope:</td></tr>
<tr><td></td><td>Sl. No.</td><td>Scope of works</td><td>Capacity (MVA) / Line length (km)/ Nos.</td></tr>
<tr><td></td><td>1.</td><td>Establishment of 2x1500 MVA, 765/400 kV S/s at Jamshedpur (New) in Jharkhand

<u>Additional space for future expansion:</u>
➢ 765/400 kV, 4x1500 MVA (12x500 MVA single phase units) ICTs along with associated ICT bays at both voltage levels
➢ 400/220 kV, 6x500 MVA ICTs along with associated ICT bays at both voltage levels
➢ 765 kV, 2x330 MVAr (6x110 MVAr single phase units) bus reactor along with associated bay
➢ 420 kV, 2x125 MVAr bus reactor along with associated bay
➢ 765 kV line bays (along with space for switchable line reactor) for future lines: 8 Nos.
➢ 400 kV line bays (along with space for switchable line reactor) for future lines: 10 Nos.
➢ 220 kV line bays for future lines: 12 Nos.
➢ 765 kV bus sectionaliser bay: 1 set
➢ 400 kV bus sectionaliser bay: 1 set
➢ 220 kV bus sectionaliser bay: 1 set
➢ 220 kV bus coupler bay: 2 set
➢ 220 kV transfer bus coupler bay: 2 set</td><td>•765/400 kV, 2x1500 MVA ICT (7x500 MVA single phase units)
• 765 kV, 2x330 MVAr bus reactor (7x110 MVAr single phase units)
• 420 kV, 125 MVAr bus reactor: 2 Nos.
• 765 kV ICT bays: 2 Nos.
• 765 kV Bus reactor bays: 2 Nos.
• 400 kV ICT bays: 2 Nos.
• 400 kV Bus reactor bays: 2 Nos.
• 765 kV line bays: 6 Nos. (2 Nos. for Jamshedpur – Tamnar 765 kV D/c line and 4 Nos. for LILO of Ranchi (New) – Medinipur 765 kV D/c line)
• 400 kV line bays: 4 Nos. [for LILO of Ranchi (New) – New PPSP 400 kV D/c line]
• 765 kV, 330 MVAr (3x110 MVAR single phase units) switchable line reactor along with associated bays in each circuit of Raigarh (Tamnar) – Jamshedpur 765 kV D/c line</td></tr>
<tr><td></td><td>2.</td><td>Establishment of 3x1500 MVA, 765/400 kV S/s (on 765 kV Bus section-II & 400 kV Bus Section-II) at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor (on 765 kV Bus section-II & 400 kV Bus Section-II)</td><td></td></tr>
<tr><td></td><td>2A.</td><td><u>Additional space for future expansion:</u>
➢ Creation of 1100 kV level
➢ 1100 kV bus sectionaliser bay: 1 set (to establish Sec-I & Sec-II)</td><td><u>Common Transmission System Augmentation:</u>
•765 kV, 2x330 MVAr bus reactor (7x110 MVAr single phase units)</td></tr>
</table>

		➢ 400 kV bus sectionaliser bay :3 sets (to establish Sec-I, Sec-III & Sec- IV) ➢ 1100/400 kV, 6x3000 MVA (19x1000 MVA single phase units) ICTs along with associated ICT bays. • 1100 kV side: 3 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) • 400 kV side: 3 Nos. on Bus Sec-III & 3 Nos. on Bus Sec- IV) ➢ 1100 kV line bays (along with space for switchable line reactor) for future lines: 12 Nos. (6 Nos. on Bus Sec-I & 6 Nos. on Bus Sec-II) ➢ 1200 kV, 4x660 MVAr (13 x 220 MVAR single phase units) bus reactor along with associated bays (2 Nos. on Bus Sec-I & 2 Nos. on Bus Sec-II) ➢ 765 kV bus sectionaliser bay: 1 set (to establish Sec-I) ➢ 765/400 kV, 5x1500 MVA (15 x 500 MVA single phase units) ICTs along with associated ICT bays • 765 kV side: 4 Nos. on Bus Sec-I & 1 No. on Bus Sec-II) • 400 kV side: 4 Nos. on Bus Sec-I & 1 No. on Bus Sec-II) ➢ 765 kV, 2x330 MVAr (6 x 110 MVAr single phase units) bus reactor along with associated bay (on Bus Sec-I) ➢ 420 kV, 6x125 MVAr bus reactor along with associated bay (2 on Bus Sec-I; 2 on Bus Sec-III & 2 on Bus Sec-IV) ➢ 765 kV line bays (along with space for switchable line reactor) for future lines: 6 Nos. (6 on Bus Sec- I) ➢ 400 kV line bays (along with space for switchable line reactor) for future lines: 22 Nos. (6 on Bus Sec- I; 4 on Bus Sec-II, 6 on Bus Sec-III & 6 on Bus Sec-IV) ➢ Establishment of 6000 MW, ± 800 kV Raigarh (Kotra-II) (HVDC) [LCC] terminal station (4x1500 MW) along with associated interconnections with 400 kV HVAC Switchyard (2x1500 MW on 400 kV Sec-III along with associated 4 No. bays & 2x1500 MW on 400 kV Sec-IV along with associated 4 No. bays) & all associated equipment (incl. filters)/ bus extension, etc.	•420 kV, 125 MVAr bus reactor: 2 Nos. •765 kV Bus reactor bays: 2 Nos. •400 kV Bus reactor bays: 2 Nos. •765 kV line bays: 6 Nos. (2 Nos. for Raigarh (Tamnar) – Raigarh (Kotra)-II 765 kV D/c line and 4 Nos. for LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line) •765 kV, 240 MVAr (3x80 MVAr single phase units) switchable line reactor along with associated bays in each circuit of Raigarh (Kotra)-II – Jharsuguda (Sec-A) 765 kV D/c section along with 1x80 MVAr 765 kV spare reactor
	2B.		**<u>ATS incl. terminal bays identified for 2x800 MW Raigarh TPS of M/s APL (appl. No.2200001709):</u>** •765/400 kV, 3x1500 MVA ICT (10x500 MVA single phase units) • 765 kV ICT bays: 3 Nos. • 400 kV ICT bays: 3 Nos.

		•400 kV line bays: 2 Nos. [for interconnectionof 2x800 MW Raigarh TPS of M/s APL to Raigarh (Kotra)-II 400 kV D/c line]
3.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line	•10 km (Route length)
4.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s	•LILO length ~40 km
5.	Raigarh (Tamnar)@ – Raigarh (Kotra)-II S/s 765 kV D/c line	•50 km
6.	765 kV, 330 MVAr switchable line reactor along with associated bays in each line of Raigarh (Tamnar) – Jamshedpur 765 kV D/c line at Raigarh (Tamnar) end	• 765 kV, 330 MVAr switchable line reactors – 2 Nos. • Switching equipment for line reactors – 2 Nos. •765 kV spare reactor: 1x110 MVAr
7.	Raigarh (Tamnar)@ – Jamshedpur (New) 765 kV D/c line	•315 km
8.	LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New)	• 51 km and 49 km
9.	LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New) (a) Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose (b) Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage)	• 63 km Twin Moose • 63 km Twin HTLS
10.	Installation of new 765/400 kV, 1x1500 MVA (3x500 MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	• 765/400 kV, 1x1500 MVA (3x500 MVA single phase units) ICT: 1 No. • 765 kV ICT bay: 1 No. • 400 kV ICT bay: 1 No.

Note:

1. @4 Nos. 765 kV line bays vacated at Raigarh (Tamnar) S/s after bypass arrangement mentioned at Sl. No. 3 of the scope of works [i.e. bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765 kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765 kV D/c at Raigarh (Tamnar)] to be utilized for termination of 765 kV lines at Raigarh (Tamnar) S/s i.e. 2 nos. for Raigarh (Tamnar) – Raigarh (Kotra-II) 765 kV D/c proposed line and 2 nos. for Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c proposed line.
2. After the implementation of subject bypassing arrangement at the outskirts of Raigarh (Tamnar) S/s, the existing unutilized portions of Raigarh (Kotra) – Raigarh (Tamnar) and Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line sections at Raigarh (Tamnar) end may be utilized for termination of proposed 765 kV D/c lines under the subject scheme i.e. proposed 765 kV D/c lines may be terminated at bypassing points. This shall ensure utilization of existing ISTS transmission infrastructure. However, if the said existing ISTS transmission line sections remain unutilized at Raigarh (Tamnar) end, due to any reason, the same shall be dismantled by the TSP of the subject scheme and cost of scrapped assets may be adjusted under subject transmission scheme. In both cases (viz. utilization of existing line sections or its scarping), the original tariff of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765 kV D/c line shall remain unaffected.

   Also, TSP of Raigarh (Tamnar) S/s shall provide space for above scope of work at the existing Raigarh (Tamnar) S/s free of cost.
3. TSP shall implement Inter-tripping scheme on Dharamjaygarh (Sec-B) – Raigarh (Kotra)-II 765 kV D/c line (for tripping of the switchable line reactor at Dharamjaygarh (Sec-B) end along with the main line breaker).

4. TSP of the subject scheme shall implement Inter-tripping scheme on Raigarh (Kotra)-II – Jharsuguda 765 kV D/c line (for tripping of the switchable line reactor at Raigarh (Kotra)-II end along with the main line breaker).
5. LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 765 kV D/c line and one circuit of Jamshedpur (New) – Medinipur 765 kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.
6. LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 400 kV D/c line and one circuit of Jamshedpur (New) – New PPSP 400 kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.
7. M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) shall provide space for above scope of work at the existing Jeerat (New) S/s free of cost.

2. WR-ER Inter-Regional Network Expansion Scheme-Part C

Tentative implementation timeframe: 31.03.2029

BPC: REC Power Development and Consultancy Limited

Scope:

Sl. No.	*Scope of works*	*Capacity (MVA) / Line length (km)/ Nos.*
1.	Jamshedpur (New) – Balasore 400 kV D/c (Quad) line	• 174 km
2.	Extension at Jamshedpur (New) 765/400 kV (ISTS) substation	• 400 kV line bays: 2 Nos. [for Jamshedpur – Balasore 400 kV D/c (Quad) line]

Note:

1. OPTCL shall implement 2 Nos. 400 kV line bays along with 1x80 MVAr switchable line reactor at its planned Balasore 400/220 kV S/s for termination of Jamshedpur (New) - Balasore 400 kV D/c (Quad) line. Balasore (OPTCL) 400/220 kV S/s is yet to be awarded. However, the expected commissioning schedule is 31-03-2029, as per OPTCL.
2. TSP of Jamshedpur (New) S/s [a new 765/400 kV S/s being implemented under WR-ER Inter-Regional Network Expansion Scheme-Part A scheme] shall provide space for above scope of work at Jamshedpur (New) S/s free of cost.

3. NERGS-III Siang Basin

Tentative implementation timeframe: 28.02.2029

BPC: PFC Consulting Limited

Scope:

Sl. No.	*Scope of works*	*Capacity (MVA) / Line length (km)/ Nos.*
1.	Establishment of new 2x500 MVA, 400/220 kV GIS Pooling station at Kaying in Arunachal Pradesh **<u>Additional space for future expansion</u>:** ➢ 400/220 kV, 2x500 MVA ICTs along with associated ICT bays at both voltage levels ➢ 420 kV, 1x80 MVAr bus reactor along with associated bay ➢ 10 Nos. of 400 kV line bays (along	• 420 kV, 80 MVAr bus reactor: 2 Nos. • 400 kV GIS Bus reactor bays: 2 Nos. • 400/220 kV, 500 MVA ICT: 2 Nos. • 400 kV GIS ICT bays: 2 Nos. • 220 kV GIS ICT bays: 2 Nos. • 220 kV bus coupler bay: 1 No. • 400 kV GIS line bays: 2 Nos. [for Kaying PS – Niglok PS 400 kV D/c (Quad) line]

		with space for switchable line reactor) for future lines ➢ 8 Nos. of 220 kV line bays for future lines ➢ 400 kV bus sectionaliser bay: 1 set ➢ 220 kV bus sectionaliser bay :1 set ➢ 220 kV bus coupler bay: 1 No.	• 220 kV GIS line bays: 2 Nos. [for termination of DTL of 1840A or more per circuit] • 420 kV, 50 MVAr switchable line reactor with GIS bays: 2 Nos. [one in each circuit of Kaying PS – Niglok PS 400 kV D/c (Quad) line]
	2.	Establishment of new 400 kV GIS Switching station at Niglok in Arunachal Pradesh (with a provision for 400/220 kV level and 6000 MW LCC HVDC station) **<u>Additional space for future expansion</u>:** ➢ Establishment of ± 800 kV, 6000 MW, Niglok (HVDC) [LCC] terminal station (4x1500 MW) along with associated interconnections with 400 kV HVAC Switchyard & all associated equipment (incl. filters)/ bus extension, etc. ➢ 400/220 kV, 4x500 MVA ICTs along with associated ICT bays at both voltage levels ➢ 420 kV, 1x80 MVAr bus reactor along with associated bays ➢ 12 Nos. of 400 kV line bays (along with space for switchable line reactor) for future lines ➢ 8 Nos. of 220 kV line bays for future lines ➢ 400 kV bus sectionaliser bay: 1 set ➢ 220 kV bus sectionaliser bay :1 set ➢ 220 kV bus coupler bay: 2 Nos.	• 420 kV, 80 MVAr bus reactor: 2 Nos. • 400 kV GIS Bus reactor bays: 2 Nos. • 400 kV GIS line bays: 4 Nos. [2 for Kaying PS – Niglok PS 400 kV D/c (Quad) line & 2 for Niglok PS – Gogamukh 400 kV D/c (Quad) line] • 420 kV, 50 MVAr switchable line reactor with GIS bays: 2 Nos. [one in each circuit of Niglok PS – Gogamukh 400 kV D/c (Quad) line]
	3.	Extension at Gogamukh 400/220/132 kV (ISTS) substation	• 400 kV line bays: 2 Nos. [for Niglok PS – Gogamukh PS 400 kV D/c (Quad) line]
	4.	Kaying PS – Niglok PS 400 kV D/c (Quad) line	• 100 km
	5.	Niglok PS – Gogamukh 400 kV D/c (Quad) line	• 125 km
	Note: 1. Gogamukh 400/220/132 kV (ISTS) S/s is under implementation under North Eastern Region Expansion Scheme-XVI (NERES-XVI) scheme through TBCB route by M/s NERES XVI Power Transmission Limited (wholly owned subsidiary of Techno Electric and Engineering Company Limited). SCoD as per TSA is 30-11-2026. 2. M/s NERES XVI Power Transmission Limited shall provide space for above scope of work at under implementation 400/220/132 kV Gogamukh S/s free of cost.		

2. The appointment of the Bid Process Coordinator is subject to the conditions laid down in the Guidelines issued by Ministry of Power in this regard, amended from time to time.

3. BPCs shall ensure RoW optimization as per the CEA's Committee report dated 24.09.2024 for calculation of reduction of Right of Way (RoW) Width through Technological Options.

4. Further, the route must be finalized after valikdation on PM Gati Shakti portal and physical survery

[F. No. 15/3/2018-Trans-Part(4)]

NAOREM INDRAKUMAR SINGH, Under Secy.(Transmission)

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GORAKHA NATH YADAVA Digitally signed by GORAKHA NATH YADAVA Date: 2025.09.23 16:06:33 +05'30'

SINGLE STAGE REQUEST FOR PROPOSAL DOCUMENT

FOR

SELECTION OF BIDDER AS TRANSMISSION SERVICE PROVIDER THROUGH TARIFF BASED COMPETITIVE BIDDING PROCESS

TO

ESTABLISH INTER-STATE TRANSMISSION SYSTEM

FOR

WR-ER INTER-REGIONAL NETWORK EXPANSION SCHEME-PART A

ISSUED BY

REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited)

Registered Office:
Core-4, SCOPE Complex,
7, Lodhi Road, New Delhi – 110 003
Email: vijay.kulkarni@recpdcl.in & tbcb@recpdcl.in

02.01.2026

REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited)
Core-4, SCOPE Complex,
7, Lodhi Road, New Delhi – 110 003

Request for Proposal Document for selection of Bidder as Transmission Service Provider through tariff based competitive bidding process to establish Inter-State Transmission system for "WR-ER Inter-Regional Network Expansion Scheme–Part A" is issued by REC Power Development and Consultancy Limited.

This RFP document is issued to -

M/s. _____

_____

_____

_____

_____

Chief Executive Officer,
REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited)

Email: …….

Place: ……

Date: ……

Signature: ……

REQUEST FOR PROPOSAL NOTIFICATION

REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited)
Core-4, SCOPE Complex,
7, Lodhi Road, New Delhi – 110 003

1. Ministry of Power, Government of India vide its Gazette Notification no. 4104 [F No. 15/03/2018- Trans- Part(4)] dated 18.09.2025 has notified REC Power Development and Consultancy Limited (RECPDCL) to be the Bid Process Coordinator (BPC) for the purpose of Selection of Bidder as Transmission Service Provider to establish Inter-State Transmission system for **"WR-ER Inter-Regional Network Expansion Scheme-Part A"** through tariff based competitive bidding process.

2. REC Power Development and Consultancy Limited (hereinafter referred to as BPC) hereby invites all prospective Bidders for issue of Request for Proposal (RFP) for selection of Bidder as 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 from time to time. The responsibility of the TSP would be to establish the following Inter-State Transmission System for "**WR-ER Inter-Regional Network Expansion Scheme-Part A"** (hereinafter referred to as 'Project') on build, own, operate & transfer basis and to provide transmission service:

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
1.	Establishment of 3x1500 MVA, 765/400kV S/s at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor **Common Transmission System Augmentation:** • 765 kV, 2x330 MVAr bus reactor (7x110MVAr single phase units) • 420 kV, 125 MVAr bus reactor: 2 Nos. • 765 kV Bus reactor bays: 2 Nos. • 400 kV Bus reactor bays: 2 Nos. • 765 kV line bays: 4 Nos. (for termination of LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line) • 765 kV, 240 MVAr (3x80MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Kotra)-II – Jharsuguda (Sec-A) 765 kV D/c section along with 1x80 MVAr 765kV spare reactor	24 Months

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
	Additional space for future expansion: • 765 kV bus sectionaliser bay: 1 set (to establish Sec-II) • 400 kV bus sectionaliser bay :1 set (to establish Sec-II) • 765/400 kV, 5x1500MVA (15 x 500 MVA single phase units) ICTs along with associated ICT bays a. 765 kV side: - 1 No. on Bus Sec-I & 4 Nos. on Bus Sec-II) b. 400 kV side: - 1 Nos. on Bus Sec-I & 4 Nos. on Bus Sec-II) • 765 kV, 2x330 MVAr (6 x 110MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) • 420 kV, 2x12 5MVAr bus reactor along with associated bay (2 on Bus Sec-II) • 765 kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. (2 Nos. on Sec-I for scope at Sl. 8 and 6 on Bus Sec-II for future lines) • 400 kV line bays (along with space for switchable line reactor) for future lines: 14 Nos. (6 on Bus Sec-I; 8 on Bus Sec-II) • 400/220 kV ICT along with bays: 6 Nos. • 220 kV line bays: 12 Nos.: (6 Nos. on Bus Sec-I and 6 on Bus Sec-II) • 220 kV Sectionalization bay: 1 set • 220 kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) • 220 kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II)	
2.	Extension at Raigarh (Kotra)-II 765/400 kV S/s **ATS incl. terminal bays identified for 2x800MW Raigarh TPS of M/s APL (appl. No.2200001709):** • 765/400 kV, 3x1500 MVA ICT (10x500 MVA single phase units) • 765 kV ICT bays: 3 Nos. • 400 kV ICT bays: 3 Nos. • 400 kV line bays: 2 Nos. [for interconnection of 2x800MW Raigarh TPS of M/s APL to Raigarh (Kotra)-II 400 kV D/c line. DTL line under scope of M/s APL.]	24 Months

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
3.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s	24 Months
4.	Installation of new 765/400 kV, 1x1500 MVA (3x500 MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends • 765/400 kV, 1x1500 MVA (3x500MVA single phase units) ICT: 1 no. • 765kV ICT bay: 1 no. • 400kV ICT bay: 1 no	24 Months
5.	Establishment of 2x1500 MVA, 765/400 kV S/s at Jamshedpur (New) in Jharkhand • 765/400 kV, 2x1500 MVA ICT (7x500 MVA single phase units) • 765 kV, 2x330MVAr bus reactor (7x110 MVAr single phase units including one spare unit) • 420 kV, 125 MVAr bus reactor: 2 Nos. • 765 kV ICT bays: 2 Nos. • 765 kV Bus reactor bays: 2 Nos. • 400 kV ICT bays: 2 Nos. • 400 kV Bus reactor bays: 2 Nos. • 765 kV line bays: 4 Nos. (for termination of LILO of Ranchi (New) – Medinipur 765 kV D/c line) • 400 kV line bays: 4 Nos. [for termination of LILO of Ranchi (New) – New PPSP 400 kV D/c line] **Additional space for future expansion:** • 765 kV bus sectionaliser bay: 1 set (to establish Sec-II) • 400 kV bus sectionaliser bay :1 set (to establish Sec-II) • 220 kV bus sectionaliser bay: 1 set (to establish Sec-II) • 220 kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) • 220 kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) • 765/400 kV, 4x1500 MVA (12x500 MVA single phase units) ICTs along with associated ICT bays at both voltage levels a. 765 kV side: - 1 No. on Bus Sec-I & 3 Nos. on Bus	30 Months

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
	Sec-II) b. 400 kV side: - 1 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) • 400/220 kV, 6x500 MVA ICTs along with associated ICT bays at both voltage levels a. 400 kV side: - 3 No. on Bus Sec-I & 3 Nos. on Bus Sec-II) b. 220 kV side: - 3 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) • 765 kV, 2x330 MVAr (6x110 MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) • 420 kV, 2x125 MVAr bus reactor along with associated bay (on Bus Sec-II) • 765 kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. (2 Nos. on Bus Sec-I and 6 on Bus Sec-II) • 400 kV line bays (along with space for switchable line reactor) for future lines: 10 Nos. (2 Nos. on Bus Sec-I and 8 on Bus Sec-II) • 220 kV line bays for future lines: 12 Nos. (6 Nos. on Bus Sec-I and 6 on Bus Sec-II)	
6.	LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New)	30 Months
7.	LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New) • Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose • Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage)	30 Months
8.	Extension at Raigarh (Kotra)-II S/s 765/400 kV S/s • 765 kV line bays: 2 nos. (for termination of Raigarh (Tamnar) – Raigarh (Kotra)-II 765 kV D/c line)	36 Months
9.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line	36 Months

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
10.	Raigarh (Tamnar)[@] - Raigarh (Kotra)-II S/s 765 kV D/c line	36 Months
11.	Extension at Raigarh (Tamnar) 765/400 kV S/s • 765 kV, 330 MVAr (3x110 MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c line along with 1x110 MVAr 765 kV spare reactor	36 Months
12.	Extension at Jamshedpur (New) 765/400 kV S/s • 765 kV line bays: 2 nos. (for termination of Jamshedpur (New) – Tamnar 765 kV D/c line) • 765 kV, 330 MVAr (3x110 MVAR single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c line	36 Months
13.	Raigarh (Tamnar)[@] – Jamshedpur (New) 765 kV D/c line	36 Months

Note:

1. *[@]4 Nos. 765kV line bays vacated at Raigarh (Tamnar) S/s after bypass arrangement mentioned at Sl. No. 9 of the scope of works [i.e. bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c at Raigarh (Tamnar)] to be utilized for termination of 765kV lines at Raigarh (Tamnar) S/s i.e. 2 nos. for Raigarh (Tamnar) – Raigarh (Kotra-II) 765kV D/c proposed line and 2 nos. for Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c proposed line.*
2. *After the implementation of subject bypassing arrangement at the outskirts of Raigarh (Tamnar) S/s, the existing unutilized portions of Raigarh (Kotra) – Raigarh (Tamnar) and Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line sections at Raigarh (Tamnar) end may be utilized for termination of proposed 765kV D/c lines under the subject scheme i.e. proposed 765kV D/c lines may be terminated at bypassing points. This shall ensure utilization of existing ISTS transmission infrastructure. However, if the said existing ISTS transmission line sections remain unutilized at Raigarh (Tamnar) end, due to any reason, the same shall be dismantled by the TSP of the subject scheme and cost of scrapped assets may be adjusted under subject transmission scheme. In both cases (viz. utilization of existing line sections or its scrapping), the original tariff of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c line shall remain unaffected.*

Also, TSP of Raigarh (Tamnar) S/s shall provide space for above scope of work at the existing Raigarh (Tamnar) S/s free of cost.

3. *TSP shall implement Inter-tripping scheme on Dharamjaygarh (Sec-B) – Raigarh (Kotra)-II 765 kV D/c line (for tripping of the switchable line reactor at Dharamjaygarh (Sec-B) end along with the main line breaker).*
4. *TSP of the subject scheme shall implement Inter-tripping scheme on Raigarh (Kotra)-II – Jharsuguda 765 kV D/c line (for tripping of the switchable line reactor at Raigarh (Kotra)-II end along with the main line breaker).*
5. *LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 765kV D/c line and one circuit of Jamshedpur (New) – Medinipur 765kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
6. *LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 400kV D/c line and one circuit of Jamshedpur (New) – New PPSP 400kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
7. *M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) shall provide space for above scope of work at the existing Jeerat (New) S/s free of cost.*

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 the provisions of the Transmission Service Agreement and applicable Rules/ Regulations, Orders and Guidelines issued by the Central Government.

4. **Transmission License**: The TSP shall obtain the Transmission License from the Commission.

5. **Bidding Process:** The Transmission Service Provider shall be selected through tariff based competitive bidding process for the Project based on meeting stipulated Qualification Requirements prescribed in Clause 2.1 of Section 2 of RFP and the lowest Quoted Transmission Charges discovered from Final Offers quoted during the e-reverse bidding. The selection of the TSP shall be subject to it obtaining Transmission License from the Commission, which, after expiry, may be further extended by such period as deemed appropriate by the Commission under powers vested with it to amend the conditions of the Transmission License.

   The entire bidding process shall be conducted on electronic platform created by MSTC Limited.

   The Bid shall be a single stage two envelope bid comprising the Technical Bid and the Financial Bid. The Bidders shall submit the Bid online through the electronic bidding platform. In addition to the online submission, the Bidder with lowest Final Offer will be required to submit original hard copies of Annexure 3, Annexure 4 (if applicable), Annexure

6 (if applicable) and Annexure 14 before issuance of LoI. There shall be no physical submission of the Financial Bid.

The Technical Bid shall be opened first and the Financial Bid of only the bidders who have qualified in the Technical Bid shall be opened. The Financial Bid will comprise of two rounds. In the first round the Initial Offer of the responsive bids would be opened and Quoted Transmission Charges of Initial Offer shall be ranked on the basis of ascending order. The Bidders, in the first fifty per cent of the ranking (with any fraction rounded off to higher integer) or four Bidders, whichever is higher, shall qualify for participating in the electronic reverse auction stage and submit their Final Offer.

6. 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 WR ER Part A Power Transmission Limited 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, twenty (20) days prior to the Bid Deadline.

   The WR ER Part A Power Transmission Limited of which one hundred percent (100%) equity shares will be 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 as per the terms of the RFP Project Documents.

   The TSP shall ensure transfer of all project assets along with substation land, right of way and clearances to CTU or its successors or an agency as decided by the Central Government after 35 years from COD of project at zero cost and free from any encumbrance and liability. The transfer shall be completed within 90 days after 35 years from COD of project failing which CTU shall be entitled to take over the project assets Suo moto.

7. **Commencement of Transmission Service**: The Bidder shall have to commence Transmission Service in accordance with the provisions of the Transmission Service Agreement.

8. **Transmission Charges**: The Transmission Charges shall be payable by the Designated ISTS Customers in Indian Rupees through the CTU as per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations as amended from time to time. Bidders shall quote the Transmission Charges as per the pre-specified structure, as mentioned in the RFP.

9. **Issue of RFP document:** The detailed terms and conditions for qualification and selection of the Transmission Service Provider for the Project and for submission of Bid are indicated in the RFP document. All those interested in purchasing the RFP document may respond in writing to Chief Executive Officer, vijay.kulkarni@recpdcl.in & tbcb@recpdcl.in at the address given in para 12 below with a non-refundable fee of Rs. 5,00,000/- (Rupees Five Lakh Only) or US$ 7,000 (US Dollars Seven Thousand Only) plus GST @18%, to be paid latest by 05.03.2026 via electronic transfer to the following Bank Account:

Bank Name, Address & Branch	ICICI Bank 9A, Phelps Building, Inner Circle, Connaught Place, New Delhi-110001

Bank Account Name	REC Power Development & Consultancy Limited
Bank Account No	000705041275
Bank IFSC Code No	ICIC0000007

Immediately after issuance of RFP document, the Bidder shall submit the Pre-Award Integrity Pact in the format as prescribed in Annexure B, which shall be applicable for and during the bidding process, duly signed on each page by any whole-time Director / Authorized Signatory, duly witnessed by two persons, and shall be submitted by the Bidder in two (2) originals in a separate envelope, duly superscripted with Pre-Award Integrity Pact. The Bidder shall submit the Pre-Award Integrity Pact on non-judicial stamp paper of Rs. 100/- each duly purchased from the National Capital Territory of Delhi. In case the Bidder is in a consortium, the Pre-Award Integrity Pact shall be signed and submitted by each member of the Consortium separately.

The RFP document shall be issued to the Bidders on any working day from 02.01.2026 to 05.03.2026 between 1030 hours (IST) to 1600 hours (IST). The BPC, on written request and against payment of the above mentioned fee by any Bidder shall promptly dispatch the RFP document to such Bidder by registered mail/ air mail. BPC shall, under no circumstances, be held responsible for late delivery or loss of documents so mailed.

10. **Receipt and opening of Bid:** The Bid must be uploaded online through the electronic bidding platform on or before 1500 hours (IST) on 06.03.2026. Technical Bid will be opened by the Bid Opening Committee on the same day at 1530 hours (IST) in the office of Central Electricity Authority, in the online presence of Bidders' representatives who wish to attend. If the Bid Deadline is a public holiday at the place of submission of Bid, it shall be opened on the next working day at the same time and venue. In addition to the online submission, the Bidder with lowest Final Offer will be required to submit original hard copies of Annexure 3, Annexure 4 (if applicable), Annexure 6 (if applicable) and Annexure 14 before issuance of LoI. Bidders meeting the Qualification Requirements, subject to evaluation as specified in Clause **3.2** to **3.4** shall be declared as "Qualified Bidders" and eligible for opening of Initial Offer.

11. The RFP document is not transferable. BPC reserves the right to reject all Bids and/or annul the process of tariff based competitive bidding for selection of Bidder as TSP to execute the Project without assigning any reason. BPC shall not bear any liability, whatsoever, in this regard.

12. **Nodal person for enquiries and clarifications**

All correspondence and clarification in respect of RFP document shall be addressed to:

Chief Executive Officer,
REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited)
REC Corporate Head Quarter,
D Block, Plot No. I – 4,
Sec – 29 Gurugram – 122 001
Email: vijay.kulkarni@recpdcl.in & tbcb@recpdcl.in

DISCLAIMER

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

2. This RFP, along with its Annexure, is not transferable 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 expressed 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 on or before the date & time mentioned in this RFP, 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. This RFP document includes statements, which reflect various assumptions arrived at by BPC in order to give a reflection of current status in the RFP. These assumptions should not be entirely relied upon by Bidders in making their own assessments. This RFP document does not purport to contain all the information each Bidder may require and may not be appropriate for all persons. It is not possible for BPC to consider the investment objectives, financial situation and particular needs of each party who reads or uses this RFP document. Certain Bidders may have a better knowledge of the Project than the others. Each Bidder should conduct its own investigations and analysis and should check the accuracy, reliability and completeness of the information in this RFP document and obtain independent advice from appropriate sources.

5. Neither BPC nor their employees or consultants make any representation or warranty as to the accuracy, reliability or completeness of the information in this RFP document.

6. Neither 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 document, any matter deemed to form part of this RFP document, the award of the Project, the information supplied by or on behalf of BPC or its employees, any consultants or otherwise arising in any way from the qualification process for the said Project.

7. By participating in the bidding process, each of the Bidder shall have acknowledged and

accepted that it has not been induced to enter into such agreement by any representation or warranty, expressed or implied, or relied upon any such representation or warranty by or on behalf of BPC or any person working in the bidding process.

8. BPC may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement this RFP document. Such updations, amendments or supplements, if any, will however be circulated to the Bidders not later than 15 days prior to the last date for submission of Bid.

9. Each Bidder unconditionally agrees, understands and accepts that the BPC reserves the rights to accept or reject any or all Bids without giving any reason. Neither the BPC nor its advisers shall entertain any claim of any nature, whatsoever, including without limitations, any claim seeking expenses in relation to the preparation of Bids.

10. 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.

Written clarifications on the RFP and other RFP Project Documents as per Clause 2.3 and 2.4 may be sought from:

Chief Executive Officer,
REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited)
REC Corporate Head Quarter,
D Block, Plot No. I – 4,
Sec – 29 Gurugram – 122 001
Email: vijay.kulkarni@recpdcl.in & tbcb@recpdcl.in

2.15 Other Aspects

2.15.1. The draft of the Transmission Service Agreement has been attached to this RFP. In addition to above, the following documents have also been attached to this RFP:

a) Share Purchase Agreement

When the drafts of the above RFP Project Documents are provided by the BPC, these RFP Project Documents shall form part of this RFP as per Formats – 1 & 2 of Annexure 20.

Upon finalization of the RFP Project Documents after incorporating the amendments envisaged in Clause 2.4 of this RFP, all the finalized RFP Project Documents shall be provided by BPC to the Bidders at least fifteen (15) days prior to the Bid Deadline.

The Transmission Service Agreement and Share Purchase Agreement shall be signed in required number of originals so as to ensure that one (1) original is retained by each party to the Agreement(s) on the date of transfer of SPV.

2.15.2. 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 Nodal Agency as per the provisions of Clause 2.12;

b) execute the Share Purchase Agreement and the Transmission Service Agreement;

c) acquire, for the Acquisition Price, one hundred percent (100%) equity shareholding of WR ER Part A Power Transmission Limited from REC Power Development and Consultancy Limited, who shall sell to the Selected Bidder, the equity shareholding of WR ER Part A Power Transmission Limited, along with all its related assets and liabilities;

Stamp duties payable on purchase of one hundred percent (100%) of the equity shareholding of WR ER Part A Power Transmission Limited, along with all its related assets and liabilities, shall also be borne by the Selected 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 ten (10) days shall be extended, on a day for day basis till the end of the Bid validity period.

