



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. No.: C/CTU/AI/00/16<sup>th</sup> CCTP

2<sup>nd</sup> January 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:

Sl. No.	Name of Transmission Scheme	Implementing Agency
<b>North Eastern Region</b>		
1.	North Eastern Region Expansion Scheme-XXI Part-A (NERES-XXI Part-A)	Power Grid Corporation of India Ltd.
2.	North Eastern Region Expansion Scheme-XXII (NERES-XXII)	Power Grid Corporation of India Ltd.
<b>Western Region</b>		
3.	Implementation of 400kV bay at Khavda-I PS (KPS1) for interconnection of RE project of Sarjan Realities Pvt. Ltd. (SRPL) (1150MW)	KPS1 Transmission Ltd. (a subsidiary of Mega Engineering & Infrastructures Ltd.)
4.	400kV line bay at 765/400kV Parli (New) S/s for RE Interconnection	POWERGRID Parli Transmission Ltd. (a subsidiary of Power Grid Corporation of India Ltd.)
5.	Implementation of 400kV line bay at 765/400/220kV Indore (PG) S/s in MP for RE Interconnection	Power Grid Corporation of India Ltd.
<b>Northern Region</b>		
6.	Reconductoring of 220 kV Hisar (PG) - Hisar (IA) D/c line	Power Grid Corporation of India Ltd.
<b>Southern Region</b>		
7.	Augmentation of transformation capacity at 400/220kV Koppal PS in Karnataka by 400/220kV, 1x500 MVA ICT (6 <sup>th</sup> )	Koppal Narendra Transmission Ltd. (a subsidiary of ReNew Transmission Ventures Pvt. Ltd.)
8.	Augmentation of transformation capacity at 400/220kV Gadag PS in Karnataka by 1x500 MVA, 400/220 kV ICT (6 <sup>th</sup> )	Gadag Transmission Ltd. (a subsidiary of ReNew Transmission Ventures Pvt. Ltd.)
9.	Scheme to bypass NGR to use Switchable Line Reactor as Bus Reactor for transmission lines implemented by WKTL under the scheme "Additional inter-Regional AC link for import into Southern Region i.e., Warora – Warangal and	Warora-Kurnool Transmission Ltd. (a subsidiary of Adani Energy Solutions Ltd.)

	Chilakaluripeta - Hyderabad - Kurnool 765kV link." – <b>Part-A</b>	
10.	Scheme to bypass NGR to use Switchable Line Reactor as Bus Reactor for transmission lines implemented by WKTL under the scheme "Additional inter-Regional AC link for import into Southern Region i.e., Warora – Warangal and Chilakaluripeta - Hyderabad - Kurnool 765kV link." – <b>Part-B</b>	Power Grid Corporation of 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:**

<b>1. The Chairman &amp; Managing Director</b> Power Grid Corporation of India Ltd., Saudamini, Plot No. 2, Sector-29, Gurgaon- 122 001	<b>2. POWERGRID Parli Transmission Ltd.</b> (a subsidiary of Power Grid Corporation of India Ltd.) Saudamini, Plot No. 2, Sector-29, Gurgaon – 122009.
<b>3. Shri J. Srinivas Kumar</b> KPS1 Transmission Ltd. (a subsidiary of Megha Engineering & Infrastructures Ltd.) S-2, Technocrat Indl. Estate, Balanagar, Hyderabad – 500 037, Telangana. Email: <a href="mailto:Infor@meil.in">Infor@meil.in</a> ;	<b>4. Shri Bhavesh Kundalia</b> Warora-Kurnool Transmission Ltd. (a subsidiary of Adani Energy Solutions Ltd.) Adani Corporate House, Shantigram, S.G. Highway, Ahmedabad – 382 421, Gujarat, India.
<b>5. Shri Amit Kumar</b> Director Koppal Narendra Transmission Ltd. (a subsidiary of ReNew Transmission Ventures Pvt. Ltd.) Commercial Block 1, Zone 6, Golf Course Road, DLF City Phase-V, Gurugram, Haryana – 122009. Email: <a href="mailto:amit.kumar1@renewpower.in">amit.kumar1@renewpower.in</a> <a href="mailto:Mohit.jain@renewpower.in">Mohit.jain@renewpower.in</a>	<b>6. Shri Amit Kumar</b> Director Gadag Transmission Ltd. (a subsidiary of ReNew Transmission Ventures Pvt. Ltd.) Commercial Block 1, Zone 6, Golf Course Road, DLF City Phase-V, Gurugram, Haryana – 122009. Email: <a href="mailto:amit.kumar1@renewpower.in">amit.kumar1@renewpower.in</a> <a href="mailto:Mohit.jain@renewpower.in">Mohit.jain@renewpower.in</a>

