

सेंट्रल ट्रांसमिशन यूटिलिटी 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.: C/CTU/AI/00/8<sup>th</sup> CCTP

14<sup>th</sup> October 2022

**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:

Sl.	Name of scheme	Implementing Agency
<b>Northern Region</b>		
1.	Augmentation of Transformation Capacity by 1x500MVA 400/220kV ICT (6th) at Fatehgarh-II PS to cater to the N-1 contingency requirement at Fatehgarh-II PS.	Power Grid Corporation of India Ltd.
2.	Augmentation of Transformation capacity by 1x500MVA, 400/220kV ICT (3rd) to cater to the N-1 contingency requirement at Bikaner PS.	Power Grid Corporation of India Ltd.
3.	Reactive power compensation on 400kV transmission lines in NR.	Power Grid Corporation of India Ltd.
<b>Eastern Region</b>		
4.	Eastern Region Expansion Scheme-XXXI (ERES-XXXI).	Power Grid Corporation of India Ltd.
<b>North Eastern Region</b>		
5.	North Eastern Region Expansion Scheme-XIX (NERES-XIX).	Power Grid Corporation of India Ltd.

The detailed scope of works for the above transmission schemes, as approved by CTU is given at **Annexure-I**.

Implementing agencies shall enter into a concession agreement with CTU for the implementation of the above-mentioned 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:**

**1. The Chairman & Managing Director**  
Power Grid Corporation of India Ltd.,  
Saudamini, Plot No. 2, Sector-29,  
Gurgaon- 122 001

**Copy to:**

**1. Shri Ishan Sharan**  
Chief Engineer & Member Secretary  
(NCT)  
Central Electricity Authority  
Sewa Bhawan, R. K. Puram,  
New Delhi-110 066.

**2. Shri Goutam Ghosh**  
Director (Trans)  
Ministry of Power,  
Shram Shakti Bhawan,  
Rafi Marg, New Delhi 110 001

Northern Region**1. Augmentation of Transformation Capacity by 1x500MVA 400/220kV ICT (6<sup>th</sup>) at Fatehgarh-II PS to cater to the N-1 contingency requirement at Fatehgarh-II PS:**

Sl. No.	Scope of the Transmission Scheme	Capacity/km	Implementation timeframe
1.	Augmentation of Transformation Capacity by 1x500MVA 400/220kV ICT (6 <sup>th</sup> ) at Fatehgarh-II PS (under Bus section-1 with cable/GIS duct connection at 220kV side).	<ul style="list-style-type: none"> <li>• 500 MVA 400/220 kV ICT- 1no.</li> <li>• 400 kV ICT bay – 1 no.</li> <li>• 220 kV ICT bay – 1 no. (with cable/GIS duct connection)</li> </ul>	18 months from the issue of OM by CTUIL (Refer Note-a).
<b>Total Estimated Cost:</b>			<b>INR 55.68 Crore</b>

**Note:**

- a. Best efforts shall be carried out to implement the transmission scheme within 15 months from the issue of OM by CTUIL.

**2. Augmentation of Transformation capacity (400/220kV) to cater to the N-1 contingency requirement at Bikaner PS:**

Sl. No.	Scope of the Transmission Scheme	Capacity/km	Implementation timeframe
1	Augmentation of Transformation capacity by 1x500MVA, 400/220kV ICT (3 <sup>rd</sup> ) at Bikaner PS.	<ul style="list-style-type: none"> <li>• 500 MVA 400/220 kV ICT- 1no.</li> <li>• 400 kV ICT bay – 1 no.</li> <li>• 220 kV ICT bay – 1 no.</li> </ul>	15 months from the issue of OM by CTUIL.
<b>Total Estimated Cost:</b>			<b>INR 45.52 Crore</b>

**3. Reactive power compensation on 400kV transmission lines in NR:**

Sl. No.	Scope of the Transmission Scheme	Capacity/km	Implementation timeframe
1.	Installation of 50 MVAR switchable line reactor at Mainpuri end and fixed 50 MVAR line reactor at Ballabgarh end on Mainpuri- Ballabgarh 400 kV D/c line along with 450 ohm NGR at each ends (with NGR bypass arrangement for operation of line reactor as a bus reactor).	<ul style="list-style-type: none"> <li>• 50 MVAR switchable line reactor along with associated bays and 450 ohm NGR at Mainpuri end - 2 Nos</li> <li>• 50 MVAR fixed line reactor along with associated</li> </ul>	15 months from the issue of OM by CTUIL

		equipments and 450-ohm NGR at Ballabgarh end -2 Nos.	
2.	Installation of 80 MVAR switchable line reactor at Allahabad end on Kanpur-Allahabad 400 kV S/c line along with 450 ohm NGR (with NGR bypass arrangement for operation of line reactor as a bus reactor).	• 80 MVAR switchable line reactor along with associated bay and 450 ohm NGR at Allahabad end -1 No.	15 months from the issue of OM by CTUIL
3.	Installation of 80 MVAR fixed line reactor at Bhiwadi end for uncompensated circuit of Agra-Bhiwadi 400 kV D/c line along with 450 Ohm NGR (with NGR bypass arrangement for operation of line reactor as a bus reactor).	• 80 MVAR fixed line reactor along with associated equipments and 450 Ohm NGR at Bhiwadi end - 1 No.	15 months from the issue of OM by CTUIL
<b>Total Estimated Cost:</b>			<b>INR 76.10 Crore</b>

### Eastern Region

#### 4. Eastern Region Expansion Scheme-XXXI (ERES-XXXI):

Sl. No.	Scope of the Transmission Scheme	Capacity/km	Implementation timeframe
1.	Installation of new 420kV, 1x63MVAR line reactor at Maithon-A end of Maithon-A – Kahalgaon-B ckt-1 400kV line along with new 500 Ohm NGR (with NGR bypass arrangement for operation of line reactor as a bus reactor)  <i>Note: The existing 50MVAR line reactor along with NGR in this line at Maithon-A end may be decommissioned prior to commissioning of the above new 63MVAR line reactor and NGR.</i>	• 63MVAR line reactor – 1 no. • 500 Ohm NGR along with line reactor including bypassing arrangement – 1 no.	18 months from the issue of OM by CTUIL
2.	Installation of new 420kV, 1x125MVAR bus reactor along with associated bay at Jamshedpur (POWERGRID) S/s.	• 420kV, 125MVAR bus reactor – 1 no. • 400kV bus reactor bay – 1 no.	
<b>Total Estimated Cost:</b>			<b>INR 35.39 Crore</b>

**5. North Eastern Region Expansion Scheme-XIX (NERES-XIX):**

<b>Sl. No.</b>	<b>Scope of the Transmission Scheme</b>	<b>Capacity/km</b>	<b>Implementation timeframe</b>
1.	Reconductoring of Loktak (NHPC) – Imphal (POWERGRID) 132kV S/c line with HTLS conductor with Ampacity of single HTLS as 800A (at nominal voltage) along with strengthening of associated structure in NHPC switchyard, if necessary.	36.6km	18 months from the issue of OM by CTUIL
2.	Replacement of existing CT of 600-400-200/1A at Loktak HEP end in Loktak – Imphal 132kV S/c line with rating commensurate with ampacity (800A) of HTLS conductor.	-	
<b>Total Estimated Cost:</b>			<b>INR 15.60 Crore</b>