2.15.3. After the date of acquisition of the equity shareholding of WR ER Part A Power Transmission Limited, 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 Nodal Agency,

ii. all rights and obligations of WR ER Part A Power Transmission Limited, shall be of the TSP,

iii. any decisions taken by the BPC prior to the Effective Date shall continue to be binding on the Nodal Agency and

iv. contractual obligations undertaken by the BPC shall continue to be fulfilled by the TSP.

v. Further, the TSP shall execute the Agreement(s) required, if any, under Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations as amended from time to time.

2.15.4. Within five (5) working days of the issue of the acquisition of the SPV by the Successful Bidder, the TSP shall apply to the Commission for grant of Transmission License and make an application to the Commission for the adoption of Transmission Charges, as required under Section – 63 of The Electricity Act 2003.

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 other parties are willing to execute the Share Purchase Agreement and REC Power Development and Consultancy Limited is willing to sell the entire equity shareholding of WR ER Part A Power Transmission Limited, 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.

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

2.15.7. The annulment of award, as provided in Clauses 2.15.5 and 2.15.6 of this RFP, will be done by the Government on the recommendations of National Committee on Transmission. However, before recommending so, National Committee on Transmission will give an opportunity to the Selected Bidder / TSP to present their view point.

2.15.8. The annulment of the award, under Clause 2.15.5 or 2.15.6 of this RFP, shall be sufficient grounds for blacklisting the bidder, whose award has been annulled, for a period of five years or more, as decided by the National Committee on Transmission, provided that the blacklisting shall be done only after giving the bidder an opportunity for showing cause.

2.16 Confidentiality

2.16.1. The parties undertake to hold in confidence this RFP and RFP Project Documents and not

REC POWER DEVELOPMENT AND CONSULTANCY LIMITED

(A wholly owned subsidiary of REC Ltd.)

GLOBAL INVITATION (Through e-bidding Only)

FOR SELECTION OF TRANSMISSION SERVICE PROVIDER THROUGH TARIFF BASED COMPETITIVE BIDDING (TBCB) PROCESS ON BUILD, OWN, OPERATE AND TRANSFER (BOOT) BASIS FOR 02 (TWO) INTER – STATE TRANSMISSION PROJECTS

REC Power Development and Consultancy Limited, New Delhi, India (a wholly owned subsidiary of REC Limited, a Maharatna Central Public Sector Undertaking) invites proposal for setting up of the below mentioned transmission projects through TBCB process on Build, Own, Operate and Transfer (BOOT) basis following single stage two envelope process of "Request for Proposal (RFP)". Interested bidders may refer to the Request for Proposal (RFP) notifications and RFP documents available on our websites www.recpdcl.in & www.recindia.nic.in w.e.f. 02.01.2026.

The bidders may obtain the RFP documents on all working days between 1030 hours (IST) to 1600 hours (IST) from 02.01.2026 to one day prior to bid submission date on payment of non-refundable fee of Rs. 5,00,000/-(Rupees Five Lakh Only) or US$ 7000 (US Dollars Seven Thousand Only) + 18% GST for each transmission project as per details provided in the respective RFP documents available on the websites www.recpdcl.in & www.recindia.nic.in.

The Request for Proposal (RFP) documents can also be downloaded from our websites www.recpdcl.in & www.recindia.nic.in, however, in such cases interested parties can submit Response to RFP only on submission of non-refundable fee of Rs. 5,00,000/-(Rupees Five Lakh Only) or US$ 7000 (US Dollars Seven Thousand Only) + 18% GST for each transmission project as per details provided in the respective RFP document. The survey report & clarifications to RFP documents shall be issued to those bidders, who have obtained/purchased RFP documents by paying requisite fee. The important timelines in this regard are as follows:

Sr. No.	Name of Project	Last Date for seeking clarifications	Last Date for submission of Response to RFP	Details of Opening of Response to RFP
1.	WR-ER Inter-Regional Network Expansion Scheme-Part A	22.01.2026	06.03.2026 up to 1500 Hrs (IST)	06.03.2026 at 1530 Hrs (IST)
2.	WR-ER Inter-Regional Network Expansion Scheme-Part C	22.01.2026	06.03.2026 up to 1600 Hrs (IST)	06.03.2026 at 1630 Hrs (IST)

All corrigenda, addenda, amendments, time extensions, etc. to the RFP will be hosted on our websites www.recpdcl.in & www.recindia.nic.in. Bidders should regularly visit our websites to keep themselves updated.

Note: RECPDCL reserves the right to cancel or modify the process without assigning any reason and without any liability. This is not an offer.

Chief Executive Officer
REC Power Development and Consultancy Ltd.
Core-4, SCOPE Complex, 7, Lodhi Road, New Delhi-110003, India

Bid Process Coordinator
REC Power Development
REC Power Development and Consultancy Limited

An Initiative of
Ministry of Power
Government of India

Initiative Partner
Central Electricity Authority

Give a missed call on toll free number 18002003004 to get our Apps.

REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited, a 'Maharatna CPSE' under Ministry of Power, Govt. of India)

REC Power Development

संदर्भ सं:आरईसीपीडीसीएल/टीबीसीबी/डब्ल्यूआर-ईआरभाग ए और सी/25-26/4505 दिनांक: 08.01.2026

सेक्रेटरी,
केन्द्रीय विद्युत विनियामक आयोग,
6वीं, 7वीं और 8वीं मंजिल, टावर-बी, वर्ल्ड ट्रेड सेंटर
नौरोजी नगर, तीसरा नई दिल्ली – 110029

Subject: Global Invitation for selection of Transmission Service Provider to establish Transmission system for the projects namely "WR-ER Inter-Regional Network Expansion Scheme Part-A" & "WR-ER Inter-Regional Network Expansion Scheme Part-C" -Copy of RFP documents.

महोदय,

Kind reference is invited to the Gazette Notification No.4104 [F.No. 15/3/2018-Trans-Part (4)] dated 18.09.2025, issued by Ministry of Power, Government of India wherein REC Power Development and Consultancy Limited has been appointed as Bid Process Coordinator (BPC) for selection of bidder as Transmission Service Provider to establish Inter-State transmission projects on Build, Own, Operate & Transfer (BOOT) basis.

In this regard, we would like to intimate that the RFP process for the subject cited projects have been initiated by way of Global Invitation in National/International newspapers i.e. Times of India Package & Financial Times Package on 02.01.2026. The important timelines in this regard are as below. :-

Sr. No.	Name of the Project	Last date of RFP Purchase	Last date for submission of response to RFP
1.	WR-ER Inter-Regional Network Expansion Scheme Part-A	05.03.2026	06.03.2026 up to 1500 Hrs (IST)
2.	WR-ER Inter-Regional Network Expansion Scheme Part-C	05.03.2026	06.03.2026 up to 1600 Hrs (IST)

The RfP notification and RfP document for the above project has also been uploaded on our websites www.recindia.nic.in and www.recpdcl.in.

In this regard, copy of Request for Proposal (RfP), Transmission Service Agreement (TSA) and Share Purchase Agreement (SPA) along with copies of newspaper notification of the subject project are enclosed herewith for your kind information and reference please.

धन्यवाद,

भवदीय,

(विजय कुलकर्णी)
वरिष्ठ महाप्रबंधक एवं विभागाध्यक्ष (टी & डी)

संलग्न: जैसा कि ऊपर बताया गया है

REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited, a 'Maharatna CPSE'
under Ministry of Power, Govt. of India)

REC Power Development

संदर्भ सं:आरईसीपीडीसीएल/टीबीसीबी/डब्ल्यूआर-ईआरभाग ए और सी/25-26/४५०8 दिनांक: 08.01.2026

निदेशक (पीजी डेस्क)
ऊर्जा मंत्रालय,
श्रमशक्ति भवन, रफी मार्ग,
नई दिल्ली-110001

Subject: Global Invitation for selection of Transmission Service Provider to establish Transmission system for the projects namely "WR-ER Inter-Regional Network Expansion Scheme Part-A" & "WR-ER Inter-Regional Network Expansion Scheme Part-C" -Copy of RFP documents.

महोदय,

Kind reference is invited to the Gazette Notification No.4104 [F.No. 15/3/2018-Trans-Part (4)] dated 18.09.2025, issued by Ministry of Power, Government of India, wherein REC Power Development and Consultancy Limited has been appointed as Bid Process Coordinator (BPC) for selection of bidder as Transmission Service Provider to establish Inter-State transmission projects on Build, Own, Operate & Transfer (BOOT) basis.

In this regard, we would like to intimate that the RFP process for the subject cited projects have been initiated by way of Global Invitation in National/International newspapers i.e. Times of India Package & Financial Times on 02.01.2026. The important timelines in this regard are as below. :-

Sr. No.	Name of the Project	Last date of RFP Purchase	Last date for submission of response to RFP
1.	WR-ER Inter-Regional Network Expansion Scheme Part-A	05.03.2026	06.03.2026 up to 1500 Hrs (IST)
2.	WR-ER Inter-Regional Network Expansion Scheme Part-C	05.03.2026	06.03.2026 up to 1600 Hrs (IST)

The RfP notification and RfP document for the above project has also been uploaded on our websites www.recindia.nic.in and www.recpdcl.in.

In this regard, copy of Request for Proposal (RfP), Transmission Service Agreement (TSA) and Share Purchase Agreement (SPA) along with copies of newspaper notification of the subject project are enclosed herewith for your kind information and reference please.

धन्यवाद,

भवदीय,

(विजय कुलकर्णी)
वरिष्ठ महाप्रबंधक एवं विभागाध्यक्ष (टी & डी)

प्रतिलिपि:

1. **संयुक्त सचिव (पारेषण), विद्युत मंत्रालय**, श्रम शक्ति भवन, रफी मार्ग, नई दिल्ली - 110 001

D-Block, REC World Headquarter, Plot No. I-4, Sector-29, Gurugram, (Haryana) - 122001
E-mail: co@recpdcl.in | Tel.: 0124-4441300 | www.recpdcl.in | CIN No. RECPDCL-U40101DL2007GOI168779 GST No. 06AADCR7399K1ZP

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 WR ER PART A POWER TRANSMISSION LIMITED is incorporated on this SIXTH day of NOVEMBER TWO THOUSAND TWENTY FIVE under the Companies Act, 2013 (18 of 2013) and that the company is Company limited by shares

The Corporate Identity Number of the company is **U42202DL2025GOI457684**

The Permanent Account Number (PAN) of the company is **AAECW2840H***

The Tax Deduction and Collection Account Number (TAN) of the company is **DELW07965G***

Given under my hand at Manesar this SIXTH day of NOVEMBER TWO THOUSAND TWENTY FIVE

Poonam Sharma

Assistant Registrar of Companies/ Deputy Registrar of Companies/ 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 mca.gov.in

Mailing Address as per record available in Registrar of Companies office:

WR ER PART A POWER TRANSMISSION LIMITED

CORE-4, SCOPE COMPLEX, 7, LODHI ROAD, Lodi Road, New Delhi, South Delhi- 110003, Delhi

*as issued by Income tax Department

REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited, a 'Maharatna CPSE'
under Ministry of Power, Govt. of India)

REC Power Development

संदर्भ संख्या: RECPDCL/TBCB/WR ER Part A/25-26/5315 दिनांक: 20.02.2026

M/s Power Grid Corporation of India Limited,
'Saudamini', Plot no. 2, Sector – 29,
Gurgaon – 122001 (Haryana).

Kind Attention: Shri Pankaj Pandey, Executive Director

विषय: Selection of Bidder as Transmission service Provider to establish "WR-ER Inter-Regional Network Expansion Scheme–Part A"- **Issuance of Tentative Acquisition Price regarding.**

महोदय,

This has reference to the RFP dated 02.01.2026 for selection of Transmission service Provider to establish "WR-ER Inter-Regional Network Expansion Scheme–Part A" through tariff based competitive bidding process.

As per the requirement of Clause 1.5 of RFP, we would like to intimate you that the Tentative Acquisition Price payable by the Selected Bidder to the BPC for the acquisition of one hundred percent (100%) of the equity shareholding of "WR ER Part A POWER TRANSMISSION LIMITED" along with all its related assets and liabilities is **Rs. 1,846.72 Lakhs (Rupees Eighteen Crore Forty-Six Lakhs Seventy-Two Thousand Only)**. This Acquisition Price shall be subject to adjustment based on the audited accounts of "WR ER Part A POWER TRANSMISSION LIMITED" as on the date of execution of the Share Purchase Agreement.

It may please be noted that as on date, there are no contractual obligations undertaken by BPC on behalf "WR ER Part A POWER TRANSMISSION LIMITED" which are to be fulfilled by the TSP.

All other terms and conditions of the RFP remain the same.

धन्यवाद,

भवदीय,

(विजय कुलकर्णी)
वरिष्ठ महाप्रबंधक एवं विभागाध्यक्ष (टी & डी)

No. 25-17/30/2026-POWER GRID(MoP)
संख्या 25-17/30/2026-पावर ग्रिड(एमओपी)

भारत सरकार
Government of India
विद्युत मंत्रालय
Ministry of Power
***

Shram Shakti Bhawan, Rafi Marg
New Delhi, Dated 16th March, 2026

To,

Smt. Navita Dubal, Director
M/s WR ER Part A Power Transmission Limited
Core-4, Scope Complex, 7, Lodhi Road
New Delhi – 110003
Email- ndubal@recl.in

Subject: Prior approval of the Government of India under Section 68 (1) of the Electricity Act, 2003, to WR ER Part A Power Transmission Limited for installation of the overhead transmission lines under the transmission scheme "WR-ER Inter-Regional Network Expansion Scheme-Part A"– regarding.

Sir,

I am directed to refer to the M/s RECPDCL's online application ID SW4493741278-M029_D002_A003-1770278495493 dated 05.02.2026 on NSWS portal, seeking prior approval of Government of India under Section 68 (1) of the Electricity Act, 2003 in favor of M/s WR ER Part A Power Transmission Limited (a wholly owned subsidiary of REC Power Development and Consultancy Limited) for installation of the following overhead transmission lines under the transmission scheme "WR-ER Inter-Regional Network Expansion Scheme-Part A":

- Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line
- LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s
- Raigarh (Tamnar) – Raigarh (Kotra)-II S/s 765 kV D/c line
- Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c line
- LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New)
- LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New)

2. Ministry of Power vide Gazette no. CG-DL-E-23092025-266305 (No. 4104) dated 18.09.2025 has appointed REC Power Development and Consultancy Limited (RECPDCL) as Bid Process Coordinator for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish the transmission scheme "WR-ER Inter-Regional Network Expansion Scheme-Part A" to be implemented through Tariff Based Competitive Bidding (TBCB) route. REC Power Development and Consultancy Limited, the Bid Process Coordinator, has incorporated the SPV, 'WR ER Part A Power Transmission Limited', for implementation of the above-mentioned transmission scheme.

3. Ministry of Power, Government of India on the basis of the recommendation of Central Electricity Authority (CEA), conveys the prior approval under Section 68 (1) of the Electricity Act, 2003 to the SPV, 'WR ER Part A Power Transmission Limited' for installation of the following overhead transmission lines under the transmission scheme "WR-ER Inter-Regional Network Expansion Scheme-Part A":

- Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line (route length is 10 km approx.)
- LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s (LILO length is 40 km approx.)
- Raigarh (Tamnar) – Raigarh (Kotra)-II S/s 765 kV D/c line (line length is 50 km approx.)
- Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c line (line length is 315 km approx.)
- LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New) (LILO lengths are 51 km and 49 km approx.)
- LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New) (LILO length is 63 km approx.)

4. The approval would be subject to compliance of:

(i) The relevant provisions of the Electricity Act, 2003, as amended from time to time and the rules and regulations made there under, and

(ii) CEA (Measures relating to Safety and Electric Supply) Regulations, 2023, and any subsequent amendments made thereto.

5. The approval would also be subject to the following conditions:

(i) The implementing agency will commence construction of the project within three years of grant of approval, unless this term is extended by Ministry of Power.

(ii) Ministry of Power may withdraw the approval before the expiry of the period of three years after giving a one-month notice.

(iii) The implementing agencies shall abide by the provisions of Works of Licensees Rules, 2006 notified by the Govt. of India, Ministry of Power in the Gazette of India, extra-ordinary Part-II, Section 3(i) dated 18-04-2006 (vide GSR 217 (E) dated 18-04-2006).

Yours faithfully,

MVNVara Prasad

(M.V.N. Vara Prasad/ एम.वी.एन. वरा प्रसाद)
Under Secretary to the Government of India
Tele: 011-23730264

Copy to:

The Chairperson
Central Electricity Authority
Sewa Bhawan, R.K. Puram, New Delhi 110066.

***

Date: 12.06.2026

CERTIFICATE BY BID EVALUATION COMMITTEE

Subject: **Selection of Successful Bidder as Transmission Service Provider through Tariff Based Competitive Bidding Process to establish Inter-State Transmission system for "WR-ER Inter-Regional Network Expansion Scheme Part-A"**

It is certified that:

a. The entire bid process has been carried out in accordance with the "Tariff based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for encouraging competition in development of the Transmission Projects" issued by Ministry of Power, Govt. of India under Section 63 of the Electricity Act, 2003 as amended from time to time.

b. M/s Power Grid Corporation of India Limited, with the lowest annual transmission charges of Rs. 7,701.00 million, emerged as the successful bidder after the conclusion of electronic reverse auction.

c. The transmission charges of Rs. 7,701.00 million discovered after electronic reverse auction is acceptable.

(Amit Jog)
General Manager,
CCGRO-II, SBI
Chairman, BEC

(Ganeswara Rao Jada)
Director (PSPA-I),
CEA
Member, BEC

(Kavita Jha)
Director (PSETD),
CEA
Member, BEC

(Maya R. Nair)
Additional Chief Engineer,
CSPTCL,
Member, BEC

(Ajay Kumar)
GM (Commercial &
Regulatory Affairs), JUSNL
Member, BEC

(Navita Dubal)
Chairman –SPV
Convener – Member, BEC

REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited, a 'Maharatna CPSE'
under Ministry of Power, Govt. of India)

Ref No.: RECPDCL/TBCB/WR ER PART A/2026-27/1220

Date: 16.06.2026

ORIGINAL

M/s Power Grid Corporation of India Limited
'Saudamini', Plot no. 2, Sector – 29,
Gurugram – 122001 (Haryana)

Kind Attention: Sh. Pankaj Pandey, Executive Director

Subject: Establishment of "WR-ER Inter-Regional Network Expansion Scheme Part-A" through Tariff Based Competitive Bidding Process (TBCB) – Letter of Intent

Sir,

We refer to:

1. The Request for Proposal (RfP) dated 02.01.2026 comprising RfP, Draft Transmission Service Agreement, Share Purchase Agreement and Survey Report dated 27.01.2026 issued to M/s Power Grid Corporation of India Limited, as regards participation in the Global Invitation for Bids for establishment of "WR-ER Inter-Regional Network Expansion Scheme Part-A" through Tariff Based Competitive Bidding process including all correspondence/clarifications/amendments/errata/corrigendum issued by REC Power Development and Consultancy Limited in regard thereto (hereinafter collectively referred to as the 'Final RFP') till the submission Bid Deadline and as listed below:

   (i) Clarification dated 23.02.2026
   (ii) Amendment-I dated 06.03.2026,
   (iii) Amendment-II & Additional Clarification dated 13.03.2026
   (iv) Additional Clarifications dated 16.03.2026
   (v) Amendment-III dated 18.03.2026,
   (vi) Additional Clarifications dated 24.03.2026
   (vii) Amendment-IV dated 27.03.2026,
   (viii) Additional Clarifications dated 01.04.2026
   (ix) Amendment-V dated 09.04.2026,
   (x) Amendment-VI dated 17.04.2026,

2. The offer of M/s Power Grid Corporation of India Limited by way of a Technical Bid pursuant to (1) above submitted on 22.04.2026 in response to the Final RFP.

3. The Initial Price Offer of M/s Power Grid Corporation of India Limited as submitted on 22.04.2026 in response to the Final RFP.

4. The final offer (which is same as Initial Price Offer) of M/s Power Grid Corporation of India Limited, discovered during e-Reverse Auction, conducted on 11.06.2026 in response to the Final RFP.

5. The Technical Bid as in (2) above, the Initial Price Offer as in (3) above and the Final Offer as in (4) above hereinafter collectively referred to as the 'Bid'.

REC Power Development and Consultancy Limited Gurugram

D-Block, REC World Headquarter, Plot No. I-4, Sector-29, Gurugram, (Haryana) - 122001.
E-mail: co@recpdcl.in | Tel.: 0124-4441300 | www.recpdcl.in | CIN No. RECPDCL-U40101DL2007GOI165779 GST No. 06AADCR7299K1ZP

We are pleased to inform you that your proposal and offer received by way of the 'Bid' has been accepted and M/s Power Grid Corporation of India Limited is here by declared as Successful Bidder as per clause 3.6.1 of the Final RFP for the above project and consequently, this Letter of Intent (hereinafter referred to as the 'LoI') is being issued in 2 copies, One original plus One copy.

This LoI is based on the Final RFP and is further contingent upon you satisfying the following conditions:

(a) Acknowledging its issuance and unconditionally accepting its contents and recording 'Accepted unconditionally' under the signature and stamp of your authorized signatory on each page of the duplicate copy of this letter attached herewith and returning the same to REC Power Development and Consultancy Limited within 7 (Seven) days from the date of issuance of LoI.

(b) Completion of various activities as stipulated in the RFP including in particular Clause 2.15.2, Clause 2.15.3 and Clause 2.15.4 of the Final RFP within the timelines as prescribed therein.

(c) Provide the Contract Performance Guarantee of Rs. 168.60 Crore (Rupees One Hundred Sixty-Eight Crore and Sixty Lakhs Only) within 10 (Ten) days from issue of this LoI, in favour of the Central Transmission Utility of India Limited, as per the provisions of Clause 2.12.

It may be noted that REC Power Development and Consultancy Limited has the rights available to them under the Final RFP, including rights under clause 2.15.5 and 3.6.3 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 transmission elements as agreed by you in your Bid, as per Annexure 21 and Format-1 of Annexure-8 respectively of the Final RFP is enclosed herewith as Schedule-A and incorporated herein by way of reference.

Further, please note that relationship of M/s Power Grid Corporation of India Limited with the REC Power Development and Consultancy Limited & Central Transmission Utility of India Limited will be governed solely on the basis of the Final RFP.

You are requested to unconditionally accept the LoI, and record on one copy of the LoI, 'Accepted unconditionally', under the signature of the authorized signatory of your Company and return such copy to us within 7 (Seven) days of issue of LoI.

Yours faithfully,

REC Power Development and Consultancy Limited Gurugram

16.06.25

(Ratnesh Kumar)
GM (Engineering)

Enclosures:

1. Schedule A: Quoted Transmission Charges and the scheduled COD of transmission element submitted in your Bid, as per Annexure 21 and Format-1 of Annexure-8 respectively of the Final RfP.

Copy for kind information to:

1. **The Secretary,** Central Electricity Regulatory Commission, 6th Floor, Tower B, World Trade Centre, Nauroji Nagar, New Delhi-110029

2. **The Joint Secretary (Transmission),** Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi- 110 004

3. **The Director (Transmission),** Ministry of Power, Govt, of India, Shram Shakti Bhawan, Rafi Marg, New Delhi 110001

4. **The Chairperson,** Central Electricity Authority, Sewa Bhawan, R K Puram, New Delhi-110086

5. **The Chief Operating Officer,** Central Transmission Utility of India Limited, 5th to 10th Floor, Ircon International Tower, Tower No.-1, Plot No. 16, Sector 32, Gurugram, Haryana – 122003

6. **The Chief Engineer (PSP & A - I),** Central Electricity Authority, Sewa Bhawan, R.K. Puram, New Delhi – 110066

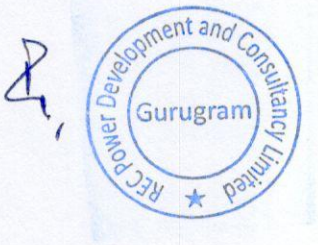
REC Power Development and Consultancy Limited
Gurugram

ANNEXURE 21 - FORMAT FOR FINANCIAL BID

Quoted Annual Transmission Charges: Rs. 7,701.00 Million

Notes:

1. The Bidders are required to ensure compliance with the provisions of Clause 2.5.3 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. The Financial Bid shall be digitally signed by the authorized signatory in whose name power of attorney as per Clause 2.5.2 is issued.
5. Ensure only one value for annual Transmission Charges is quoted. The same charge shall be payable every year to TSP for the term of TSA.



UNDERTAKING AND DETAILS OF EQUITY INVESTMENT

Format 1: Bidders' Undertakings

Date: 08/04/2026

To,
Chief Executive Officer,
REC Power Development and Consultancy Limited
(A wholly owned subsidiary of REC Limited)
REC Corporate Head Quarter,
D Block, Plot No. I – 4,
Sec – 29 Gurugram – 122 001
Dear Sir,

Sub: Bidders' Undertakings in respect of Bid for selection of Bidder as TSP to establish Inter State transmission system for "WR-ER Inter-Regional Network Expansion Scheme–Part A"

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 1.6.1.2 of the RFP and the TSP shall comply with the provisions contained in the Central Electricity Regulatory Commission Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-state Transmission and related matters Open Access) Regulations, 2009.

3. We give our unconditional acceptance to the RFP dated **02.01.2026** issued by the BPC and the RFP Project Documents, as amended, and undertake to ensure that the TSP shall execute all the RFP Project Documents, as per the provisions of this RFP.

4. 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 21 of the RFP, without mentioning any deviations, conditions, assumptions or notes in the said Annexure.

5. Our Bid is valid up to the period required under Clause 2.8 of the RFP.

6. 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 with this undertaking.

REC Power Development and Consultancy Limited Gurugram

कौशल किशोर/KAUSHAL KISHOR
वरिष्ठ उप महाप्रबंधक (टी.बी.सी.बी.)/Sr. Dy. General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
Plot No. 2, Sector-29, Gurgaon-122 001 (Haryana)

POWER GRID CORPORATION OF INDIA LTD.

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7. [NOT APPLICABLE].

8. 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	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.	Establishment of 3x1500 MVA, 765/400 kV S/s at Raigarh (Kotra)-II S/s in Chhattisgarh	24 months from effective date	6.92%	Elements at a), b), & c) can be commissioned together.
b.	Extension at Raigarh (Kotra)-II 765/400 kV S/s (ATS incl. terminal bays identified for 2x800 MW Raigarh TPS of M/s APL)	24 months from effective date	6.45%	Elements at a), b), & c) can be commissioned together.
c.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s	24 months from effective date	8.13%	Elements at a), b), & c) can be commissioned together.
d.	Installation of new 765/400 kV, 1x1500 MVA (3x500 MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	24 months from effective date	2.29%	Element at d) can be commissioned independently
e.	Establishment of 2x1500 MVA, 765/400 kV S/s at Jamshedpur (New) in Jharkhand	30 months from effective date	10.17%	Elements at e), f), & g), can be commissioned together
f.	LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New)	30 months from effective date	11.40%	Elements at e), f), & g), can be commissioned together
g.	LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New)	30 months from effective date	8.52%	Elements at e), f), & g), can be commissioned together

POWER GRID CORPORATION

कौशल किशोर / KAUSHAL KISHOR
महाप्रबंधक (टी.बी.सी.बी.) / Sr. Dy. General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enta.)
Plot No.-2, Sector-29, Gurgaon-1

REC Power Development and Consultancy Limited
Gurugram

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h.	Extension at Raigarh (Kotra)-II S/s 765/400 kV S/s	36 months from effective date	0.91%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
i.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line	36 months from effective date	1.05%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
j.	Raigarh (Tamnar)-Raigarh(Kotra)-II S/s 765 kV D/c line	36 months from effective date	5.26%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
k.	Extension at Raigarh (Tamnar) 765/400 kV S/s	36 months from effective date	2.15%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
l.	Extension at Jamshedpur (New) 765/400 kV S/s	36 months from effective date	2.82%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
m.	Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c line	36 months from effective date	33.93%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g)

We 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

POWER GRID CORPORATION OF INDIA

कौशल किशोर / KAUSHAL KISHOR
वरिष्ठ उप महाप्रबंधक (टी.बी.सी.बी.) / Sr. Dy. General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम) / (A Govt. of India Enterp
Sector-29, Gurgaon- 122 001 (Hary

REC Power Development and Consultancy Limited
Gurugram

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the successful commissioning of Element(s) which are pre - required for declaring the commercial operation of such Element as mentioned in the above table.

Scheduled COD for the Project: 36 months from the date of SPV Transfer.

9. We confirm that our Financial Bid conforms to all the conditions mentioned in this RFP, and in particular, we confirm that:

   a. Financial Bid in the prescribed format of Annexure 21 has been submitted duly signed by the authorized signatory.

   b. Financial Bid is unconditional.

   c. Only one Financial Bid has been submitted.

10. 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 **WR ER Part A Power 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 Transmission Service Agreement, and relevant provisions of Transmission Service Agreement shall apply.

11. 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.

12. Power of attorney/ Board resolution as per Clause 2.5.2 is enclosed.

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कौशल किशोर/KAUSHAL KISHOR
वरिष्ठ उप महाप्रबंधक (टी.बी.सी.बी.)/ Sr. Dy. General Manager (TBCB)
पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड
Power Grid Corporation of India Ltd.
(भारत सरकार का उद्यम)/(A Govt. of India Enterprise)
No.-2, Sector-29, Gurgaon- 122 001 (Haryana)

(Signature)

Name: Kaushal Kishor
Designation: Sr. DGM

Power Development and Consultancy Limited
Gurugram
REC

POWER GRID CORPORATION OF INDIA LTD.

REC Power Development and Consultancy Limited
(Formerly known as REC Power Distribution Company Limited,
A wholly owned subsidiary of REC Limited, a 'Maharatna CPSE'
under Ministry of Power, Govt. of India)

REC Power Development

संदर्भ संख्या: आरईसीपीडीसीएल/टीबीसीबी/WR ER Part A/2026-27/1459 **दिनांक**: 30.06.2026

M/s Power Grid Corporation of India Limited
'Saudamini', Plot no. 2, Sector – 29,
Gurugram – 122001 (Haryana)

Kind Attention: Sh. Pankaj Pandey, Executive Director

विषय: Establishment of "WR-ER Inter-Regional Network Expansion Scheme Part-A" through tariff based competitive bidding process – **Extension of LoI-** regarding.

संदर्भ: Letter of Intent (LOI) No. RECPDCL/TBCB/WR ER PART A/2026-27/1220, dated 16.06.2026

महोदय,

This is in reference to above referred Letter of Intent dated 16th April, 2026 issued to M/s Power Grid Corporation of India Limited for "WR-ER Inter-Regional Network Expansion Scheme Part-A".

In this regard, in accordance with clause 2.15.2 of RFP, the validity of LoI is extended till 30.06.2026 (i.e., date of SPV transfer).

Further, as per clause 2.15.4 of RFP, the TSP shall apply to the Commission for grant of Transmission License and make an application to the Commission for adoption of Transmission Charges, as required under Section – 63 of the Electricity Act 2003, within 5 working days from the date of acquisition of SPV i.e. by 07.07.2026.

धन्यवाद।

भवदीय,

30/06/26

for **महाप्रबंधक (इंजीनियरिंग)**

सं./No. 27-44/1/2024-REC DESK
भारत सरकार/Government of India
विद्युत मंत्रालय/Ministry of Power
***

Shram Shakti Bhawan, Rafi Marg,
New Delhi, dated the 30th June, 2026

To

The CEO, RECPDCL
Plot No. I-4, Sector-29,
Gurugram (Haryana)-122001.

Sub: Seeking approval for sale & transfer of WR ER Part C Power Transmission Limited, WR ER Part A Power Transmission Limited, Musalgaon Power Transmission Limited and Ryapte Power Transmission Limited to the Successful Bidder(s), selected through Tariff-Based Competitive Bidding process.

Sir,

I am directed to refer to RECPDCL's letter SEC No. 1/219/2026/1304 dated 22.06.2026 on the subject mentioned above and to convey the approval of Competent Authority for divesting the shareholding of RECPDCL and its nominee in following Special Purpose Vehicles(SPVs), incorporated for carrying out bidding of various Inter- State/intra-State transmission projects under Tariff Based Competitive Bidding(TBCB) mode, to the respective successful bidder(s), as indicated in below table, with a view to facilitate transfer of the SPV to the successful bidder, as required under Ministry of Heavy Industries, Department of Public Enterprises O.M. No. 22(I)12009-GM dated 04.02.2010:

Sl. No.	Name of the Project	Name of SPV	Successful Bidder
1	WR-ER Inter-Regional Network Expansion Scheme- Part C	WR ER Part C Power Transmission Limited	H G Infra Engineering Limited
2	WR-ER Inter-Regional Network Expansion Scheme- Part A	WR ER Part A Power Transmission Limited	Power Grid Corporation of India Limited
3	Establishment of 220/132/33 k V AIS Musalgaon (Dist. Nashik)	Musalgaon Power Transmission Limited	Maharastra State Electricity Transmission Company Limited
4	Evacuation Scheme for 2000 MW Solar Park at Ryapte village, Tumkur District, Karnataka	Ryapte Power Transmission Limited	The Tata Power Company Limited

Yours faithfully.