**Copy to:**

<b>1. Shri Ishan Sharan</b> Chief Engineer & Member Secretary (NCT) Central Electricity Authority Sewa Bhawan, R. K. Puram, New Delhi-110 066.	<b>2. Shri Om Kant Shukla</b> Director (Trans) Ministry of Power, Shram Shakti Bhawan, Rafi Marg, New Delhi 110 001
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**CC:**

<b>1. Director (Technical)</b> Haryana Vidhyut Prasaran Nigam Ltd., Shakti Bhawan, Sector-6, Panchkula – 134 109, Haryana.	With the request to carry out necessary bay equipment upgradation works at 220kV Hisar(IA) end in the matching time frame of reconductoring of the Hisar(PG)- Hisar (IA) 220kV D/c line
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**North Eastern Region****1. North Eastern Region Expansion Scheme-XXI Part-A (NERES-XXI Part-A)**

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Upgradation of Single Main & Transfer Bus to Double Bus arrangement with GIS at 132kV Khliehriat (POWERGRID) switching station along with upgradation of necessary Control, Protection, Communication, Automation & LT auxiliary system  <b>Note:</b> 1 no. 132kV AIS line bay owned by MePTCL of Khliehriat (POWERGRID) – Khliehriat (MePTCL) line-2 is also included for upgradation in GIS under this scheme. The ownership of the new line bay would be with the implementation agency. The existing AIS line bay for the said line may be dismantled and handed over to MePTCL on as is where is basis and the implementing agency will coordinate with MePTCL for the same	-	24 months from the date of issuance of OM by CTUIL
<b>Total Estimated Cost:</b>			<b>₹ 48 Crore</b>

**2. North Eastern Region Expansion Scheme-XXII (NERES-XXII)**

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Decommissioning of existing 420kV, 2x50MVA bus reactors at Bongaigaon (POWERGRID) S/s	-	18 months from the date of issuance of OM by CTUIL
2.	Installation of a new 420kV, 1x125MVA bus reactor at Bongaigaon (POWERGRID) S/s in one of the vacated bays after decommissioning of above mentioned 420kV, 2x50MVA bus reactors.  <b>Note:</b> The new 1x125MVA bus reactor would be installed in one of the 400kV bays (1 <sup>st</sup> bay) vacated after decommissioning of existing 420kV, 2x50MVA bus reactors at Bongaigaon (POWERGRID) S/s without any modification/ upgradation in the existing bus reactor bay equipment.	• Bus reactor: 420kV, 1x125MVA – 1 no.	

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
3.	One of the existing 2x80MVA bus reactors (presently installed in parallel in same bay) may be installed at Bongaigaon (POWERGRID) S/s in other vacated bay after decommissioning of above mentioned 420kV, 2x50MVA bus reactors.  <i>Note: One of the existing 2x80MVA bus reactor would be installed in other 400kV bay (2<sup>nd</sup> bay) vacated after decommissioning of existing 420kV, 2x50MVA bus reactors at Bongaigaon (POWERGRID) S/s without any modification/ upgradation in the existing bus reactor bay equipment.</i>		
<b>Total Estimated Cost:</b>			<b>₹ 17.26 Crore</b>

### Western Region

#### 3. Implementation of 400kV bay at Khavda-I PS (KPS1) for interconnection of RE project of Sarjan Realities Pvt. Ltd. (SRPL) (1150MW)

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	400kV line bay at Khavda-I PS (KPS1) (GIS) for interconnection of RE project of Sarjan Realities Pvt. Ltd. (1150MW)	• 400 kV GIS line bay – 1no. + 1 no. additional bay for diameter completion at 2 <sup>nd</sup> 400 kV bus section (refer note a)	28.02.2026 (refer note b)
<b>Total Estimated Cost:</b>			<b>₹ 31.8 Crore</b>

**Note:**

- 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 RE project in one 400kV bay. Utilization of another 400kV bay of the diameter shall be identified in future.
- Implementing agency shall match the Implementation Timeframe of the subject transmission scheme with commissioning schedule of Khavda Phase-IV transmission system which is expected by 28.02.2026 (i.e., 24 months from the date of SPV transfer which is presently anticipated by Feb'24).

