



## **Eastern Regional Power Committee**

**231<sup>st</sup> OCC MEETING**

**Venue: ERPC Secretariat, Kolkata**

**Date: 22.09.2025**

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## **EASTERN REGIONAL POWER COMMITTEE**

### **AGENDA OF 231<sup>st</sup> OCC MEETING TO BE HELD ON 22.09.2025 (MONDAY) AT 10:30 HRS**

#### **1. PART-A: CONFIRMATION OF MINUTES**

##### **1.1. Confirmation of Minutes of 230<sup>th</sup> OCC Meeting held physically at Power Training Centre, OPTCL, Bhubaneswar on 22<sup>th</sup> August 2025**

The minutes of 230<sup>th</sup> Operation Coordination Sub-Committee meeting held on 22.08.2025 was circulated vide letter dated 01.09.2025.

**Members may confirm the minutes of 230<sup>th</sup> OCC meeting.**

**Deliberation in the meeting**

#### **2. PART-B: ITEMS FOR DISCUSSION**

##### **2.1 Intrastate Transmission Network Assessment & Mitigation across Eastern Region States**

Eastern Region has witnessed a significant rise in power demand, recording an annual growth of nearly 7-8% YoY. The regional peak demand met reached 33,450 MW on 23.07.2025, with several states surpassing their previous peak demand records this year.

Constituents	ER Power Position: 19-Aug-2025							
	Daily Power Position			All Time High				
	Max demand	Time	MU/Day	Demand Met	Demand Date	Demand Time	MU/Day	Energy Date
Bihar	7776	22:30	161.36	8752	23-Jul-25	22:02	186.78	24-Jul-25
DVC	3078	19:30	69.85	3674	14-Jun-24	19:30	81.22	22-Apr-22
Jharkhand	2040	19:00	42.13	2406	13-Jun-25	20:00	52.47	14-Jun-25
Odisha	6268	19:14	131.33	7302	12-Aug-25	22:33	148.54	19-Apr-24
Sikkim	79	18:34	1.28	137	11-Jan-24	18:59	2.50	28-Jan-20
W. Bengal	10365	00:38	220.48	13108	14-Jun-25	23:33	268.22	14-Jun-25
ER	28635	23:01	626.61	33452	23-Jul-25	22:56	703.71	23-Jul-25

Sharp increase in demand highlights the rapid growth trajectory of the region. However, intra-state transmission capacity addition/augmentation particularly of new 220 kV and 400 kV corridors has not kept pace. Intra-state network upgradation continues to be a matter of serious concern due to missed execution timelines and lack of clear visibility at the regional level especially after the dissolution of the Standing Committee.

In this context, an assessment of **Intrastate Transmission Network and Mitigation Measures** across Eastern Region states has been carried out based on operational feedback of ER, as detailed below.

### West Bengal:

Nearly 30% of West Bengal's demand is concentrated in Kolkata and adjoining areas, supplied mainly through the **765 kV New Ranchi–Medinipur–New Jeerat D/C, 400 kV New Ranchi–New PPSP D/C, and 400 kV Kahalgaon–Farakka D/C corridors**. In the last summer, these corridors carried **~4500 MW (~60–70% of WB's total import)**.

Even with all lines in service, voltages in the capital **pocket remain below 385 kV** during peak summer, and the outage of any one corridor leads to severe low-voltage stress. An N-2 contingency of 765 kV Medinipur–New Jeerat D/C may result in complete voltage collapse in Kolkata region.

This issue has been repeatedly deliberated, including in the 226th OCC, where it was recommended to implement dynamic reactive compensation as a long-term measure and UVLS as an immediate defence mechanism. An assessment has been undertaken to examine the existing network issues concerning Inter-state lines, Tie lines and Intra-state networks across the ER states.

#### A) Inter-State (ISTS) associated network of WB:

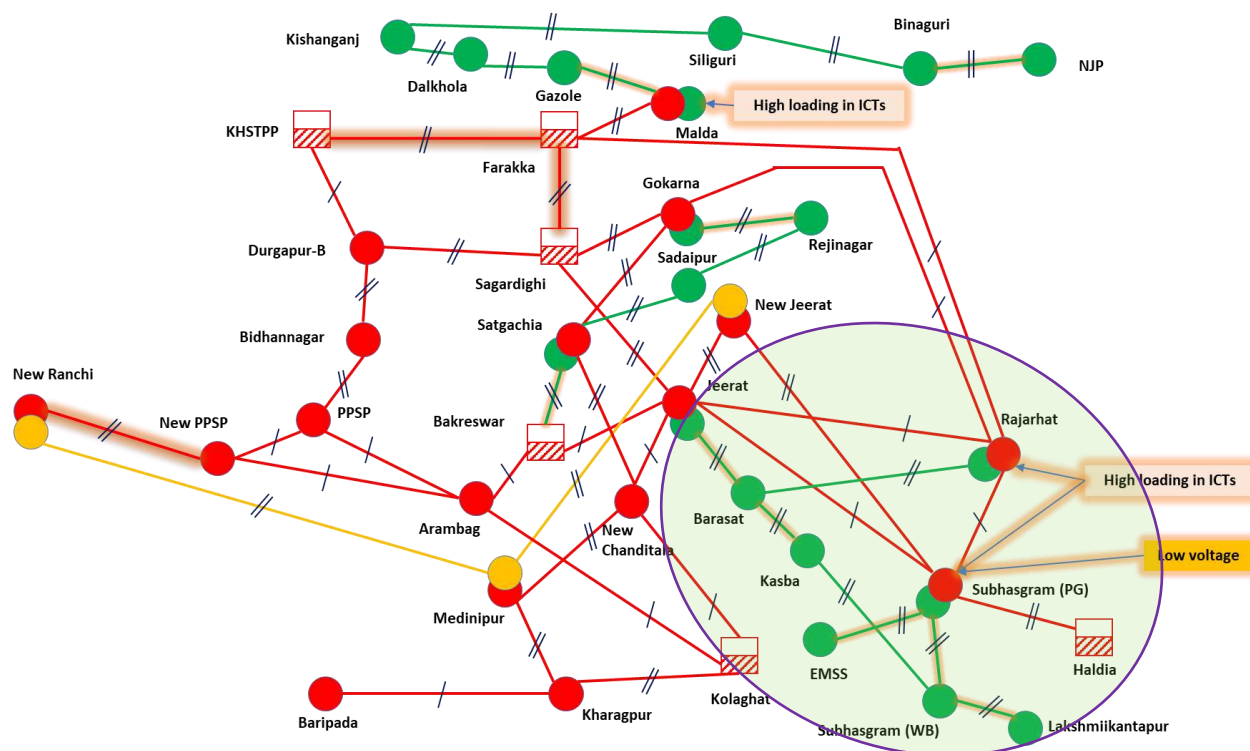
Inter State Element(s)	Contingency/Risk in Operation	Actionable points
765kV New Ranchi–Medinipur–New Jeerat D/C	Voltage collapse in case N-2 contingency.	<b>Short term measure (Summer '26):</b> ✓ Implementation of UVLS Scheme <b>Long term measure (2028 onwards):</b> ✓ Installation of STATCOM ✓ Requirement of another 765kV corridor connecting New Jeerat
400kV New Ranchi–New PPSP D/C	N-1 non-compliant.	<b>Short term measure (Summer '26):</b> ✓ Limiting drawl by PPSP during solar hours. (Pump Mode) <b>Long term measure (2028 onwards):</b> LILO of this line agreed at New Jamshedpur with reconductoring of New Jamshedpur to –NPPSP.
400kV Farakka- Kahalgaon-D/C & 400kV Farakka-Sagardighi-D/C	N-1 non-compliant. & low Voltage scenario	<b>Short term measure (Summer '26):</b> ✓ Commissioning of Sagardighi Unit 5 <b>Long term measure (2028 onwards):</b> ✓ Reconductoring of Farakka-Kahalgaon-D/C approved. ✓ 765kV corridor in this area connecting Northern Region.

