सेंट्रल ट्रांसमिशन युटिलिटी ऑफ इंडिया लिमिटेड



(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड के स्वामित्व में) (भारत सरकार का उद्यम)

## **CENTRAL TRANSMISSION UTILITY OF INDIA LTD.**

(A wholly owned subsidiary of Power Grid Corporation of India Limited) (A Government of India Enterprise)

Ref. No.: C/CTU/AI/00/17th CCTP

22<sup>nd</sup> March 2024

### **OFFICE MEMORANDUM**

# Sub: Inter-State Transmission Schemes (costing up to Rs.100 Cr.) to be taken up for implementation under Regulated Tariff Mechanism (RTM).

The undersigned is directed to inform that CTU has approved the implementation of the following ISTS costing less than or equal to Rs.100 Cr. in line with the MoP office order dated 28.10.2021 under the Regulated Tariff Mechanism (RTM) mode by the implementing agencies as indicated in the table below:

SI. No.	Name of Transmission Scheme	Implementing Agency
North	nern Region	
1.	Augmentation of Transformation Capacity at 400/220kV Kankroli (PG) S/s in Rajasthan by 400/220kV, 1x500 MVA ICT (4 <sup>th</sup> )	Power Grid Corporation of India Ltd.
2.	Replacement of 400/220kV, 315 MVA ICT-3 with 400/220kV, 500 MVA ICT at 400/220/66 kV Bawana (DTL) substation	Power Grid Corporation of India Ltd.
3.	Augmentation of Transformation Capacity at 400/220kV New Wanpoh (PG) S/s in Jammu & Kashmir by 400/220kV, 1x315 (3x105MVA) MVA ICT (3 <sup>rd</sup> )	Power Grid Corporation of India Ltd.
4.	Implementation of 1 no. of 220 kV line bay at 400/220 kV Fatehgarh-III PS (Sec-1) for interconnection of BESS of JSW Renew Energy Five Ltd.	POWERGRID Ramgarh Transmission Ltd. (a subsidiary of Power Grid Corporation of India Ltd.)
West	ern Region	1
5.	Augmentation of Transformation Capacity at 400/220 kV Boisar substation in Maharashtra by 400/220 kV, 1x500 MVA (5 <sup>th</sup> ) ICT	Power Grid Corporation of India Ltd.
Sout	hern Region	
6.	Augmentation of transformation capacity at 400/230kV Tuticorin-II GIS PS in Tamil Nadu by 500 MVA, 400/230kV ICT (6 <sup>th</sup> ) to meet N-1 reliability of RE Pooling Station	Power Grid Corporation of India Ltd.
7.	Augmentation of transformation capacity at 400/220kV NP Kunta PS in Andhra Pradesh by 1x500 MVA, 400/220kV ICT (5 <sup>th</sup> ) and implementation of common facility works for providing connectivity to RE generation projects	Power Grid Corporation of India Ltd.
8.	Implementation of 3 nos. of 400kV line bays at Ananthapuram PS for integration of RE generation projects	Ananthapuram Kurnool Transmission Ltd. (a subsidiary of Power Grid Corporation of India Ltd.)

"सौदामिनी", प्रथम तल, प्लॉट .सं.2, सेक्टर-29, गुरुग्राम- 122001 (हरियाणा), दूरभाष: 0124-2822000, सीआईएन: U40100HR2020GOI091857 "Saudamini", 1st Floor, Plot No. 2, Sector-29, Gurugram-122001 (Haryana), Tel : 0124-2822000, CIN: U40100HR2020GOI091857 Website: https://www.cturl.in

9.	Implementation of 1 no. of 230kV line bay at Pugalur	Power Grid Corporation of			
	(Existing) 400/230kV S/s for integration of RE generation	India Ltd.			
	project (M/s Tata Power Renewable Energy Ltd.)				
North	North Eastern Region				
10.	North Eastern Region Expansion Scheme-XXIV (NERES-	Power Grid Corporation of			
	XXIV)	India Ltd.			

The detailed scope of works for the above transmission schemes is given at Annexure-I.

The above transmission schemes are awarded to the Implementing Agency for its implementation under RTM mode. The implementing agency shall enter into a concession agreement with CTU for the implementation of the above-mentioned transmission schemes through the Regulated Tariff Mechanism (RTM).

This issues with the approval of Competent Authority.

(Partha Sarathi Das) Sr. General Manager

Encl: as stated.