30/6/26

(Nidhi Juneja)
Under Secretary to the Govt. of India
email: juneja.n13@nic.in /
sopfcrec-mop@gov in
Tel: 011-23711302

Copy for information and necessary action to:

i. CMD, REC Ltd.

ii. US (Trans), MoP. with the request that transmission wing should also write to concerned states informing about the project for extending all possible help in assessment of compensation to be paid to landowners and also expediting forest clearance, if involved in the project.

iii. Sr. PPS to Secretary (Power)/JS (Distt. &Reforms)/Dir (Distt.), Ministry of Power

SHARE PURCHASE AGREEMENT

BETWEEN

REC POWER DEVELOPMENT AND CONSULTANCY LIMITED

AND

WR ER PART A POWER TRANSMISSION LIMITED

AND

POWER GRID CORPORATION OF INDIA LIMITED

Dated: 30th June, 2026

सत्यमेव जयते

INDIA NON JUDICIAL

Government of National Capital Territory of Delhi

e-Stamp
Reprinted e-Stamp Certificate

Certificate No.	:	IN-DL42352227463820Y
Certificate Issued Date	:	29-Jun-2026 04:13 PM
Account Reference	:	SELFPRINT (PU)/ dl-self/ NEHRU/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL-SELF93326427864246Y
Purchased by	:	REC POWER DEVELOPMENT AND CONSULTANCY
Description of Document	:	Article 5 General Agreement
Property Description	:	CORE-4, SCOPE COMPLEX, 7, LODHI ROAD, NEW DELHI - 110003
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	WR ER PART A POWER TRANSMISSION LIMITED
Second Party	:	POWERGRID CORPORATION OF INDIA LIMITED
Stamp Duty Paid By	:	WR ER PART A POWER TRANSMISSION LIMITED
Stamp Duty Amount(Rs.)	:	500 (Five Hundred only)

SELF PRINTED CERTIFICATE TO BE VERIFIED BY THE RECIPIENT AT WWW.SHCILESTAMP.COM

IN-DL42352227463820Y

Please write or type below this line

SHARE PURCHASE AGREEMENT

This **SHARE PURCHASE AGREEMENT** ('**Agreement**') made on the 30th day of June, 2026 at New Delhi by and between:

REC POWER DEVELOPMENT AND CONSULTANCY LIMITED, a company incorporated under the Companies Act, 1956, vide CIN-U40101DL2007GOI165779 having its registered office at Core 4, SCOPE Complex, 7, Lodhi Road, New Delhi 110 003, India (hereinafter referred to as "**REC PDCL**", which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assigns) of the **FIRST PART**;

REC Power Development and Consultancy Ltd. Gurug

RECPDCL | **WR ER Part A PTL** | **PGCIL**

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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Certificate No.	:	IN-DL42368513288365Y
Certificate Issued Date	:	29-Jun-2026 04:23 PM
Account Reference	:	SELFPRINT (PU)/ dl-self/ NEHRU/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL-SELF93353869483755Y
Purchased by	:	REC POWER DEVELOPMENT AND CONSULTANCY
Description of Document	:	Article 5 General Agreement
Property Description	:	CORE-4, SCOPE COMPLEX, 7, LODHI ROAD, NEW DELHI - 110003
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	WR ER PART A POWER TRANSMISSION LIMITED
Second Party	:	POWERGRID CORPORATION OF INDIA LIMITED
Stamp Duty Paid By	:	WR ER PART A POWER TRANSMISSION LIMITED
Stamp Duty Amount(Rs.)	:	500 (Five Hundred only)

SELF PRINTED CERTIFICATE TO BE VERIFIED BY THE RECIPIENT AT WWW.SHCILESTAMP.COM

IN-DL42368513288365Y

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AND

WR ER PART A POWER TRANSMISSION LIMITED a company incorporated under the Companies Act, 2013 vide CIN- U42202DL2025GOI457684, having its registered office at Core 4, SCOPE Complex, 7, Lodhi Road, New Delhi 110003, India (herein after referred to as "**Company**" which expression shall, unless repugnant to the context, mean and include its successors in interest) of the **SECOND PART**;

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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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Certificate No.	:	IN-DL42319670410246Y
Certificate Issued Date	:	29-Jun-2026 03:51 PM
Account Reference	:	SELFPRINT (PU)/ dl-self/ NEHRU/ DL-DLH
Unique Doc. Reference	:	SUBIN-DLDL-SELF93269744934971Y
Purchased by	:	REC POWER DEVELOPMENT AND CONSULTANCY
Description of Document	:	Article 5 General Agreement
Property Description	:	CORE-4, SCOPE COMPLEX, 7, LODHI ROAD, NEW DELHI - 110003
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	WR ER PART A POWER TRANSMISSION LIMITED
Second Party	:	POWERGRID CORPORATION OF INDIA LIMITED
Stamp Duty Paid By	:	WR ER PART A POWER TRANSMISSION LIMITED
Stamp Duty Amount(Rs.)	:	200 (Two Hundred only)

SELF PRINTED CERTIFICATE TO BE VERIFIED BY THE RECIPIENT AT WWW.SHCILESTAMP.COM

IN-DL42319670410246Y

Please write or type below this line

AND

POWER GRID CORPORATION OF INDIA LIMITED, a company incorporated under the Companies Act, 1956 vide CIN-L40101DL1989GOI038121 and having its registered office at **B-9, Qutab 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.**

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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.

WHEREAS:

A. Ministry of Power, Government of India vide its Gazette Notification no. 4104 [F No. 15/03/2018- Trans- Part(4)] dated 18.09.2025 has appointed REC Power Development and Consultancy Limited to be the Bid Process Coordinator (BPC) for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish "**WR-ER Inter-Regional Network Expansion Scheme Part-A**" through tariff based competitive bidding process (hereinafter referred to as the "Project").

B. In accordance with the Bidding Guidelines, the BPC had initiated a competitive bidding process through issue of RFP for selecting a Successful Bidder to build, own, operate and transfer the Project comprising of the Elements mentioned in **Schedule 2** of the TSA. BPC had initiated this process in accordance with and on the terms and conditions mentioned in the RFP Project Documents (as defined hereinafter).

C. BPC has incorporated the Company and has undertaken the preliminary studies, obtained certain approvals, etc. regarding the Project on behalf of the Company

D. REC PDCL along with the Nominees hold one hundred per cent (100%) of the total issued and paid up equity share capital of the Company.

E. Pursuant to the said Bid Process, Power Grid Corporation of India Limited has been identified as the Selected Bidder vide Letter of Intent dated 16th June, 2026 issued by the BPC in favour of the Selected Bidder.

F. As envisaged in the RFP, 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:

REC Power Development and Consultancy Ltd. Gurugram

RECPDCL

For WR ER Part A Power Transmission Limited New Delhi 110003 Core 4, Scope Complex, 7, Lodhi Road

WR ER Part A PTL

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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 TSA.

1.2 Additionally, the following terms shall have the meaning hereinafter respectively assigned to them herein below:

(i) **"Acquisition Price"** shall mean INR 18,61,68,233/- (Rupees Eighteen Crore Sixty-One Lakh Sixty-Eight Thousand Two Hundred Thirty-Three Only) which is the aggregate consideration payable by the Selected Bidder towards purchase of the Sale Shares at par and for taking over of all 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 the Parties in writing;

(iii) **"Bid Process"** shall mean the competitive bidding process initiated by the BPC, by issuance of RFP for selecting a Successful Bidder to build, own, operate and transfer 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 2.15.2 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 Bid Documents;

(viii) "**Nominees**" shall mean the Persons, who are named in Annexure A of this Agreement, holding the Sale Shares as nominees of REC PDCL;

(ix) "**Party**" shall mean REC PDCL, Company and the Selected Bidder, referred to individually, and "Parties" shall mean REC PDCL, Company and the Selected Bidder collectively referred to, as relevant;

(x) "**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;

(xi) "**RFP Project Documents**" shall mean the following documents, referred to collectively:

a. Transmission Service Agreement; and
b. this Agreement.

(xii) "**Representations and Warranties**" shall mean the representations and warranties mentioned in Clause 4 hereto;

(xiii) "**RoC**" shall mean the Registrar of Companies;

(xiv) "**Sale Shares**" shall mean 50,000 shares, representing one hundred percent (100%) 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 REC PDCL; and

(xvii) "**Transmission Service Agreement**" or "**TSA**" means the agreement titled 'Transmission Service Agreement' to be executed on 30th June 2026 between Central Transmission Utility of India Limited (CTUIL) and WR ER Part A Power Transmission Limited, pursuant to which the TSP shall build, own, operate and transfer the Project and make available the assets of the Project on a commercial basis.

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.

REC Power Development and Consultancy Ltd. Gurugram

For WR ER Part A Power Transmission Limited New Delhi 110003 Core-4, Scope Complex 7, Lodhi Road

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REC PDCL WR ER Part A PTL PGCIL

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 free from Encumbrances together with all assets and liabilities of the Company 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 Nominees of 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 duly stamped with requisite amount of stamp duty payable on the transfer of the Sale Shares ("**Share Transfer Forms**").

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**") executed by the Shares Seller and the Nominees, simultaneously against the Selected Bidder handing over to the Shares Seller, demand drafts drawn in favour of the Shares Seller or by confirmation of RTGS transfer 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 REC PDCL that on the Closing Date, the Selected Bidder has furnished the Contract Performance Guarantee to Central Transmission Utility of India Limited (CTUIL) and is in a position to comply with all other requirements of Clause 2.15.2 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 Share Certificates with the Company along with the names of its nominees to be appointed on the Board of the Company. The new registered office address of the Company shall be within the jurisdiction of the RoC of New Delhi or within the jurisdiction of any other RoC, as required by selected bidder, by following the due process as may be required, 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:

REC Power Development and Consultancy Ltd. Gurugram

RECPDCL

For WR ER Part A Power Transmission Ltd. New Delhi 110003 Core-4, Scope Complex, 7, Lodhi Road

WR ER Part A PTL

POWER GRID CORPORATION OF INDIA LTD.

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(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 and transfer of all assets and liabilities of the Company as on Closing Date;

(b) approving the **Power Grid Corporation of India Limited** and its nominees as the members 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 as provided by the Selected Bidder as per clause 3.3 above.

(d) appointing the Directors of the Selected Bidder on the Board of the Company.

Immediately pursuant to the resignation of the existing Directors, the newly constituted Board of Directors shall continue/hold the meeting and pass the following resolution:

(e) 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.

(f) 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

(g) 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 authorized 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) (c) to (i) (d) of Clause 3.3 (i) to the Selected Bidder.

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 Shares of the Company by the Selected Bidder as per Clause 3.3, (a) the authority of the BPC 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 Central Transmission Utility of India Limited (CTUIL) themselves, (b) all rights and obligations of the BPC shall cease forthwith, (c) all other rights and obligations of the Company shall be of the TSP and (d) any decisions taken by the BPC on behalf of the Company prior to the date of acquisition, shall continue to be binding on the Company and/or Central Transmission Utility of India Limited (CTUIL)as the case may be.

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 (i) 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 is 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.

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 Company.

REC Power Development and Consultancy Limited Gurugram RECPDCL

For WR ER Part A Power Transmission Limited New Delhi 110003 WR ER Part A PTL

POWER GRID CORPORATION OF INDIA PGCIL

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 a period of 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 the 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. MISCELLANEOUS

6.1 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 certified mail or by recognised courier to the addresses below:

Selected Bidder: **Power Grid Corporation of India Limited,**
B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

REC PDCL: **REC Power Development and Consultancy Limited**
Core-4, SCOPE Complex, 7, Lodhi Road, New Delhi-110003

Company: **WR ER PART A Power Transmission Limited**
Core-4, SCOPE Complex, 7, Lodhi Road, New Delhi-110003

REC Power Development and Consultancy Limited Gurugram
RECPDCL

For WR ER Part A Power Transmission Limited New Delhi 110
WR ER Part A PTL

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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.

6.2 RESOLUTION OF DISPUTES

6.2.1 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 endeavor to settle such Dispute amicably. The attempt to bring about an amicable settlement shall be considered to have failed if not resolved within sixty (60) days from the date of the Dispute.

6.2.2 If the Parties are unable to amicably settle the Dispute in accordance with Clause 6.2.1 within the period specified therein, any of the Parties shall be entitled to within thirty (30) days after expiry of the aforesaid period, refer the Dispute to the Chief Executive Officer/Director of REC PDCL 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 thirty (30) days from the date of receipt of a written notification in this regard.

6.2.3 In the event the Dispute is not settled in accordance with Clause 6.2.2 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 thirty (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.

6.2.4 The place of the arbitration shall be New Delhi. The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996.

6.2.5 The proceedings of arbitration shall be in English language.

6.2.6 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.

6.3 AUTHORISED PERSON

For the purposes of this Agreement, the Selected Bidder is represented by Smt. Anjana Luthra, Company Secretary, pursuant to an authorization granted to Smt. Anjana Luthra, Company Secretary through necessary Board resolutions. Further, Smt. Anjana Luthra, 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 Smt. Anjana Luthra, Company Secretary shall be deemed to be acts done or documents executed by the Selected Bidder and shall be binding on the Selected Bidder.

6.4 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.

6.5 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.

6.6 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.

REC Power Development and Consultancy Limited Gurugram
RECPDCL

For WR ER Part A Power Transmission Limited New Delhi 110003 Core-4, Scope Complex, 7, Lodhi
WR ER Part A PTL

POWER GRID CORPORATION OF INDIA LTD
PGCIL

6.7 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 Central Transmission Utility of India Limited (CTUIL) in accordance with Article 3.3.2 or Article 13 of the TSA thereof, REC PDCL shall have a right to terminate this Agreement forthwith by giving a written notice to the other Parties hereto.

6.8 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.

6.9 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.

6.10 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.

6.11 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 costs in respect of this Agreement and transfer of Sale Shares.

6.12 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.

REC Power Development and Consultancy Limited Gurugram
RECPDCL

For WR ER Part A Power Transmission Limited New Delhi 110003 Core-4, Scope Complex 7, Lodhi Road
WR ER Part A PTL

POWER GRID CORPORATION OF INDIA LTD
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6.13 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.

6.14 COUNTERPARTS

This Agreement may be executed in counterparts by the Parties and each fully executed counterpart shall be deemed to be original.

6.15 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 Central Transmission Utility of India Limited (CTUIL)and REC PDCL 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.

6.16 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 Shares Seller, 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.

REC Power Development and Consultancy Limited Gurugram RECPDCL

WR ER Part A Power Transmission Limited New Delhi 110 WR ER Part A PTL

POWER GRID CORPORATION OF INDIA LTD PGCIL

- Further, the Selected Bidder hereby indemnifies and holds harmless at all times the Shares Seller against all past, present and future third party claims and liabilities arising out of actions or decisions taken by any of the persons or bodies referred to in Clause 6.3 up to the Closing Date 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.

6.17 SURVIVAL

The provisions of Clause 1 (Definitions and Interpretation), Clause 4 (Representations and Warranties), Clause 6.2 (Resolution of Disputes), Clause 6.7 (Termination), Clause 6.15 (Confidentiality), Clause 6.16 (Indemnification) and other representations, warranties, covenants and provisions contained herein that by their nature are intended to survive, shall survive the termination of this Agreement

6.18 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 the party including delay caused through flood, riot, Act of God, lighting civil commotion, storm, tempest and earthquake.

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

RECPDCL | WR ER Part A PTL | PGCIL

SIGNED AND DELIVERED by the within named **REC POWER DEVELOPMENT AND CONSULTANCY LIMITED** by the hand of Sh. Rajkumar Sonkar, HoD (CS)

(Authorised pursuant to the resolution passed by its Board of Directors in its meeting held on 17th June, 2026)

IN THE PRESENCE OF:

WITNESS:
(Name and address)

1. Anil Kumar Perala, DGM (Engg)
REC PDCL, Gurugram

(Core-4, SCOPE Complex, 7, Lodhi Road, New Delhi-110003)

2. RITAN BISWAS
DM (BNH), RECPDCL

(Core-4, SCOPE Complex, 7, Lodhi Road, New Delhi-110003)

SIGNED AND DELIVERED by the within named **WR ER PART A POWER TRANSMISSION LIMITED** by the hand of Smt. Navita Dubal, Chairman

(Authorised pursuant to the resolution passed by its Board of Directors in its meeting held on 30th June, 2026)

WITNESS:
(Name and address)

RITU MADAN AHORA
CM (CS)
REC LIMITED

(Core-4, SCOPE Complex, 7, Lodhi Road, New Delhi-110003)

Nirbhay Goel
DM (CS), REC

(Core-4, SCOPE Complex, 7, Lodhi Road, New Delhi-110003)

SIGNED AND DELIVERED by the within named **POWER GRID CORPORATION OF INDIA LIMITED** by the hand of Smt. Anjana Luthra, Company Secretary

(Authorised pursuant to the resolution passed by its Board of Directors in its meeting held on 30th January, 2026)



WITNESS:
(Name and address)

VIKAS KUMAR
Chief Manager (POWERGRID)

B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

Kaushal Kishor
Sr. DGM (POWERGRID)

B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

ANNEXURE A

DESCRIPTION OF THE SALE SHARES

S. NO.	NAME OF THE SHAREHOLDER(s)	NUMBER OF EQUITY SHARES HELD	PERCENTAGE OF THE TOTAL PAID UP EQUITY CAPITAL
1.	REC Power Development and Consultancy Limited	49,994	99.988
2.	Shri Jaspal Singh Kushwaha*	1	0.002
3.	Shri Mukul Agarwal*	1	0.002
4.	Shri Vijay Shridhar Kulkarni*	1	0.002
5.	Smt. Navita Dubal*	1	0.002
6.	Shri Arvind Kumar*	1	0.002
7.	Shri Anil Kumar Perala*	1	0.002
	Total	50,000	100.000

*** Held as nominee of REC PDCL.**

TRANSMISSION SERVICE AGREEMENT

FOR

DEVELOPMENT AND OPERATION OF INTER-STATE TRANSMISSION SYSTEM

FOR TRANSMISSION OF ELECTRICITY THROUGH TARIFF BASED COMPETITIVE BIDDING FOR

WR-ER INTER-REGIONAL NETWORK EXPANSION SCHEME-PART A

BETWEEN THE

CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED

(NODAL AGENCY)

AND

WR ER PART A POWER TRANSMISSION LIMITED

30th JUNE, 2026

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Bond

Indian-Non Judicial Stamp
Haryana Government

Date :01/06/2026

Certificate No. G0A2026F4626

GRN No. 152752614

Transmission Service Agreement

Stamp Duty Paid : ₹ 101
(Rs. Only)

Penalty :₹ 0
(Rs. Zero Only)

Deponent

Name: Central transmission Utility of india ltd

H.No/Floor : 2 Sector/Ward : 29 Landmark : Na

City/Village : Gurugram District : Gurugram State : Haryana

Phone : 98******10

Purpose : Article 5 General Agreement **to be submitted at Concerned office**

THIS TRANSMISISON SERVICE AGREEMENT (hereinafter referred to as "TSA" or "Agreement" or "the Agreement" or "this Agreement") is made on the ....30th.... [Insert day] of...JUNE [Insert month] of Two Thousand and .....2026.....[Insert Year]

BETWEEN:

The **CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED**, a company incorporated under the Companies Act, 2013, having its registered office at **Plot No.2, Sector 29, Gurugram, Haryana 122001, India** & Correspondence address at **Floor No. 5-10, Tower 1, Plot No. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana – 122001, India**, acting as a Nodal Agency (referred to as the "Nodal Agency"), which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the one part;

AND

WR ER PART A POWER TRANSMISSION LIMITED, incorporated under the Companies Act, 2013, having its registered office at Core-4, Scope Complex 7, Lodhi Road Delhi, South Delhi, Delhi 110003 (herein after referred to as "Transmission Service Provider" or "TSP" or "ISTS Licensee", which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the other part;

("Nodal Agency" 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 RFP for selecting a Successful Bidder to build, own, operate and transfer the Project comprising of the Elements mentioned in Schedule 1 (hereinafter referred to as the Project)

B) Pursuant to the said e-reverse bidding process, the BPC has identified the Successful Bidder, who will be responsible to set up the Project on build, own, operate and transfer basis to provide Transmission Service in

C) The Selected Bidder have submitted the Contract Performance Guarantee and acquired one hundred percent (100%) of the equity shareholding of WR ER Part A Power 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 Commission for setting up the Project on build, own, operate and transfer basis.

E) The TSP has further agreed to make an application to the 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 TSP has agreed to execute the agreement(s) required, if any, under Sharing Regulations within fifteen (15) days from the date of grant of Transmission License from the Commission.

G) The TSP agrees to the terms and conditions laid down under Sharing Regulations, for making available the ISTS and charge the Transmission Charges in accordance with the terms and conditions of Sharing Regulations.

H) The billing, collection and disbursement of the Transmission Charges by the CTU to the ISTS Licensee shall be governed as per Sharing Regulations.

I) The terms and conditions stipulated in the Transmission License issued by the 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 Transmission License terms & conditions and the conditions of this Agreement, the conditions stipulated in the Transmission License granted by the Commission shall prevail.

NOW, THEREFORE, IN CONSIDERATION OF THE PREMISES AND MUTUAL AGREEMENTS, COVENANTS AND CONDITIONS SET FORTH HEREIN, IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.
WR ER Part A Power Transmission Limited New Delhi

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 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;

"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 entity of at least twenty six percent (26%) of the voting rights of the other entity;

"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 Appendix –IV to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, attached herewith in Schedule 6;

"Bid" shall mean technical 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 RFP for the Project;

"Bidding Consortium / Consortium" shall refer to a group of companies that has collectively made a Response to RFP for the Project;

"Bid Documents" or **"Bidding Documents"** shall mean the 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 under Section – 63 of the Electricity Act 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, responsible for carrying out the process for selection of Bidder who will acquire Transmission Service Provider;

"Bill" shall mean any bill raised by the CTU on the DICs to recover the Transmission Charges pursuant to the Sharing Regulations;

"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 Nodal Agency's registered office is located and the concerned TSP are located;

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

"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;

"Commission" or **"CERC"** shall mean the Central Electricity Regulatory Commission referred to in sub-section (1) of Section 76 of the Electricity Act, 2003 or its successors and assigns;

"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 or STU or any other concerned parties 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, 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 Notice or a Nodal Agency'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 concerned authority 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 Transmission Service Agreement 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, or insurance surety bond or Payment on Order Instrument submitted and to be submitted by the TSP or by the Selected Bidder on behalf of the TSP to the Nodal Agency from a bank mentioned in Annexure 17 of the RFP, in the form attached here to as Schedule 8 (for bank guarantee) or Schedule-8A (for insurance surety bond issued by any of the insurance companies authorized by Insurance Regulatory and Development Authority of India), or Schedule-8B (for Payment on Order Instrument issued by PFC/REC/IREDA) in accordance with Article 3 of this Agreement and which shall include the additional bank guarantee or insurance surety bond or Payment on Order Instrument furnished by the TSP under 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 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 have same meaning as defined in the Electricity Act, 2003;

"Day" shall mean a day starting at 0000 hours and ending at 2400 hours;

"D/C" shall mean Double Circuit;

"Designated ISTS Customers" or **"DICs"** shall have the meaning as ascribed in the Sharing Regulations;

"Dispute" shall mean any dispute or difference of any kind between the Parties, 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;

"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 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, including ICTs, Reactors, SVC, FSC, etc. forming part of the ISTS, which will be owned, operated and maintained by the concerned ISTS Licensee, and which has a separate Scheduled COD as per Schedule 2 of this Agreement and has a separate percentage for recovery of Transmission Charges on achieving COD as per Schedule 5 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 thirty five (35) years from the 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 RFP;

"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 Designated ISTS Customers / Nodal Agency;

"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" shall mean the Grid Code specified by the Central Commission under Clause (h) of sub-section (1) of Section 79 of the Electricity Act;

"Independent Engineer" shall mean an agency/ company, appointed by Nodal Agency in accordance with the Guidelines for Encouraging Competition in Development of Transmission Projects.

"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 Commission or tribunal or judicial or quasi-judicial body in India but excluding the CTU, TSP and the Designated ISTS Customers;

"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 / ISTS Licensee's / Designated ISTS 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;

"ISTS Licensee" shall be the TSP under this Agreement, consequent to having been awarded a Transmission License by the CERC and shall be referred to as the TSP or the ISTS Licensee, as the context may require in this Agreement;

"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 Commission;

"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 RFP and so designated by other Member(s) in Bidding Consortium;

"Lenders" means the banks, financial institutions, multilateral funding agencies, non banking financial companies registered with the Reserve Bank of India (RBI), insurance companies registered with the Insurance Regulatory & Development Authority (IRDA), pension funds regulated by the Pension Fund Regulatory & Development Authority (PFRDA),mutual funds registered with Securities & Exchange Board of India (SEBI), 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;

Provided that, such assignment or transfer shall not relieve the TSP of its obligations to the Nodal Agency under this Agreement in any manner and shall also does not lead to an increase in the liability of the Nodal Agency;

"Lenders Representative" shall mean the person notified by the Lender(s) in writing as being the representative of the Lender(s) or the Security Trustee and such person may from time to time be replaced by the Lender(s) pursuant to the Financing Agreements by written notice to the TSP;

"Letter of Intent" or **"LOI"** shall have the same meaning as in the RFP;

"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 as specified in Schedule 5 of this Agreement multiplied by no. of days in the relevant month and divided by no. of days in the year;

"National Load Despatch Centre" shall mean the centre established as per sub-section (1) of Section 26 of the Electricity Act 2003;

"**Nodal Agency**" shall mean CTU, which shall execute and implement the Transmission Service Agreement (TSA);

Provided that while taking major decisions, CTU shall consult CEA on technical matters and any other matter it feels necessary.

"Notification" shall mean any notification, issued in the Gazette of India;

"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 an entity 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;

"Payment on Order Instrument" shall mean Letter of Undertaking from Indian Renewable Energy Development Agency Limited (IREDA) or Power Finance Corporation Limited (PFC) or REC Limited (REC) [the three non- banking financial institutions under Ministry of New & Renewable Energy (MNRE)/ Ministry of Power (MoP)], to pay in case situation of default of Transmission Service Provider (TSP) in terms of tender conditions/Power Purchase Agreement (PPA) arises. Such Letter(s) will have same effect as that of a Bank Guarantee issued by any public sector bank. Such "Payment on Order instrument" would have terms and conditions similar to that of any Bank Guarantee given by any public sector bank and would promise to pay the Nodal Agency on demand within stipulated time. TSPs can seek such Letters(s) by offering due security to the above mentioned three non- banking financial institutions mentioned above (IREDA, PFC & REC). Nodal Agency shall not accept the instrument of 'Letter of Undertaking' as described above or

in any other form, from any other non-banking financial institutions or bank, except IREDA, PFC & REC.

"Preliminary Termination Notice" shall mean a Nodal Agency's Preliminary Termination Notice as defined in Article 13 of this Agreement;

"Project" shall mean **WR-ER Inter-Regional Network Expansion Scheme-Part A**, as detailed in Schedule 1 of this Agreement;

"**Project Assets**" shall mean all physical and other assets relating to and forming part of the Project including:

(a) rights over the Site for substations, ROW for transmission lines;

(b) tangible & intangible assets such as civil works and equipment including foundations, embankments, pavements, electrical systems, communication systems, relief centres, administrative offices, Sub-stations, software, tower and sub-stations designs etc;

(c) project facilities situated on the Site;

(d) all rights of the TSP under the project agreements;

(e) financial assets, such as receivables, security deposits etc;

(f) insurance proceeds; and

(g) Applicable Permits and authorisations relating to or in respect of the Transmission System;"

"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;

(iv) the safety of operating personnel and human beings;

"Rated Voltage" shall mean 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 the Central Transmission Utility;

"Rebate" shall have the meaning as ascribed to in Article 10.3 of this Agreement;

"RFP" shall mean Request for Proposal dated 02.01.2026 along with all schedules, annexures and RFP Project Documents attached thereto, issued by the BPC for tariff based competitive bidding process for selection of Bidder as TSP to execute the Project, including any modifications, amendments or alterations 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:

a. Transmission Service Agreement,

b. Share Purchase Agreement,

c. Agreement(s) required under Sharing Regulations and

d. Any other agreement as may be required;

"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;

"Scheduled COD" in relation to an Element(s) shall mean the date(s) as mentioned in Schedule 2 as against such Element(s) and in relation to the Project, shall mean the date as mentioned in Schedule 2 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 technical Bid and the Final Offer of the Selected Bidder submitted during e-reverse bidding, which shall be downloaded and attached in Schedule 7 on or prior to the Effective Date;

"Share Purchase Agreement" shall mean the agreement amongst REC Power Development and Consultancy Limited, WR ER Part A Power Transmission Limited, and the Successful Bidder for the purchase of one hundred (100%) per cent of the shareholding of the WR ER Part A Power Transmission Limited, for the Acquisition Price, by the Successful Bidder on the terms and conditions as contained therein;

"Sharing Regulations" shall mean the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 and as amended from time to time;

"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 and who has to acquire one hundred percent (100%) equity shares of WR ER Part A Power 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 transfer basis as per the terms of the TSA and other RFP Project Documents;

"TSP's Preliminary Notice" shall mean a notice issued by the TSP in pursuant to the provisions of Article 13.3 of this Agreement;

"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 RFP;

"Termination Notice" shall mean a Nodal Agency's Termination Notice given by the Nodal Agency to the TSP pursuant to the provisions of Articles 3.3.2, 3.3.4, 4.4.2, 5.8, 13.2 and 13.3 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;

"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 as per Sharing Regulations;

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

"Transmission Service" shall mean making the Project available as per the terms and conditions of this Agreement and Sharing Regulations;

"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 an entity which owns at least twenty six percent (26%) equity in the Bidding Company or Member of a Consortium, (as the 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 entity;

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 have the meaning as defined in Section 2 (49) of the Act;

"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"** in the context of a company or corporation shall have the same meaning as defined in the Companies Act, 1956/ Companies Act, 2013 (as the case may be).

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.

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 7 shall be referred to for ascertaining accuracy and correctness of the representations made by the Selected Bidder in Article 17.2.1 hereof.

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 Selected Bidder, on behalf of the TSP, has provided the Contract Performance Guarantee, as per terms of Article 3.1 of this Agreement; and

b. The Selected Bidder has acquired for the Acquisition Price, one hundred percent (100%) of the equity shareholding of REC Power Development and Consultancy Limited in WR ER Part A Power Transmission Limited, along with all its related assets and liabilities as per the provisions of the Share Purchase Agreement. and

c. The Agreement is executed and delivered by the Parties;

2.2 Term and Termination:

2.2.1 Subject to Article 2.2.3 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.

2.2.2 Post the Expiry Date of this Agreement, the TSP shall ensure transfer of Project Assets to CTU or its successors or an agency as decided by the Central Government at zero cost and free from any encumbrance and liability. The transfer shall be completed within 90 days of expiry of this Agreement failing which CTU shall be entitled to take over the Project Assets Suo moto.

2.2.3 This Agreement shall terminate before the Expiry Date in accordance with Article 13 or Article 3.3.2 or Article 3.3.4.

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 Commission at least two (2) years before the date of expiry of the Transmission License, seeking the Commission's approval for the extension of the term of the Transmission License up to the Expiry Date.

2.3.2 The TSP shall timely comply with all the requirements that may be laid down by the Commission for extension of the term of the Transmission License beyond the initial term of twenty-five (25) years & upto the Expiry Date and the TSP shall keep the Nodal Agency fully informed about the progress on its application for extension of the term of the Transmission License.

2.4 Survival:

The expiry or termination of this Agreement shall not affect any accrued rights, obligations/ roles 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/ roles for which this Agreement provides, either expressly or by necessary implication, which are to survive after the Expiry Date or termination including those under Articles 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 19 (Miscellaneous).

2.5 Applicability of the provisions of this Agreement

2.5.1 For the purpose of Availability, Target Availability and the computation of Availability, Incentive, Penalty, the provisions provided in this Agreement shall apply and any future modifications in the relevant Rules and Regulations shall not be applicable for this Project.

2.5.2 For the purposes of this Agreement for ISTS systems developed under the tariff based competitive bidding framework, the provisions relating to the definitions (Availability and COD), Article 3 (Contract Performance Guarantee and Conditions Subsequent), Article 5 (Construction of the Project), Article 6 (Connection and Commissioning of the Project), Article 8 (Target Availability and calculation of Availability), Article 11 (Force Majeure), Article 12 (Change in Law), Article 13 (Event of Default), Article 14 (Indemnification), Article 15 (Assignment and Charges), Articles 16.1, 16.2 and 16.4 (Governing Laws and Dispute Resolution) and Article 17 (representation and warranties of the ISTS Licensee) of this agreement shall supersede the corresponding provisions under Sharing Regulations.

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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, shall:

a. Provide the Contract Performance Guarantee, and

b. Acquire, for the Acquisition Price, one hundred percent (100%) equity shareholding of WR ER Part A Power Transmission Limited, from REC Power Development and Consultancy Limited, who shall sell to the Selected Bidder, the equity shareholding of WR ER Part A Power Transmission Limited, along with all its related assets and liabilities.

c. Execute this Agreement;

The TSP shall, within five (5) working days from the date of acquisition of SPV by the Selected Bidder, undertake to apply to the Commission for the grant of Transmission License and for the adoption of tariff as required under section-63 of the Electricity Act.

The Selected Bidder, on behalf of the TSP, will provide to the Central Transmission Utility of India Limited (being the Nodal Agency) the Contract Performance Guarantee for an amount of **Rs. 168.60 Crore (Rupees One Hundred Sixty-Eight Crore and Sixty Lakhs Only)**.

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 (except for c) below), unless such completion is affected due to any Force Majeure Event, or if any of the activities is specifically waived in writing by the Nodal Agency:

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a. To obtain the Transmission License for the Project from the Commission;

b. To obtain the order for adoption of Transmission Charges by the Commission, as required under Section 63 of the Electricity Act 2003;

c. To submit to the Nodal Agency, CEA & Independent Engineer, the Project Execution Plan, immediately after award of contract(s) and maximum within one hundred and twenty (120) days from the Effective Date. Also, an approved copy each of Manufacturing Quality Plan (MQP) and Field Quality Plan (FQP) would be submitted to Independent Engineer & Nodal Agency in the same time period. The TSP's Project Execution Plan should be in conformity with the Scheduled COD as specified in Schedule 2 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 and commissioning to commercial operation;

d. To submit to the Nodal Agency, CEA & Independent Engineer a detailed bar (GANTT) chart of the Project outlining each activity (taking longer than one Month), linkages as well as durations;

e. To submit to the Nodal Agency, CEA & Independent Engineer detailed specifications of conductor meeting the functional specifications specified in RFP;

f. To achieve Financial Closure;

g. 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;

h. To award the Engineering, Procurement and Construction contract ("EPC contract") for the design and construction of the Project and shall have given to such Contractor an irrevocable notice to proceed; and

i. To sign the Agreement(s) required, if any, under Sharing Regulations.

3.2 Recognition of Lenders' Rights by the Nodal Agency

3.2.1 The Nodal Agency hereby accepts and acknowledges the rights provided to the Lenders as per Article 15.3 of this Agreement and all other RFP Project Documents.

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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 monthly basis, be liable to furnish to Central Transmission Utility of India Limited (being the Nodal Agency) additional Contract Performance Guarantee of **Rupees Sixteen Crore and Eighty-Six Lakh Only (Rs. 16.86 Crore)** within two (2) Business Days of expiry of every such Month. Such additional Contract Performance Guarantee shall be provided to Central Transmission Utility of India Limited (being the Nodal Agency) 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. Central Transmission Utility of India Limited (being the Nodal Agency) 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 Nodal Agency in accordance with Article 3.3.1 hereof; or

(ii) the TSP furnishes additional Performance Guarantee to the Nodal Agency 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 Nodal Agency 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 CEA and the Lenders' Representative in order to enable the Lenders to exercise right of substitution in accordance with Article 15.3 of this Agreement.

3.3.3 If the Nodal Agency elects to terminate this Agreement as per the provisions of Article 3.3.2, the TSP shall be liable to pay to the Nodal Agency an amount of **Rs. 168.60 Crore (Rupees One Hundred Sixty-Eight Crore and Sixty Lakhs Only)**.as liquidated damages. The Nodal Agency shall be entitled to recover this amount of damages by invoking the Contract

Performance Guarantee to the extent of liquidated damages, which shall be required by the Nodal Agency, and the balance shall be returned to TSP, if any.