## West Bengal -Intra-state system:

220 kV Kolkata ring which is under STU network face high loading during high demand in summer due to high concentration of space cooling load. In the last summer season, several 220 kV lines already exceeded their thermal capacity. The situation could be temporarily managed through load rearrangement, and Load Trimming Schemes but with the prevailing demand growth trend, it is anticipated that all critical 220 kV corridors would be highly loaded in the coming summer.

This scenario of no margin in the system, poses a serious risk to reliable supply in the Kolkata pocket, and proactive measures need to be finalised to ensure continued growth.

Intra State Element(s)	Contingency/Risk in Operation	Actionable points
220kV Kolkata Network: <ul style="list-style-type: none"><li>• Jeerat–Barasat D/C</li><li>• Barasat–Kasba D/C</li><li>• Subhasgram(PG)–EMSS (CESC) D/C</li><li>• Subhasgram(PG)–Subhasgram(WB) D/C</li><li>• Subhasgram(WB)–Lakshmikantpur D/C</li></ul>	<ul style="list-style-type: none"><li>▪ N-1 violations</li><li>▪ potential thermal limit violation.</li></ul> <p>It will impact to meet load of the capital city in coming summer '26</p>	<b>Short term measure (Summer '26):</b> <ul style="list-style-type: none"><li>✓ SPS/LTS need to be checked and ready.</li><li>✓ Load re-arrangement/ Network reconfiguration- 220kV Network, if required.</li></ul> <b>Long term measure (2028 onwards):</b> <ul style="list-style-type: none"><li>✓ Reconductoring of these 220 KV Feeders with HTLS planned.</li><li>✓ Upgradation of Lakshmikantapur S/S to 400kV level is approved.</li></ul> <p><i>Upgradation work needs to be expedited. Upgradation of other 220kV lines to HTLS or 400kV may be considered.</i></p>
220kV Malda–Gazole D/C	N-1 violation	<b>Short term measure (Summer '26):</b> <ul style="list-style-type: none"><li>✓ Network reconfiguration- 220kV Network.</li></ul> <b>Long term measure (2028 onwards):</b> <ul style="list-style-type: none"><li>✓ Reconductoring already approved</li></ul>

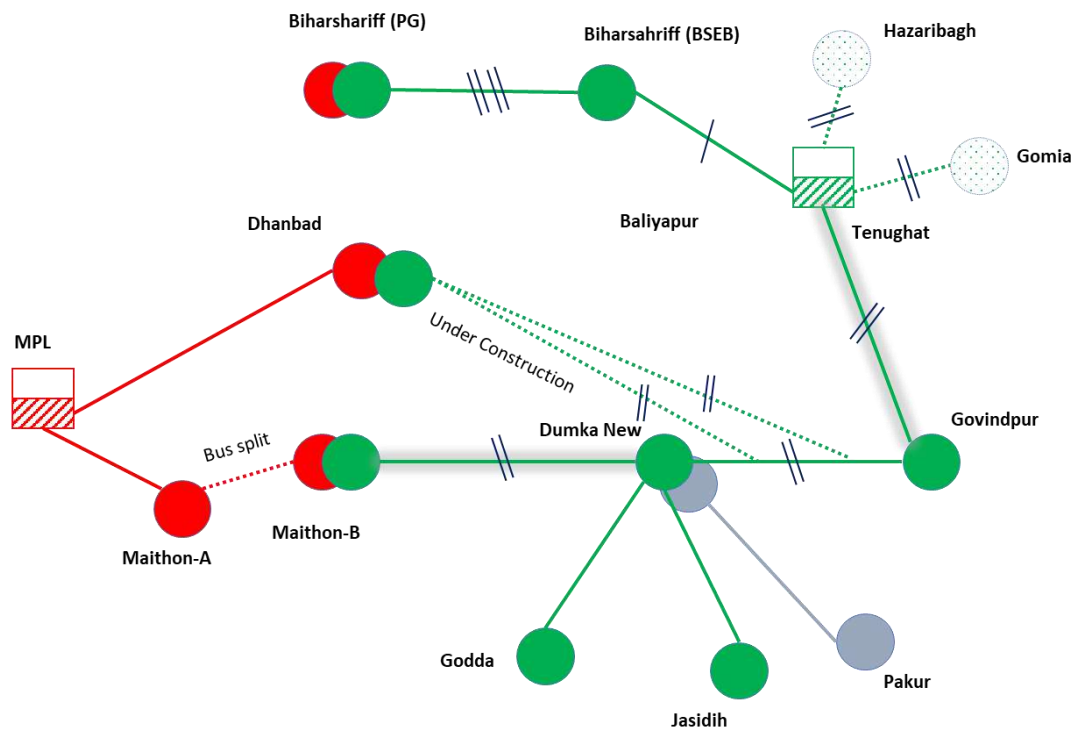


### Jharkhand System:

North-Eastern part of Jharkhand network is very sensitive in context of the power evacuation from **Tenughat & Patratu** and demand meet of this area. Several GD/GI events have occurred in this area leading to complete outage of Dumka, Godda, Govindpur, Jasidih & Tenughat. Tripping of any of the side of the network leads to cascade trip and leads to complete blackout. Detailed constraints are below:

Intra State Element(s)	Contingency/Risk in Operation	Actionable points
220 kV Maithon New Dumka D/C (JUSNL)	N violation	<b>Short term measure (Summer '26):</b> ✓ SPS implementation in Maithon - New Dumka- already done. ✓ Continuing 400kV PVUNL- Tenughat link in post PVUNL unit synchronization will support this area. ✓ Restoration of 220 kV Farakka Lalmatia S/C for decongesting 220 kV Maithon Dumka D/C.  <b>Long term measure (2028 onwards):</b> ✓ LILO of 220 kV Dumka - Govindpur at 400/220 kV Dhanbad.
220 kV Tenughat–Govindpur D/C (JUSNL)	N-1 violations; Tripping of one circuit leads to cascade effect finally to total blackout.	

✓ 220kV Tenughat - Gomia D/C and  
220kV Tenughat - Hazaribagh D/C



## Odisha System:

The capital region of Odisha, accounting for nearly 40% of the state's predominantly domestic and commercial demand, experiences very high summer load due to the hot and humid climate and associated space-cooling requirements. Transmission corridors supplying power to this region are already operating at their capacity. During peak summer, voltage in this region has been observed below 390 kV during peak summer even with all corridors in service and has fallen below 370 kV during contingencies. Few near-miss events have already been occurred.