To:

<ol> <li>The Chairman &amp; Managing Director Power Grid Corporation of India Ltd., Saudamini, Plot No. 2, Sector-29, Gurgaon- 122 001</li> </ol>	<ul> <li>2. POWERGRID Ramgarh Transmission Ltd. (a subsidiary of Power Grid Corporation of India Ltd.) Saudamini, Plot No. 2, Sector-29, Gurgaon – 122009.</li> </ul>
<ol> <li>Ananthapuram Kurnool Transmission Ltd. (a subsidiary of Power Grid Corporation of India Ltd.) Saudamini, Plot No. 2, Sector-29, Gurgaon – 122009.</li> </ol>	

## Copy to:

1. Shri Rakesh Goyal	2. Shri Om Kant Shukla
Chief Engineer & Member Secretary (NCT)	Director (Trans)
Central Electricity Authority	Ministry of Power,
Sewa Bhawan, R. K. Puram,	Shram Shakti Bhawan,
New Delhi-110 066.	Rafi Marg, New Delhi 110 001
	-

## CC:

1. Director (Operations) Delhi Transco Ltd. Shakti Sadan, Kotla Road, New Delhi-110 002 <u>dir.opr@dtl.gov.in;</u> pramod@dtl.gov.in;;	For kind information, please.
2. Chief Engineer JKPTCL, Kashmir PDD Complex, Bemina Srinagar-190010 jkptcl-mdjkptcl1@gmail.com; Sesandocr1jmu@gmail.com	For kind information, please.
3. Director (Technical) Rajasthan Rajya Vidyut Prasaran Nigam Ltd., Vidyut Bhawan, Jaipur, Rajasthan-302005. <u>rvpnl-dir.tech@rvpn.co.in;</u> <u>xen2.pp@rvpn.co.in;</u> <u>se.pp@ rvpn.co.in;</u>	For kind information, please.
4. Managing Director Assam Electricity Grid Corporation Limited Bijulee Bhawan, Paltan Bazar Guwahati (Assam) – 781001 <u>managing.director@aegcl.co.in</u>	With a request to take up implementation of AEGCL scope in matching time-frame of North Eastern Region Expansion Scheme-XXIV (NERES-XXIV).

#### Northern Region

1. Augmentation of Transformation Capacity at 400/220kV Kankroli (PG) S/s in Rajasthan by 400/220kV, 1x500MVA ICT (4<sup>th</sup>)

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	AugmentationofTransformation Capacity at400/220kVKankroli (PG)S/sinRajasthanby400/220kV1x500MVAICT(4th)alongalcT(4th)alongwithassociated220kVtransformer bay**incl. extension of 220 kVside of ICT through 220 kVCable/GIB	<ul> <li>500 MVA, 400/220 kV ICT- 1 no.</li> <li>220 kV ICT bay - 1 no.</li> <li>220kV GIS Bus duct - 850m approx.</li> </ul>	18 months from date of issuance of OM by CTUIL
2.	Shifting of existing 50 MVAr Bus reactor [so as to accommodate 4 <sup>th</sup> ICT] and development of 400kV bay for reactor.	<ul> <li>400kV bay for existing 50MVAr Bus Reactor – 1 no.</li> </ul>	
		Total Estimated Cost:	₹ 59.55 Crore

# 2. Replacement of 400/220kV, 315MVA ICT-3 with 400/220kV, 500 MVA ICT at 400/220/66kV Bawana (DTL) substation

SI.	Scope of the Transmission	Item Description	Implementation
INO.	Scheine		rimename.
1.	Replacement of 400/220kV, 315	500 MVA, 400/220 kV	18 months from the
	MVA ICT-3 with 400/220kV, 500	ICT - 1 no.	date of issuance of
	MVA ICT at 400/220/66 kV Bawana		OM by CTUIL
	(DTL) substation		-
		Total Estimated Cost:	₹ 40.6 Crore

Note:

- a. Present scope of work involves ICT replacement with 400/220kV 500MVA ICT for which existing 400kV & 220kV ICT bays shall be utilized.
- 3. Augmentation of Transformation Capacity at 400/220kV New Wanpoh (PG) S/s in Jammu & Kashmir by 400/220kV, 1x315MVA (3x105MVA) ICT (3<sup>rd</sup>)

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Augmentation of Transformation Capacity at 400/220kV New Wanpoh (PG) S/s in Jammu & Kashmir by 400/220kV 1x315 MVA	315 MVA, 400/220 kV ICT (3x105 MVA single phase units)- 1 no.	31.12.2025
	ICT (3rd) (3x105MVA single phase units) along with associated transformer bays.	400 kV ICT bay (AIS) – 1 no. (in existing dia)	
		220 kV ICT bay (AIS) – 1	
		no.	
		Total Estimated Cost:	₹ 61 Crore

#### 4. Implementation of 1 no. of 220 kV line bay at 400/220 kV Fatehgarh-III PS (Sec-1) for interconnection of BESS of JSW Renew Energy Five Ltd.