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, may be extended for a period of such Force Majeure Event. Alternatively, if deemed necessary, this Agreement may be terminated by the Nodal Agency by giving a Termination Notice to the TSP, in writing, of at least seven (7) days, with a copy to CEA and the Lenders' Representative in order to enable the Lenders to exercise right of substitution in accordance with Article 15.3 of this Agreement and the Contract Performance Guarantee shall be returned as per the provisions of Article 6.5.1.

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. If the Scheduled COD is extended beyond a period of one hundred eighty (180) days due to the provisions of this Article 3.3.4, the TSP will be allowed to recover the interest cost during construction corresponding to the period exceeding one hundred eighty (180) days by adjustment in the Transmission Charges in accordance with Schedule 9.

3.3.5 Upon termination of this Agreement as per Articles 3.3.2 and 3.3.4, the Nodal Agency may take steps to bid out the Project again.

3.3.6 The Nodal agency, on the failure of the TSP to fulfil its obligations, if it considers that there are sufficient grounds for so doing, apart from invoking the Contract Performance Guarantee under para 3.3.3 may also initiate proceedings for blacklisting the TSP as per provisions of Article 13.2 of TSA.

3.4 Progress Reports

The TSP shall notify the Nodal Agency and CEA in writing at least once a Month on the progress made in satisfying the conditions subsequent in Article 3.1.3.

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 1 of this Agreement in accordance with:

i. the Electricity Act and the Rules made thereof;

ii. the Grid Code;

iii. the CEA Regulations applicable, and as amended from time to time, for Transmission Lines and sub-stations:

- 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) Regulation, 2010;
- Central Electricity Authority (Grid Standard) Regulations, 2010;
- Central Electricity Authority (Safety requirements for construction, operation and maintenance of Electrical Plants and Electrical Lines) Regulation, 2011;
- Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulation, 2010;
- Central Electricity Authority (Technical Standards for Communication System in Power System Operation) Regulations, 2020.

iv. Safety/ security Guidelines laid down by the Government;

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v. Prudent Utility Practices, relevant Indian Standards and the Law; not later than the Scheduled COD as per Schedule 2 of this Agreement;

c. for entering into a Connection Agreement with the concerned parties 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;

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 Nodal Agency and CEA, on a monthly basis, progress reports with regard to the Project and its execution (in accordance with prescribed form) to enable the CEA to monitor and co-ordinate the development of the Project matching with the Interconnection Facilities;

h. to comply with Ministry of Power order no. 25-11/6/2018 – PG dated 02.07.2020 as well as other Guidelines issued by Govt. of India pertaining to this;

i. 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. A-1/2021- FSC- Part(5) dated 16.11.2021 and No.: P45021/2/2017-PP (BE-II)-Part-4 Vol.II dated 19.07.2024 issued by Ministry of Power 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,Office Memorandum (OM) No. F.18/37/2020-PPD dated 08.02.2021, OM No. F.12/1/2021- PPD(Pt.) dated 02.03.2021, OM No. F.7/10/2021-PPD dated 08.06.2021 and Order (Public Procurement No 4) bearing File No. F.7/10/2021- PPD dated 23.02.2023 as amended from time to time, regarding public procurement from a bidder of a country, which shares land border with India;

j. to submit to Nodal Agency information in the prescribed format [To be devised by Nodal Agency] for ensuring compliance to Article 4.1 i) above.

k. to comply with all its obligations undertaken in this Agreement.

4.2 Roles of the Nodal Agency in implementation of the Project:

4.2.1 Subject to the terms and conditions of this Agreement, the Nodal Agency shall be the holder and administrator of this Agreement and shall inter alia:

a. appoint an Independent Engineer within 90 days of the Effective Date

b. provide letters of recommendation to the concerned Indian Governmental Instrumentality, as may be requested by the TSP from time to time, for obtaining the Consents, Clearances and Permits required for the Project;

c. coordinate among TSP and upstream/downstream entities in respect of Interconnection Facilities; and

d. monitor the implementation of the Agreement and take appropriate action for breach thereof including revocation of guarantees, cancellation of Agreement, blacklisting etc

e. provide all assistance to the Arbitrators as required for the performance of their duties and responsibilities; and

f. perform any other responsibility (ies) as specified in this Agreement.

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 2 of this Agreement;

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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 unable to perform its obligations for the reasons solely attributable to the Nodal Agency, the Scheduled COD shall be extended, by a 'day to 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 to day' basis for a period of such Force Majeure Event. Alternatively, if deemed necessary, the Nodal Agency may terminate the Agreement as per the provisions of Article 13.4 by giving a Termination Notice to the TSP, in writing, of at least seven (7) days, with a copy to CEA and the Lenders' Representative in order to enable the Lenders to exercise right of substitution in accordance with Article 15.3 of this Agreement.

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 deferred 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.

4.6 Interconnection Facilities:

4.6.1 Subject to the terms and conditions of this Agreement, the TSP shall be responsible for connecting the Project with the interconnection point(s) specified in Schedule 1 of this Agreement. The Interconnection Facilities shall be developed as per the scope of work and responsibilities assigned in Schedule 1 of this Agreement. The Nodal Agency shall be responsible for coordinating to make available the Interconnection Facilities.

4.6.2 In order to remove any doubts, it is made clear that the obligation of the TSP within the scope of the project is to construct the Project as per Schedule-1 of this Agreement and in particular to connect it to the Interconnection Facilities as specified in this Agreement.

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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, testing and commissioning each Element of the Project by the Scheduled COD in accordance with the Regulations and other applicable Laws specified in Article 4.1 of this Agreement.

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 or any compensation whatsoever by reason of the unsuitability of the Site or Transmission Line route(s).

5.1.3 The TSP shall be responsible for obtaining all Consents, Clearances and Permits related 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 shall furnish to the Nodal Agency such copy/ies of each Consents, Clearances and Permits, on demand. Nodal Agency shall provide letters of recommendation to the concerned Indian Governmental Instrumentality, as may be requested by the TSP from time to time, for obtaining the Consents, Clearances and Permits required for the Project.

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. Also, the actual location of Greenfield substations (Switching Stations or HVDC Terminal or Inverter Stations) in the scope of TSP:

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- For a Generation Pooling Substation shall not be beyond 3Km radius of the location proposed by the BPC in their Survey Report.
- For load Serving Substation within the scope of TSP shall not be beyond 5Km radius of the location proposed by the BPC in their Survey Report
- For an intermediate Substation shall not be beyond 10Km radius of the location proposed by the BPC in their Survey Report.

(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 risk and costs, including payment of any crop, tree 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 the Nodal Agency liable for the performance of such Contractor(s).

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5.3 Monthly Progress Reporting:

The TSP shall provide to the CEA, Nodal Agency & Independent Engineer, on a monthly basis, progress reports along with likely completion date of each Element with regard to the Project and its execution (in accordance with prescribed form). The Nodal Agency/ CEA shall monitor the development of the Project for its timely completion for improving and augmenting the electricity system as a part of its statutory responsibility.

5.4 Quality of Workmanship:

The TSP shall ensure that the Project is designed, built and completed in a good workmanship using sound engineering and construction practices, and using only materials and equipment that are new and manufactured as per the MQP and following approved FQP for erection, testing & commissioning and complying with Indian /International Standards such that, the useful life of the Project will be at least thirty five (35) years from the COD of the Project.

The TSP shall ensure that all major substation equipment / component (e.g. transformers, reactors, Circuit Breakers, Instrument Transformers (IT), Surge Arresters (SA), Protection relays, clamps & connectors etc.), equipment in terminal stations of HVDC installations including Thyristor/ IGBT valves, Converter Transformers, smoothing reactors, Transformer bushings and wall bushings, GIS bus ducts, towers and gantry structures and transmission towers or poles and line materials (conductors, earthwire, OPGW, insulator, accessories for conductors, OPGW & earthwires, hardware fittings for insulators, aviation lights etc), facilities and system shall be designed, constructed and tested (Type test, Routine tests, Factory Acceptance Test (FAT)) in accordance with relevant CEA Regulations and Indian Standards. In case Indian Standards for any particular equipment/ system/ process is not available, IEC/ IEEE or equivalent International Standards and Codes shall be followed.

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5.5 Progress Monitoring & Quality Assurance:

5.5.1 The Project Execution Plan submitted by the TSP in accordance with Article 3.1.3 c) shall comprise of detailed schedule of all the equipments/items /materials required for the Project, right from procurement of raw material till the dispatch from works and receipt at the site. Further, it should also include various stages of the construction schedule up to the commissioning of the Project.

5.5.2 Nodal Agency, CEA & Independent Engineer shall have access at all reasonable times to the Site and to the Manufacturer's works and to all such places where the Project is being executed.

5.5.3 Independent Engineer shall ensure conformity of the conductor specifications with the functional specifications specified in RFP.

5.5.4 The Independent Engineer shall monitor the following during construction of the Project:

a) Quality of equipments, material, foundation, structures and workmanship etc. as laid down in Articles 5.4 and 6.1.4 of the TSA. Specifically, quality of Sub-station equipments, transmission line material and workmanship etc. would be checked in accordance with the Article 5.4.

b) Progress in the activities specified in Condition Subsequent

c) Verification of readiness of the elements including the statutory clearances & completion of civil works, fixing of all components and finalisation of punch points (if any) prior to charging of the elements

d) Progress of construction of substation and Transmission Lines

5.5.5 The progress shall be reviewed by the Independent Engineer against the Project Execution Plan. The Independent Engineer shall prepare its report on monthly basis and submit the same to Nodal Agency highlighting the progress achieved till the end of respective month vis-à-vis milestone activities, areas of concern, if any, which may result in delay in the timely completion of the Project. Based on the progress, Nodal Agency and/ or CEA shall issue written instructions to the TSP to take corrective measures, as may be prudent for the timely completion of the Project. In case of any deficiency, the Nodal Agency would be at liberty to take action in accordance with the procedure of this Agreement.

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5.5.6 For any delay in commissioning any critical Element(s), as identified in Schedule 1 & Schedule 2 of this Agreement, beyond a period of 45 days shall lead to a sequestration of 10% of the Contract Performance Guarantee.

5.6 Site regulations and Construction Documents

The TSP shall abide by the Safety Rules and Procedures as mentioned in Schedule 3 of this Agreement

The TSP shall retain at the Site and make available for inspection 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 Independent Engineer and/ or CEA and/ or the Nodal Agency. However, such intimation by the Independent Engineer and/ or CEA and/ or the Nodal Agency and the subsequent effect of such remedial measures carried out by the TSP shall not relieve the TSP of its obligations in the Agreement. Independent Engineer and/ or CEA and/ or the Nodal Agency 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 remedied to the satisfaction of the CEA and/ or the Nodal Agency, this Agreement may be terminated by the Nodal Agency by giving a Termination Notice to the TSP, in writing, of at least seven (7) days, with a copy to CEA and the Lenders' Representative in order to enable the Lenders to exercise right of substitution in accordance with Article 15.3 of this Agreement.

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), CTU, / STU, as the case may be, 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 not be earlier than its Scheduled COD or Schedule COD extended as per Article 4.4.1 & 4.4.2 of this Agreement, unless mutually agreed to by Parties. Further, any preponing of COD of any element prior to Scheduled COD must be approved by the Nodal Agency.

6.1.2 The RLDC / SLDC (as the case may be) or the CTU / STU (as the case may be), for reasonable cause, including non-availability of Interconnection Facilities as per Article 4.2, can 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 thirty (30) days. Further, the Scheduled COD would be extended as required, for all such deferments on "day to 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 as amended from time to time 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.

d. It has satisfactorily met all the testing requirements as per Articles 6.1.4

6.1.4 Site Acceptance Test (SAT)/ pre-commissioning tests of all major substation equipment, component, system, facilities shall be successfully carried out before commissioning. The Type tests, FAT and SAT reports should be available at the substation / terminal station of HVDC installations for ready reference of operation and maintenance staff and has to be made available to the Independent Engineer appointed for quality monitoring or their authorised representatives, as and when they wish to examine the same.

6.2 Commercial Operation:

6.2.1 An Element of the Project shall be declared to have achieved COD twenty four (24) hours following the connection of the Element with the Interconnection Facilities pursuant to Article 6.1 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 subject 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 2 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, TSP shall be eligible for the Monthly Transmission Charges applicable for such Element

6.3 Compensation for Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or Natural Force Majeure Event (affecting the Nodal Agency)

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 concerned agencies of the date of intention to connect the Element(s) of the Project, where such date is not 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 Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency, provided such Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or Natural

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Force Majeure Event affecting the Nodal Agency has continued for a period of more than three (3) continuous or non-continuous Months, the TSP shall, until the effects of the Direct Non Natural Force Majeure Event or of Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency 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 due to Direct Non Natural Force Majeure Event, TSP is entitled for 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 (c) below.

b. In case of delay due to Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency, TSP is entitled for payment for debt service which is due under the Financing Agreements, subject to a maximum of 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 (c) below.

c. 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 Nodal Agency, the TSP is entitled for payments mentioned in (a) and (b) above, after commencement of Transmission Service, in the form of an increase in Transmission Charges. These amounts shall be paid from the date, being the later of a) the date of cessation of such Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency and b) the completion of sixty (60) days from the receipt of the Financing Agreements by the Nodal Agency from the TSP.

   Provided such increase in Transmission Charges shall be so as to put the TSP in the same economic position as the TSP would have been in case the TSP had been paid amounts mentioned in (a) and (b) above in a situation where the Force Majeure Event had not occurred.

For the avoidance of doubt, it is clarified that the charges payable under this Article 6.3.1 shall be recovered as per Sharing Regulations.

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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 or such Scheduled COD as extended under Articles 4.4.1 and 4.4.3, then the TSP shall pay to the Nodal Agency, 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 any rights of the Nodal Agency under the Agreement.

6.4.2 The TSP's maximum liability under this Article 6.4 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 to the Nodal Agency 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 to the Nodal Agency within the said period of ten (10) days, the Nodal Agency 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 Nodal Agency under this Article 6.3 and the TSP fails to make payment of the balance amount of the liquidated damages not covered by the Contract Performance Guarantee, then such balance amount shall be deducted from the Transmission Charges payable to the TSP. The right of the

Nodal Agency to encash the Contract Performance Guarantee is without prejudice to the other rights of the Nodal Agency under this Agreement.

6.4.5 For avoidance of doubt, it is clarified that amount payable by TSP under this Article is over and above the penalty payable by TSP under Article 5.5.6 of this Agreement.

6.5 Return of Contract Performance Guarantee

6.5.1 The Contract Performance Guarantee as submitted by TSP in accordance with Article 3.1.1 shall be released by the Nodal Agency 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 3.1.3 or Article 11) and consequent part invocation of the Contract Performance Guarantee by the Nodal Agency, Nodal Agency 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 Nodal Agency 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. 168.60 Crore (Rupees One Hundred Sixty-Eight Crore and Sixty Lakhs Only)**, or (ii) termination of this Agreement by the Nodal Agency as mentioned under Article 3.3.4 of this Agreement.

6.5.2 The release of the Contract Performance Guarantee shall be without prejudice to other rights of the Nodal Agency under this Agreement.

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ARTICLE: 7

7 OPERATION AND MAINTENANCE OF THE PROJECT

7.1 Operation and Maintenance of the Project:

The TSP shall be responsible for ensuring that the Project is operated and maintained in accordance with the regulations made by the Commission and CEA from time to time and provisions of the Act.

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 Appendix –IV to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, as applicable on the Bid Deadline and as appended in Schedule 6 of this Agreement.

8.2 Target Availability:

The Target Availability of each Element and the Project shall be 98%.

Payment of monthly Transmission charges based on actual availability will be calculated as per para 1.2 of Schedule 4 of this Agreement.

If the availability of any Element or the Project is below the Target Availability, for six consecutive months in a Contract Year, the DIC(s) or the Nodal Agency may issue a show cause notice to the TSP, asking them to show cause as to why the Transmission Service Agreement be not terminated, and if no satisfactory cause is shown it may terminate the Agreement. If the Nodal Agency is of the opinion that the transmission system is of critical importance, it may carry out or cause to carry the operation and maintenance of transmission system at the risk and cost of TSP.

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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, adequate Insurances against such risks, with such deductibles including but not limited to any third party liability 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 Nodal Agency copies of certificates and policies of the Insurances, as and when the Nodal Agency may seek from the TSP as per the 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 only to the TSP. Nodal Agency and / or concerned Designated ISTS Customers shall have no claim on such proceeds of the Insurance.

9.3.3 Subject to the requirements of the Lenders under the Financing

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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 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 Nodal Agency / Designated ISTS Customers

9.4.1 The Nodal Agency and / or the Designated ISTS 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 Monthly Transmission Charges shall be paid to the TSP, in Indian Rupees, on monthly basis as per the provisions of the Sharing Regulations, from the date on which an Element(s) has achieved COD until the Expiry Date of this Agreement, unless terminated earlier and in line with the provisions of Schedule 4 of this Agreement.

10.2 Calculation of Monthly Transmission Charges:

The Monthly Transmission Charges for each Contract Year including Incentive & Penalty payment shall be calculated in accordance with the provisions of Schedule 4 of this Agreement.

10.3 Rebate & Late Payment Surcharge:

The rebate and late payment surcharge shall be governed as per Sharing Regulations.

10.4 Disputed Bills, Default in payment by the Designated ISTS Customers & Annual Reconciliation:

Any Disputed Bill, Default in payment by the Designated ISTS Customers & Annual Reconciliation shall be governed as per Sharing Regulations.

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 Party whose performance has been affected by an event of Force Majeure.

11.2.2 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/ roles 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:**

i. 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; and

ii. epidemic/ pandemic notified by Indian Governmental Instrumentality.

(b) **Non-Natural Force Majeure Events :**

i. Direct Non–Natural Force Majeure Events

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- Nationalization or compulsory acquisition by any Indian Governmental Instrumentality of any material assets or rights of the Affected Party; or

- the unlawful, unreasonable or discriminatory revocation of, or refusal to renew, any Consents, Clearances and Permits required by the Affected Party to perform their obligations/ roles 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

- radio active 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.

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.

(g) Any error or omission in the survey report provided by BPC during the bidding process.

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 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.

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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/ roles 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/ roles 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/ roles pursuant to this Agreement to the extent that the performance of its obligations/ roles was prevented, hindered or delayed due to a Force Majeure Event;

(b) each Party shall be entitled to claim relief for a Force Majeure Event affecting its performance in relation to its obligations/ roles under Articles 3.3.4, 4.4.2 and 6.3.1 of 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 Appendix – IV to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024 as on Bid Deadline. For the event(s) for which the Element(s) is/are deemed to be available as per Appendix –IV to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024, then the Transmission Charges, as applicable to such Element(s), shall be payable as per Schedule 4, 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 Nodal Agency may, if it so desires, from time to time on one (1) day notice, inspect the Project and the TSP shall provide the Nodal Agency's personnel with access to the Project to carry out such inspections.

(e) For avoidance of doubt, the TSP acknowledges that for extension of Scheduled COD a period up to one hundred eighty (180) days due to

Force Majeure event, no compensation on the grounds such as interest cost, incident expenditure, opportunity cost will be made to the TSP. However, if Scheduled COD is extended beyond a period of one hundred eighty (180) days due to Force Majeure event, the TSP will be allowed to recover the interest cost during construction corresponding to the period exceeding one hundred eighty (180) days by adjustment in the Transmission Charges in accordance with Schedule 9.

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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 Bid Deadline resulting into any additional recurring / non-recurring expenditure by the TSP or any savings of 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, subject to the provisions under Article 12.1.2;
- 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 Commission, under which the Transmission License for the Project was granted if made applicable by such Commission to the TSP;
- change in wind zone; 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) Taxes on corporate income; and

b) Withholding tax on income or dividends distributed to the shareholders of the TSP.

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12.2 Relief for Change in Law

12.2.1 During Construction Period, the impact of increase/decrease in the cost of the Project on the Transmission Charges shall be governed by the formula given in Schedule 9 of this Agreement.

12.2.2 During the Operation Period:

During the operation period, if as a result of Change in Law, the TSP suffers or is benefited from a change in costs or revenue, the aggregate financial effect of which exceeds 0.30% (zero point three percent) of the Annual Transmission Charges in aggregate for a Contract Year, the TSP may notify so to the Nodal Agency and propose amendments to this Agreement so as to place the TSP in the same financial position as it would have enjoyed had there been no such Change in Law resulting in change in costs or revenue as aforesaid.

12.2.3 For any claims made under Articles 12.2.1 and 12.2.2 above, the TSP shall provide to the Nodal Agency documentary proof of such increase / decrease in cost of the Project / revenue for establishing the impact of such Change in Law.

In cases where Change in Law results in decrease of cost and it comes to the notice of Nodal Agency that TSP has not informed Nodal Agency about such decrease in cost, Nodal Agency may initiate appropriate claim.

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 Nodal Agency of such Change in Law as soon as reasonably practicable after becoming aware of the same.

12.3.2 The TSP shall also be obliged to serve a notice to the Nodal Agency 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 estimated impact on the TSP.

12.4 Payment on account of Change in Law

12.4.1 The payment for Change in Law shall be through a separate Bill. However, in case of any change in Monthly Transmission Charges by reason of Change in Law, as determined in accordance with this Agreement, the Bills to be raised by the Nodal Agency 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's 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 any non-fulfilment of its obligations as prescribed under this Agreement by the Nodal Agency 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 Nodal Agency in this regard;

b. The failure to commission any Element of the Project by the date falling six (6) months after its Scheduled COD unless extended by Nodal Agency as per provisions of this Agreement;

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:

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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

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's 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 Commission as per the provisions of Central Electricity Regulatory Commission (Procedure, terms and Conditions for grant of Transmission License and other related matters) Regulations, 2006 or as amended from time to time; or

e. Failure on the part of the TSP to comply with the provisions of Article 19.1 of this Agreement; or

f. the TSP repudiates this Agreement and does not rectify such breach even within a period of thirty (30) days from a notice from the Nodal Agency in this regard; or

g. after Commercial Operation Date of the Project, the TSP fails to achieve monthly Target Availability of 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

h. 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 Selected Bidder at the time of submission of the Bid being found to be breached or inaccurate, including but not limited to undertakings from its Parent Company / Affiliates related to the minimum equity obligation; or

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i. the TSP fails to complete / fulfil all the activities / conditions within the specified period as per Article 3; or

j. except for the reasons solely attributable to Nodal Agency, 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 Nodal Agency; or

k. 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 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 Nodal Agency may serve notice on the TSP, with a copy to the CEA and the Lenders' Representative, of their intention to terminate this Agreement (a "Nodal Agency's Preliminary Termination Notice"), which shall specify in reasonable detail, the circumstances giving rise to such Nodal Agency's Preliminary Termination Notice.

b. Following the issue of a Nodal Agency'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.

c. During the Consultation Period, the Parties shall, save as otherwise provided in this Agreement, continue to perform their respective obligations/ roles under this Agreement, and the TSP shall not remove any material, equipment or any part of the Project, without prior consent of the Nodal Agency.

Following the expiry of the Consultation Period, unless the Parties shall have otherwise agreed to the contrary or the circumstances giving rise to Nodal Agency's Preliminary Termination Notice shall have ceased to exist or shall have been remedied, this Agreement may be terminated by the Nodal Agency by giving a Termination Notice to the TSP, in writing, of at least seven (7) days, with a copy to CEA and the Lenders' Representative in order to enable the

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Lenders to exercise right of substitution in accordance with Article15.3 of this Agreement.

Further, the Nodal Agency may also initiate proceedings to blacklist the TSP & its Affiliates from participation in any RFP issued by BPCs for a period of 5 years.

13.3 Procedure for Nodal Agency's non-fulfilment of Role

a. Upon the Nodal Agency not being able to fulfil its role under Article 4.2, the TSP may serve notice on the Nodal Agency, with a copy to CEA and the Lenders' Representative (a "TSP's Preliminary Notice"), which notice shall specify in reasonable detail the circumstances giving rise to such non-fulfilment of role by the Nodal Agency.

b. Following the issue of a TSP's Preliminary 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 non-fulfilment of role by the Nodal Agency including giving time extension to TSP, 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/ roles under this Agreement.

13.4 Termination due to Force Majeure

13.4.1 In case the Parties could not reach an agreement pursuant to Articles 3.3.4 and 4.4.2 of this Agreement and the Force Majeure Event or its effects continue to be present, the Nodal Agency shall have the right to cause termination of the Agreement. In case of such termination, the Contract Performance Guarantee shall be returned to the TSP as per the provisions of Article 6.5.1.

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13.4.2 In case of termination of this Agreement, the TSP shall provide to the Nodal Agency 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 Nodal Agency within thirty (30) days of Termination Notice.

13.5 Termination or amendment due to non-requirement of any Element or Project during construction

13.5.1 In case any Element or Project, which is under construction, is no longer required due to any reason whatsoever, the Nodal Agency may issue a notice to this effect to the TSP.

13.5.2 Nodal agency may also issue notice to the TSP seeking their response to the proposed termination/ amendment (as the case may be) of the Agreement. The Nodal Agency shall issue copy of such notice to Lenders. In the notice, Nodal Agency shall also include an assessment of the physical progress made by TSP in the Element/ Project (as the case may be) that is no longer required.

13.5.3 The TSP shall neither carry out further investment nor carry out any work on the Element/ Project (as the case may be) that is no longer required after delivery of the notice.

13.5.4 After taking into account the comments of the TSP, the Nodal Agency may terminate the Agreement or amend it if both Parties agree to the amendment.

13.6 Revocation of the Transmission License

13.6.1 The Commission may, as per the provisions of the Electricity Act, 2003, revoke the Transmission License of the ISTS Licensee. Further, in such a case, the Agreement shall be deemed to have been terminated.

13.7 Termination Payment

13.7.1 If Agreement is terminated on account of Force Majeure Events, non-requirement of any Element or Project during Construction, Nodal Agency's non-fulfilment of Role & TSP's Event of Default, the TSP shall be entitled for Termination Payment equivalent to valuation of Project Assets. Upon payment, the Nodal Agency shall take over the Project Assets.

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ARTICLE: 14

14 LIABILITY AND INDEMNIFICATION

14.1 Indemnity

14.1.1 The TSP shall indemnify, defend and hold the Nodal Agency harmless against:

(a) any and all third party claims, actions, suits or proceedings against the Nodal Agency 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 non-fulfilment of statutory duty on the part of Nodal Agency; and

(b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest actually suffered or incurred by the Nodal Agency 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 non-fulfilment of statutory duty on the part of the Nodal Agency, or

ii. any of the representations and warranties of the TSP under this Agreement being found to be inaccurate or untrue.

14.1.2 The Nodal Agency shall, in accordance with the Regulations framed by CERC in this regard, 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 any material breach by the Nodal Agency of any of their roles under this Agreement, except to the extent that any such claim, action, suit or

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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. any material breach by the Nodal Agency of any of its roles under this Agreement (provided that, this Article 14 shall not apply to such breaches by the Nodal Agency, 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 Nodal Agency under this Agreement being found to be inaccurate or untrue.

14.2 Patent Indemnity:

14.2.1

(a) The TSP shall, subject to the Nodal Agency's compliance with Article 14.2.1 (b), indemnify and hold harmless the Nodal Agency 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 Nodal Agency 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 Nodal Agency arising out of the matters referred to in Article 14.2.1(a), the Nodal Agency 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 Nodal Agency of all actions taken in such proceedings or claims.

(c) If the TSP fails to notify the Nodal Agency within twenty-eight (28) days after receipt of such notice from the Nodal Agency under Article 14.2.1(b) above, that it intends to attend any such proceedings or claim, then the Nodal Agency 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 Nodal Agency within the twenty eight (28) days period, the Nodal Agency shall make no admission that may be prejudicial to the defence of any such proceedings or claims.

(d) The Nodal Agency 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 Nodal Agency, in accordance with the Regulations framed by CERC in this regard, 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 Nodal Agency a notice thereof, and the Nodal Agency shall at its own expense take necessary steps and attend such proceedings or claim and any negotiations for the

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settlement of any such proceedings or claim. The Nodal Agency shall promptly notify the TSP of all actions taken in such proceedings or claims.

(c) If the Nodal Agency 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 Nodal Agency. Unless the Nodal Agency 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 Nodal Agency request, afford all available assistance to the Nodal Agency in attending to such proceedings or claim, and shall be reimbursed by the Nodal Agency 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 Eleven Crore and Twenty-Four Lakh only (Rs. 11.24 Crore)**.

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:

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,

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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 not 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 Nodal Agency 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 Nodal Agency, the TSP or others), strict liability, contract, breach of statutory duty, operation of law or otherwise

14.5.2 The Nodal Agency 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

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shareholder of the Nodal Agency, or any Affiliate of the Nodal Agency 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.

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 15.3.

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, or the Project 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 developing and operating 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 developing and operating 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 developing and operating the Project.

15.3 Substitution Rights of the Lenders

15.3.1 The TSP would need to operate and maintain the Project under the provisions of this Agreement and cannot 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 Nodal Agency.

15.3.2 However, in the case of default by the TSP in debt repayments or in the case of default by the TSP as per Article 13 of this Agreement during the debt repayments, the 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, 2006 and as amended from time to time.

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 Delhi.

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 defense 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.

16.3 Dispute Resolution:

All Disputes shall be adjudicated by the Commission.

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16.4 Parties to Perform Obligations:

Notwithstanding the existence of any Dispute and difference referred to the Commission as provided in Article 16.3 and save as the Commission may otherwise direct by a final or interim order, the Parties hereto shall continue to perform their respective obligations/ roles (which are not in dispute) under this Agreement.

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ARTICLE: 17

17 REPRESENTATION AND WARRANTIES

17.1 Representation and warranties of the Nodal Agency

17.1.1 The Nodal Agency 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 authority to execute and consummate this Agreement;

b. This Agreement is enforceable against the Nodal Agency in accordance with its terms;

c. The consummation of the transactions contemplated by this Agreement on the part of Nodal Agency 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 Nodal Agency is a Party or to which the Nodal Agency is bound, which violation, default or power has not been waived;

17.2 Representation and Warranties of the TSP:

17.2.1 The TSP hereby represents and warrants to and agrees with the Nodal Agency as follows and acknowledges and confirms that the Nodal Agency 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;

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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 Effective Date of this Agreement.

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ARTICLE: 18

18 INDEPENDENT ENGINEER

18.1 Appointment of Independent Engineer

The Nodal Agency shall appoint an agency/ company as Independent Engineer as per framework provided in the Guidelines for Encouraging Competition in Development of Transmission Projects for selection of Independent Engineer.

18.2 Roles and functions of Independent Engineer

The role and functions of the Independent Engineer shall include the following:

a. Progress Monitoring as required under this Agreement;

b. Ensuring Quality as required under this Agreement;

c. determining, as required under the Agreement, the costs of any works or services and/or their reasonableness during construction phase;

d. determining, as required under the Agreement, the period or any extension thereof, for performing any duty or obligation during construction phase;

e. determining, as required under the Agreement, the valuation of the Project Assets.

f. Assisting the Parties in resolution of Disputes and

g. Undertaking all other duties and functions in accordance with the Agreement.

18.3 Remuneration of Independent Engineer

The fee and charges of the Independent Engineer shall be paid by the Nodal Agency as per terms & conditions of appointment.

18.4 Termination of appointment

18.4.1 The Nodal Agency may, in its discretion, terminate the appointment of the Independent Engineer at any time, but only after appointment of another Independent Engineer.

18.4.2 If the TSP has reason to believe that the Independent Engineer is not discharging its duties and functions in a fair, efficient and diligent manner, it

may make a written representation to the Nodal Agency and seek termination of the appointment of the Independent Engineer. Upon receipt of such representation, the Nodal Agency shall hold a tripartite meeting with the TSP and Independent Engineer for an amicable resolution, and the decision of Nodal agency is final. In the event that the appointment of the Independent Engineer is terminated hereunder, the Nodal Agency shall appoint forthwith another Independent Engineer.

18.5 Authorised signatories

The Nodal Agency shall require the Independent Engineer to designate and notify to the Nodal Agency up to 2 (two) persons employed in its firm to sign for and on behalf of the Independent Engineer, and any communication or document required to be signed by the Independent Engineer shall be valid and effective only if signed by any of the designated persons; provided that the Independent Engineer may, by notice in writing, substitute any of the designated persons by any of its employees.

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ARTICLE: 19

19 MISCELLANEOUS PROVISIONS

19.1 Equity Lock-in Commitment:

19.1.1 The aggregate equity share holding of the Selected Bidder in the issued and paid up equity share capital of WR ER Part A Power Transmission Limited shall not be less than Fifty one percent (51%) up to a period of one (1) 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 remaining Members (which shall always include the Lead Member) hold the minimum equity specified above.

19.1.2 If equity is held by the Affiliates, Parent Company or Ultimate Parent Company of the Selected Bidder, then, subject to the second proviso to Article 19.1.1, such Affiliate, Parent Company or Ultimate Parent Company shall be eligible to transfer its shareholding in WR ER Part A Power 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.

19.1.3 Subject to Article 19.1.1, all transfer(s) of shareholding of WR ER Part A Power Transmission Limited by any of the entities referred to in Article 19.1.1 and 19.1.2 above, shall be after prior written intimation to the Nodal Agency.

19.1.4 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 WR ER Part A Power 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 WR ER Part A Power Transmission Limited then holding of Selected Bidder A in WR ER Part A Power 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 WR ER Part A Power Transmission Limited, then, for the purposes of ascertaining the minimum equity/equity lock-in requirements specified above, the effective holding of Bidder A in WR ER Part A Power Transmission Limited shall be fifteen percent (15%), (i.e., 30% x 50%)

19.1.5 The provisions as contained in this Article 19.1 shall override the terms of the consortium agreement submitted as part of the Bid.

19.1.6 The TSP shall be responsible to report to Nodal Agency, within thirty (30) days from the occurrence of any event that would result in any change in its equity holding structure from that which existed as on the date of signing of the Share Purchase Agreement. In such cases, the Nodal Agency would reserve the right to ascertain the equity holding structure and to call for all such required documents / information / clarifications as may be required.

19.2 Commitment of maintaining Qualification Requirement

19.2.1 The Selected Bidder will be required to continue to maintain compliance with the Qualification Requirements, as stipulated in RFP Document, till the COD of the Project. Where the Technically Evaluated Entity and/or the Financially Evaluated Entity is not the Bidding Company or a Member in a Bidding Consortium, as the case may be, the Bidding Company or Member shall continue to be an Affiliate of the Technically Evaluated Entity and/or Financially Evaluated Entity till the COD of the Project.

19.2.2 Failure to comply with the aforesaid provisions shall be dealt in the same manner as TSP's Event of Default as under Article 13 of this Agreement.