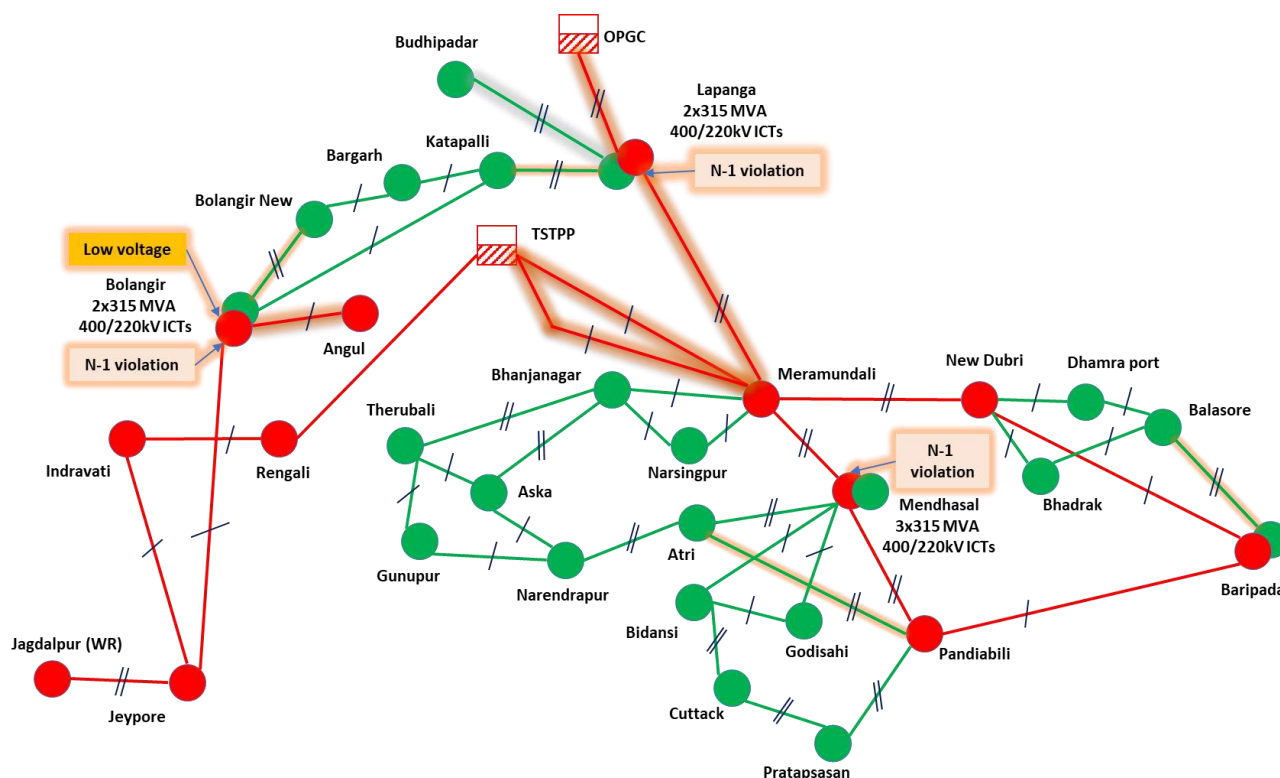
These concerns have been deliberated in several OCC meetings, including the latest 226th OCC, where ERLDC once again recommended implementation of adequate Dynamic compensation devices as long-term measure.

Details of the stressed corridors and contingencies are as follows:

Limiting Constraints	Contingency/Risk in Operation	Remedial Measures
400kV infeed to Bhubaneswar Area <ul style="list-style-type: none"> <li>400 kV Lapanga-Meeramundali D/C</li> </ul>	N-1 contingency, Probable voltage collapse scenario in case double circuit outage	<b>Short term measure (Summer '26):</b> <ul style="list-style-type: none"> <li>✓ Implementation of UVLS scheme in Baripada, New Duburi &amp; Mendhashal area.</li> </ul>



<ul style="list-style-type: none"> <li>• 400 kV OPGC- Lapanga D/C</li> <li>• 400kv Talcher – Meramundali D/C</li> <li>• 400kV Meeramundali-Medhashal D/C</li> </ul>		✓ Network reconfiguration- 220kV system.  <b>Long term measure (2028 onwards):</b> ✓ Reconductoring of 400kv Talcher – Meramundali D/C approved under ISTS scheme. ✓ OPTCL agreed to install $\pm 300$ MVAR STATCOM along with 2x125MVAR MSC and 1x125MVAR MSR at Mendhashal
Transformation capacity & 220kV network near Bhubaneswar: <ul style="list-style-type: none"> <li>• 400/220 kV 315 MVA ICT at Mendhashal -1 &amp; 2 &amp; 3</li> <li>• 220 kV Pandiabili- Atri D/C</li> </ul>		<i>Reconductoring of 400 kV OPGC-Lapanga D/C, 400kV Meeramundali-Medhashal D/C and installation additional ICT or upgradation of ICT capacity may be taken up earliest basis</i>



In western part of Odisha, where majorly industrial loads along with CPP are connected. Budhipadhar, Rourkella, Lapanga and Bolangir are major power sources of this area. 220kV lines connecting Budhipadhar to Lapanga to Bolagir are highly loaded. Detailed contingencies are as follows:

Limiting Constraints	Contingency/Risk in Operation	Remedial Measures
220kV network: <ul style="list-style-type: none"> <li>• 220 kV Lapanga-Katapalli D/C</li> <li>• 220 kV Bolangir- New Bolangir D/C</li> <li>• 220 kV Budhipadar- Lapanga D/C</li> <li>• 220 kV Budhipadar- Vedanta D/C</li> </ul>	<ul style="list-style-type: none"> <li>▪ N-1 contingency</li> <li>▪ Low voltage issue.</li> </ul>	<b>Short term measure (Summer '26):</b> ✓ Network reconfiguration- 220kV Network.  <b>Long term measure (2028 onwards):</b> ✓ Odisha planned for reconductoring this link.
Transformation capacity: <ul style="list-style-type: none"> <li>• 400/220 kV 315 MVA Lapanga ICT - 1&amp;2</li> <li>• 400/220 kV 315 MVA ICT at Bolangir -1 &amp; 2</li> </ul>	Low voltage issue in this region	<i>Work needs to be expedited to complete early. Augmentation of transformation capacity may be planned.</i>

#### DVC:

DVC caters mainly to industrial load in the Durgapur, Asansol, and Maithon belt, with demand remaining steady across seasons. Following the decommissioning of 132/220 kV generation, power flow from the 400 kV system into the 220 kV network has increased, leading to heavy loading of 220 kV corridors at Maithon and DSTPS and ICT overloading at Koderma, DSTPS, and Bokaro.

With new 400 kV generation planned and demand growth continuing, the 220 kV network and ICTs are likely to face further congestion, necessitating timely augmentation.

