

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/00/7<sup>th</sup> CCTP

25<sup>th</sup> August 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>Western Region</b>		
1.	Augmentation of Transformation Capacity by 1x500 MVA, 400/220kV ICT (3 <sup>rd</sup> ) at Raigarh (PG) substation.	Power Grid Corporation of India Ltd.
2.	Western Region Expansion Scheme-XXX (WRES-XXX).	Power Grid Corporation of India Ltd.
<b>Northern Region</b>		
3.	Implementation of 2 nos. of 220 kV line bays at 400/220kV Bikaner-II PS for interconnection of solar projects (ACME Solar Holdings Pvt. Ltd., Prerak Greentech Pvt. Ltd.).	POWERGRID Bikaner Transmission System Ltd. [a subsidiary of Power Grid Corporation of India Ltd. (erstwhile known as Bikaner-II Bhiwadi Transco Ltd.)]
<b>Southern Region</b>		
4.	Augmentation of Transformation Capacity by 1x500 MVA, 400/230kV ICT (4 <sup>th</sup> ) at Arasur substation.	Power Grid Corporation of India Ltd.
5.	Augmentation of Transformation Capacity by 1x500 MVA, 400/230kV ICT (4 <sup>th</sup> ) at Hosur substation.	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 Ravinder Gupta**  
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

**Western Region****1. Augmentation of Transformation Capacity by 1x500 MVA, 400/220kV ICT (3<sup>rd</sup>) at Raigarh(PG) substation:**

Sl. No.	Scope of the Transmission Scheme	Capacity/km	Implementation timeframe
1.	Augmentation of Transformation Capacity by 1x500 MVA, 400/220 kV ICT (3 <sup>rd</sup> ) at Raigarh(PG) S/s along with associated ICT bays	<ul style="list-style-type: none"> <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>	15 months from the issue of OM by CTUIL
<b>Total Estimated Cost:</b>			<b>INR 45.52 Crore</b>

**2. Western Region Expansion Scheme-XXX (WRES-XXX):**

Sl. No.	Scope of the Transmission Scheme	Capacity /km	Implementation timeframe
1.	Bypassing of Parli(PG) – Parli(M) 400kV D/c line (~5km.) and Parli(PG) – Parli(New) 400kV D/c (quad) line (~18km.) at the outskirts of the Parli(PG) S/s so as to form Parli(M) – Parli(New) 400kV D/c direct line ( <i>refer to note a</i> )	Line Bypassing work	12 months from the issue of OM by CTUIL.
2.	Reconductoring of Parli(PG) – Parli(M) 400kV D/c line section of above line (at Sl. 1) with twin HTLS conductor with a minimum capacity of 1940MVA per circuit at a nominal voltage ( <i>refer to note b</i> )	Reconductoring length: About 5 km.	
3.	400kV Bay Upgradation work at Parli(M) S/s  <i>(Parli(M) S/s has a DMT scheme. The current rating of existing bays is 2000A which would be upgraded to 3150A to suit the reconductoring with Twin HTLS conductor)</i>	400 kV line bays (Bay Upgradation) – 2 nos.	
<b>Total Estimated Cost:</b>			<b>INR 26.64 Crore</b>

**Note:**

- a. As per GA of Parli(PG) S/s, Parli(M) & Parli(New) 400kV D/c lines are getting terminated in adjacent bays on the same side of Parli(PG) S/s. Hence, the above would facilitate their interconnection and bypassing at Parli(PG) S/s.

- b. As informed by POWERGRID in the 8th CMETS-WR meeting, existing towers have been designed for sag corresponding to twin moose conductor at 85C design temperature. Hence, Reconductoring shall be possible on existing towers with GAP conductor to achieve 1400A per sub conductor or 1940MVA per ckt.
- c. Balance works at Parli(M) S/s end such as Bus coupler/Transfer Bus Coupler/Bus Upgradation to 3150A, as required, shall be taken up by MSETCL in matching time-frame of the reconductoring scheme (WRES-XXX).
- d. Due to the volatility in the metal market, scrap value of aluminum conductors may be highly variable at this time. Considering this, the scrap value of the existing ACSR Moose conductor shall be deducted as per the prevailing scrap value to arrive at the final cost of the project.

### **Northern Region**

#### **3. Implementation of 2 nos. of 220 kV line bays at 400/220kV Bikaner-II PS for interconnection of solar projects (ACME Solar Holdings Pvt. Ltd., Prerak Greentech Pvt. Ltd.):**

<b>Sl. No.</b>	<b>Scope of the Transmission Scheme</b>	<b>Capacity/km</b>	<b>Implementation timeframe</b>
1.	2 nos. of 220 kV line bays at 400/220 kV Bikaner-II PS for interconnection of RE projects (ACME Solar Holdings Pvt. Ltd., Prerak Greentech Pvt. Ltd.)	<ul style="list-style-type: none"> <li>• 220 kV line bay – 2 Nos. (refer to note a)</li> </ul>	15 months from the issue of OM by CTUIL
2.	Implementation of 220kV Bus sectionalizer along with bus coupler and transfer bus coupler at 400/220kV Bikaner-II PS.	<ul style="list-style-type: none"> <li>• 220kV Bus Sectionalizer Bay– 1 Set</li> <li>• 220kV Bus Coupler Bay–1 No.</li> <li>• 220kV Transfer Bus Coupler Bay–1 No.</li> <li>• Bus extension works for future Bays (3 Nos. of Line Bays &amp; 3 Nos. of ICT Bays) – 1 Set.</li> </ul>	
<b>Total Estimated Cost:</b>			<b>INR 38.56 Crore</b>

**Note:**

- a. At 220 kV Bikaner-II, future line bays (no. 214/216/218) in Section-B are allocated to RE developers with bays in the RE developer's scope.

## Southern Region

### 4. Augmentation of Transformation Capacity by 1x500 MVA, 400/230kV ICT (4<sup>th</sup>) at Arasur substation:

Sl. No.	Scope of the Transmission Scheme	Capacity/km	Implementation timeframe
1.	Augmentation of transformation capacity by 1x500 MVA, 400/230kV ICT (4 <sup>th</sup> ) at Arasur S/s along with associated ICT bays	<ul style="list-style-type: none"><li>• 500 MVA, 400/230 kV ICT – 1 No.</li><li>• 400kV ICT bay – 1 No.</li><li>• 230kV ICT bay – 1 No.</li></ul> <p>(For ICT interconnection to 230kV Switchyard, 245kV Cable / GIB shall be required)</p>	18 months from the issue of OM by CTUIL
<b>Total Estimated Cost:</b>			<b>INR 61 Crore</b>

### 5. Augmentation of Transformation Capacity by 1x500 MVA, 400/230kV ICT (4<sup>th</sup>) at Hosur substation:

Sl. No.	Scope of the Transmission Scheme	Capacity/km	Implementation timeframe
1.	Augmentation of transformation capacity by 1x500 MVA, 400/230kV ICT (4 <sup>th</sup> ) at Hosur S/s along with associated ICT bays	<ul style="list-style-type: none"><li>• 500 MVA, 400/230 kV ICT – 1 No.</li><li>• 400kV ICT bay – 1 No.</li><li>• 230kV ICT bay – 1 No.</li></ul>	15 months from the issue of OM by CTUIL
<b>Total Estimated Cost:</b>			<b>INR 46 Crore</b>