19.3 Language:

19.3.1 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.

19.3.2 If any of the agreements, correspondence, communications or documents are prepared in any language other than English, the English

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translation of such agreements, correspondence, communications or documents shall prevail in matters of interpretation.

19.4 Affirmation

The TSP and the Nodal Agency, 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 Nodal Agency hereby undertake not to engage in any similar acts during the Term of Agreement.

19.5 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.

19.6 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.

19.7 Breach of Obligations/ Roles

The Parties acknowledge that a breach of any of the obligations/ roles contained herein 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.

19.8 Restriction of Shareholders / Owners Liability

19.8.1 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.

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19.8.2 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).

19.9 Taxes and Duties:

19.9.1 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.

19.9.2 The Nodal Agency shall be indemnified and held harmless by the TSP against any claims that may be made against the Nodal Agency in relation to the matters set out in Article 19.9.1.

19.9.3 The Nodal Agency shall not be liable for any payment of, taxes, duties, levies, cess whatsoever for discharging any obligation of the TSP by the Nodal Agency on behalf of TSP or its personnel, provided the TSP has consented in writing to the Nodal Agency for such work, for which consent shall not be unreasonably withheld.

19.10 No Consequential or Indirect Losses

The liability of the TSP shall be limited to that explicitly provided in this Agreement.

Provided that, notwithstanding anything contained in this Agreement, under no event shall the Nodal Agency or the TSP claim from one another any indirect or consequential losses or damages.

19.11 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.

19.12 Confidentiality

19.12.1 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

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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 the Nodal Agency, 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.

19.13 Order of priority in application:

Save as provided in Article 2.5, in case of inconsistencies between the terms and conditions stipulated in Transmission License issued by the 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:

- terms and conditions of Transmission License;
- applicable Law, rules and regulations framed thereunder;
- this Agreement;
- Agreement(s), if any, under Sharing Regulations.

19.14 Independent Entity:

19.14.1 The TSP shall be an independent entity performing its obligations pursuant to the Agreement.

19.14.2 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 the Nodal Agency 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 Nodal Agency.

19.15 Amendments:

19.15.1 This Agreement may only be amended or supplemented by a written

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agreement between the Parties.

19.16 Waiver:

19.16.1 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.

19.16.2 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.

19.17 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 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.

19.18 Entirety:

19.18.1 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.

19.18.2 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 Nodal Agency by the TSP shall stand superseded and abrogated.

19.19 Notices:

19.19.1 All notices or other communications which are required to be given under this Agreement shall be in writing and in the English language

19.19.2 If to the TSP, all notices or communications must be delivered personally or by registered post or facsimile or any other mode duly acknowledged

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to the addressee below:

	CORPORATE	BUSINESS
Address	: Saudamini, Plot NO2, Sec-29, Gurugram, Haryana - 122001	WR-I RHQ, Samproti Nagar, Nari Ring Road, Uppalwadi, Nagpur - 440026
Attention	: ED (TBCB)	Sh. Mayank Singh (Dep. PIC)
Email	: tbcb@powergrid.in	mayank singh@powergrid.in
Fax. No.	: —	—
Telephone No.	: 0124-2822123	9425409529

19.19.3 If to the Nodal Agency, all notices or communications must be delivered personally or by registered post or facsimile or any other mode duly acknowledged to the addresses below:

(i) **Central Transmission Utility of India Limited (Nodal Agency)**

Address	: 5th to 10th Floor, IRCON International Tower, Tower no-1, Plot no-16, Sector-32, Gurugram, Haryana: 122003
Attention	: Ramachandra, Sr GM
Email	: ramachand@powergrid.in
Fax. No.	:
Telephone No.	: 9910378128

19.19.4 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.

19.19.5 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 are to be delivered or mailed.

19.20 Fraudulent and Corrupt Practices

19.20.1 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 Nodal Agency 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

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corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bid process. In such an event, the Nodal Agency shall forfeit the Contract Performance Guarantee of the TSP, without prejudice to any other right or remedy that may be available to the Nodal Agency hereunder or subsistence otherwise.

19.20.2 Without prejudice to the rights of the Nodal Agency under Clause 19.20.1 hereinabove and the rights and remedies which the Nodal Agency may have under this Agreement, if a TSP is found by the Nodal Agency 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 agreement(s) required under Sharing Regulations, the Nodal Agency may terminate the Agreement without being liable in any manner whatsoever to the TSP. Further, the TSP & its Affiliates shall not be eligible to participate in any tender or RFP issued by any BPC for an indefinite period from the date such TSP is found by the Nodal Agency 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.

19.20.3 For the purposes of this Clause 19.20, 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 RFP Project Documents 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 RFP Project Documents, as the case may be, any person in respect of any matter relating to the Project or the LoI or the RFP Project Documents, 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;

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(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;

19.21 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 SET FORTH ABOVE.

1. For and on behalf of TSP

.....

[Signature, Name, Designation and Address]

Sh. Mayank Singh
Deputy Project In-charge

2. For and on behalf of **Central Transmission Utility of India Limited (Nodal Agency)**

.....

KAMAL KUMAR JAIN
Senior General Manager
CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED
(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड की पूर्ण स्वामित्व कंपनी)
(A wholly owned subsidiary of POWERGRID)
5th-10th Floor, Ircon International Tower-1, Plot No.-16 Sector-32, Gurugram-122003

[Signature, Name, Designation and Address]

WITNESSES:

1. For and on behalf of

: BPC

.....

[Signature]

RITAM BISWAS
DY. MANAGER (ENG.)
RBCPDCL

.....

[Insert, Name, Designation and Address of the Witness]

2. For and on behalf of

: Nodal Agency

.....

[Signature]

DEEPAK KRISHNAN
Chief Manager
CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED
(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड की पूर्ण स्वामित्व कंपनी)
(A wholly owned subsidiary of POWERGRID)
5th-10th Floor, Ircon International Tower-1, Plot No.-16, Sector-32, Gurugram-122003

[Insert Name, Designation and Address of the Witness]

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SCHEDULES

Schedule: 1

Project Description and Scope of Project

Scope of the Project:

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
1.	Establishment of 3x1500 MVA, 765/400kV S/s at Raigarh (Kotra)-II S/s in Chhattisgarh with 2x330 MVAR, 765 kV bus reactor and 2x125 MVAR, 420 kV bus reactor **Common Transmission System Augmentation:** • 765 kV, 2x330 MVAr bus reactor (7x110MVAr single phase units) • 420 kV, 125 MVAr bus reactor: 2 Nos. • 765 kV Bus reactor bays: 2 Nos. • 400 kV Bus reactor bays: 2 Nos. • 765 kV line bays: 4 Nos. (for termination of LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765kV D/c line) • 765 kV, 240 MVAr (3x80MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Kotra)-II – Jharsuguda (Sec-A) 765 kV D/c section along with 1x80 MVAr 765kV spare reactor **Additional space for future expansion:** • 765 kV bus sectionaliser bay: 1 set (to establish Sec-II) • 400 kV bus sectionaliser bay :1 set (to establish Sec-II) • 765/400 kV, 5x1500MVA (15 x 500 MVA single phase units) ICTs along with associated ICT bays a. 765 kV side: - 1 No. on Bus Sec-I & 4 Nos. on Bus Sec-II) b. 400 kV side: - 1 Nos. on Bus Sec-I & 4 Nos. on Bus Sec-II) • 765 kV, 2x330 MVAr (6 x 110MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) • 420 kV, 2x12 5MVAr bus reactor along with associated bay (2 on Bus Sec-II)	24 Months (30.06.2028)

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Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
	• 765 kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. (2 Nos. on Sec-I for scope at Sl. 8 and 6 on Bus Sec-II for future lines) • 400 kV line bays (along with space for switchable line reactor) for future lines: 14 Nos. (6 on Bus Sec-I; 8 on Bus Sec-II) • 400/220 kV ICT along with bays: 6 Nos. • 220 kV line bays: 12 Nos.: (6 Nos. on Bus Sec-I and 6 on Bus Sec-II) • 220 kV Sectionalization bay: 1 set • 220 kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) • 220 kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II)	
2.	Extension at Raigarh (Kotra)-II 765/400 kV S/s **ATS incl. terminal bays identified for 2x800MW Raigarh TPS of M/s APL (appl. No.2200001709):** • 765/400 kV, 3x1500 MVA ICT (10x500 MVA single phase units) • 765 kV ICT bays: 3 Nos. • 400 kV ICT bays: 3 Nos. • 400 kV line bays: 2 Nos. [for interconnection of 2x800MW Raigarh TPS of M/s APL to Raigarh (Kotra)-II 400 kV D/c line. DTL line under scope of M/s APL.]	24 Months (30.06.2028)
3.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s	24 Months (30.06.2028)

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Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
4.	Installation of new 765/400 kV, 1x1500 MVA (3x500 MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends • 765/400 kV, 1x1500 MVA (3x500MVA single phase units) ICT: 1 no. • 765kV ICT bay: 1 no. • 400kV ICT bay: 1 no	24 Months (30.06.2028)
5.	Establishment of 2x1500 MVA, 765/400 kV S/s at Jamshedpur (New) in Jharkhand • 765/400 kV, 2x1500 MVA ICT (7x500 MVA single phase units) • 765 kV, 2x330MVAr bus reactor (7x110 MVAr single phase units including one spare unit) • 420 kV, 125 MVAr bus reactor: 2 Nos. • 765 kV ICT bays: 2 Nos. • 765 kV Bus reactor bays: 2 Nos. • 400 kV ICT bays: 2 Nos. • 400 kV Bus reactor bays: 2 Nos. • 765 kV line bays: 4 Nos. (for termination of LILO of Ranchi (New) – Medinipur 765 kV D/c line) • 400 kV line bays: 4 Nos. [for termination of LILO of Ranchi (New) – New PPSP 400 kV D/c line] **Additional space for future expansion:** • 765 kV bus sectionaliser bay: 1 set (to establish Sec-II) • 400 kV bus sectionaliser bay :1 set (to establish Sec-II) • 220 kV bus sectionaliser bay: 1 set (to establish Sec-II) • 220 kV bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) • 220 kV transfer bus coupler bay: 2 set (1 No. each on bus Sec-I and bus Sec-II) • 765/400 kV, 4x1500 MVA (12x500 MVA single phase units) ICTs along with associated ICT bays at both voltage levels	30 Months (30.12.2028)

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
	a. 765 kV side: - 1 No. on Bus Sec-I & 3 Nos. on Bus Sec-II) b. 400 kV side: - 1 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) • 400/220 kV, 6x500 MVA ICTs along with associated ICT bays at both voltage levels a. 400 kV side: - 3 No. on Bus Sec-I & 3 Nos. on Bus Sec-II) b. 220 kV side: - 3 Nos. on Bus Sec-I & 3 Nos. on Bus Sec-II) • 765 kV, 2x330 MVAr (6x110 MVAr single phase units) bus reactor along with associated bay (on Bus Sec-II) • 420 kV, 2x125 MVAr bus reactor along with associated bay (on Bus Sec-II) • 765 kV line bays (along with space for switchable line reactor) for future lines: 8 Nos. (2 Nos. on Bus Sec-I and 6 on Bus Sec-II) • 400 kV line bays (along with space for switchable line reactor) for future lines: 10 Nos. (2 Nos. on Bus Sec-I and 8 on Bus Sec-II) • 220 kV line bays for future lines: 12 Nos. (6 Nos. on Bus Sec-I and 6 on Bus Sec-II)	
6.	LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New)	30 Months (30.12.2028)
7.	LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New) • Jamshedpur (New) to LILO section towards Ranchi (New) needs to be implemented with Twin Moose • Jamshedpur (New) to LILO section towards New PPSP needs to be implemented with Twin HTLS (ampacity of single HTLS as 1574A at nominal voltage)	30 Months (30.12.2028)
8.	Extension at Raigarh (Kotra)-II S/s 765/400 kV S/s • 765 kV line bays: 2 nos. (for termination of Raigarh (Tamnar) – Raigarh (Kotra)-II 765 kV D/c line)	36 Months (30.06.2029)

Sl. No.	Scope of the Transmission Scheme	Scheduled COD in months from Effective Date
9.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line	36 Months (30.06.2029)
10.	Raigarh (Tamnar)@ - Raigarh (Kotra)-II S/s 765 kV D/c line	36 Months (30.06.2029)
11.	Extension at Raigarh (Tamnar) 765/400 kV S/s • 765 kV, 330 MVAr (3x110 MVAr single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c line along with 1x110 MVAr 765 kV spare reactor	36 Months (30.06.2029)
12.	Extension at Jamshedpur (New) 765/400 kV S/s • 765 kV line bays: 2 nos. (for termination of Jamshedpur (New) – Tamnar 765 kV D/c line) • 765 kV, 330 MVAr (3x110 MVAR single phase units) switchable line reactor along with associated switching equipment in each circuit of Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c line	36 Months (30.06.2029)
13.	Raigarh (Tamnar)@ – Jamshedpur (New) 765 kV D/c line	36 Months (30.06.2029)

Note:

1. *@4 Nos. 765kV line bays vacated at Raigarh (Tamnar) S/s after bypass arrangement mentioned at Sl. No. 9 of the scope of works [i.e. bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c at Raigarh (Tamnar)] to be utilized for termination of 765kV lines at Raigarh (Tamnar) S/s i.e. 2 nos. for Raigarh (Tamnar) – Raigarh (Kotra-II) 765kV D/c proposed line and 2 nos. for Raigarh (Tamnar) – Jamshedpur (New) 765kV D/c proposed line.*
2. *After the implementation of subject bypassing arrangement at the outskirts of Raigarh (Tamnar) S/s, the existing unutilized portions of Raigarh (Kotra) – Raigarh (Tamnar) and Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line sections at Raigarh*

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(Tamnar) end may be utilized for termination of proposed 765kV D/c lines under the subject scheme i.e. proposed 765kV D/c lines may be terminated at bypassing points. This shall ensure utilization of existing ISTS transmission infrastructure. However, if the said existing ISTS transmission line sections remain unutilized at Raigarh (Tamnar) end, due to any reason, the same shall be dismantled by the TSP of the subject scheme and cost of scrapped assets may be adjusted under subject transmission scheme. In both cases (viz. utilization of existing line sections or its scrapping), the original tariff of Raigarh (Tamnar) – Dharamjaygarh (Sec -B) 765kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765kV D/c line shall remain unaffected.

Also, TSP of Raigarh (Tamnar) S/s shall provide space for above scope of work at the existing Raigarh (Tamnar) S/s free of cost.

3. *TSP shall implement Inter-tripping scheme on Dharamjaygarh (Sec-B) – Raigarh (Kotra)-II 765 kV D/c line (for tripping of the switchable line reactor at Dharamjaygarh (Sec-B) end along with the main line breaker).*
4. *TSP of the subject scheme shall implement Inter-tripping scheme on Raigarh (Kotra)-II – Jharsuguda 765 kV D/c line (for tripping of the switchable line reactor at Raigarh (Kotra)-II end along with the main line breaker).*
5. *LILO of Ranchi (New) – Medinipur 765kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 765kV D/c line and one circuit of Jamshedpur (New) – Medinipur 765kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
6. *LILO of Ranchi (New) – New PPSP 400kV D/c line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 400kV D/c line and one circuit of Jamshedpur (New) – New PPSP 400kV D/c line are terminated in same diameter. Similarly, second circuit of both line sections may also be terminated in bays of the same diameter.*
7. *M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) shall provide space for above scope of work at the existing Jeerat (New) S/s free of cost.*

Project Description

From operational feedback of Grid-India and further system studies it was observed that Ranchi – Dharamjaygarh 765 kV 2xS/C line, Ranchi – Sipat 400 kV D/C and Ranchi New – New PPSP 400 kV D/C lines are getting critically loaded under N-1 contingencies in high solar scenarios when thermal generations are backed down in ER. In order to relieve the critical loading on the above-mentioned lines, an additional 765 kV corridor between ER and WR was identified to relieve the loading of various 765 kV and 400 kV lines in the WR-ER corridor and nearby 400 kV corridors in the peak solar scenario in 2028-29 timeframe.

Further, in order to facilitate evacuation of power from 2x800 MW Raigarh TPS of Adani

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Power Limited at Raigarh (Kotra)-II, Korba Power Limited (2x660 MW) at Champa and & Korba Power Limited (2x800 MW) at Dharamjaygarh, two new 765/400 kV ISTS substations at Raigarh (Kotra-II) in WR and Jamshedpur (New) in ER along with WR – ER inter-regional link and associated transmission lines have been planned. This scheme shall also facilitate additional drawl of power from ISTS by West Bengal and Odisha, mainly during high solar scenarios.

The subject scheme was agreed in the 36th Consultation Meeting for Evolving Transmission Schemes in Western Region (CMETS-WR) held from 26.05.2025 to 28.05.2025 and 43rd Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER) held on 29.05.2025. It was further recommended in a Special Joint TCC and ERPC meeting held on 11.08.2025 and 55th meeting of WRPC held on 08.08.2025. The scheme was thereafter deliberated and approved for implementation through TBCB route in the 32nd meeting of National Committee on Transmission (NCT) held on 12.08.2025.

MoP vide Gazette dated 18.09.2025 has notified implementation of the subject scheme through TBCB route and has appointed RECPDCL as the BPC.

The scheme was rediscussed in the 35th meeting of NCT held on 19-11-2025 wherein revised completion schedule of the elements and foregoing the space requirement for future expansion of 1150kV and HVDC at Raigarh (Kotra)-II were agreed.

SPECIFIC TECHNICAL REQUIREMENTS FOR TRANSMISSION LINE

The design, routing and construction of transmission lines shall be in accordance with Chapter V, Part-A of CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2022, as amended from time to time. Other CEA Regulations/ guidelines as amended up to date and Ministry of Power (MoP) guidelines, as applicable, shall also be followed.

A.1.0 Selection of tower type shall be made as per CEA Regulations, however in case lattice type towers are used, the following shall also be applicable:

A.2.0 Steel section of grade E 250 and/or grade E 350 as per IS 2062, only are permitted for use in towers, extensions, gantry structures and stub setting templates. For towers in snowbound areas, steel sections shall conform to Grade-C of IS-2062.

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

Solidity Ratio	Drag Coefficient
Up to 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

A.4.0 Transmission Service Provider (TSP) shall adopt any additional loading/design criteria for ensuring reliability of the line, if so desired and /or deemed necessary.

A.5.0 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. Further, for transmission line sections passing within a distance of 50 km from the boundary of two wind zones, higher of the two wind zones shall be considered for design of towers located in such sections.

A.6.0 Selection of reliability level for design of tower shall be as per CEA Regulation (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2022, as amended from time to time.

A.7.0

a) In case of construction of transmission line of Voltage level of 400 kV and above, under crossing of the existing transmission line shall not be allowed. In the case where it is inevitable to under-cross the existing transmission line then TSP shall seek prior approval from Chief Electrical Inspector, CEA with detailed study

ensuring that all statutory electrical clearances and Electric Field limit of 10 kV/m at 1 m and 1.8 m from ground level is not violated.

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

c) For power line crossing of 132 kV and 220 kV 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.

d) 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.

e) For crossing railways, national highways and state highways, the Rules/Regulations of appropriate authorities shall be followed.

A.8.0 (a) The relevant conductor configuration shall be as follows: -

A. Type of conductor: ACSR / AAAC / AL59

Basic parameters:

Transmission line	**ACSR Conductor specified**	**Equivalent AAAC conductor based on 53.5% conductivity of Al Alloy**	**Equivalent AL59 conductor based on 59% conductivity of AL Alloy***	**Sub-conductor Spacing**
765 kV D/C (Hexa Bundle) transmission lines	**Zebra: Stranding** 54/3.18 mm-Al + 7/3.18 mm-Steel, **428.9** sq mm, Aluminium area, 28.62 mm diameter Maximum DC Resistance at 20°C (Ω/km): **0.0677** Minimum UTS: **131.44 kN**	**Stranding details:** 61/3.19mm, 28.71 mm diameter; 487.5 sq.mm Aluminium alloy area Maximum DC Resistance at 20°C (Ω/km): 0.06815 Minimum UTS: 135.6 kN	**Stranding details:** 61/3.08mm, 27.72 mm diameter; 454 sq.mm Aluminium alloy area Maximum DC Resistance at 20°C (Ω/km): 0.0653 Minimum UTS: 108 kN	457 mm
400 kV D/C (Twin Bundle)	**Moose: Stranding**	**Stranding details:**	**Stranding details:**	

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Transmission line	ACSR Conductor specified	Equivalent AAAC conductor based on 53.5% conductivity of Al Alloy	Equivalent AL59 conductor based on 59% conductivity of AL Alloy*	Sub-conductor Spacing
transmission lines	54/3.53mm-Al + 7/3.53 mm-Steel, 31.77 mm diameter 528.5 sq. mm, Aluminium area, Maximum DC Resistance at 20°C (Ω/km): **0.0549** Minimum UTS: **159.60 kN**	61/3.55mm 31.95mm diameter; 604 sq. mm Aluminium alloy area Maximum DC Resistance at 20°C (Ω/km): 0.05506 Minimum UTS: 159.80 kN	61/3.31 mm 29.79 mm diameter; 525 sq. mm Aluminium alloy area Maximum DC Resistance at 20°C (Ω/km): 0.0566 Minimum UTS: 124.70 kN	450 mm

Note:

1. **To select any size above the minimum, the sizes mentioned in the Indian standard IS-398(part-6) shall be followed.*
2. *The transmission lines shall have to be designed for a maximum operating conductor temperature of 85°C.*

B. Type of conductor: HTLS (High Temp & low Sag)

Basic parameters:

Transmission Line	Parameter of single conductor			Sub-conductor Spacing (mm)
	Ampacity of HTLS conductor	Minimum Conductor diameter (mm)	Maximum DC Resistance at 20°C (Ω/km)	
400 kV Transmission line with Twin HTLS conductor	**1574 A**	28.62	**0.0549**	450

A.9.0 The required phase to phase spacing and horizontal spacing for 765 kV and 400 kV line(s) shall be governed by the tower design as well as minimum live metal clearances for 765 kV and 400 kV voltage level under different insulator swing angles. However, the phase to phase spacing for 765 kV and 400 kV lines shall not be less than 15m and 8m respectively.

A.10.0 All electrical clearances including minimum live metal clearance, ground clearance and

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minimum mid span separation between earth wire and conductor as given below shall be considered:

A. Minimum live metal clearances for 765 kV line:

a) (i) Under stationary conditions

From tower body: For 765 kV D/C: 6.1 m
For 765 kV S/C: 5.6 m

(ii) Under swing conditions

Wind Pressure Condition	Minimum Electrical Clearance
a) Swing angle (25°)	4.4 m
b) Swing angle (55°)	1.3 m

b) Minimum ground clearance for 765 kV: 18 m
c) Minimum mid span separation between earth-wire and conductor for 765 kV: 9.0 m

B. Minimum live metal clearances for 400 kV line:

a) (i) Under stationary conditions:
From tower body: 3.05m

(ii) Under Swing conditions

Wind Pressure Condition	Minimum Electrical Clearance
a) Swing angle (22°)	3.05 mtrs
b) Swing angle (44°)	1.86 mtrs

b) Minimum ground clearance for 400kV: 8.84 m
c) Minimum mid span separation between earthwire and conductor for 400kV: 9.0 m

A.11.0 The shielding angle shall not exceed 10 deg for 765 kV D/C and 20 deg for 400 kV transmission line.

A.12.0 The Fault current for design of line shall be 50 kA for 1 sec for 765 kV and 63 kA for 1 sec for 400 kV.

A.13.0 In case of 765 kV & 400 kV voltage class lines, at least one out of two earth wires shall be OPGW and second earth wire, if not OPGW, shall be either of galvanized stranded steel (GSS) or Aluminum Alloy Conductor Steel Reinforced (AACSR) conductor type or any other suitable conductor type depending upon span length and other technical consideration.

A.14.0 Each tower shall be earthed such that tower footing impedance does not exceed 10 ohms. Pipe type or Counterpoise type earthing shall be provided in accordance with relevant IS. Additional earthing shall be provided on every 7 to 8 km distance for direct earthing of both

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shield wires. If site condition demands, multiple earthing or use of earthing enhancement compound shall be used.

A.15.0 Pile type foundation shall be used for towers located in river or creek bed or on bank of river having scourable strata or in areas where river flow or change in river course is anticipated, based on detailed soil investigation and previous years' maximum flood discharge of the river, maximum velocity of water, highest flood level, scour depth and anticipated change in course of river based on river morphology data of at least past 20 years to ensure availability and reliability of the transmission line.

A.16.0 Transmission line route shall be finalized, in consultation with appropriate authorities so as to avoid the habitant zones of endangered species and other protected species. Bird diverters, wherever required, shall be provided on the transmission line. In order to optimize the route, use of GATISHAKTI platform shall also be made.

A.17.0 Wherever, transmission lines are passing through cyclone prone areas (i.e. areas up to 60 km from coast)/ creek regions/ aggressive soil areas following shall also be applicable:

a) The fabricated tower parts and stubs shall have a minimum overall zinc coating of 900 g/m^2 of surface area except for plates and sections below 5 mm which shall have a minimum overall zinc coating of 610 g/ m^2 of surface area. The average zinc coating for all sections and plates 5 mm and above shall be maintained as 127 microns and that for plates and sections below 5 mm shall be maintained as 87 microns.

b) Ready mix concrete of M30 Grade shall be used to avoid use of locally available saline water. However, design mix concrete of M30 Grade conforming to IS 456 with potable water can be used at locations where transportation of ready-mix concrete is not feasible. Minimum cement content in any case shall not be less than 330 kg/m^3.

c) The surface of the reinforced steel shall be treated with epoxy-based coating to enhance corrosion performance of foundation. Use of epoxy coated reinforcement in foundation shall be as per IS 13620. In addition, two (2) coats of bituminous painting of minimum 1.6 kg/m^2 per coat shall be applied on all exposed faces of foundation (i.e. pedestal and base slab).

d) Double coat 20 mm thick cement plaster shall be provided on all exposed concrete surface as well up to 300 mm below ground level to give protection to concrete surface from environmental and saline effect.

e) Before coping of chimney top portion, three coats of anti-corrosive paint of minimum 30-35 microns dry film thickness each shall be applied on the stub in the 50mm coping portion as well as up to 350 mm above CL portion.

A.18.0 The raised chimney foundation is to be provided in areas prone to flooding/water stagnation like paddy field /agricultural field and undulated areas to avoid direct contact of water with steel part of tower. The top of the chimney of foundation should be at least above High Flood Level (HFL) or the historical water stagnation/ logging level (based on locally available data) or above High Tide Level or 500 mm above Natural Ground level (whichever is higher).

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A.19.0 Routing of transmission line through protected areas of India shall be avoided to the extent possible. In case, it is not possible to avoid protected areas, the towers of the transmission line up to 400 kV level which are installed in protected areas shall be designed for Multi-circuit (4 circuits) configuration of same voltage level considering reliability level of at least two (2). The top two circuits of these multi-circuit towers shall be used for stringing of the transmission line under present scope and the bottom two circuits shall be made available for stringing of any future transmission line of any transmission service providers/ State transmission utilities/Central transmission utilities passing through the same protected area. Further, the configuration and coordinates of such transmission towers shall be submitted to CEA, CTU and BPC by the TSP.

A.20.0 The TSP shall abide by the Guidelines of CEA w.r.t. shifting of transmission lines for NHAI projects and other projects.

A.21.0 Safety precautions in regards to gas/oil pipelines in vicinity of Transmission lines shall be taken in coordination with gas/ petroleum authorities.

A.22.0 The stringing of the transmission line in the forest area shall be carried out through drones.

A.23.0 RoW width and Span in different terrain shall be as per Schedule VII of CEA (Technical Standards for Construction of Electrical plants and Electric Lines) Regulations 2022, as amended from time to time.

A.24.0 The tower shall be designed considering the porcelain Insulators with creepage factor of 31 mm/ kV irrespective of type of insulator used.

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SPECIFIC TECHNICAL REQUIREMENTS FOR SUBSTATION

The proposed 765/400 kV Jamshedpur (New) S/s and proposed 765/400 kV Raigarh (Kotra)-II shall be Conventional Air Insulated Substation (AIS) type generally conforming to the requirements of CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2022, as amended from time to time.

Extension of 765 kV Raigarh (Tamnar) S/s and Extension of 765/400 kV Jeerat (New) S/s shall be Air Insulated Switchgear (AIS) type generally conforming to the requirements of CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2022, as amended from time to time.

Other CEA Regulations/guidelines as amended up to date and MoP guidelines, as applicable, shall also be followed.

B.1.0 Salient features of Substation Equipment and Facilities

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

B.1.1 Insulation Coordination

The system design parameters for substations/switchyards shall be as given below:

Sl No	Description of parameters	765/400 kV Raigarh (Kotra)-II S/s		765/400 kV Jamshedpur (New) S/s	
		765 kV System	400 kV System	765 kV System	400 kV System
1.	System Operating Voltage	765 kV	400 kV	765 kV	400 kV
2.	Maximum voltage of the system (rms)	800 kV	420 kV	800 kV	420 kV
3.	Rated Frequency	50 Hz	50 Hz	50 Hz	50 Hz
4.	No. of Phases	3	3	3	3
5.	Rated Insulation Levels				
i)	Lightning Impulse withstand voltage for (1.2/50 micro sec.) - for Equipment other than Transformer and Reactor - for Insulator String	2100 kVp 2100 kVp	1425 kVp 1550 kVp	2100 kVp 2100 kVp	1425 kVp 1550 kVp
ii)	Switching Impulse withstand voltage (250/2500 micro sec.) dry	1550 kVp	1050 kVp	1550 kVp	1050 kVp

Sl No	Description of parameters	765/400 kV Raigarh (Kotra)-II S/s		765/400 kV Jamshedpur (New) S/s	
		765 kV System	400 kV System	765 kV System	400 kV System
	and wet				
iii)	One-minute power frequency dry withstand voltage (rms)	830 kV	630 kV	830 kV	630 kV
6.	Corona Extinction Voltage	508 kV	320 kV	508 kV	320 kV
7.	Max. radio interference voltage for frequency between 0.5 MHz and 2 MHz	2500 micro-volts at 508 kV rms	1000 micro-volts at 266 kV rms	2500 micro-volts at 508 kV rms	1000 micro-volts at 266 kV rms
8.	Minimum creepage distance for insulator string/ longrod insulators/ outdoor bushings	24800 mm (31 mm/ kV)	13020 mm (31 mm/kV)	24800 mm (31 mm/kV)	13020 mm (31 mm/kV)
9.	Minimum creepage distance for switchyard equipment	20000 mm (25 mm/kV)	10500 mm (25 mm/kV)	20000 mm (25 mm/kV)	10500 mm (25 mm/kV)
10.	Max. fault current	50 kA	63 kA	50 kA	63 kA
11.	Duration of fault	1 sec	1 Sec	1 sec	1 Sec

Sl No	Description of parameters	Extn. of 765/400 kV Jeerat (New) S/s		Extn. of 765 kV Raigarh (Tamnar) S/s
		765 kV System	400 kV System	765 kV System
1.	System operating voltage	765 kV	400 kV	765 kV
2.	Maximum voltage of the system (rms)	800 kV	420 kV	800 kV
3.	Rated frequency	50 Hz	50 Hz	50 Hz
4.	No. of phases	3	3	3
5.	Rated Insulation levels			
i)	Lightning Impulse withstand voltage for (1.2/50 micro sec.) - for Equipment other than Transformer and Reactor - for Insulator String	2100 kVp 2100 kVp	1425 kVp 1550 kVp	2100 kVp 2100 kVp

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Sl No	Description of parameters	Extn. of 765/400 kV Jeerat (New) S/s		Extn. of 765 kV Raigarh (Tamnar) S/s
		765 kV System	400 kV System	765 kV System
ii)	Switching impulse withstand voltage (250/2500 micro sec.) dry and wet	1550 kVp	1050 kVp	1550 kVp
iii)	One-minute power frequency dry withstand voltage (rms)	830 kV	630 kV	830 kV
6.	Corona extinction voltage	508 kV	320 kV	508 kV
7.	Max. radio interference voltage for frequency between 0.5 MHz and 2 MHz	2500 micro-volts at 508 kV rms	1000 micro-volts at 266 kV rms	2500 micro-volts at 508 kV rms
8.	Minimum creepage distance for insulator string/ longrod insulators/ outdoor bushings	24800 mm (31 mm/kV)	13020 mm (31 mm/kV)	24800 mm (31 mm/kV)
9.	Minimum creepage distance for switchyard equipment	20000 mm (25 mm/kV)	10500 mm (25 mm/kV)	20000 mm (25 mm/kV)
10.	Max. fault current	50 kA	63 kA	50 kA
11.	Duration of fault	1 sec	1 Sec	1 sec

B.1.2 Switching Scheme

The switching schemes, as mentioned below, shall be adopted at various voltage levels of substation/switchyard:

Substation	765 kV side	400 kV side
765/400 kV Jamshedpur (New) S/s	One and half breaker	One and half breaker
765/400 kV Raigarh (Kotra)-II S/s	One and half breaker	One and half breaker
Extn. of 765 kV Raigarh (Tamnar) S/s	One and half breaker	--
Extn. of 765/400 kV Jeerat (New) S/s	One and half breaker	One and half breaker

Notes: -

(i) *For one and half breaker switching scheme, any double circuit line consisting of two numbers of feeders and originating from the same transmission or generating switchyard shall not be terminated in one diameter.*

(ii) *Two transformers of same HV rating shall not be connected in the same diameter and similarly, two bus reactors of same HV rating shall also not be connected in the same diameter.*

(iii) *A diameter in one and half breaker scheme is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling 2 (two) numbers of feeders.*

(iv) *Connection arrangement of Switchable Line reactors shall be such that it can be used as Line reactor as well as Bus reactor with suitable NGR bypass arrangement. Further, Spare 1-phase Shunt Reactor unit shall be placed and connected in such a way that the spare unit can be utilized for all the bus and switchable line reactor banks (including future reactor banks) without its physical movement.*

(v) *TSP shall plan connectivity of line and transformer feeders to bus bar in such a way that all power can be evacuated successfully without crossing thermal limit at any point of bus bar.*

(vi) *Space Provision for Future Bus sectionalizer:*

One (1) set of future bus sectionalizer for 400 kV shall comprise 2 Nos. of bus sectionalizer bays with associated Circuit Breakers, Isolators and Current Transformers for both buses.

One (1) set of future bus sectionalizer for 765 kV shall comprise 2 Nos. of bus sectionalizer bays with associated Circuit Breakers, Isolators and Current Transformers for both buses.