Detailed network constraints are as follows:

Limiting Constraints	Contingency/Risk in Operation	Remedial Measures
400/220kV ICT having generation <ul style="list-style-type: none"> <li>• 315 MVA ICT at Bokaro -1 &amp; 2</li> <li>• 315 MVA ICT at Koderma - 1 &amp; 2</li> <li>• 315 MVA ICT at DSTPS (Andal) -1 &amp; 2</li> </ul>	N-1 violation of these ICTs due to high generation in these buses	<b>Short term measure (Summer '26):</b> ✓ Network reconfiguration- 220kV Network.  <b>Long term measure (2028 onwards):</b> ✓ DVC planned for an additional 500 MVA ICT at Bokaro. ✓ ICTs will come to Koderma (PH-II) expected by Feb 2028  <i>More capacity addition is required.</i>

220kV link:

- Maithon -Dhanbad D/C
- Maithon-Kalyaneshwari D/C
- Waria -DSTPS D/C

N-1 violation

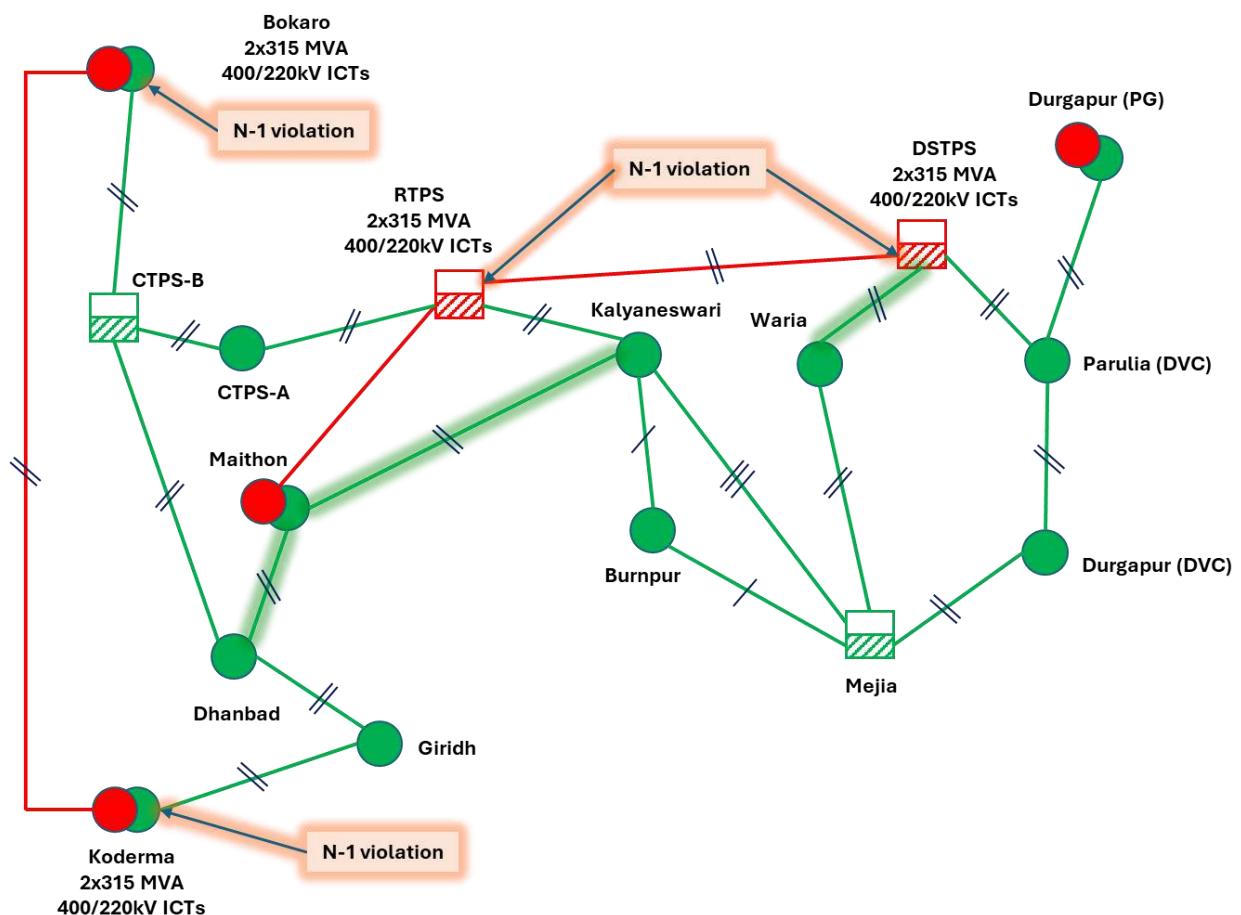
**Short term measure (Summer '26):**

- ✓ Network reconfiguration- 220kV Network.

**Long term measure (2028 onwards):**

- ✓ Establishing connectivity between 220 kV and 400 kV of Mejia power plants may reduce the constraint.

*Long term plan to increase connectivity with 400kV S/S needs to be chalk out*



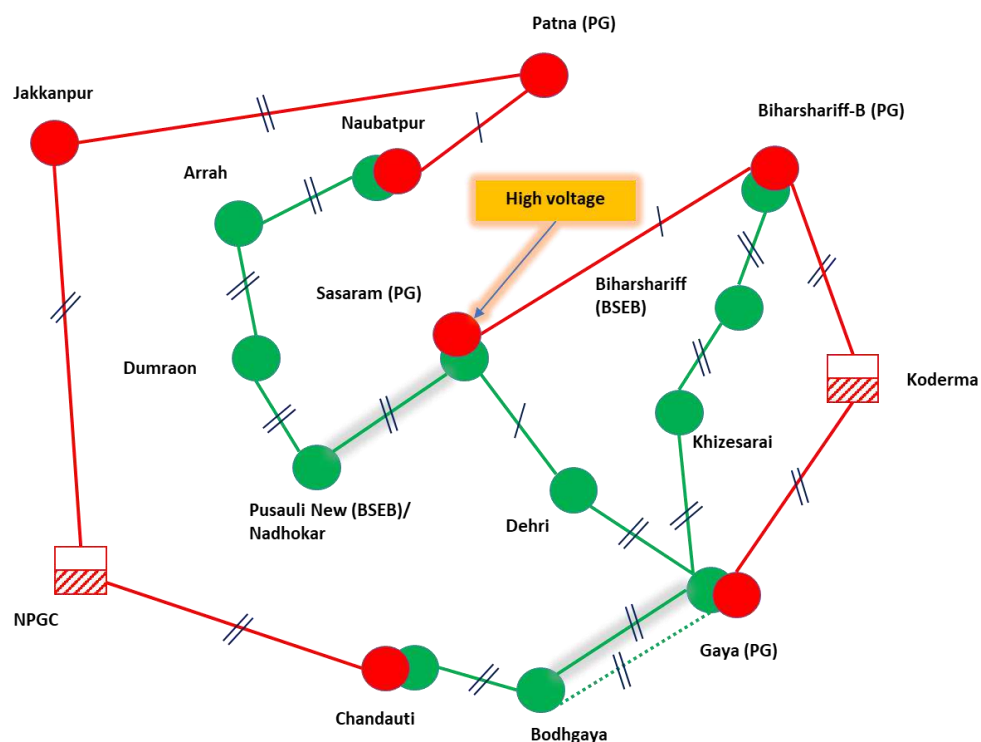
### Bihar:

Bihar is undergoing through a massive demand growth over last decade. Its maximum demand met has increased fourfold in this period and is expected to grow further. Both STU & CTU network in Bihar have grown in this period supplementing the need of the state. The state's demand pattern is largely driven by domestic and agricultural consumption, which leads to sharp variations across different times of the day and

seasons. As a result, the grid faces operational challenges, with certain lines getting overloaded during peak periods and over-voltage issues occurring in other parts of the network during lean period.