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	1 no. of 220kV line bay at 400/220kV Fatehgarh-III PS (Sec- 1) for interconnection of JSW Renew Energy Five Ltd. BESS Project (Connectivity App No. 0212100040-250 MW)	220kV line bay – 1 no.	30.06.2025
		Total Estimated Cost:	₹ 5.94 Crore

#### Note:

a. At 220 kV Fatehgarh-III PS (Sec-1), future line bay (no. 218) is allocated to M/s JSW Renew Energy Five Ltd. (Connectivity Appl. No. 212100040)

#### Western Region

5. Augmentation of Transformation Capacity at 400/220 kV Boisar substation in Maharashtra by 400/220 kV, 1x500 MVA (5<sup>th</sup>) ICT

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Augmentation of Transformation capacity at 400/220kV Boisar S/s in Maharashtra by 400/220kV 1x500MVA ICT (5 <sup>th</sup> )	<ul> <li>400/220kV, 500MVA ICT–1 No.</li> <li>400kV ICT bay (AIS) – 1 No.</li> <li>220kV ICT bay (AIS) – 1 No.</li> </ul>	18 months from date of issuance of OM by CTUIL
		Total Estimated Cost:	₹ 49.87 Crore

#### Southern Region

6. Augmentation of transformation capacity at 400/230kV Tuticorin-II GIS PS in Tamil Nadu by 500 MVA, 400/230kV ICT (6th) to meet N-1 reliability of RE Pooling Station

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Augmentation of transformation capacity at 400/230kV Tuticorin- II GIS PS in Tamil Nadu by 500 MVA, 400/230kV ICT (6th)	<ul> <li>500 MVA, 400/230 kV ICT – 1 No.</li> <li>400kV ICT bays (GIS): 1 No. for ICT bay (in new dia. with 1 no. additional bay for diameter completion) (refer note a)</li> <li>230kV ICT bay (Hybrid MTS) – 1 No.</li> <li>400 kV GIS duct (m) – 280m approx.</li> </ul>	21 months from the date of issuance of OM by CTUIL
		Total Estimated Cost:	₹ 79 Crore

Note:

- a. In view of GIS substation, one complete 400kV diameter with three Circuit Breakers (one and half switching scheme) shall be implemented at 400kV level for interconnection of ICT in one 400kV bay. Utilization of another 400kV bay of the diameter shall be identified in future.
- 7. Augmentation of Transformation Capacity at 400/220kV NP Kunta PS in Andhra Pradesh by 1x500MVA, 400/220kV ICT (5<sup>th</sup>) and implementation of common facility works for providing connectivity to RE generation projects.

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Augmentation of transformation capacity at 400/220kV NP Kunta PS by 1x500 MVA, 400/220kV ICT (5th)	<ul> <li>500 MVA, 400/220 kV ICT – 1 No.</li> <li>400kV ICT bay- 1 No.</li> <li>220kV ICT bay- 1 No.</li> </ul>	18 months from the date of issuance of OM by CTUIL
2.	Implementation of common facility works at NP Kunta for providing connectivity to RE generation projects	<ul> <li>220kV bus works for 6 nos. bays – 1 set</li> </ul>	12 months from the date of issuance of OM by CTUIL
		Total Estimated Cost:	₹ 52.24 Crore

8. Implementation of 3 nos. of 400kV line bays at Ananthapuram PS for integration of RE generation projects

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	2 nos. of 400kV line bays at Ananthapuaram PS for Connectivity to M/s Renew Vikram Shakti Pvt. Ltd.	<ul> <li>400kV line bays – 2 Nos.</li> </ul>	31.03.2026
2.	1 no. of 400kV line bay at Ananthapuaram PS for Connectivity to M/s ABC Cleantech Pvt. Ltd.	• 400kV line bays – 1 No.	31.03.2026

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
		Total Estimated Cost:	₹ 45.64 Crore

# 9. Implementation of 1 no. of 230kV line bay at Pugalur (Existing) 400/230kV S/s for integration of RE generation project (M/s Tata Power Renewable Energy Ltd.)

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	1 no. 230kV line bay at Pugalur(Existing) 400/230kV S/s for Connectivity to M/s Tata Power Renewable Energy Ltd.	• 230kV line bay – 1 No.	01.03.2026
		Total Estimated Cost:	₹ 6.08 Crore

### North-Eastern Region

### 10. North-Eastern Region Expansion Scheme-XXIV (NERES-XXIV)

SI. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe
1.	Reconductoring of Khandong (NEEPCO) – Halflong (POWERGRID) 132kV S/c line [excluding the LILO portion of this line at Umrangshu (AEGCL) S/s, which is owned by AEGCL] with Single HTLS conductor of ampacity 600A (at nominal voltage level) <b>Note:</b> Reconductoring of LILO portion of this line along with replacement of CTs of 132kV line bays of the LILO line at Umrangshu (AEGCL) S/s is to be taken up by AEGCL under intra-state scheme.	63.036km	18 months from the date of issuance of OM by CTUIL <i>(refer</i> <i>note a)</i>
2.	Reconductoring of Halflong (POWERGRID) – Jiribam (POWERGRID) 132kV S/c line with Single HTLS conductor of ampacity 600A	100.63km	
	Tota	I Estimated Cost:	₹ 39.38 Crore

Note:

a. Best efforts shall be made to implement the transmission scheme within 15 months from the date of issuance of OM by CTUIL.