(vii) *In one and half breaker scheme, both main bay and tie bay shall be completed for controlling a feeder. Further, all associated interconnection work shall also be in the present scope of TSP.*

(viii) *For AIS type substation, TSP shall keep space provisions for future elements such that interconnection arrangement to the corresponding future bays can be done with overhead AIS type connection without any cable/ GIS duct.*

(ix) ***Augmentation of Jeerat (New) s/s:***

For installation of new 765/400 kV ICT at Jeerat (New) S/s, 01 No. half diameter (consisting of Main and associated Tie Bay) shall be constructed at both 765 kV & 400 kV voltage level under present scope of work.

Further, all associated interconnection work shall also be in the present scope of TSP

(x) ***765/400 kV Jamshedpur (New) S/s***

LILO of Ranchi (New) – Medinipur 765 kV D/C line at Jamshedpur (New) shall be carried

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out such that one circuit of Ranchi (New) – Jamshedpur (New) 765 kV D/C line and one circuit of Jamshedpur (New) – Medinipur 765 kV D/C line are terminated in same diameter. Similarly, second circuit of both line sections shall also be terminated in bays of the same diameter.

LILO of Ranchi (New) – New PPSP 400 kV D/C line at Jamshedpur (New) shall be carried out such that one circuit of Ranchi (New) – Jamshedpur (New) 400 kV D/C line and one circuit of Jamshedpur (New) – New PPSP 400 kV D/C line are terminated in same diameter. Similarly, second circuit of both line sections shall also be terminated in bays of the same diameter.

B.2.0 Substation Equipment and facilities (Voltage level as applicable):

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

Sl. No	Description of bay	765/400 kV Raigarh (Kotra)-II S/s		765/400 kV Jamshedpur (New) S/s	
		765 kV	400 kV	765 kV	400 kV
1.	Bus Bar	4000 A	4000 A	4000 A	4000 A
2.	Line bay	3150 A	3150 A	3150 A	3150 A
3.	ICT bay	3150 A	3150 A	3150 A	3150 A
4.	Reactor Bay	3150 A	3150 A	3150 A	3150 A

Sl. No	Description of bay	Extn. of 765/400 kV Jeerat (New) S/s		Extn. of 765 kV Raigarh (Tamnar) S/s
		765 kV	400 kV	765 kV
1.	Bus Bar	4000 A	4000 A	4000 A
2.	Line bay	--	--	3150 A
3.	ICT bay	3150 A	3150 A	--

B.2.1 (765/√3)/ (400/√3)/ 33 kV, Single Phase Autotransformer

500 MVA, (765/√3)/ (400/√3)/ 33kV, single phase Transformer (including arrangement for 3-phase bank formation of 1500 MVA) shall conform to CEA's "Standard Specifications and Technical Parameters for Transformers and Reactors (66 kV and above)" available on CEA website.

Spare 1-phase Transformer unit shall be placed and connected in such a way that in case of fault in any unit of any of the transformer banks (including for future transformer banks) can

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be replaced by spare unit without physically moving it.

B.2.2 (765/√3) kV, Single Phase Shunt Reactor

110 MVAr, 765/√3 kV, Single Phase Reactor (including arrangement for 3-phase bank formation of 330 MVAr) shall conform to CEA's "Standard Specifications and Technical Parameters for Transformers and Reactors (66 kV and above Voltage class)" available on CEA website and as amended up to date.

80 MVAr, 765/√3 kV, Single Phase Reactor (including arrangement for 3-phase bank formation of 240 MVAr) shall conform to CEA's "Standard Specifications and Technical Parameters for Transformers and Reactors (66 kV and above Voltage class)" available on CEA website and as amended up to date.

Spare 1-phase Shunt Reactor unit shall be placed and connected in such a way that the spare unit can be utilized for all the bus and switchable line reactor banks (including for future reactor banks) without its physical movement.

Neutral Grounding Reactor and Surge Arrester for 765 kV Switchable Line Reactors (as applicable):

The neutral of the switchable line reactors (wherever provided) shall be grounded through adequately rated Neutral Grounding Reactors (NGR) to facilitate single phase auto-reclosure, provided that the NGR shall be provided with suitable bypass arrangement so that the switchable line reactor can be used as Bus Reactor as and when required. The neutral of bus reactor shall be solidly grounded.

NGR shall be oil filled or dry type air core for outdoor application. NGR shall conform to CEA's "Standard Specifications and Technical Parameters of Transformers and Reactors (66 kV and above Voltage Class)" as amended up to date. Technical parameters of NGR shall be as specified in Annexure-A of above-mentioned document.

The surge arresters (rated voltage of arrester in co-ordination with ohmic value of NGR shall be decided by the TSP) shall be provided and physically located between the neutral of shunt reactor (brought out at 145 kV class bushing) and neutral grounding reactor. The surge arresters shall be of heavy duty station class gapless Metal oxide (ZnO) type conforming in general to IEC-60099-4. Surge Arresters shall be hermetically sealed units, of self-supporting construction, suitable for mounting on structures.

The Ohmic value of NGR for each circuit at **Jamshedpur (New) S/s** end of 765 kV

Raigarh (Tamnar) – Jamshedpur (New) D/c line shall be **350 Ohm.**

The Ohmic value of NGR for each circuit at **Raigarh (Tamnar) S/s** end of 765 kV

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Raigarh (Tamnar) – Jamshedpur (New) D/c line shall be **350 Ohm.**

The Ohmic value of NGR for each circuit at **Raigarh (Kotra)-II S/s** end of 765 kV

Raigarh (Kotra)-II – Jharsuguda (Sec-A) D/c section (after LILO) shall be **500 Ohm.**

B.2.3 420 kV, 3-phase, Shunt Reactor

125 MVAr, 420 kV, 3-Phase Reactor shall conform to CEA's "Standard Specifications and Technical Parameters for Transformers and Reactors (66 kV and above voltage class)" as amended upto date available on CEA website.

B.2.4 765 kV & 400 kV AIS Substation equipment (as applicable)

B.2.4.1 Circuit Breakers (AIS)

The circuit breakers and accessories shall conform to IEC: 62271-100, IEC: 62271-1 and shall be of SF6 Type. The circuit breakers shall be of class C2-M2 (as per IEC) with regard to restrike probability during capacitive current breaking and mechanical endurance. The rated break time shall not exceed 40 ms for 765 kV and 400 kV circuit breakers. 765 kV and 400 kV Circuit breakers shall be provided with single phase and three phase auto reclosing. Each breaker would have two sets of trip circuits which would be connected to separate DC supplies for greater reliability. The Circuit breakers controlling 765 kV lines shall be provided either with pre-insertion closing resistor of about 450 ohms maximum with 9 ms insertion time or with Controlled Switching Device. The Circuit breakers controlling 400 kV lines shall be provided either with pre insertion closing resistor of about 400 ohms with 8 ms insertion time or Controlled Switching Device (CSD) for lines longer than 200 km length. The short line fault capacity shall be same as the rated capacity and this is proposed to be achieved without use of opening resistors. The controlled switching device shall be provided in Circuit breakers of switchable line reactor bay and in Main and Tie bay circuit breakers of line with non-switchable line reactors, Bus Reactors and Transformers of voltage class 400 kV and above.

B.2.4.2 Isolators (AIS)

The Isolators shall comply with IEC 62271-102 in general.765 kV Isolator design shall be double break or vertical break or knee-type. 400 kV Isolators shall be double break type. All Isolators and earth switches shall be motor operated. Earth switches shall be provided at various locations to facilitate maintenance. Isolator rated for 400 kV shall be of extended mechanical endurance class - M2 as per IEC-62271-102. Main blades and earth blades shall be interlocked and interlock shall be fail safe type. 765 kV and 400 kV earth switch for line isolator shall be suitable for induced current switching duty as defined for Class-B.

B.2.4.3 Current Transformers (AIS)

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Current Transformers shall comply with IEC 61869 in general. All ratios shall be obtained by secondary taps only. Generally, Current Transformers (CT) for 765 kV and 400 kV shall have six cores (four for protection and two for metering). The burden and knee point voltage shall be in accordance with the requirements of the system including possible feeds for telemetry. The Accuracy class for the protection core shall be PX and for the metering core it shall be 0.2S. The rated burden of cores shall be closer to the maximum burden requirement of metering and protection system (not more than 20 VA for metering core) for better sensitivity and accuracy. The instrument security factor shall be less than five (5) for CTs upto 400 kV and less than ten (10) for CTs of 765 kV voltage class.

B.2.4.4 Capacitive Voltage Transformers (AIS)

Capacitive Voltage transformers shall comply with IEC 61869 in general. These shall have three secondaries out of which two shall be used for protection and one for metering. Accuracy class for protection cores shall be 3P and for metering core shall be 0.2. The Capacitive voltage transformers on lines shall be suitable for Carrier Coupling. The Capacitance of CVT for 400 kV shall be of 4400/8800 pF depending on PLCC requirements whereas the Capacitance of CVT for 765 kV shall be 8800 pF. The rated burden of cores shall be closer to the maximum burden requirement of metering and protection system (not more than 50 VA for metering core) for better sensitivity and accuracy.

B.2.4.5 Surge Arresters (AIS)

624 kV and 336 kV Station High (SH) duty gapless type Surge Arresters with thermal energy (Wth) of minimum 13 kJ/kV and 12 kJ/kV conforming to IEC 60099-4 in general shall be provided for 800 kV and 420 kV systems respectively. Other characteristics of Surge arrester shall be chosen in accordance with system requirements. Surge Arresters shall be provided at line entrances, near transformers and reactor so as to achieve proper insulation coordination. Surge Arresters shall be provided with porcelain/ polymer housing fitted with pressure relief devices. A leakage current monitor with surge counter shall be provided with each surge arrester.

B.2.5 Protection Relaying and Control System

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 and should have interoperability during integration of numerical relays to communicate over IEC61850 protocol with RTU/SAS/IEDs of different OEMs. All numerical relays shall have built in disturbance recording feature.

The protection circuits and relays of the transformer and reactor shall be electrically and

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physically segregated into two groups each being independent and capable of providing uninterrupted protection even in the event of one of the protection groups failing, to obtain redundancy, and to take protection systems out for maintenance while the equipment remains in service.

a) Transmission Lines Protection

765 kV & 400 kV line shall have Main-I numerical three zone distance protection scheme with carrier aided inter-tripping feature. 765 kV & 400 kV line shall also have Main-II numerical distance protection scheme like Main-I but from different make that of Main-I. The Main-I and Main-II protection relays of same make may be provided only if they are of different hardware and manufacturing platform or different principle of operation.

However, Line Current Differential Relay (with back up distance protection feature) as Main–I and Main-II shall be considered at both ends for short lines (line length below 30 km) having Fiber Optic Communication Link. Differential relay at remote end shall be provided by the TSP. The associated power and control cabling and integration with SAS at remote end shall be provided by respective bay owners.

Further, all 765 kV & 400 kV 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.

All 765 kV and 400 kV lines shall also be provided with two stage over voltage protection. The over voltage protection and distance to fault locator may be provided as in-built feature of Main-I and Main-II protection relays. Auto reclose as built-in function of Bay Control Unit (BCU) is also acceptable.

The Main-I and Main-II protection relays shall be fed from separate DC sources and shall be mounted in separate panels.

For 765 kV & 400 kV transmission line, directional IDMT earth fault relay should be provided as standalone unit or in-built feature of Main-I and Main -II feature.

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.

b) Auto Transformer Protection

These shall have the following protections:

i) Numerical Differential Protection
ii) Numerical Restricted Earth Fault Protection
iii) Numerical Back-up Over-Current and Earth Fault Protection on High Voltage (HV) and Intermediate Voltage (IV) side

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iv) Numerical Over Fluxing Protection on HV and IV side
v) Numerical Overload Alarm

Further, Numerical Back-up Over-Current and Earth Fault Protection on HV and IV side of auto-transformer shall not be combined with other protective functions in the main relays and shall be independent relays. Besides these, power transformers shall also be provided with Buchholz relay, Magnetic Oil Gauge (MOG) with low oil level alarm, protection against high oil and winding temperature and pressure relief device etc.

Suitable monitoring, control (operation of associated circuit breaker and isolator) and protection for LT auxiliary transformer connected to tertiary winding of auto-transformer for the purpose of auxiliary supply shall be provided. The over current and other necessary protection shall be provided for the auxiliary transformer. These protection and control may be provided as built in feature either in the bay controller to be provided for the auxiliary system or in the control and protection IEDs to be provided for autotransformer.

c) 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 Buchholz relay, Magnetic Oil Gauge (MOG) with low oil level alarm, protection against oil and winding temperatures and pressure relief device, etc.

d) Bus bar Protection

The high-speed low impedance type 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 765 kV and 400 kV. Duplicated bus bar protection is envisaged for 765 kV and 400 kV 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 complete bus bar protection for present as well as envisaged future bays i.e. input / output modules for future bays for the bus section under present scope shall also be provided.

Bus Bar protection system for new substation shall be de-centralized (distributed) type.

In case, the bus section is provided, then each side of bus section shall have separate set of bus bar protection schemes.

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Peripheral Units (PUs) shall be provided by the respective bay owners.

For existing substations, the existing bus bar protection shall be augmented as per requirement.

e) Local Breaker Back up Protection

This shall be provided for each 765 kV and 400 kV circuit breakers and will be connected to de-energize the affected stuck breaker from both sides.

Notes:

1. *LBB and REF relays shall be provided separately from transformer differential relay.*
2. *LBB relay may also be provided as built-in protection function of distributed bus bar protection scheme; however, in such case separate LBB relay shall be provided for tie bays (in case of One and Half breaker scheme).*
3. *Over fluxing and overload protection can be provided as built-in feature of differential relay.*
4. *In 765 kV and 400 kV switchyard, if spare bay of half diameter is identified as future, Tie CB relay panel shall be with Auto-reclosure feature.*

B.2.6 Substation Automation System

a) 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 220 kV and above. All Bay Control Units as well as protection units are normally connected through an Optical fibre 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.

The functions of control, annunciation, disturbance recording, event logging and measurement of electrical parameters shall be integrated in the Substation Automation System.

At the new substations, the Substation Automation System (SAS) shall be suitable for the operation and monitoring of the complete substation including proposed future bays/elements.

In the existing substations with a Substation Automation System (SAS), augmentation of existing SAS shall be done for bays under the present scope.

In the existing Substations where Substation automation is not provided, control functions

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shall be done through control panels.

Necessary gateway and modems (as required) shall be provided to send data to RLDC/SLDC as per their requirement and shall be provisioned with 2+2 redundancy i.e. 2 channels for Main Control Centre and 2 channels for Backup Control Centre. In order to meet this requirement, suitable redundancy at port and card level need to be ensured by the TSP to avoid any single point of failure which may lead to interruption in real-time grid operation. Accordingly, all the hardware for communication services of station as stated above shall support dual redundancy for data transmission of station to respective main and backup RLDCs. Any augmentation work at RLDC/SLDC is excluded from TSP's scope. However, all the configuration work at substation end required to send data to RLDC/SLDC shall be in the scope of TSP.

b) Time Synchronisation Equipment

Time Synchronization Equipment complete in all respect including antenna, cable and processing equipment required to receive time signal through GPS/NavIC or from National Physical Laboratory (NPL) through INSAT shall be provided at new substations. This equipment shall be used to synchronize SAS and IEDs etc.

B.3.0 Substation Support Facilities

Certain facilities required for the operation and maintenance of substations as described below shall be provided at the new substation. In existing substation, these facilities have already been provided and will be extended/ augmented as per requirement.

B.3.1 AC and DC power supplies

For catering the requirements of three phase and single phase AC supply and DC supply for various substation equipment (for present and future scope), the following arrangement is envisaged : -

i) For LT Supply at each new Substation, two (2) Nos. of LT Transformers (minimum 800 kVA for substations with highest voltage rating as 765 kV) shall be provided which shall be fed from two independent sources as per the CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007.

Metering arrangement with Special Energy Meters (SEMs) shall be provided by TSP at 33 kV tertiary of Transformer for drawing auxiliary supply at new substation. Such SEMs shall be provided by CTU at the cost of the TSP. Accounting of such energy drawn by the TSP shall be done by RLDC/RPC as part of Regional Energy Accounting.

Additionally, Active Energy Meters may be provided at the same point in the 33 kV tertiary

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of Transformer by local SEB/DISCOM for energy accounting.

ii) 2 sets of 220V battery banks for control and protection and 2 sets of 48 V battery banks for PLCC/ communication equipment shall be provided at each new Substation. Each battery bank shall have a float-cum-boost charger.

At new substation, sizing of 220 V battery and battery charger shall be done based on the number of bays specified (including future bays) as per CEA Regulations and relevant IS. 2 sets of 48 V battery banks for PLCC and communication equipment for present and future scope shall be provided at each new Substation with at least 10-hour battery backup and extended backup, if required.

iii) Suitable AC and DC distribution boards and associated LT Switchgear shall be provided at new substation.

For new substation, following switch boards shall be considered with duplicate supply with bus coupler/ sectionalizer and duplicate outgoing feeders except for Emergency lighting distribution board which shall have only one incoming feeder:

a) 415 V Main Switchboard – 1 No.
b) AC distribution board – 1 No.
c) Main lighting distribution board – 1 No.
d) Emergency lighting distribution board – 1 No.
e) 220 Volt DC distribution board – 2 Nos.
f) 48 Volt DC distribution board – 2 Nos.

Sizing of LT Switchgear shall be suitable to cater the requirement for all present and future bays. AC and DC distribution boards shall have modules for all the feeders (including future as specified).

iv) At new Substation, one No. of DG set (minimum 500 kVA for substations with highest voltage rating as 765 kV) shall be provided for emergency applications.

v) For substation extensions, existing facilities shall be augmented as required.

B.3.2 Fire Fighting System

Fire-fighting system for substation including Transformer and Reactor shall conform to CEA (Measures Relating to Safety and Electric Supply) Regulations, 2023 as amended from time to time.

Further, adequate water hydrants and portable fire extinguishers shall be provided in the substations. The main header of the firefighting system shall be suitable for extension to bays

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covered under the future scope; necessary piping interface in this regard shall be provided.

At existing substations, the fire-fighting systems as available shall be extended to meet the additional requirements.

B.3.3 Oil evacuating, Filtering, Testing and 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 storage tanks of adequate capacities for storage of transformer oil would be provided.

Online Transformer Oil Drying Out System shall be provided in line with the provisions of Standard Specification and Technical Parameters for Transformers and Reactors (66 kV and above Voltage Class) as amended up to date available on CEA website.

B.3.4 Illumination

Normal and emergency AC and DC illumination shall be provided adequately in the control room and other buildings of the substation. The switchyard shall also be provided with adequate illumination.

The lighting of the entire control room building, fire-fighting pump house, other building (if any) and switchyard shall be done by LED based low power consumption luminaries.

B.3.5 Control Room

For the new substation, substation control room shall be provided to house substation work stations for station level control (SAS) along with its peripheral and recording equipment, AC and DC distribution boards, DC batteries and associated battery chargers, Fire Protection panels, Telecommunication panels and other panels as per requirements. Air conditioning shall be provided in the building as functional requirements. Main cable trenches from the control room shall have adequate space provision for laying of cables from the control room for all the future bays.

At existing substations, the adequacy of size of control room shall be ascertained and the same shall be augmented as per requirement.

B.3.6 Control Concept

All the EHV circuit breakers in substation/switching stations shall be controlled and synchronized from the switchyard control room/remote control center. All the isolators shall have control from remote/local whereas the earth switches shall have local control only.

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B.3.7 Visual Monitoring System (VMS) for watch and ward of substation premises:

Visual Monitoring System for effective watch and ward of substation premises shall cover all the transformers and reactors, all other major AIS Equipment (such as CB, isolators, CT, CVT, SA etc. as applicable), GIS bays, panel room, all the gates of switchyard and all entry and exit points of control room building and accordingly the location of cameras shall be decided. In addition to the gates of the switchyard, the cameras shall also be located around the boundaries at suitable locations. The camera shall be high definition color CCD camera with night vision feature. The VMS data partly/completely shall be recorded (minimum for 15 days) at least @25fps (or better) and stored on network video recorder. The system shall use video signals from various cameras installed at different locations, process them for viewing on workstations/monitors in the control room and simultaneously record all the cameras. The VMS data should go only to the intended personnel/facility and not to the remote server of the Camera (VMS supplier).

Mouse/keyboard controllers shall be used for pan, tilt, zoom and other functions of the desired camera. The Visual Monitoring System shall have provision of WAN connectivity for remote monitoring.

All camera recordings shall have Camera ID and location/area of recording as well as date/time stamp. The equipment should generally conform to Electromagnetic compatibility requirement for outdoor equipment in EHV substation.

Advisory on deployment of CCTV issued by Ministry of Electronics and Information Technology (MEITY) shall be followed.

At existing substations, the Visual Monitoring System if available shall be augmented as per existing or better specification as required.

B.4.0 General Facilities

a) Line Gantry/Towers are envisaged for bays under the present scope only. However, for adjacent future line bay, gantry/tower shall be designed for extension (considering Hexa conductors for 765 kV and Quad conductors 400 kV future lines) wherever applicable.

b) Bay extension works at existing substation shall be executed by TSP in accordance with the requirements/provisions mentioned above. However, interface points shall be considered keeping in view the existing design/arrangement at the substation.

c) TSP has to arrange for construction power and water on its own.

d) All outdoor steel structures including anchor/foundation bolts shall be fully galvanized. The weight of the zinc coating shall be at least 610 gm/m^2 and 900 gm/m^2 for coastal/ creek regions (if applicable).

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e) In 765 kV and 400 kV switchyard, if spare bay of half diameter is identified as future, all the equipment for Tie and Future Bay shall be designed considering the current rating of line bay i.e. 3150 A.

f) Boundary wall shall be brick masonry wall with RCC frame or Stone masonry wall or Precast RCC wall under present scope along the property line of complete substation area including future switchyard area to prevent encroachment and unauthorized access. Minimum height of the boundary wall shall be of 1.8 m from Finished Ground Level (FGL).

g) All electrical equipment shall be installed above the Highest Flood Level (HFL) and where such equipment is not possible to be installed above Highest Flood Level, it shall be ensured that there is no seepage or leakage or logging of water.

h) As per CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2022 and CEA Manual on Transmissions Planning criteria 2023, line approaching substation shall normally be perpendicular to the substation boundary for a stretch of 2-3 km. Accordingly, TSP shall ensure that line terminations at substations are arranged in a manner to avoid hindrance to future line terminations at the substations.

i) TSP shall finalize the substation site/layout such that the corridor for the termination of lines, including future lines at the substation, can be accommodated without any constraints. Accordingly, forests, large water bodies, or hills adjacent to the substation boundary should be avoided.

B.5.0 EXTENSION OF EXISTING SUBSTATION

The following drawings/details of existing substation is attached with the RFP documents for further engineering by the bidder.

Sl. No.	Drawing Title	Drawing No./Details	Rev. No.
A.	**Raigarh (Tamnar) S/s**		
1.0	Single Line Diagram	CG/321RG/EL/101	Rev-0
2.0	General Arrangement	C/ENGG-SS/WR/RAIGARH POOLING (T)/EXTN./GA/01	Rev. 00
3.0	Earthmat Layout	CG/321RG/EL/103	Rev-0
4.0	Visual Monitoring System	Nicevision Software	--
5.0	Bus Bar Protection	Make: SIEMENS Model: 7SS522	--
6.0	Substation Automation System (SAS)	Make: SIEMENS Model: SICAM PAS	--
B.1	**Raigarh (Kotra)-II S/s**		

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1.0	Single Line Diagram	C/CTU/Kotra II/01	--
B.2	**Jamshedpur s/s**		
1.0	Single Line Diagram	C/CTU/Jamshedpur /01	--
C.	**Jeerat (New) S/s**		
1.0	Single Line Diagram	C/ENGG/TBCB/JEERAT/765 KV/EXTN/	REV-0
2.0	General Arrangement	TB-0-395-316-013	REV-02
3.0	Earthmat Layout	TB-0-395-316-005	REV-00
4.0	Visual Monitoring System	--	--
5.0	Bus Bar Protection	Make : NR Model, PCS-915 M-140134	--
6.0	Substation Automation System (SAS)	Make : NR Model, PCS 9700	--

Bidders shall follow the RfP for scope of work. Actual site conditions may be different due to other schemes being executed or subsequent revisions by the developer. Thus, bidders are advised to visit the substation sites and acquaint themselves for details such as:

(i) Actual site conditions, Layout, Topography
(ii) Infrastructure such as roads, cable trench, drainage
(iii) Space availability in existing control room and LT panel room
(iv) Soil investigation
(v) Fire hydrant layout
(vi) SAS architecture and IO list
(vii) Boundary
(viii) Design philosophy etc.

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SPECIFIC TECHNICAL REQUIREMENTS FOR COMMUNICATION

The communication requirement shall be in accordance to CEA (Technical Standards for Communication System in Power System Operations) Regulations, 2020, CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022, CERC (Communication System for inter-State transmission of electricity) Regulations, 2017, CEA (Cyber Security in Power Sector) Guidelines, 2021, CEA Guidelines on Unified Philosophy for placement of PMUs in Indian Grid, March 2025 and all above documents as amended from time to time.

The communication services viz. SCADA, AGC (wherever applicable), VoIP, AMR and PMU have been identified as critical services and therefore shall be provisioned with 2+2 redundancy i.e. 2 channels for Main Control Centre and 2 channels for Backup Control Centre. In order to meet this requirement, suitable redundancy at port and card level need to be ensured by the TSP to avoid any single point of failure which may lead to interruption in real-time grid operation.

PMU to PDC communication (wherever required) shall be through 2 channels to the PDC (main) as there is no backup PDC at present.

Accordingly, all the hardware for communication services of station as stated above shall support dual redundancy for data transmission of station to respective main and backup RLDCs.

The complete ISTS communication system commissioned by TSP under the RFP shall be the asset of ISTS and shall be available for usage of ISTS requirements as suggested by CTU from time to time.

In order to meet the requirement for grid management and operation of substations, Transmission Service Provider (TSP) shall provide the following:

C.1.0 Establishment of 2x1500 MVA, 765/400 kV at Jamshedpur (New) in Jharkhand

(i) TSP shall supply, install & commission one or more FODP of minimum 288 Fiber capacity along with panel in the control room. TSP shall provide required approach Cables (48F/24F) with all associated hardware fittings from gantry towers to Bay kiosk/Control Room and terminate them in substation FODP for all the incoming lines envisaged under the present scope.

(ii) TSP shall supply, install & commission One or more STM-16 (FOTE) equipment along with panel/s supporting minimum eight (8) MSP (Multiplex Section Protection – 1+1) STM-16 directions along with necessary interfaces/amplifiers at control room/Bay kiosk and required optical interfaces/amplifiers at **Ranchi (New) S/s, Medinipur S/s, Balasore S/s (upcoming OPTCL S/s), New PPSP, Raigarh (Tamnar) S/s** to meet the voice and data communication requirement among **Ranchi (New) S/s, Medinipur S/s, New PPSP, Balasore S/s (upcoming OPTCL S/s), Raigarh (Tamnar) S/s and Jamshedpur (New) S/s**. These directions shall exclude protected (1+1) local patching among equipment (if any). The suitable DC Power Supply and backup to be provided for communication equipment.

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(iii) FOTE & FODP can be accommodated in the same panel to optimize space.

(iv) The new communication equipment under the present scope shall be compatible for integration with existing regional level centralized NMS. The local configuration of the new communication equipment shall be the responsibility of TSP. The configuration work in the existing centralized NMS for integration of new Communication equipment shall be done by Regional ULDC Team, however all the necessary support in this regard shall be ensured by TSP.

(v) TSP shall deploy Cyber Security System in compliance with CEA (Cyber Security in Power Sector) Guidelines, 2021 and CEA (Cyber Security in Power Sector) Regulation, from its date of publication/ notification and their amendments thereof.

(vi) The maintenance of all the communication equipment and software thereof including FOTE, FODP, PMU, approach cable, DCPS along with Battery Bank & Cyber Security System etc. shall be the responsibility of TSP

C.2.0 Establishment of 765/400 kV Raigarh (Kotra)-II S/s

(i) TSP shall supply, install & commission one or more FODP with minimum 216 Fiber capacity with panel and required approach Cables (48F/24F) with all associated hardware fittings from gantry towers to Control Room for all the incoming lines envisaged under the present scope.

(ii) TSP shall supply, install & commission One or more STM-16 (FOTE) equipment along with panel/s supporting minimum six (6) MSP (Multiplex Section Protection – 1+1)STM-16 directions along with necessary interfaces/amplifiers at the control room and required optical interfaces/amplifiers at **Raigarh (Tamnar) S/s, Dharamjaygarh S/s, Jharsuguda S/s, Raigarh TPS (APL)** to meet the voice and data communication requirement among **Raigarh (Tamnar) S/s, Dharamjaygarh S/s, Jharsuguda S/s, Raigarh TPS (APL) and Raigarh (Kotra) - II S/s** . These directions shall exclude protected (1+1) local patching among equipment (if any). The suitable DC Power Supply and backup to be provided for communication equipment.

(iii) FOTE & FODP can be accommodated in the same panel to optimize space.

(iv) The new communication equipment under the present scope shall be compatible for integration with existing regional level centralized NMS. The local configuration of the new communication equipment shall be the responsibility of TSP. The configuration work in the existing centralized NMS for integration of new Communication equipment shall be done by Regional ULDC Team, however all the necessary support in this regard shall be ensured by TSP.

(v) TSP shall deploy Cyber Security System in compliance with CEA (Cyber Security in Power Sector) Guidelines, 2021 and CEA (Cyber Security in Power Sector) Regulation, from its date of publication/ notification and their amendments thereof.

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(vi) The maintenance of all the communication equipment and software thereof including FOTE, FODP, PMU, approach cable, DCPS along with Battery Bank & Cyber Security System etc. shall be the responsibility of TSP.

C.3.0 OPGW Requirement for Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh (Kotra) – Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line (Bypass of two lines to form one line)

(i) TSP shall supply, install & commission One (1) no. OPGW cable containing 48 Fibers (48F) on one E/W peak and conventional earth wire on other E/W peak on the bypass section of Raigarh (Kotra) - Dharamjaygarh 765 kV D/c line

(ii) The TSP shall install OPGW on the bypass section with all associated hardware including Vibration Dampers, mid-way & bypass Joint Boxes (called **OPGW Hardware** hereafter) and shall integrate with the OPGW of 765 kV D/c Raigarh (Tamnar) – Raigarh (Kotra) line and 765 kV D/c line Raigarh (Tamnar) - Dharamjaygarh to form the Raigarh (Kotra) - Dharamjaygarh Optic Fiber link.

(iii) TSP shall provide required interfaces/ amplifiers at **Raigarh (Kotra) S/s and Dharamjaygarh S/s** to meet the voice and data communication requirement between **Raigarh (Kotra) S/s and Dharamjaygarh S/s.**

(iv) The total transmission line length including bypass portion, Raigarh (Tamnar) – Dharamjaygarh, Raigarh (Tamnar) – Raigarh (Kotra) and bypass section is 195 kms. (approx.) (137 kms of Raigarh (Tamnar) - Dharamjaygarh + 10 kms for bypass section + 48 kms of Raigarh (Tamnar) – Raigarh (Kotra) line) where repeater may not be required to meet the link budget requirement of Raigarh (Tamnar) - Dharamjaygarh link. However, if after survey additional repeater shall be required to meet the link budget requirement of Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line, the same shall be provided by TSP.

(v) TSP shall finalize the location of the repeater station depending upon the actual site conditions. Further TSP shall comply with the requirements mentioned as per **Appendix-F.1**.

(vi) Maintenance of OPGW Cable & OPGW Hardware etc. shall be the responsibility of TSP.

C.4.0 LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s

(i) On LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s, TSP shall supply, install & commission OPGW and earthwire as per Tower Configurations:

a) For Multi Circuit Tower Configuration: Two (2) no. OPGW cable containing 24 Fibres (24F) to be installed & commissioned by the TSP on both the Earthwire peaks.

b) For Double Circuit Tower configuration: (for both Loop In and Loop Out portion): One (1) no. OPGW cable containing 24 Fibres (24F) on one earthwire peak & conventional earthwire on other E/W peak for both Loop In and Loop Out Lines.

(ii) The TSP shall install OPGW cables from gantry of Raigarh (Kotra)-II S/s up to the LILO towers with all associated hardware including Vibration Dampers, LILO tower, mid-way &

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gantry Joint Boxes etc. (called OPGW Hardware hereafter) and finally terminate in Joint Boxes/ FODP at Raigarh (Kotra)-II.

(iii) TSP to provide suitable optical interfaces/equipment at Dharamjaygarh, Jharsuguda station FOTE to meet link budget requirement for connectivity with Raigarh (Kotra)-II Station if required. The transmission line length of LILO portion is 40 kms (approx.), if after survey additional repeater shall be required to meet the link budget requirement of Jharsuguda-Raigarh (Kotra)-II & Raigarh (Kotra)-II - Dharamjaygarh link, the same shall be provided by TSP.

(iv) TSP shall finalize the location of repeater station depending upon the actual site conditions. Further TSP shall comply with the requirements mentioned as per Appendix-F.1.

(v) Maintenance of OPGW Cable, OPGW Hardware & repeater equipment & items associated with repeater shelter shall be the responsibility of TSP.

C.5.0 Raigarh (Tamnar) – Raigarh (Kotra)-II S/s 765 kV D/c line (Existing Bay at Raigarh (Tamnar)

(i) On Raigarh (Tamnar) – Raigarh (Kotra)-II S/s 765kV D/c line, TSP shall supply, install & commission One (1) no. OPGW cable containing 48 Fibers (48F) on one E/W peak and conventional earth wire on other E/W peak. The TSP shall install this OPGW from gantry of **Raigarh (Tamnar) S/s** up to the gantry of **Raigarh (Kotra) – II** with all associated hardware including Vibration Dampers, mid-way & gantry Joint Boxes etc. (called **OPGW Hardware** hereafter) and finally terminate in Joint Boxes/ FODP at end Substations.

(ii) TSP shall supply, install & commission one or more FODP with minimum 96 Fiber capacity with panel at **Raigarh (Tamnar)** and required approach cable (48F each) with all associated hardware fittings from gantry tower to Control Room for all the incoming lines envisaged under the present scope.

(iii) The transmission line length is **50 kms (approx.),** where repeater may not be required to meet the link budget requirement of **Raigarh (Tamnar) - Raigarh (Kotra) – II** link.

(iv) Maintenance of OPGW Cable & OPGW Hardware etc. shall be the responsibility of TSP.

C.6.0 Raigarh (Tamnar) - Jamshedpur (New) 765 kV D/c line

(i) On Raigarh (Tamnar) - Jamshedpur (New) S/s 765 kV D/c line, TSP shall supply, install & commission One (1) no. OPGW cable containing 48 Fibers (48F) on one E/W peak and conventional earth wire on other E/W peak. The TSP shall install this OPGW from gantry of **Raigarh (Tamnar) S/s** up to the gantry of **Jamshedpur (New)** with all associated hardware including Vibration Dampers, mid-way & gantry Joint Boxes (called **OPGW Hardware** hereafter) and finally terminate in Joint Boxes/ FODP at end Substations.