Detailed network constraints are as follows:

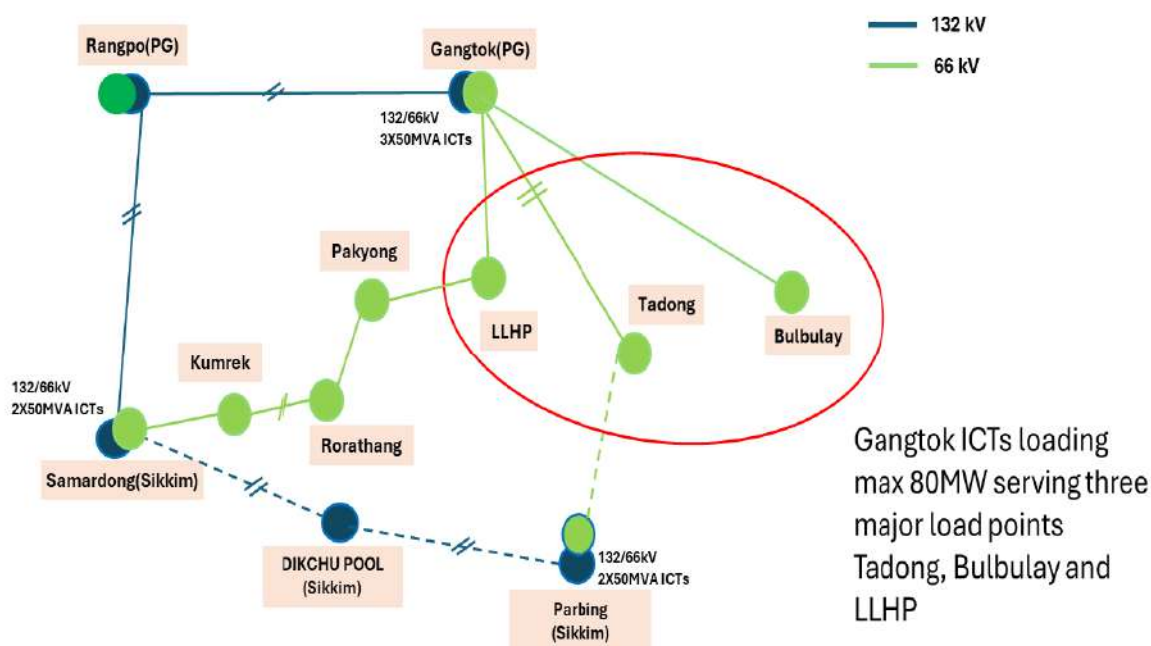
Limiting Constraints	Contingency/Risk in Operation	Remedial Measures
220 kV Sasaram (PG)- Pusauli New D/C 220 kV Gaya- (PG) - Bodhgaya D/C	N-1 violation	<b>Short-term measure:</b> Reconductoring of Sasaram (PG)- Pusauli New D/C has been completed. However, upgradation of bay equipment at State end is pending. Commissioning of 2nd 220 kV Gaya- Bodhgaya D/C post-LILO of 220 kV Gaya-Chandauti D/C at Bodhgaya will make these circuit N-1 secure.  <i>Completion of both works needs to be  expedited before 2026 Summer.</i>
High voltage issues at 400 kV Sasaram (PG), 400 kV Saharsa (PMTL) (BGCL)	High voltage issues	<b>Short-term measure:</b> As a short-term measure, lightly loaded lines connected to these S/S are opened. <b>Long-term measure:</b> Reactive compensation needs to be planned



Sikkim:

Sikkim demand is mostly centred around the capital city of Gangtok, which reaches its peak during the winter season. Gangtok power is mainly served from 132kV Rangpo (PG) source via 132KV Rangpo-Gangtok D/c. As the demand growth is in an upward trend in Sikkim and all dependency on 132KV Main and Transfer Scheme of 132kV Gangtok (PG) S/S. There is a need of strengthening of the internal network to ensure the reliability of power.

Detailed network constraints are as follows: <b>Limiting Constraints</b>	<b>Contingency/Risk in Operation</b>	<b>Remedial Measures</b>
Single main and transfer scheme at 132kV Gangtok (PG) S/S and Low voltage issues at 66kV system in the downstream of Gangtok	In case of outage (planned/forced) of main bus the power of capital city Gangtok may be put under threat.	<b>Short-term measure:</b> Network re-arrangement <b>Long-term measure:</b> 132/66kV Perbing S/S is under planning stage. Alternate source needs to be planned. Possibilities of Double bus scheme and transfer at Gangtok SS.



Inter/Intra state Transmission Network & Mitigation Measures across Eastern Region states has been carried out, outlining both short-term (**Summer 2026 onwards**) and long-term (**Summer 2028 onwards**) requirements. The same was submitted on 21.08.2025 for deliberation in the 230th OCC meeting. However, during the OCC, it was highlighted that more time is required for states preparedness, suggestions and reviews are essential for effective discussion. Further, OCC has directed to discuss with states and put up the gist of the discussions:

In this context, two meetings were conducted to discuss constraints in detailed:

➤ **West Bengal -Intra-state system:**

An Online meeting with West Bengal was held on 9<sup>th</sup> September 2025, where CE, SLDC, ACE (System Operation), SLDC & CE, STU were present. All issues were discussed, and West Bengal recognised the requirement for urgent measures for the upcoming summer and beyond.

**Short-term (Summer 2026 onwards):**

- Modification of existing SPS scheme of Subhasgram(PG) with under Voltage logic.

**Long-term (Summer 2028 onwards):**

- Requirement of another 765kV corridor connecting New Jeerat. (Under discussion in the CMETS)
- Requirement of dynamic reactive power compensation was deliberated. WB STU informed that Static Capacitors are being planned instead dynamic reactive compensation. However, ERLDC opined that dynamic reactive compensation is crucial due to the changing load types and increasing AC loads, which pose a significant threat of FIDVR event.
- It was decided to conduct a joint study with ERLDC and WB STU to finalize the plan for dynamic/static reactive compensation.

➤ **Bihar, Jharkhand, DVC & Sikkim:**

An Online meeting with Bihar, Sikkim, Jharkhand & DVC was held on 11<sup>th</sup> September 2025, where representatives from SLDCs & STUs/Planning were present in the meeting and all the points and action plan were deliberated.