#### 4. Implementation of 400kV line bay at 765/400kV Parli (New) S/s for interconnection of RE project:

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	400kV line bay at 765/400kV Parli(New) S/s for interconnection of RE Project	• 400kV line bay– 1 No.	31.12.2025
<b>Total Estimated Cost:</b>			<b>₹ 18 Crore</b>

**5. Implementation of 400kV line bay at 765/400/220kV Indore (PG) S/s in MP for interconnection of RE project.**

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	400kV line bay at 765/400/220kV Indore (PG) for Interconnection of RE project	400kV line bay – 1 No. (On bus section A with Indore & Khandwa lines)	30.06.2025
<b>Total Estimated Cost:</b>			<b>₹ 9 Crore</b>

**Northern Region**

**6. Reconductoring of 220 kV Hisar (PG) - Hisar (IA) D/c line.**

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Reconductoring of 220 kV Hisar (PG) - Hisar (IA) D/c line (Single Zebra) with HTLS conductor (with minimum 1050 Ampere/ckt requirement)	14km	18 months from the date of issuance of OM by CTUIL
2.	Bay equipment upgradation at 220kV Hisar (PG) end		
<b>Total Estimated Cost:</b>			<b>₹ 30.72 Crore</b>

**Southern Region**

**7. Augmentation of transformation capacity at 400/220kV Koppal PS in Karnataka by 1x500 MVA, 400/220kV ICT (6th)**

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Augmentation of Transformation Capacity at 400/220 kV Koppal PS in Karnataka by 400/220 kV, 1x500 MVA ICT (6 <sup>th</sup> )	<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>	18 months from the date of issuance of OM by CTUIL
<b>Total Estimated Cost:</b>			<b>₹ 57.59 Crore</b>

**8. Augmentation of transformation capacity at 400/220kV Gadag PS in Karnataka by 1x500 MVA, 400/220kV ICT (6th)**

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Augmentation of Transformation Capacity at 400/220kV Gadag PS in Karnataka by 400/220kV, 1x500 MVA ICT (6th)	<ul style="list-style-type: none"> <li>• 1x500 MVA, 400/220 kV ICT</li> <li>• 400kV ICT bay- 1 No.</li> <li>• 220kV ICT bay- 1 No.</li> </ul>	18 months from the date of issue of OM by CTUIL
<b>Total Estimated Cost:</b>			<b>₹ 57.59 Crore</b>

**9. Scheme to bypass NGR to use Switchable Line Reactor as Bus Reactor for transmission lines implemented by WKTL under the scheme “Additional inter-Regional AC link for import into Southern Region i.e., Warora – Warangal and Chilakaluripeta - Hyderabad - Kurnool 765kV link.” – Part-A**

Sl. No.	Scope of the Transmission Scheme	Item Description	Implementation Timeframe.
1.	Warangal (New) – Hyderabad 765 kV D/c line with 240 MVAR switchable line reactor at Warangal end of each circuit.	NGR bypass arrangement to use 240 MVAR SLR as bus reactors installed at Warangal end on each circuit of Warangal (New) – Hyderabad 765 kV D/c line	6 months from the date of issuance of OM by CTUIL
2.	Warora Pool – Warangal (New) 765 kV D/c line with 240 MVAR switchable line reactor at both ends of each circuit.	<ul style="list-style-type: none"> <li>• NGR bypass arrangement to use 240 MVAR SLR as bus reactors installed at Warora and Warangal New ends on each circuit of Warora Pool – Warangal (New) 765 kV D/c line</li> </ul>	
3.	Warangal (New) – Chilakaluripeta 765kV D/c line with 240 MVAR switchable line reactor at both ends of each circuit.	<ul style="list-style-type: none"> <li>• NGR bypass arrangement to use 240 MVAR SLR as bus reactors installed at Warangal New and Chilakaluripeta ends on each circuit of Warangal (New) – Chilakaluripeta 765kV D/c line</li> </ul>	
<b>Total Estimated Cost:</b>			<b>₹ 2.08 Crore</b>

**10. Scheme to bypass NGR to use Switchable Line Reactor as Bus Reactor for transmission lines implemented by WKTL under the scheme “Additional inter-Regional AC link for import into Southern Region i.e., Warora – Warangal and Chilakaluripeta - Hyderabad - Kurnool 765kV link.” – Part-B**

<b>Sl. No.</b>	<b>Scope of the Transmission Scheme</b>	<b>Item Description</b>	<b>Implementation Timeframe.</b>
1.	Hyderabad – Kurnool 765 kV D/c line with 240 MVAR switchable line reactor at Kurnool end of each circuit.	<ul style="list-style-type: none"> <li>NGR bypass arrangement to use 240 MVA SLR as bus reactors installed at Kurnool end on each circuit of Hyderabad – Kurnool 765 kV D/c line</li> </ul>	6 months from the date of issuance of OM by CTUIL
<b>Total Estimated Cost:</b>			<b>₹ 0.42 Crore</b>