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(ii) TSP shall supply, install & commission required approach cable (48F each) with all associated hardware fittings from gantry tower to Control Room for all the incoming lines envisaged under the present scope.

(iii) The transmission line length is **315 kms (approx.),** where repeater shall be required to meet the link budget requirement of **Raigarh (Tamnar) - Jamshedpur (New)** link.

(iv) TSP shall finalize the location of repeater station depending upon the actual site conditions. Further, TSP shall comply with the requirements mentioned as per **Appendix-F.1**.

(v) Maintenance of OPGW Cable & OPGW Hardware etc. shall be the responsibility of TSP.

C.7.0 LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New) S/s

(i) On LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New) S/s, TSP shall supply, install & commission OPGW and earthwire as per Tower Configurations:
   a) For Multi Circuit Tower Configuration: Two (2) no. OPGW cable containing 24 Fibres (24F) to be installed & commissioned by the TSP on both the Earthwire peaks.
   b) For Double Circuit Tower configuration: (for both Loop In and Loop Out portion): One (1) no. OPGW cable containing 24 Fibres (24F) on one earthwire peak & conventional earthwire on other E/W peak for both Loop In and Loop Out Lines.

(ii) The TSP shall install OPGW cables from gantry of Jamshedpur (New) S/s up to the LILO towers with all associated hardware including Vibration Dampers, LILO tower, mid-way & gantry Joint Boxes etc. (called OPGW Hardware hereafter) and finally terminate in Joint Boxes/ FODP at Jamshedpur (New) S/s.

(iii) TSP to provide suitable optical interfaces/equipment at Ranchi (New), Medinipur station FOTE to meet link budget requirement for connectivity with Jamshedpur (New) S/s if required. The transmission line length of LILO portion is 51 km & 49 km (approx.), if after survey additional repeater shall be required to meet the link budget requirement of Ranchi (New)-Jamshedpur (New) S/s & Jamshedpur (New) S/s -Medinipur S/s link, the same shall be provided by TSP.

(iv) TSP shall finalize the location of the repeater station depending upon the actual site conditions. Further TSP shall comply with the requirements mentioned as per **Appendix-F.1**.

(v) Maintenance of OPGW Cable, OPGW Hardware & repeater equipment & items associated with repeater shelter shall be the responsibility of TSP.

C.8.0 LILO of Ranchi (New) – New PPSP 400 Kv D/c line at Jamshedpur (New) S/s

(i) On LILO of Ranchi (New) – New PPSP 765 kV D/c line at Jamshedpur (New) S/s, TSP shall supply, install & commission OPGW and earthwire as per Tower Configurations:

a) For Multi Circuit Tower Configuration: Two (2) no. OPGW cable containing 24 Fibres (24F) to be installed & commissioned by the TSP on both the Earthwire peaks.
b) For Double Circuit Tower configuration: (for both Loop In and Loop Out portion): One (1) no. OPGW cable containing 24 Fibres (24F) on one earthwire peak & conventional earthwire on other E/W peak for both Loop In and Loop Out Lines.

(ii) The TSP shall install OPGW cables from gantry of Jamshedpur (New) S/s up to the LILO towers with all associated hardware including Vibration Dampers, LILO tower, mid-way & gantry Joint Boxes etc. (called OPGW Hardware hereafter) and finally terminate in Joint Boxes/ FODP at Jamshedpur (New) S/s.

(iii) TSP shall supply, install & commission required FODP at New PPSP S/s and Ranchi (New) S/s) along with panel in the Bay kiosk/control room. TSP shall provide required approach cables (24F each) at New PPSP S/s and Ranchi (New S/s) with all associated hardware fittings from gantry tower to Bay kiosk/Control Room and terminate them in substation FODP for all the incoming lines envisaged under the present scope.

(iv) TSP shall supply, install & commission One or more STM-16 (FOTE) equipment alongwith panel/s supporting minimum three MSP (Multiplex Section Protection – 1+1) STM-16 directions alongwith necessary interfaces/amplifiers at the bay kiosk/control room at New PPSP S/s to meet the voice and data communication requirement between Jamshedpur (New) S/s and New PPSP. These directions shall exclude protected (1+1) local patching among equipment (if any). The suitable DC Power Supply and backup to be provided for communication equipment. TSP to provide suitable optical interfaces/amplifiers/equipment at Ranchi (New) FOTE to meet link budget requirement for connectivity with Jamshedpur (New) S/s Station if required. The transmission line length of LILO portion is 63 kms (approx..), if after survey additional repeater shall be required to meet the link budget requirement of Ranchi (New)- Jamshedpur (New) S/s & Jamshedpur (New) S/s – New PPSP S/s link, the same shall be provided by TSP.

(v) TSP shall finalize the location of the repeater station depending upon the actual site conditions. Further TSP shall comply with the requirements mentioned as per **Appendix-F.1**.

(vi) FOTE & FODP Equipment can be accommodated in same panel to optimize space.

(vii) The new communication equipment under the present scope shall be compatible for integration with existing regional level centralized NMS. The local configuration of the new communication equipment shall be the responsibility of TSP. The configuration work in the existing centralized NMS for integration of new Communication equipment shall be done by Regional ULDC Team, however all the necessary support in this regard shall be ensured by TSP.

(viii) The maintenance of all the communication equipment and software thereof including FOTE, FODP, PMU, approach cable, DCPS alongwith Battery Bank under the present scope of RfP shall be the responsibility of TSP.

Note: Existing Station owner/s to provide necessary support to integrate different equipment & applications of new extended bays with the existing substation e.g. Communication





(through FOTE), PMUs, Voice etc. for smooth operation and monitoring of new added grid elements.

Maintenance of OPGW Cable, OPGW Hardware & repeater equipment & items associated with repeater shelter shall be the responsibility of TSP.

C.9.0 Specific Requirement for Phasor Measurement Units (PMUs)

TSP shall supply, install & commission required no. of Phasor Measurement Units (PMUs) as per Guidelines for Unified Philosophy for Placement of Phasor Measurement Units (PMUs) in Indian Grid (along with all amendments if any) dated 19th March 25 and all the applicable Regulations, Standards, Guidelines issued time to time. These PMUs shall be provided with GPS clock and LAN switch and shall connect with LAN switch of control room of respective substations/ generating stations with Fibre Optic cable. These PMUs shall be connected with the FOTE at Substation/ generating stations for onwards data transmission to the PDC (Phasor Data Concentrator) located at respective RLDC. Configuration work in existing PDC at RLDC for new PMU integration shall be done by respective RLDC, however all the necessary support in this regard shall be ensured by TSP.
The maintenance of all the PMUs and associated equipment shall be the responsibility of TSP.

Note: Existing Station owner/s to provide necessary support to integrate different equipment and applications of new extended bays with the existing substation e.g. Communication (through FOTE), Voice etc. for smooth operation and monitoring of new added grid elements.

Communication system integration in UNMS/CSMS

TSP is to ensure integration of communication system into UNMS/CSMS as per following:

"The new communication equipment/ system under the present scope shall be compatible for integration with existing regional level NMS system/ Centralized Supervision & Monitoring System (CSMS) i.e. Regional UNMS. The local configuration of the new communication equipment/ system at the station end shall be the responsibility of TSP as per followings. The configuration work in the existing centralized NMS/ UNMS at Control center end, for integration of new Communication equipment/ system shall be done by Regional ULDC Team/ NMT, however all the necessary support in this regard shall be ensured by TSP.

Requirement for integration of Communication Equipment/ system with Regional UNMS:

1. TSP shall ensure that NMS/EMS/NE supplied by them is NBI compliant and all FCAPS functionality is supported in the NBI such as NE Inventory, Hardware Inventory– Shelf/Slot/Card/SFP/Port, Topology, Protections, Alarms, Performance-real time & periodic, Performance KPI parameters (E-1, STM, Ethernet), Remote Configuration, Cross Connects, Trails & Circuits, Services Provisioning (NE), E-1, STM, Ethernet, TX & RX Trace, loop back and details are published in the NBI guide for the configuration parameters.

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2. TSP shall be obliged to provide/share all necessary documentations such as NBI Guide/MIB/IDL/WSDL/API files etc. for onward integration of their NMS/EMS/NE with regional UNMS.

3. The following support shall be provided by TSP for integration of their supplied equipment with regional UNMS:

   - Enabling & activating NBI license in their EMS/NMS and providing NBI login access along with User credentials
   - Assist in verifying NBI Connectivity with UNMS vendor for the successful communication and retrieval of data.
   - Assist in troubleshooting (if required) for NBI connectivity along with UNMS vendor for the communication and retrieval of data.

4. For standalone NE which is not integrated with any EMS/NMS, TSP shall provide modality of complete FCAPS data acquisition as above through industry standard programmatic methods and provide the CLI command manual."

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Appendix-F.1

Repeater Requirements

1.1.1 If the repeater location is finalized in the Control Room of a nearby substation, TSP shall provide **OPGW to accommodate all the fibers in main transmission line** on a single Earthwire peak with OPGW Hardware & mid-way Joint Boxes etc. of the line crossing the main line **and required approach Cable to accommodate all the OPGW fibers**, with all associated hardware fittings, to establish connectivity between crossing point of main transmission line up to the repeater equipment in substation control room.

TSP shall co-ordinate for Space & DC power supply sharing for repeater equipment.

TSP shall provide FODP, FOTE (with STM-16 capacity) with suitable interfaces require for link budget of respective link.

OR

1.1.2 If the repeater location is finalized in the nearby substation premises, the TSP shall identify the Space for repeater shelter in consultation with station owner. Further TSP shall provide **OPGW to accommodate all the fibers in main transmission line** on a single Earthwire peak with OPGW Hardware & mid-way Joint Boxes etc. of the line crossing the main line and **and required approach Cable to accommodate all the OPGW fibers**, with all associated hardware fittings, to establish connectivity between crossing point of main transmission line up to the substation where the repeater shelter is to be housed.

TSP shall provide repeater shelter along with FODP, FOTE (with STM-16 capacity) with suitable interfaces require for link budget of respective link, reliable power supply provisioning for AC and DC supply, battery bank, Air Conditioner and other associated systems.

OR

1.1.3 If the repeater location is finalized on land near the transmission tower. TSP shall make the provisions for Land at nearby tower for repeater shelter. Further TSP shall provide **required approach Cable to accommodate all the OPGW fibers** with all associated hardware fittings to establish connectivity up to the location of repeater shelter.

TSP shall provide repeater shelter along with FODP, FOTE (with STM-16 capacity) with suitable interfaces require for link budget of respective link, reliable power supply provisioning for AC and DC supply, battery bank, Air Conditioner and other associated systems

Maintenance of OPGW Cable and OPGW Hardware, repeater equipment & items associated with repeater shelter shall be responsibility of TSP.

Note: Existing Station owner/s to provide necessary support to integrate different equipment & applications of new extended bays with the existing substation e.g. Communication (through FOTE), PMUs, Voice etc. for smooth operation and monitoring of new added grid elements.

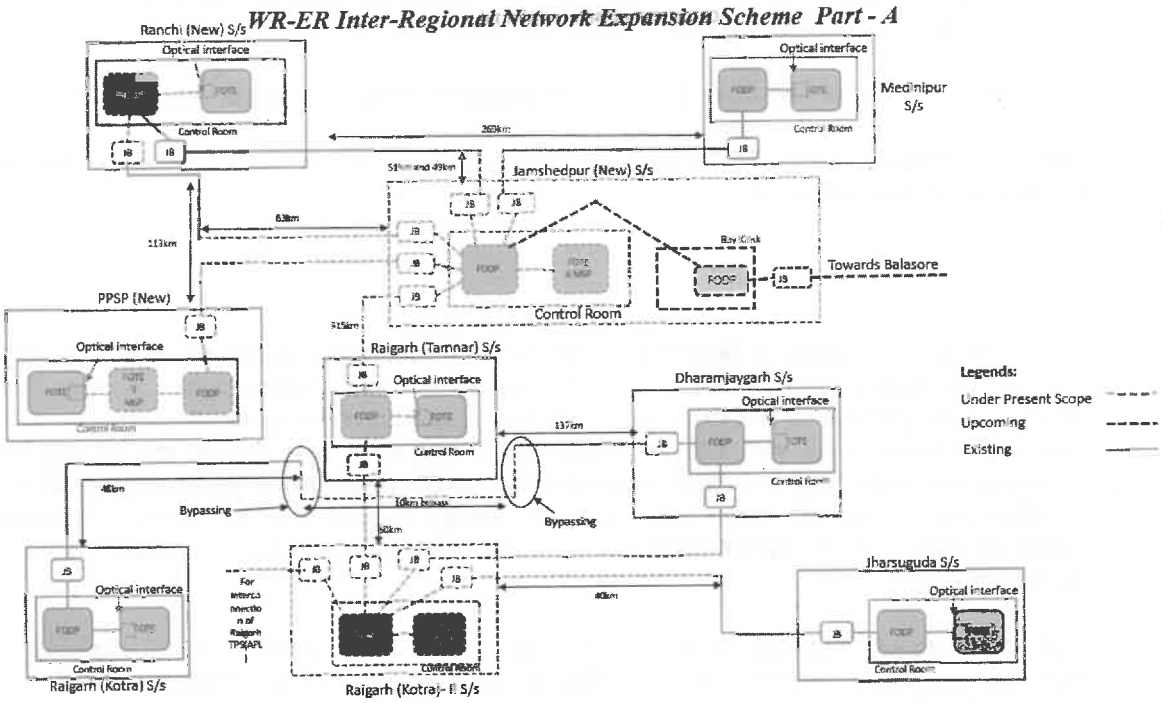


Figure F.1

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C.10.0 PLCC and PABX:

Power line carrier communication (PLCC) equipment complete for speech, tele-protection commands and data channels shall be provided on each transmission line. The protections for transmission line and the line compensating equipment shall have hundred percent back up communication channels i.e. two channels for tele- protection in addition to one channel for speech plus data for each direction. The PLCC equipment shall in brief include the following: -

- Coupling device, Coupling filters, line traps, carrier terminals, protection couplers, HF cables, PABX (if applicable) and maintenance and testing instruments.
- At new substation, a telephone exchange (PABX) of 24 lines shall be provided at 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 phase-to-phase coupling for 765 kV Transmission lines. The pass band of coupling devices shall have sufficient margin for adding communication channel in future if required. Necessary protection devices for safety of personnel and low voltage part against power frequency voltages and transient over voltage shall also be provided.
- The line traps shall be broadband tuned suitable for blocking the complete range of carrier frequencies. Line Trap shall have necessary protective devices such as lightning arresters for the protection of tuning device. 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 sideband (SSB) amplitude modulation (AM) type and shall have 4 kHz band width. PLCC Carrier terminals and Protection couplers shall be considered for both ends of the line.
- PLCC equipment for all the transmission lines covered under the scheme (consisting of one set of analog PLCC channel along with circuit protection coupler and one set of Digital protection coupler for both ends) shall be provided by TSP. CVT and Wave trap for all the line bays under present scope shall be provided by TSP. PLCC to be provided for following lines under present scope:
- TSP shall provide new set of PLCC as per following configuration:

Sl. No.	Line Section	PLCC configuration
1.	Raigarh (Tamnar) – Raigarh (Kotra)-II S/s 765 kV D/c line	1 set Analog PLCC and 1 set Digital Protection Coupler for each circuit at both ends. Existing PLCC panel may also be utilized.
2.	Raigarh (Tamnar) – Jamshedpur (New) 765 kV	1 set Analog PLCC + 1 set Digital Protection Coupler for each circuit at

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	D/c line	both ends. Existing PLCC panel may also be utilized.
3.	Ranchi (New) – Jamshedpur (New) 765 kV D/c line (after LILO)	1 set Analog PLCC + 1 set Digital Protection Coupler for each circuit at both ends. Existing PLCC panel may also be utilized.
4.	Jamshedpur (New) – Medinipur 765 kV D/c line (after LILO)	1 set Analog PLCC + 1 set Digital Protection Coupler for each circuit at both ends. Existing PLCC panel may also be utilized.
5.	Dharamjaygarh (Sec-B) – Raigarh (Kotra)-II 765 kV D/c line (after LILO)	1 set Analog PLCC + 1 set Digital Protection Coupler for each circuit at both ends. Existing PLCC panel may also be utilized.
6.	Raigarh (Kotra)-II – Jharsuguda (Sec-A) 765 kV D/c line (after LILO)	1 set Analog PLCC + 1 set Digital Protection Coupler for each circuit at both ends. Existing PLCC panel may also be utilized.
7.	Ranchi (New) – Jamshedpur (New) 400 kV D/c line (after LILO)	1 set Analog PLCC + 1 set Digital Protection Coupler for each circuit at both ends. Existing PLCC panel may also be utilized.
8.	Jamshedpur (New) – New PPSP 400 kV D/c line (after LILO)	1 set Analog PLCC + 1 set Digital Protection Coupler for each circuit at both ends. Existing PLCC panel may also be utilized.

- All other associated equipment like cabling, coupling device and HF cable shall also be provided by the TSP.

Frequently Asked Queries:

Transmission Line:

1.1 Please clarify that whether shutdowns for crossing of existing transmission lines of POWERGRID/STUs/ Power Evacuation Lines from Generation Plants/ Any other Transmission Licensee will be given to TSP on chargeable basis or free of cost.

Reply: Shutdowns for crossing of existing transmission lines of POWERGRID/ STUs/ Power Evacuation Lines from Generation Plants/ Any other Transmission Licensee will be given to TSP by the concerned owner of the lines as per their own terms and conditions. As far as shutdown of ISTS lines are concerned the same can be availed by approaching respective Regional Power Committee.

1.2 We understand that the suggested swing angle criteria are applicable for Suspension Insulator in Suspension Tower. Further, you are requested to provide similar swing angle and clearance criteria for Pilot Insulator with Jumper and Jumper.

Reply: It is clarified that the swing angle criteria (as mentioned in RFP) for transmission lines is applicable for Suspension Insulator in Suspension Tower. Further, as per Clause 3.0 of Specific Technical Requirements for transmission lines, Transmission service Provider (TSP) shall adopt any additional loading/design criteria for ensuring reliability of the line, if so desired and /or deemed necessary.

1.3 We request you to kindly allow that use of diamond configuration at Power line crossings and the existing owner of the lines may be directed to allow the same for the successful bidders.

Reply: Power line crossing including Diamond configuration is the responsibility of the TSP. TSP shall formally submit the profile of the crossing section to the owner of the existing line suggesting proposed crossing alternatives. The crossing will have to be carried out as per approval of owner of the existing line.

1.4 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.

Reply: Based on the preliminary route survey, the process of initiation of forest clearance for the forest stretches, if any, enroute the proposed line alignment will be initiated by way of writing letters to the concerned authority (ies). However, it may be noted that it will be the responsibility of TSP for obtaining forest clearance for the forest stretches as provided in the survey report and also for any forest area encountered during detailed survey.

1.5 For transmission line, no special requirement is specified for type of Insulator and creepage in RFP document. Hence it is understood that bidder can decide the type of insulator along

with creepage requirement based on general CEA regulations and relevant standards. Kindly confirm.

Reply: The minimum specific creepage distances shall be decided for the site pollution severity in the area of installation keeping in mind further increase in pollution during life of the line. It shall be as per CEA regulations and relevant standards. . However, the tower shall be designed considering the porcelain insulators with creepage factor of 31 mm/kV irrespective of type of insulator used.

Substation

2.1 We understand that space for storage of O&M spare shall be provided by the existing owner within the station boundary without any cost. Kindly confirm.

Reply: Space for storage of O&M spares shall be arranged by TSP on its own.

2.2 We presume that the O&M for the end Termination bays will be in the scope of the TSP and TSP shall not be liable for any payment towards O&M to the existing owner of the substation. Kindly confirm.

Reply: Operation and maintenance of the bays is solely the responsibility of the TSP.
Further, TSP shall follow CEA's "Operation and Maintenance (O&M) guidelines and Standard Format for Memorandum of Understanding between New TSP and Existing TSP" issued by CEA vide its letter No. I/28514/2023 dated 22.06.2023.

2.3 With reference to subject scheme of existing sub-station, we assumed following scope of work:

(a) We assumed internal road is available and need not to be consider in the present scope of work.

(b) Drainage is available and need not to consider in the present scope of work.

(c) Cable trench extension adjacent to Main cable trench only under present scope of work.

(d) Levelled area being provided by developer for bay extension.

Reply: Regarding requirement of internal road, drainage, cable trench, leveling of the bay extension area, bidder is advised to visit site and acquaint themselves with the provisions/facilities available at substation.

2.4 Kindly provide the soil investigation report of soil parameters of existing substation.

Reply: Bidder is advised to visit the substation site and ascertain the requisite parameters.

2.5 Kindly confirm, energy accounting of aux. power consumption. Whether it will be on chargeable basis or part of transmission loss.

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Reply: It will be on a chargeable basis.

2.6 We understand that VMS requirement is for unmanned stations only. For Manned stations VMS is not compulsory.

Reply: VMS shall be provided in line with requirements of RfP document.

2.7 It is understood that Construction water and power shall be provided free of cost to TSP by the respective substation owner for construction of new bays.

Reply: Arrangement of construction power and water is in the scope of TSP.

2.8 It is understood that the existing fire hydrant system shall be extended by the TSP for bay extension.

Reply: Existing fire hydrant system shall be extended from existing system (if required)

2.9 Please clarify the Status of land acquisition for new Substations. Whether the lands have been acquired by BPC and will be transferred to TSP.

Reply: The acquisition of land for new substation is in the scope of TSP.

2.10 We understood that no any dedicated metering CT and CVT is required for Line/feeders. Further, we understood that requisite Energy meters for various 765kV, 400kV and 220kV Feeders shall be provided and installed by CTU free of cost to TSP.

Reply: Dedicated metering CT and CVT are not required for line/feeders. Metering core of existing CT/CVT can be used provided accuracy class matches with metering requirement. Requisite Special Energy Meters shall be provided and installed by CTU at the cost of TSP in C&P panel subject to space availability, else, in separate metering panel (to be provided by TSP at its cost).

2.11 A draft copy of the Connection Agreement may be furnished. A draft copy of the Connection Agreement may be furnished.

Reply: Web page link https://www.ctuil.in/formats_gna_transition

2.12 Please clarify whether the spare 765kV single phase Reactor unit for Bus reactor shall be provided with 1ph 765kV CB.

Reply: As per RfP, the spare 1-Ph reactor unit shall be utilized for all the bus and switchable line reactor banks (including for future reactor banks). Hence, 1ph 765kV CB shall also be provided with spare 1-Ph reactor for utilizing with bus reactor as well as switchable line reactor.

2.13 It is understood that existing busbar protection has provision for future bays and also PUs are available for future bays. BPC to confirm availability of CU and PU for bays under

present scope of work at existing substations. BPC may kindly confirm availability of communication ports for integrating new PUs with the existing CUs at existing substations.

Reply: Bus Bar Protection with Central Unit (CU) is required for the new bus section as specified in RfP. Peripheral Units (PUs) shall be provided by the respective bay owner. Further, augmentation/replacement of existing CU, if required, to meet the system requirement shall also be provided for proper functioning of bus bar protection.

2.14 For SCADA, it is understood that necessary process I/O shall be available for future bays and accordingly license for same. BPC to confirm.

Reply: Necessary process I/O along with license shall be in the scope of the successful bidder.

2.15 No separate FF system is envisaged under the present scope of work for existing substation. BPC to confirm.

Reply: Existing fire-fighting systems shall be extended to meet the additional requirements under present scope.

2.16 PLCC for 220kV Lines are not under the scope of TSP. BPC to Confirm.It is requested to provide Type of Coupling for 220kV Transmission Lines under present scope.

Reply: PLCC for 220kV line is in the scope of developer of the line.

Inter circuit coupling for 220kV D/C and phase to phase coupling for 220kV S/C shall be applicable for PLCC.

2.17 BPC is requested to confirm the availability of space in the existing control rooms at existing substation for execution of extension work under current project.

Reply: Switchyard Panel Rooms are generally required for AIS type substation and relay room are required for GIS type substation. Further, if needed, the control room shall be augmented as per requirement.

Communication

3.1 What are the usage of OPGW, FOTE, PMU etc. under communication requirement of RFP?

Reply: User shall be responsible for providing compatible equipment along with appropriate interface for uninterrupted communication with the concerned control center and shall be responsible for successful integration with the communication system provided by CTU.

Communication systems e.g. OPGW, FOTE etc. and PMU are required for grid operation

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through RLDC/SLDC, speech communication, tele-protection and tele-metering.

3.2 Is space for installation of communication panels are provided to TSP in existing Substations incase new bays are in the scope of TSP?

Reply: The space related issues are deliberated in the RfP itself. TSP to install FOTE/FODP panels in the new Bay Kiosk (Switchyard Panel Room (SPR)) / Bay Kisok/ Relay Panel Room (in case of GIS S/s). Further, TSP to connect and integrate the proposed FOTE with the existing FOTE in the control room to complete the communication path upto RLDC.

In Case 132 kV Substation TSP shall accommodate the said panels either by extension of existing control room or other arrangements.

3.3 How is the OPGW laying done in case of LILO lines?

Reply: In case LILO lines are on same towers (e.g. both Line in and Line Out portion are on same towers, generally done LILO of S/C lines). Then one no. OPGW having fibers equal to no of fibers in main line OPGW shall be required to be install by TSP on both earthwire peak on 400 kV & 765 kV lines where two E/W peaks are available. On 220 & 132 kV lines where only one E/W peak is available TSP to install one no OPGW having fibers double the no of fibers in main line OPGW.

Incase LILO lines are on different towers (e.g. both Line In and Line Out portion are on different towers, generally done LILO of D/C lines). Then one no. OPGW having fibers equal to no of fibers in main line OPGW shall be required to be install by TSP on one earthwire peak and conventional earthwire on second earthwire peak, on both Line In and Line Out portion towers of 400 kV & 765 kV lines. On 220 &132 kV lines where only one E/W peak is available TSP to install one no. OPGW having fibers equal to no of fibers in main line OPGW in place of conventional earthwire.

3.4 How is the OPGW laying done in the case of Multi circuit Towers?

Reply: In case two different lines are using common multi circuit portion for some distance (originating from different stations, may be terminating on same or on different stations), Then OPGW having fibers equal to fibers laid on different lines to be installed on both E/W peaks for common M/C portion of 765 kV & 400 kV lines by the TSP. Incase 220/132 kV lines using multi circuit portion where single E/W peak is available required OPGW to accommodate all the OPGW fibers of different transmission lines may be installed for common multi circuit portion.

3.5 How PMUs are integrated for new bays at existing Substations?

Reply: PMU data of new bays to be provided in the ethernet port of switch at control room and thereafter to be connected with existing FOTE of existing substation to send data to PDC of RLDC by TSP. These PMUs shall be provided with GPS/NavIC clock and LAN

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switch and shall connect with LAN switch of control room of respective substations with Fibre Optic cable. In this regard, the "Guidelines on Unified Philosophy for placement of PMUs in Indian Grid" issued vide letter No. CEA-PS-14-12/9/2024-PSETD Division dated 19.03.2025 shall be followed.

3.6 Is Spare direction available in existing FOTE for integration with new bay kiosk FOTE

Reply: The FOTE under present scope shall be integrated by TSP with the existing FOTE at control room of substation for onwards data Transmission. In case spare optical direction is not available in the existing FOTE at the control room, the TSP shall coordinate with station owner to reconfigure the directions in existing FOTE at control room.

3.7 What is the distance from LILO point to proposed substation for feasibility of repeater station?

Reply: Tentative Location of LILO point shall be as per survey report of BPC however exact location to be ascertained after detailed survey by TSP.

3.8 What is the make and model of existing OPGW in case LILO of main line at new substation?

Reply: All OPGW (alongwith optical fibers) meet Central Electricity Authority (Technical Standards for Communication System in Power System Operations) Regulations, 2020 and bidder shall install OPGW accordingly.

3.9 In case of LILO of existing line at new substation who shall provide PMUs at existing substation bays?

Reply: TSP shall provide PMUs for the scope under the RfP, in compliance of the "Guideline on Unified Philosophy for placement of PMUs in Indian Grid" issued vide letter No. CEA-PS-14-12/9/2024-PSETD Division dated 19.03.2025

Planning:

4.1 Whether the Project/ Elements are eligible for early commissioning incentive as per MoP, GoI order dated 15.07.2015.?

Reply: Commissioning is to be done as per the timeline mentioned in RfP. However, early commissioning shall be treated as per applicable CERC Regulations/orders.

Schedule: 2 Scheduled COD

[Note: As referred to in the definition of "Element", "Scheduled COD", and in Article 3.1.3 (c), 4.1 (b) and 4.3 (a) of this Agreement]

Sl. No.	Name of the Transmission Element	Scheduled COD	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.	Establishment of 3x1500 MVA, 765/400 kV S/s at Raigarh (Kotra)-II S/s in Chhattisgarh	24 months (30.06.2028)	6.92%	Elements at a), b), & c) can be commissioned together.
b.	Extension at Raigarh (Kotra)-II 765/400 kV S/s (ATS incl. terminal bays identified for 2x800 MW Raigarh TPS of M/s APL)	24 months (30.06.2028)	6.45%	Elements at a), b), & c) can be commissioned together.
c.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s	24 months (30.06.2028)	8.13%	Elements at a), b), & c) can be commissioned together.
d.	Installation of new 765/400 kV, 1x1500 MVA (3x500 MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	24 months (30.06.2028)	2.29%	Element at d) can be commissioned independently
e.	Establishment of 2x1500 MVA, 765/400 kV S/s at Jamshedpur (New) in Jharkhand	30 months (30.12.2028)	10.17%	Elements at e), f), & g), can be commissioned together
f.	LILO of Ranchi (New) – Medinipur 765 kV D/c line at Jamshedpur (New)	30 months (30.12.2028)	11.40%	Elements at e), f), & g), can be commissioned together
g.	LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New)	30 months (30.12.2028)	8.52%	Elements at e), f), & g), can be commissioned

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				together
h.	Extension at Raigarh (Kotra)-II S/s 765/400 kV S/s .	36 months (30.06.2029)	0.91%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
i.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line	36 months (30.06.2029)	1.05%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
j.	Raigarh (Tamnar)-Raigarh(Kotra)-II S/s 765 kV D/c line	36 months (30.06.2029)	5.26%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
k.	Extension at Raigarh (Tamnar) 765/400 kV S/s	36 months (30.06.2029)	2.15%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
l.	Extension at Jamshedpur (New) 765/400 kV S/s	36 months (30.06.2029)	2.82%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
m.	Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c line	36 months (30.06.2029)	33.93%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).

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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 the Project is: 36 Months from the date of SPV transfer

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Schedule: 3

Safety Rules and Procedures

[Note: As referred to in Articles 5.6 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 till expiry 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 Nodal Agency and the CEA 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 entity , 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.

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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.

Schedule: 4

Computation of Transmission Charges

1.1 General

The Monthly Transmission Charges to be paid to the TSP for providing Transmission Service for any Contract Year during the term of the Agreement shall be computed in accordance with this Schedule and paid as per Sharing Regulations.