<b>States</b>	<b>Constraints</b>	<b>Short-term (Summer 2026 onwards):</b>	<b>Long-term (Summer 2028 onwards):</b>
<b>Sikkim</b>	132kV Gangtok (PG) S/S and Low voltage issues at 66kV system in the downstream of Gangtok	- Sikkim load is basically winter pre-dominant. Alternative Source of Gangtok via Parbing (132/66KV SS) is in advance stage of commissioning.	- Reconductoring of 66KV Downstream network Gangtok – Tadong-Sinchey-Bulbulay.  - * Requirement of Double main bus scheme at 132KV Gangtok will be explored by Sikkim
<b>Jharkhand</b>	220 kV Maithon New Dumka D/C (JUSNL) and 220 kV Tenughat–	- 220KV Dumka – Gobindpur lilo at Dhanbad (NKTL) will be	220KV Tenughat - Gomia & 220KV Tenughat-Hazaribagh Road will be

	Govindpur D/C (JUSNL)	<p>commissioned by Dec 2025.</p> <ul style="list-style-type: none"> <li>- 2<sup>nd</sup> ICT 400/220KV 315MVA at Tenughat to be commissioned.</li> </ul> <p>* Bay equipment of PVUNL – Tenughat will be upgraded as per the line rating to make it capable of carrying power more than 200MW</p>	commissioned tentatively on Dec 26.
<b>Bihar</b>	<p>220 kV Sasaram (PG)- Pusauli New D/C</p> <p>220 kV Gaya- (PG) - Bodhgaya D/C</p> <p>High voltage issues at 400 kV Sasaram (PG), 400 kV Saharsa (PMTL) (BGCL)</p>	<ul style="list-style-type: none"> <li>- Charging of 2nd 220 kV Gaya-Bodhgaya D/C and bay equipment upgradation of 220kV Naodkhar-Psuali-D/C will be expedited.</li> <li>- Buxar Generation will reduce the overloading issue.</li> </ul>	-
<b>DVC</b>	<p>400/220kV ICTs at Generating Stations:</p> <p>315 MVA ICT at Bokaro -1 &amp; 2</p> <p>315 MVA ICT at Koderma -1 &amp; 2</p> <p>315 MVA ICT at DSTPS (Andal) -1 &amp; 2</p> <p>220kV link:</p> <ul style="list-style-type: none"> <li>• Maithon - Dhanbad D/C</li> </ul>	<ul style="list-style-type: none"> <li>- 315MVA 400/220KV Koderma ICT replacement (Taken on load basis from MZP) will be completed by Dec 2025.</li> <li>- DVC agreed for SPS scheme for N-1 compliance of ICTs at Bokaro.</li> <li>- Joint Study will be done and scheme will be finalised accordingly.</li> <li>- DVC informed, loading of 220KV Maithon-Dhanbad</li> </ul>	<ul style="list-style-type: none"> <li>- 400/220KV ICTs upgradation to 500MVA at Koderma.</li> <li>- 3<sup>rd</sup> ICT 500MVA at Bokaro.</li> <li>- Connectivity between Mejia B 400KV with 220KV DVC System.</li> </ul>



		will be controlled by network rearrangement.	
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➤ **Odisha:**

Following to the near miss event on 12.08.2025 and subsequent discussion in the 230<sup>th</sup> OCC held on 22.09.2025 at Bhubaneswar, it was discussed to form a committee to assess the requirement of short term and long-term transmission adequacy of Odisha system. In this regard, an online meeting has been planned on 18.09.2025 or 19.09.2025.

However, the issue of intra-state network of Odisha was highlighted by ERLDC in their internal Grid Co-ordination Committee meeting held on 3<sup>rd</sup> September 2025, Bhubaneswar, where all stakeholders of Odisha were present. Following agenda points were discussed:

- SLDC Agreed to implement UVLS scheme in and around Bhubaneswar areas to safeguard the system in next summer.
- STATCOM already planned by Odisha at Mendhashal as long term measure.
- Reconductoring of 400kV OPGC-Lapanga D/C & 400kV Meramundali-Mendhashal D/C.

**ERLDC may update. Members may discuss.**

**2.2 Issues for follow up.**

Issue	Reference	Last updated Status	Action Point
<b>Update on Rajarhat GIS (POWERGRID) 400/220kV S/S: 2x500MVA</b>	<p>Vide 226th OCC dated 22.04.2024:</p> <p>The need to prioritize the installation of a 3<sup>rd</sup> 400/220KV,500MVA ICT at Rajarhat (PG) with the same urgency as Subhasgram (PG) to prevent a recurrence of similar critical situations in the future</p> <p>If the proposed 3<sup>rd</sup> ICT is not operational by the summer of 2026, severe congestion is likely to affect the ICTs at Rajarhat (PG).</p>	<p>As per 230<sup>th</sup> OCC: PowerGrid informed that the transportation of the ICT has already commenced from Kolaghat. Regarding the GIS package, it was informed that only a single bid has been received from M/s Siemens as of 17th July 2025. Consequently, the bid submission deadline has been extended by one month, after which a final decision will be taken. The updated status on the GIS package tender will be shared in the next OCC meeting.</p> <p>OCC advised PGCIL to expedite the bidding process for the GIS package and finalize the same at the earliest to avoid any further delays in project implementation.</p>	Power grid may update .



<b>Near Miss event in Odisha System on 12.08.2025</b>	<p>On 12.08.2025 at 22:36 hrs, the Odisha system experienced a near-miss event while meeting its all-time maximum demand of 7302 MW (recorded at 22:33 hrs). the events led to the tripping of 400 kV Lapanga-Sterlite D/C and 400 kV OPGC Lapanga D/C transmission lines. This led to critical loading of 400 kV Talcher-Meramundali D/C lines putting the power supply to capital city of Bhubaneswar and adjoining areas in jeopardy.</p>	<p><b>As per 230<sup>th</sup> OCC:</b> OPTCL was advised to submit the Action Taken Report to ERPC/ERLDC within a month.</p> <p>OCC advised SLDC Odisha to constitute the committee at the earliest. The committee shall review the protection settings and the short term/long term measures as suggested by ERLDC.</p> <p>➤ OCC also advised SLDC Odisha to expedite the identification of HT and LT feeders in coordination with DISCOMs and share the details of the identified feeders for the implementation of the UVLS scheme at the earliest.</p>	<p>OPTCL/Sldc, Odisha may update .</p>
<b>Update on IB Valley TPS Islanding Scheme</b>	<ul style="list-style-type: none"> <li>IB valley TPS Islanding scheme has also been put on hold for long time. The status regarding the same has been sought on urgent basis by Ministry of Power (Govt of India).</li> </ul> <p>229th OCC Decision: ➤ OCC advised ERLDC to conduct the dynamic studies of the OPGC network at the earliest in association with SLDC Odisha and OPGC.</p> <p>➤ OCC advised OPTCL to prepare the DPR after the completion of dynamic studies.</p> <p>ERLDC has done dynamic study of the proposed islanding scheme, and one online meeting was arranged on 19.08.25 to discuss about the study</p>	<ul style="list-style-type: none"> <li><b>As per 230<sup>th</sup> OCC:</b>  SLDC Odisha informed that the DPR for the IB Valley TPS Islanding Scheme is planned to be submitted by September 2025, and the same will be communicated to ERPC.</li> </ul>	<p>OPGC/Sldc, Odisha to update .</p>

	result, where SLDC Odisha, OPGC (IB Thermal) & OPTCL were present.		
<b>Commissioning of an additional 250 MVA ICT at Tenughat</b>	On 06.08.2025 a special meeting was convened to decide on the future course of the 400 kV Tenughat–PVUNL interim line.	As per the Deliberation of the Meeting, JUSNL and SLDC Jharkhand have decided to keep the 400 kV Patratu–Tenughat line continuously in service to improve the reliability of the Jharkhand power system. SLDC highlighted that the line helps relieve loading on the 220 kV Maithon–Dumka D/C and supports the Dumka–Govindpur loop under varying Tenughat unit availability, including during outages. However, during high demand periods with both Tenughat units offline, loading on the line may exceed 200 MW. This is a concern due to the single moose conductor termination (limiting capacity to 200 MW) and the aging ICT at Tenughat (safe limit: 180 MW due to a 40-year-old CT).	JUSNL may update .
<b>Implementation of AGC in Intra-state generating units.</b>	<ul style="list-style-type: none"> <li>218<sup>th</sup> OCC dated 13.08.24</li> </ul> <p>With the increasing penetration of renewable energy, managing frequency is expected to become more challenging in the future. Therefore, it is crucial to enhance frequency control and stability through increased participation from intra-state AGC.</p>	<p>As per <b>230<sup>th</sup> OCC</b>:</p> <p>Bihar updated that Closed loop communication link has been established however testing is yet to be performed.</p>	NTPC Barauni & SLDC, Bihar may update .
<b>Scheduling of PVUNL units BY SLDC,</b>	In 229 <sup>th</sup> OCC Meeting, It was decided that PVUNL should be treated as a regional entity for the purpose of scheduling and		JUSNL may update .