Illustration regarding payment of Transmission Charges under various scenarios (considering definitions of Contract Year, Expiry Date & Monthly Transmission Charges above) is as below: -

Illustration-1: In case the Project Elements achieve COD as per Schedule

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

Element No.	Completion Schedule in Months	Scheduled CoD of the Element	Actual CoD of the Element	% Charges recoverable on Scheduled CoD of the Element
Element 1	28	1-Feb-2018	1-Feb-2018	25%
Element 2	38	1-Dec-2018	1-Dec-2018	75%

Tariff Payable as follows:

Transmission Charges for Element 1			Transmission Charges for Element 2		
1-Feb-18 to 31-Mar-18	140 X 25% X ((28+31)/365)	5.65		--	0.00
1-Apr-18 to 30-Nov-18	140 X 25% X (244/365)	23.39		--	0.00
1-Dec-18 to 31-Mar-19	140 X 100% X (121/365)				46.41
2	140 X 100% X 1				140
3	140 X 100% X 1				140
4	140 X 100% X 1				140
5	140 X 100% X 1				140
.....					
.....					
36 (1-Apr to 30-Nov)	140 X 100% X (244/365)				93.59

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Illustration-2: In case of extension of Scheduled COD as per Article 4.4.1 & 4.4.2 of this Agreement

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

Element No.	Completion Schedule in Months	Scheduled CoD of the Element	Actual CoD of the Element	% Charges recoverable on Scheduled CoD of the Element
Element 1	20	1-Feb-2018	1-Jul-2018	25%
Element 2	28	1-Oct-2018	1-Dec-2018	75%

Tariff Payable as follows:

Transmission Charges for Element 1			**Transmission Charges for Element 2**		
1-Feb-18 to 31-Mar-18	--	0.00		--	0.00
1-Apr-18 to 30-Jun-18	--	0.00		--	0.00
1-Jul-18 to 30-Nov-18	140 X 25% X (153/365)	14.67		--	0.00
1-Dec-18 to 31-Mar-19	140 X 100% X (121/365)				46.41
2	140 X 100% X 1				140
3	140 X 100% X 1				140
4	140 X 100% X 1				140
5	140 X 100% X 1				140
.....					
.....					
36 (1-Apr to 30-Nov)	140 X 100% X (244/365)				93.59

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Illustration-3: In case of delay in achieving COD of Project & all individual Elements (COD of the Project achieved in Contract Year 1)

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

Element No.	Completion Schedule in Months	Scheduled CoD of the Element	Actual CoD of the Element	% Charges recoverable on Scheduled CoD of the Element
Element 1	20	1-Feb-2018	1-Dec-2018	25%
Element 2	28	1-Oct-2018	1-Dec-2018	75%

Tariff Payable as follows:

Transmission Charges for Element 1			**Transmission Charges for Element 2**		
1-Feb-18 to 31-Mar-18	--	0.00		--	0.00
1-Apr-18 to 30-Sept-18	--	0.00		--	0.00
1-Oct-18 to 30-Nov-18	--	0.00	1-Oct-18 to 30-Nov-18	--	0.00
1-Dec-18 to 31-Mar-19	140 X 100% X (121/365)				46.41
2	140 X 100% X 1				140
3	140 X 100% X 1				140
4	140 X 100% X 1				140
5	140 X 100% X 1				140
.....					
.....					
36 (1-Apr to 30-Nov)	140 X 100% X (244/365)				93.59

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Illustration-4: In case of delay in achieving COD of Project & all individual Elements (COD of the Project achieved in Contract Year other than Contact Year 1)

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

Element No.	Completion Schedule in Months	Scheduled CoD of the Element	Actual CoD of the Element	% Charges recoverable on Scheduled CoD of the Element
Element 1	38	1-Oct-2019	1-May-2020	25%
Element 2	38	1-Oct-2019	1-May-2020	75%

Tariff Payment to be paid as:

Transmission Charges for Element 1			**Transmission Charges for Element 2**		
1-Oct-19 to 31-Mar-20	--	0.00	1-Oct-19 to 31-Mar-20	--	0.00
1-Apr-20 to 30-Apr-20	-	0.00	1-Apr-20 to 30-Apr-20	-	0.00
1-May-20 to 31-Mar-21	140 X 100% X (335/365)				128.49
2	140 X 100% X 1				140
3	140 X 100% X 1				140
4	140 X 100% X 1				140
5	140 X 100% X 1				140
.....					
.....					
36 (1-Apr to 30-Apr)	140 X 100% X (30/ 365)				11.51

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Illustration5: In case of delay in achieving COD of Element but Project COD achieved on time

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

Element No.	Completion Schedule in Months	Scheduled CoD of the Element	Actual CoD of the Element	% Charges recoverable on Scheduled CoD of the Element
Element 1	20	1-Feb-2018	1-Jul-2018	25%
Element 2	30	1-Dec-2018	1-Dec-2018	75%

Tariff Payable as follows:

Transmission Charges for Element 1			Transmission Charges for Element 2		
1-Feb-18 to 31-Mar-18	--	0.00		--	0.00
1-Apr-18 to 30-Jun-18	--	0.00		--	0.00
1-Jul-18 to 30-Nov-18	140 X 25% X (153/365)	14.67		--	0.00
1-Dec-18 to 31-Mar-19	140 X 100% X (121/365)				46.41
2	140 X 100% X 1				140
3	140 X 100% X 1				140
4	140 X 100% X 1				140
5	140 X 100% X 1				140
.....					
.....					
36 (1-Apr to 30-Nov)	140 X 100% X (244/365)				93.59

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Illustration-6: In case of early commissioning of Project

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

Element No.	Completion Schedule in Months	Scheduled CoD of the Element	Actual CoD of the Element	% Charges recoverable on Scheduled CoD of the Element
Element 1	38	1-Oct-2019	1-Jul-2019	25%
Element 2	38	1-Oct-2019	1-Jul-2019	75%

Tariff Payment to be paid as:

Transmission Charges for Element 1	**Transmission Charges for Element 2**
1-July-19 to 31-Mar-20	140 X 100% X (274/365)	105.09
2	140 X 100% X 1	140
3	140 X 100% X 1	140
4	140 X 100% X 1	140
5	140 X 100% X 1	140
.....		
.....		
36 (1-Apr to 30-Jun)	140 X 100% X (91/365)	34.91

Illustration-7: In case of early commissioning of an element

Quoted Transmission Charges: **Rs. 140 Million**
Completion Schedule:

Element No.	Completion Schedule in Months	Scheduled CoD of the Element	Actual CoD of the Element	% Charges recoverable on Scheduled CoD of the Element
Element 1	38	1-Oct-2019	1-Apr-2019	25%
Element 2	38	1-Jul-2019	1-Jul-2019	75%

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Tariff Payment to be paid as:

Transmission Charges for Element 1			Transmission Charges for Element 2		
1-Apr-2019 to 30-Jun-19	140 X 25% X (91/365)	8.72	1-Apr-2019 to 30-Jun-19	--	0.00
1-July-19 to 31-Mar-20	140 X 100% X (274/ 365)				105.09
2	140 X 100% X 1				140
3	140 X 100% X 1				140
4	140 X 100% X 1				140
5	140 X 100% X 1				140
.....					
.....					
36 (1-Apr-30-Jun)	140 X 100% X (91/365)				34.91

The Transmission Charges shall be payable on monthly basis as computed above.

1.2 Computation of Monthly Transmission Charges

The Monthly Transmission Charges for any month m in a Contract Year n shall be calculated as below:

For AC System:

a. If Actual Transmission System Availability for the month m of contract year n is greater than or equal to 98% and less than or equal to 98.5%;

Monthly Transmission Charges MTC(m) = Tmn *1

b. If Actual Transmission System Availability for the month m of contract year n exceeds 98.5% and less than or equal to 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 98.5%)

c. If Actual Transmission System Availability for the month m of contract year n is greater than 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (99.75% / 98.5%)

d. If Actual Transmission System Availability for the month m of contract year n is less than 98%and greater than or equal to 95.00%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 98%)

e. If Actual Transmission System Availability for the month m of contract year falls below 95%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 98%) - 0.02 * (Tmn * (AA/ 95%)

For DC System:

a. If Actual Transmission System Availability for the month m of contract year n is greater than or equal to 95% and less than or equal to 96%;

Monthly Transmission Charges MTC(m) = Tmn *1

b. If Actual Transmission System Availability for the month m of contract year n exceeds 96% and less than or equal to 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 96%)

c. If Actual Transmission System Availability for the month m of contract year n is greater than 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (99.75% / 96%)

d. If Actual Transmission System Availability for the month m of contract year n is less than 95% and greater than or equal to 92.00%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 95%)

e. If Actual Transmission System Availability for the month m of contract year falls below 92%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 95%) - 0.02 * (Tmn * (AA/ 92%)

where:

- AA is the actual Availability, as certified by RPC, as per procedure provided in Schedule 6.
- m is the month in Contract Year 'n'
- Tmn= Transmission Charges for the month 'm' in Contract Year 'n' = (=Transmission Charge/ no. of days in the Year n)* no. of days in 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.

1.3 RLDC Fee & Charges

The payment of RLDC fee & charges, in accordance with relevant regulations of CERC, shall be the responsibility of the TSP.

Schedule: 5

Quoted Transmission Charges

[Quoted Transmission Charges from Annexure - 21 of the RFP of the Selected Bidder to be inserted here]

[To be incorporated from the Bid of the Selected Bidder submitted during the e-reverse auction after its selection]

Quoted Annual Transmission Charges: Rs. 7,701.00 Million

Proportionate Transmission Charges payable for each Element of the Project:

Sl. No.	Name of the Transmission Element	Scheduled COD	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.	Establishment of 3x1500 MVA, 765/400 kV S/s at Raigarh (Kotra)-II S/s in Chhattisgarh	24 months (30.06.2028)	6.92%	Elements at a), b), & c) can be commissioned together.
b.	Extension at Raigarh (Kotra)-II 765/400 kV S/s (ATS incl. terminal bays identified for 2x800 MW Raigarh TPS of M/s APL)	24 months (30.06.2028)	6.45%	Elements at a), b), & c) can be commissioned together.
c.	LILO of Dharamjaygarh (Sec-B) – Jharsuguda (Sec-A) 765 kV D/c line at Raigarh (Kotra)-II S/s	24 months (30.06.2028)	8.13%	Elements at a), b), & c) can be commissioned together.
d.	Installation of new 765/400 kV, 1x1500 MVA (3x500 MVA single phase units) ICT (3rd) at Jeerat (New) S/s of M/s POWERGRID Medinipur Jeerat Transmission Limited (PMJTL) along with associated bays at both ends	24 months (30.06.2028)	2.29%	Element at d) can be commissioned independently
e.	Establishment of 2x1500 MVA, 765/400 kV S/s at Jamshedpur (New) in Jharkhand	30 months (30.12.2028)	10.17%	Elements at e), f), & g), can be commissioned together
f.	LILO of Ranchi (New) – Medinipur 765 kV D/c line at	30 months	11.40%	Elements at e), f), & g),

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	Jamshedpur (New)	(30.12.2028)		can be commissioned together
g.	LILO of Ranchi (New) – New PPSP 400 kV D/c line at Jamshedpur (New)	30 months (30.12.2028)	8.52%	Elements at e), f), & g), can be commissioned together
h.	Extension at Raigarh (Kotra)-II S/s 765/400 kV S/s	36 months (30.06.2029)	0.91%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
i.	Bypassing of Raigarh (Tamnar) – Dharamjaygarh (Sec-B) 765 kV D/c line & Raigarh(Kotra) – Raigarh (Tamnar) 765 kV D/c line at Raigarh (Tamnar) S/s so as to form at Raigarh (Kotra) – Dharamjaygarh (Sec-B) 765 kV D/c line	36 months (30.06.2029)	1.05%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
j.	Raigarh (Tamnar)-Raigarh(Kotra)-II S/s 765 kV D/c line	36 months (30.06.2029)	5.26%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
k.	Extension at Raigarh (Tamnar) 765/400 kV S/s	36 months (30.06.2029)	2.15%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
l.	Extension at Jamshedpur (New) 765/400 kV S/s	36 months (30.06.2029)	2.82%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).
m.	Raigarh (Tamnar) – Jamshedpur (New) 765 kV D/c line	36 months (30.06.2029)	33.93%	Elements at h), i), j), k) l) & m) can be commissioned together subject to prior commissioning of a), b), c), e), f), & g).

Schedule: 6

Appendix -IV to the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations 2024

Procedure for Calculation of Transmission System Availability Factor for a Month

1. Transmission system availability factor for nth calendar month ("TAFPn") shall be calculated by the respective transmission licensee, verified by the concerned Regional Load Dispatch Centre (RLDC) and certified by the Member-Secretary, Regional Power Committee of the region concerned, separately for each AC and HVDC transmission system and grouped according to sharing of transmission charges. In the case of the AC system, transmission System Availability shall be calculated separately for each Regional Transmission System and inter-regional transmission system. In the case of the HVDC system, transmission System Availability shall be calculated on a consolidated basis for all inter-state HVDC systems.

2. Transmission system availability factor for nth calendar month ("TAFPn") shall be calculated by considering the following:

   i) **AC transmission lines**: Each circuit of AC transmission line shall be considered as one element;

   ii) **Inter-Connecting Transformers (ICTs):** Each ICT bank (three single-phase transformers together) shall form one element;

   iii) **Static VAR Compensator (SVC):** SVC, along with SVC transformer, shall form one element;

   iv) **Bus Reactors or Switchable line reactors:** Each Bus Reactors or Switchable line reactors shall be considered as one element;

   v) **HVDC Bi-pole links:** Each pole of the HVDC link, along with associated equipment at both ends, shall be considered as one element;

   vi) **HVDC back-to-back station:** Each block of the HVDC back-to-back station shall be considered as one element. If the associated AC line (necessary for the transfer of inter-regional power through the HVDC back-to-back station) is not available, the HVDC back-to-back station block shall also be considered unavailable;

   vii) **Static Synchronous Compensation ("STATCOM"):** Each STATCOM shall be considered as a separate element.

3. The Availability of the AC and HVDC portion of the Transmission system shall be calculated by considering each category of transmission elements as under:

TAFPn (in %) for AC system:

$$= \frac{(o \times AVo)+(p \times AVp)+(q \times AVq)+(r \times AVr)+(u \times AVu)}{(o+p+q+r+u)} \times 100$$

Where,

o	=	Total number of AC lines
AVo	=	Availability of o number of AC lines
p	=	Total number of bus reactors/switchable line reactors
AVp	=	Availability of p number of bus reactors/switchable line reactors
q	=	Total number of ICTs
AVq	=	Availability of q number of ICTs
r	=	Total number of SVCs
AVr	=	Availability of r number of SVCs
u	=	Total number of STATCOM
AVu	=	Availability of u number of STATCOM

TAFMn (in %) for HVDC System:

$$= \frac{\sum_{x=1}^{s} Cxbp\,(act) \times AVxbp + \sum_{y=1}^{t} Cy\,(act)btb \times AVybtb}{\sum_{x=1}^{s} Cxbp + \sum_{y=1}^{t} Cybtb} \times 100$$

Where

Cxbp(act)	=	Total actual operated capacity of x^{th} HVDC pole
Cxbp	=	Total rated capacity of x^{th} HVDC pole
AVxbp	=	Availability of x^{th} HVDC pole
Cybtb(act)	=	Total actual operated capacity of y^{th} HVDC back-to-back station block
Cybtb	=	Total rated capacity of y^{th} HVDC back-to-back station block
AVybtb	=	Availability of y^{th} HVDC back-to-back station block
s	=	Total no of HVDC poles
t	=	Total no of HVDC Back to Back blocks

4. The availability for each category of transmission elements shall be calculated based on the weightage factor, total hours under consideration and non-available hours for each element of that category. The formulae for calculation of the Availability of each category of the transmission elements are as per **Appendix-V**. The weightage factor for each category of transmission elements shall be considered as under:

   (a) For each circuit of the AC line – The number of sub-conductors in the line multiplied by ckt-km;

   (b) For each HVDC pole- The rated MW capacity x ckt-km;

   (c) For each ICT bank – The rated MVA capacity;

   (d) For SVC- The rated MVAR capacity (inductive and capacitive);

   (e) For Bus Reactor/switchable line reactors – The rated MVAR capacity;

   (f) For HVDC back-to-back stations connecting two Regional grids- Rated MW capacity of each block; and

   (g) For STATCOM – Total rated MVAR Capacity.

5. The transmission elements under outage due to the following reasons shall be deemed to be available:

   i. Shut down availed for maintenance of another transmission scheme or construction of new element or renovation/upgradation/additional capitalization in an existing system approved by the Commission. If the other transmission scheme belongs to the transmission licensee, the Member Secretary, RPC may restrict the deemed availability period to that considered reasonable by him for the work involved. In case of a dispute regarding deemed availability, the matter may be referred to the Chairperson, CEA, within 30 days.

   ii. Switching off of a transmission line to restrict over-voltage and manual tripping of switched reactors as per the directions of the concerned RLDC.

   iii. Shut down of a transmission line due to the Project(s) of NHAI, Railways and Border Road Organization, including for shifting or modification of such transmission line or any other infrastructure project approved by Ministry of Power. Member Secretary, RPC may restrict the deemed availability period to that considered reasonable by him for the work involved; Provided that apart from the deemed availability, any other costs involved in the process of such shutdown of transmission line shall not be borne by the DICs.

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Provided that such deemed availability shall be considered only for the period for which DICs are not affected by the shutdown of such transmission line.

6. For the following contingencies, the outage period of transmission elements, as certified by the Member Secretary, RPC, shall be excluded from the total time of the element under the period of consideration for the following contingencies:

   i) Outage of elements due to force majeure events beyond the control of the transmission licensee. However, whether the same outage is due to force majeure (not design failure) will be verified by the Member Secretary, RPC. A reasonable restoration time for the element shall be considered by the Member Secretary, RPC, 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. Member Secretary, RPC 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;

   ii) Outage caused by grid incident/disturbance not attributable to the transmission licensee, e.g. faults in a substation or bays owned by another agency causing an outage of the transmission licensee's elements, and tripping of lines, ICTs, HVDC, etc., due to grid disturbance. However, if the element is not restored on receipt of direction from RLDC 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 RLDC's direction for restoration;

   iii) The outage period which can be excluded for the purpose of sub-clause (i) and (ii) of this clause shall be declared as under:

      a. Maximum up to one month by the Member Secretary, RPC;

      b. Beyond one month and up to three months after the decision at RPC;

      c. Beyond three months by the Commission for which the transmission license shall approach the Commission along with reasons and steps taken to mitigate the outage and restoration timeline.

7. Time frame for certification of transmission system availability: (1) The following schedule shall be followed for certification of availability by the Member Secretary of the concerned RPC:

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- Submission of outage data along with documentary proof (if any) and TAFPn calculation by Transmission Licensees to RLDC/ constituents

  – By the 5th of the following month;

- Review of the outage data by RLDC / constituents and forward the same to respective RPC – by 20th of the month;
- Issue of availability certificate by respective RPC – by the 3rd of the next month.

Appendix-V

FORMULAE FOR CALCULATION OF AVAILABILITY OF EACH CATEGORY OF TRANSMISSION ELEMENTS

For AC transmission system

AVo(Availability of o no. of AC lines) = $\frac{\sum_{i=1}^{o} Wi(Ti - TNAi)Ti}{\sum_{i=1}^{o} Wi}$

AVq(Availability of q no. of ICTs) = $\frac{\sum_{k=1}^{q} Wk(Tk - TNAk)Tk}{\sum_{k=1}^{q} Wk}$

AVr(Availability of r no. of SVCs) = $\frac{\sum_{i=1}^{r=1} Wi(Ti - TNAi)Ti}{\sum_{i=1}^{r} Wi}$

AVp(Availability of p no. of Switched Bus reactors) = $\frac{\sum_{m=1}^{p} Wm(Tm - TNAm)Tm}{\sum_{m=1}^{p} Wm}$

AVu(Availability of u no. of STATCOMs) = $\frac{\sum_{n=1}^{u} Wn(Tn - TNAn)Tn}{\sum_{n=1}^{u} Wn}$

AV_{xbp}(Availability of an individual HVDC pole) = $\frac{(Tx - TN)}{Tx}$

AV_{ybb} (Availability of an individual HVDC Back-to-back Blocks) = $\frac{(Ty - TNAy)}{Ty}$

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For the HVDC transmission system

For the new HVDC commissioned but not completed twelve months:

For first 12 months: [(AV_{HVDC} or AV_{VSC})x95%/85%], subject to a ceiling of 95%

Where,

o	=	Total number of AC lines;
AVo	=	Availability of o number of AC lines;
p	=	Total number of bus reactors/switchable line reactors;
AVp	=	Availability of p number of bus reactors/switchable line reactors.
q	=	Total number of ICTs;
AVq	=	Availability of q number of ICTs;
r	=	Total number of SVCs;
AVr	=	Availability of r number of SVCs;
U	=	Total number of STATCOM;
AVu	=	Availability of u number of STATCOMs;
Wi	=	Weightage factor for *i*th transmission line;
Wk	=	Weightage factor for *k*th ICT;
Wl	=	Weightage factors for inductive & capacitive operation of *l*th SVC;
Wm	=	Weightage factor for *m*th bus reactor;
Wn	=	Weightage factor for *n*th STATCOM.
T_i, T_k, T_l, T_m, T_n, T_x, T_y		The total hours of i^{th} AC line, k^{th} ICT, l^{th} SVC, m^{th} Switched Bus Reactor & n^{th} STATCOM, x^{th} HVDC pole, y^{th} HVDC back-to-back blocks during the period under consideration (excluding time period for outages not attributed to transmission licensee for the reasons given in Para 5 of the procedure)
T_{NAi}, T_{NAk}		The non-availability hours (excluding the time period for outages not T_{NAi}, T_{NAm}, attributable to transmission licensee taken as deemed availability as T_{NAn}, T_{NAu}, T_{NAx}, T_{NAy} per Para 5 of the procedure) for i^{th} AC line, k^{th} ICT, l^{th} SVC, m^{th} Switched Bus Reactor, n^{th} STATCOM, x^{th} HVDC pole and y^{th} HVDC back-to-back block.

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Schedule: 7

Entire Bid (both financial bid and technical bid) of the Selected Bidder to be attached here

Bid dated 22.04.2026 and 11.06.2026 shall be an integral part of this Agreement.

Schedule: 8

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.)

In consideration of the .....[Insert name of the SPV or Selected Bidder on behalf of the TSP, or Lead Member in case of the Consortium, with address] agreeing to undertake the obligations under the Transmission Service Agreement dated .....and the other RFP Project Documents and the Nodal Agency and the .....[Insert the name of the BPC], agreeing to execute the *RFP Project Documents* 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 .....(being the Nodal Agency) _at .....[Insert the Place from the address of the Nodal Agency indicated in the TSA] forthwith on demand in writing from the Nodal Agency or any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees.....Crores (Rs. .....) only [Insert the amount of the bank guarantee] on behalf of M/s. ..... [Insert name of the Selected Bidder or SPV].

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 Transmission Service Agreement 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. ..... 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 Agreement]. The Nodal Agency, shall be entitled to invoke this Guarantee up to three hundred sixty five (365) days of the last date of the validity of this Guarantee.

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.
WR ER Part A Power Transmission Limited New Delhi

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from ..... (in its roles as the Nodal Agency), made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to Nodal Agency.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by ..... [Insert name of the Selected Bidder], ... [Insert name of the TSP] and / or any other person. The Guarantor Bank shall not require Nodal Agency to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against Nodal Agency 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 Nodal Agency shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against .....[Insert name of the SPV]or the Selected Bidder, as the case may be, to make any claim against or any demand on .....[Insert name of the SPV] or the Selected Bidder, as the case may be, or to give any notice to ..... [Insert name of the SPV] or the Selected Bidder, as the case may be, or to enforce any security held by the Nodal Agency or to exercise, levy or enforce any distress, diligence or other process against .....[Insert name of the SPV] or the Selected Bidder, as the case may be.

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

The Guarantor Bank hereby agrees and acknowledges that Nodal Agency 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. ..... Crores (Rs. .....) only and it shall remain in force until .....[Date to be inserted on the basis of Article 3.1.2 of the Transmission Service Agreement], with an additional claim period of three hundred sixty five (365) 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 or SPV]. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if Nodal Agency 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

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.
WR ER Part A Power Transmission Limited New Delhi

SCHEDULE: 8A

(ISB for CPG)

FORMAT FOR SURETY INSURANCE CONTRACT

(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 of India)

In consideration of the ..... [Insert name of the SPV or Selected Bidder on behalf of SPV or Lead Member in case of the Consortium, with address] (hereinafter referred to as the **'Principal Debtor'** for the purposes of this Surety Insurance Contract as provided in Section 126 of the Indian Contract Act, 1872) having been selected to undertake the Transmission Project on the terms and conditions contained in the Transmission Service Agreement dated ...../ to be executed as per the Model Transmission Service Agreement provided along with the Request for Proposal **('RFP')** and other RFP Project Documents, subject to the condition of providing a Performance Bank Guarantee or a Surety Insurance Contract guaranteeing/insuring the due performance of the obligations under the Transmission Service Agreement, to the Central Transmission Utility of India Limited **('CTUIL')** [herein after referred to as the Nodal Agency], the [Insert name and address of the Insurance Company issuing the Surety Insurance Contract and address of the head office] (hereinafter referred to as **"Surety")** hereby agrees unequivocally, irrevocably, absolutely and unconditionally, without demur, to pay to the Nodal Agency at _____ [Insert Place and Address of the Nodal Agency indicated in Transmission Service Agreement, or to the designated Bank Account of the Nodal Agency, namely] forthwith on demand in writing from the Nodal Agency, or any Officer authorized by it in this behalf, intimated to the Surety at the address mentioned above, any amount as may be decided by the Nodal Agency not exceeding Rupees.....Crores (Rs.....) only [Insert the amount of the Surety Insurance Contract]

The Surety hereby acknowledges, accepts and confirms that the Surety has received from the Principal Debtor, by way of premium the entire consideration for the Surety to execute, in favour of the Nodal Agency, this Surety Insurance Contract, as extended by the Surety from time to time and assuming the obligation to pay to the Nodal Agency the amount in terms hereof, without any requirement for payment of any other consideration to the Surety by the Principal Debtor, or otherwise.

This Surety Insurance Contract shall be valid and binding on the Surety, as the principal obligation of the Surety to pay on demand by the Nodal Agency, and shall not be terminable by notice or any change in the constitution of the Surety or the term of the Transmission Service Agreement or by any other reasons whatsoever and the liability hereunder of the Surety shall not be impaired or discharged by any

extension of time or variations or alternations made, given, or agreed (with or without the knowledge or consent of the Surety) by or between the Principal Debtor and the Nodal Agency.

The liability of the Surety under this Surety Insurance Contract is restricted to Rupees ..... Crores (Rs) only. The Surety Insurance Contract shall remain in force until [Insert the date of validity of the Surety Insurance Contract]. The Nodal Agency shall be entitled to invoke this Surety Insurance Contract up to three hundred sixty five (365) days after the last date of the validity of this Surety Insurance Contract.

The Surety hereby expressly agrees that it shall not require any proof except for the written demand from the Nodal Agency, containing the statement that the contractor has failed to meet its contractual obligations raised at the above mentioned address of the Surety (address of Surety office should be a place in NCR only) and the Surety shall pay the amount without reference to the Principal Debtor.

Any such demand made by the Nodal Agency on the Surety shall be conclusive and binding not withstanding any difference between the Nodal Agency and the Principal Debtor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Surety undertakes not to revoke this guarantee during its currency without previous consent of the Nodal Agency and further agrees that the Surety Insurance Contract herein contained shall continue to be enforceable till the Nodal Agency discharges this contract or till the expiry of tenor (including Claim period) whichever is earlier.

The Surety shall make payment hereunder within two (02) working days on first demand without restriction or conditions and notwithstanding any objection by the Principal Debtor, namely, ... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person. The Surety shall not require the Nodal Agency to justify the invocation of this Surety Insurance Contract, nor shall the Surety have any recourse against the Nodal Agency in respect of any payment made hereunder.

This **SURETY INSURANCE CONTRACT** shall be interpreted in accordance with the laws of India.

This SURETY INSURANCE CONTRACT is being executed by the Surety in terms of the IRDAI (Surety Insurance Contract) Guidelines, 2022 and the Surety hereby acknowledges, accepts and confirms that this Surety Insurance Contract shall be a Contract of Guarantee as provided under Section 126 of the Indian Contract Act, 1872 and further shall be covered by Section 14(3)(b) of the Insolvency and Bankruptcy Code, 2016 (as amended) shall be enforceable as such.

The Surety represents that this Surety Insurance Contract has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Surety in the manner provided herein.

This SURETY INSURANCE CONTRACT 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 Surety.

In order to give effect to this surety Bond, the Nodal Agency shall be entitled to act as if the surety insurer were the principal debtor and any change in the constitution of the contractor and/or the surety insurer, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the surety insurer under this surety Bond.

This SURETY INSURANCE CONTRACT shall be a primary obligation of the Surety as a Principal to pay on demand by the Nodal Agency and the Nodal Agency shall not be obliged before enforcing this Surety Insurance Contract to take any action in any court or arbitral proceedings against the Principal Debtor, namely, ...[Insert name of SPV], or ... ...[Insert name of the Selected Bidder], or ....[Insert name of the TSP] and/or any other person, as the case may be, to make any claim against or any demand on the Principal Debtor, namely, ... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or.....[Insert name of the TSP] and/or any other person, as the case may be, or to give any notice to Principal Debtor, namely..... [Insert name of SPV], or.....[Insert name of the Selected Bidder], or .....[Insert name of the TSP] and/or any other person, as the case may be, or to enforce any security held by the Nodal Agency or to exercise, levy or enforce any distress, diligence or other process against the Principal Debtor, namely,.....[Insert name of SPV], or ..... [Insert name of the Selected Bidder], or .....[Insert name of the TSP] and/or any other person, as the case may be.

The Surety acknowledges that this Surety Insurance Contract is not personal to the Nodal Agency and may be assigned, in whole or in part, (whether absolutely or by way of security) by Nodal Agency to any entity to whom the Nodal Agency is entitled to assign its rights and obligations under the Transmission Service Agreement Provided that any such assignment shall be in compliance with the relevant provisions of the Insurance Act 1938

The Surety hereby agrees and acknowledges that the Nodal Agency shall have a right to invoke this Surety Insurance Contract either in part or in full, as it may deem fit. In case of invocation of this Surety Insurance Contract in part, besides making payment for the part of Surety Insurance Contract invoked, surety at the request of nodal agency shall amend the value of Surety Insurance Contract to the extent of balance amount.

The Surety undertakes not to revoke this Surety Contract during its currency, except with the previous express consent of the Nodal Agency in writing and declares and warrants that it has the power to issue this Surety Contract and the undersigned has full powers to do so on behalf of the Surety

In witness where of:

Signature.....

Name: .....

Power of attorney No/ Employee No. as applicable.: .....

For:

.....[Insert Name of the Surety-Insurance Company]

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 Insurance Company

SCHEDULE: 8B

(POI for CPG)

Format for Issuance of Payment on Order Instrument

Dear Sir,

1. Indian Renewable Energy Development Agency Limited ('IREDA")/PFC/REC has sanctioned a non-fund based limit loan of Rs. (Rupees..... Only) to M/s. .... [Insert name of SPV or selected Bidder] under the Loan Agreement executed on..... to execute Transmission System Projects.

2. In consideration of the..... [Insert name of the SPV or Selected Bidder on behalf of SPV or Lead Member in case of the Consortium, with address] for the purposes of this Payment on Order Instrument ("POI") having been selected to undertake the Transmission Project on the terms and conditions contained in the Transmission Service Agreement dated ...../ to be executed as per the draft of the Model Transmission Service Agreement provided along with the Request for Proposal (,,RFP") and other RFP Project Documents, subject to the condition of providing a POI guaranteeing the due performance of the obligations under the Transmission Service Agreement to the Nodal Agency/Central Transmission Utility of India Limited (,,CTUIL"), the..... [Insert name and address of the non-banking financial institutions(IREDA/PFC/REC) issuing the POI and address of the head office] (hereinafter referred to as "Guarantor") hereby agrees unequivocally, irrevocably, absolutely and unconditionally, without demur, to pay to the Nodal Agency at ..... [Insert Place and Address of the Nodal Agency indicated in Transmission Service Agreement, or to the designated Bank Account of the Nodal Agency, namely .....] forthwith on demand in writing from the Nodal Agency, or any Officer authorized by it in this behalf, intimated to the Guarantor at the address mentioned above, any amount as may be decided by the Nodal Agency not exceeding Rupees ..... Crores (Rs) only [Insert the amount of Payment on Order Instrument]

3. At the request of .....and on behalf of M/s. ....., [Insert name of SPV or selected Bidder] this Payment on Order Instrument (POI) for an amount of Rs.....(Rupees .....) is being issued with IREDA/PFC/REC assuming the obligations to remit such amount to CTUIL from the sanctioned loan.

4. This Payment on Order Instrument comes into force immediately and IREDA/PFC/REC confirms that it has sufficient amount out of the sanctioned loan and shall maintain the required amount to pay under this Payment on Order Instrument, during the validity and claim period of this Payment on Order Instrument.

5. This POI has been issued by IREDA/PFC/REC utilizing the credit limit of M/s.....[Insert name of SPV or selected Bidder]

IREDA/PFC/REC confirms that its liability to pay under this Payment on Order Instrument shall be primary and independent of whether at the time of invocation of Payment on Order Instrument, the sanctioned funds are available or not and notwithstanding, the status of M/s [Insert name of SPV or selected Bidder] at the relevant time and to whether IREDA/PFC/REC is able to recover the amount advanced by it to the said developer.

6. IREDA/PFC/REC and M/s.....[Insert name of SPV or selected Bidder] hereby acknowledges, accepts and confirms that this Payment on Order Instrument shall be a Contract of Guarantee as provided under Section 126 of the Indian Contract Act, 1872 and further shall be covered by Section 14(3)(b) of the Insolvency and Bankruptcy Code, 2016 (as amended) shall be enforceable as such.

7. IREDA/PFC/REC liability under this POI is restricted to Rupees Crores (Rs.....) only. This POI shall remain in force until..... [Insert the date of validity of the POI]. The Nodal Agency shall be entitled to invoke this POI up to three hundred sixty-five (365) days after the last date of the validity of this POI. This POI shall be extended from time to time for such period, as may be desired by the TSP.

8. The Guarantor hereby expressly agrees that it shall not require any proof except for the written demand from the Nodal Agency, raised at the above- mentioned address of the Guarantor (address of Guarantor office should be in NCR only) and the Guarantor shall pay the amount to the Nodal Agency without reference to the TSP.

9. Any such demand made by the Nodal Agency on the Guarantor shall be conclusive and binding not withstanding any difference between the Nodal Agency and the TSP or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Guarantor undertakes not to revoke this guarantee during its currency without previous consent of the Nodal Agency and further agrees that the POI herein contained shall continue to be enforceable till the Nodal Agency discharges this contract or till the expiry of tenure or (including Claim period) whichever is earlier.

10. The Guarantor shall make payment hereunder within two (02) working days on first demand without restriction or conditions and notwithstanding any objection or disputes raised by the TSP, namely, ... [Insert name of SPV], or [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person. The Guarantor shall not require the Nodal Agency to justify the invocation of this POI, nor shall the Guarantor have any recourse against the Nodal Agency in respect of any payment made hereunder.

11. This POI shall be interpreted in accordance with the laws of India.

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

13. This POI 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.

14. This POI Contract shall be a primary obligation of the Guarantor as a Principal to pay on demand by the Nodal Agency and the Nodal Agency shall not be obliged before enforcing this POI Contract to take any action in any court or arbitral proceedings against the TSP, namely, ... [Insert name of SPV], or..... [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person, as the case may be to make any claim against or any demand on the TSP, namely, ... [Insert name of SPV], or.....[Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person, as the case may be, or to give any notice to TSP, namely..... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or..... [Insert name of the TSP] and/or any other person, as the case may be, or to enforce any security held by the Nodal Agency or to exercise, levy or enforce any distress, diligence or other process against the TSP, namely, ... [Insert name of SPV], or.....[Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person, as the case may be.

15. The Guarantor acknowledges that this POI Contract is not personal to the Nodal Agency and may be assigned, in whole or in part, (whether absolutely or by way of security) by Nodal Agency to any entity to whom the Nodal Agency is entitled to assign its rights and obligations under the Transmission Service Agreement.

16. The Guarantor hereby agrees and acknowledges that the Nodal Agency shall have a right to invoke this POI Contract either in part or in full, as it may deem fit. In case of invocation of this POI Contract in part, besides making payment for the part of POI Contract invoked, Guarantor at the request of Nodal Agency shall amend the value of POI Contract to the extent of balance amount.

IN WITNESS WHERE OF the non- banking financial institutions through its authorized officer, has set its hand and stamp on this..... day of.....at.....

Signature .....
Name:
Power of attorney No.: .....
For: ..... [Insert Name of the non- banking financial institutions Company]

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

Schedule: 9

Methodology for determining the Relief Under Force Majeure Event & Change in Law during Construction Period

The relief in the form of revision in tariff due to Force Majeure Event leading to extension of Scheduled COD for a period beyond one hundred eighty (180) days and/ or Change in Law during the construction period shall be as under:

$\Delta T = [(P \times d)] \div [1-(1+ d)^{(-n)}]$

Where,

ΔT = Change in Transmission Charges for each year

P = Sum of cumulative increase or decrease in the cost of the Project due to Change in Law and interest cost during construction corresponding to the period exceeding one hundred eighty (180) due to Force Majeure Event leading to extension of Scheduled COD for a period beyond one hundred eighty (180) days

n = number of years over which the Transmission Charges has to be paid

d = Discount rate as notified by the CERC, applicable on the Bid Deadline

The increase in Transmission Charges as stated above shall be applicable only if the value of increase in Transmission Charges as calculated above exceeds 0.30% (zero point three percent) of the quoted Transmission Charges of the TSP.

MAYANK SINGH
Digitally signed by MAYANK SINGH
Date: 2026.07.07 18:05:18 +05'30'