<b>Jharkhand</b>	accounting till it is under control area jurisdiction of ERLDC as per CERC directives till December 2025. Thereafter All the Scheduling & other related issue shall be dealt as per the State Regulations.		
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**All concerned may update. Members may discuss.**

### **2.3 Extension of AMC of SCADA System and OSI Support in Eastern Region, maintained by M/s Chemtrols Industries Pvt. Ltd: BSPTCL**

This is regarding the Annual Maintenance Contract for services of round the clock comprehensive maintenance of software and hardware of overall EMS/SCADA system of BSPTCL. Present SCADA/EMS system in BSPTCL (Eastern Region) is commissioned in March 2016 by M/s Chemtrols and M/s OSI under ULDC Upgradation Scheme through POWERGRID and was under AMC contract till 02nd July 2023. The AMC was further extended till 02nd July 2025 on the same rates and terms and condition in all ER Constituents on mutually agreed basis with great effort of ERPC. As Annual Maintenance Contract (AMC) for the SCADA system at SLDC, Bihar, maintained by M/s Chemtrols Industries Pvt. Ltd., has expired. Similar situations may also arise in other Eastern Region constituents' states and DVC. The matter is of critical importance as the SCADA system forms the backbone of real-time grid monitoring and control. Given the situation, and the requirement of continued support from OSI for ensuring reliable and secure operations, it is proposed to discuss the matter in 230th OCC meeting with all Eastern Region constituents, ERLDC, M/s OSI and M/s Chemtrols to address the issues of extension of AMC for SCADA so that the modalities, cost, terms and conditions, support in case of end of life of hardware and software may be fixed and uniform rates and terms and conditions may be discovered.

#### **In 230<sup>th</sup> OCC Meeting:**

OCC opined that a separate meeting may be convened by PGCIL involving all ER states, ERLDC, M/s Chemtrols, and M/s OSI for detailed deliberations

**PGCIL may explain. Members may discuss.**

## **2.4 Sorting of 400 kV Farakka-Purnea and 400 KV Purnea - Gokarna lines to establish the old configuration of Farakka-Gokarna 400 kV line either for better Reliability: WB SLDC**

With present flooded condition in the Sahebganj around area, 400 kV Farakka-Purnea and 400 KV Purnea - Gokarna lines are kept off by ERLDC. If this status to continue for a considerable period of time, then it was proposed to make shorting of these two lines in a suitable place before the flooded area to establish the old configuration of Farakka-Gokarna 400 kV line either for better redundancy or for additional option to use in case of any exigency condition.

**WB SLDC may update. Members may discuss.**

## **2.5 Bringing Purnea-Dalkhola lines to service either in through bus mode or in split bus mode: SLDC, WB**

Present Bus arrangement at Dalkhola (PG) sub-station is very often not confirming (n-1) contingency criteria in respect of Kishanganj-Dalkhola 220 kV lines. Hence Purnea-Dalkhola lines need to be brought back to service either in through bus mode or in split bus mode depending upon the system study results. This is extremely important to implement before the festival period to avoid any undesired outcome during Durga puja festival and onwards.

**WB SLDC may update. Members may discuss.**

## **2.6 Providing multiple user access (Edit Option) for operating WBES to ensure smooth and uninterrupted operations: JIPL**

JIPL received communication from ERLDC dated **01.09.2025** regarding **Implementation of login in WBES through verified OTP and the requirement to update user mobile numbers and email IDs.**

After internal discussion, JIPL responded via email on **02.09.2025**, highlighting a key operational challenge: **multiple users currently operate under the same credentials**, and receiving OTP on only one registered mobile number and email ID is creating difficulties in accessing the system efficiently.

We kindly request your guidance on how to proceed in such cases. Specifically, we would like to know if there is any provision to **accommodate multiple mobile numbers and email addresses for OTP delivery** under a single user account.

Additionally, we request you to kindly consider providing **multiple user access (Edit Option)** for operating WBES to ensure smooth and uninterrupted operations.

**JIPL may update. Members may discuss.**

**2.7 SgTPP is facing software license related and other issues during the meter data download from Commercial meters of some 400 KV feeders maintained by PGCIL: WBPDCCL**

Line Feeder	Line Jurisdiction	Main Meter	Check Meter	Remarks
Farakka1	PGCIL	Genus	L&T	The check meter data download may be stopped any time due to expiry of the meter data software validity.
Berhampore-1	PGCIL	Genus	L&T	The check meter data download may be stopped any time due to expiry of the meter data software validity.
Berhampore-2	PGCIL	Genus	L&T	1. The main meter data download not possible from Optical port of the meter 2. The check meter data download may be stopped any time due to expiry of the meter data software validity.
Jeerat-2	PGCIL/WBSETCL	Genus	L&T	As per ERLDC, it is intra state feeder. Existing meter of PGCIL may be replaced with SAMSAT meter of WBSETCL

The same downloaded meter data is forwarded to the SLDC & ERLDC on periodical basis. Due to the above-mentioned issues, the existing practise may be discontinued at any time.

**WBPDCCL may update & PGCIL may explain. Members may discuss.**

**2.8 Shutdown proposal of generating units for the month of October 2025: ERPC**

<b>Maintenance Schedule of Thermal Generating Units of ER during 2025-26</b>									
System	Station	Unit	Capacity (MW)	CEA Approved		No. of Days	Revised proposed		Reason
				From	To		From	To	
DVC	KODARMA TPP	1	500	5-Oct-25	1-Nov-25	28			AO H-Blr, LPT

									& Gen
CESC	SOUTHERN REPL. TPS	2	67.5	27-Oct- 25	5- Nov- 25	10			AO H

**Members may discuss/update.**

## 2.9 Shutdown Program of Generating Units at TSTPS: NTPC

As per the approved schedule in the 228th OCC, the planned shutdown of **TSTPS Unit-1(500MW)** was from **16th October 2025 to 30th November 2025** (45 days).

However, due to delay in receipt of certain critical turbine spares being imported from Germany, it will not be feasible to commence the overhaul as per the original plan, these spares are essential to complete the overhaul and to ensure reliable operation of the unit after resumption.

In view of the above, it is kindly requested to consider the revised proposed outage schedule for TSTPS Unit-1 as follows:

**Revised Dates: 15th December 2025 to 28th January 2026 (45 days)**

**Members may discuss.**

## 2.10 Resolving issues of repeated line faults in 220kV Keonjhar (PG) – Turumunga D/C line and enabling Auto-recloser function at Turumunga (OPTCL) end: PG ODISHA

The first time charging of 220kV Keonjhar (PG) – Turumunga D/C line on 04.06.2025. There has been several instances of line faults in these lines, however, each time the line has tripped from Turumunga (OPTCL) end. On further enquiry from OPTCL end, it came to the notice that, the Auto-Recloser function is not in service for both 220kV Keonjhar (PG) – Turumunga#1 & 2 at OPTCL end resulting in tripping of the line from OPTCL end only, whereas auto-recloser function successfully operated from Keonjhar (POWERGRID) end.

Due to repeated faults in 220kV Keonjhar (PG) – Turumunga D/C line, 315MVA, 400/220kV ICTs at Keonjhar Substation along with associated bay equipment's have been subjected to both electrical and mechanical stresses. Recently, on 05.08.2025, 315 MVA ICT#2 at Keonjhar Substation tripped due to the operation of Buchholz relay and fault gases have been noticed during the DGA analysis. As only Buchholz relay was operated without any operation of electrical protection, it indicates internal fault and replacement this ICT is under progress.

As a precautionary measure we have now kept the auto-recloser function of 220kV Keonjhar (PG) – Turumunga D/C line in “Non-Auto” mode at Keonjhar (PG) end, till

rectification/normalization of Auto-Recloser function of both the lines at Turumunga (OPTCL) end. A letter has been sent to The General Manager, EHT (O&M) circle, Jaipur Road (**Annexure B.2.10**) with a request to resolve the issue.

Hence, OPTCL may please be instructed to resolve the issue at the earliest for smooth and reliable operation of grid.

Further, functionality of operationalization of Auto-Recloser scheme for the lines, where two ends belong to different utilities may also be ensured by RLDC before according FTC Clearance.

**PGCIL may update. Members may discuss.**

#### **2.11 Inordinate delay in extension of CT and CVT inputs of 400kV Angul-JIPL#1 & 2 at JIPL end for the reporting of Analog PMU Data to ERLDC: PG ODISHA**

PMU has been installed by POWERGRID at JITPL, Angul plant under URTDSM package for the reporting of real time data to ERLDC. PMU was installed at JITPL and SAT was signed on 12.10.2018 with the remark "CT & PT connection will be done by JITPL during opportunity shutdown" (**Annexure B.2.11.1**). The optical link from JITPL to POWERGRID, Angul Substation has been commissioned, and the PMU is reporting to ERLDC since 07.03.2025 with digital signal only. Analog signals are not reporting to ERLDC due to the non-extension of CT & CVT inputs of 400kV Angul-JITPL#1 & 2 at JITPL end. In this regard, copy of e-mails and letters issued to M/s JITPL, Angul are attached(**Annexure B.2.11.2**) for ready reference. The validation of PMU data by ERLDC SCADA team has not been possible due to non-extension of inputs for Analog data, which in turn affecting the DOCO of PMU installed at M/s JITPL end. Also, contract closing of the executing agency (M/s GE) is getting affected due to pending validation of PMU data at ERLDC end due to delay in extension of CT and CVT inputs.

As commissioning and complete data reporting of JITPL PMU to ERLDC is a critical long pending issue, hence M/s JITPL may be suitably instructed to extend CT and CVT inputs to the installed PMU for both 400kV Angul-JITPL#1 & 2 at the earliest.

**PGCIL may update. Members may discuss.**

#### **2.12 Ensuring Reliable Operation of +/- 450 MVar STATCOM for Voltage Control at 400/220kV Jeypore Substation: PG ODISHA**

In July 2018, (+/-) 405 MVar STATCOM was commissioned and charged at the POWERGRID 400/220kV Jeypore substation. The STATCOM consists of two voltage source converters (VSCs), each rated at (+/-) 100 MVar, along with two mechanically switched reactors (MSRs) rated at (-) 125 MVar each and two mechanically switched capacitors (MSCs) rated at 125 MVar each. The MSRs and MSCs are automatically switched "ON" and "OFF" based on the reactive power requirements.

All these components are connected to the medium-voltage (MV) side of a coupling transformer rated at 500 MVA, 400/28 kV. Since the MSR and MSC branches operate at lower voltages, they generally handle higher currents compared to the same MVar capacity of the 400 kV reactors and capacitors.



The primary purpose of the STATCOM is to provide support during transient stability rather than steady-state stability; however, it can also be used for steady-state stability for shorter periods. The Short Circuit Level (SCL) at the Jeypore substation is very low (6 GVA), causing frequent voltage fluctuations on the bus even with minor disturbances in the grid. These voltage fluctuations lead to a high number of operations of the MSRs and MSCs, contributing to increased stress on the circuit breakers.

On October 15, 2021, the Y-phase pole of the MSR 1 circuit breaker experienced a failure, resulting in significant economic losses and availability issues for the STATCOM. Following this incident, measures were implemented to limit the number of operations by adjusting the voltage band of the STATCOM.

In June 2025, a double circuit line (Jeypore – Jagadapur) was added to the Jeypore bus, which increased the SCL to around 9 GVA; however, due to lightly loaded conditions, the bus voltage consistently remained high, ranging from 415 to 420 kV. This high voltage caused the STATCOM to continuously inject inductive reactive power between (-) 280 and (-) 430 MVar into the grid. As a result, both MSRs were in service for more than three months, which led to multiple hot spots at the clamps of the MSRs and the melting of conductors in several locations due to the prolonged high currents.

POWERGRID availed the shutdown of the STATCOM on 03rd July'2025 to address these hot spots and replace the melted conductors. On 27th August 2025, the R-phase of MSR I failed due to an internal flashover in the air core reactor coil resulting in an approximate financial loss of 1.5 crore and outage of MSR-I for 2 days. Subsequently, the voltage band was adjusted to a higher range to minimize the continuous operation of the MSRs.

Later, due to a change in load patterns, the number of MSR operations has increased again. To reduce these operations, the STATCOM's voltage band needs to be raised further. However, penalties imposed on OPTCL for injecting VAr at voltages greater than 1.03 PU are preventing this adjustment (as per information from GRID INDIA), leading to the continued operation of the MSRs.

As a result of these challenges, the utilization of the STATCOM is straying from its initial intended function. It is now primarily being used for steady-state stability, causing either continuous operation of the MSRs or an increased number of operations, leading to forced outages and economic losses due to equipment failure, as well as problems with hot spots and the melting of conductors.

To mitigate these issues, it is crucial to control the voltage at Jeypore to stabilize the grid, ensuring reliable operation of the STATCOM. This will allow for greater utilization during transient stability without risking forced outages due to equipment failure or conductor damages from prolonged service or excessive operations of the MSRs.

**PGCIL may update. Members may discuss.**

### **2.13 De-commissioning of 3X16.67 MVar (50MVAR), Bus Reactor-1 at Jamshedpur Sub-station w.e.f. 25.08.2025: PG ER1**

3X16.67 MVar (50MVAR), Bus Reactor-1 at Jamshedpur Sub-station was commissioned under Farakka Transmission System (FATL) on dated 29.07.1993. Further one no. 125MVAR Bus reactor was also connected in parallel to this Reactor w.e.f. 01.12.2021 under ERSS-IX project.



Residual Life Analysis (RLA) of the said single phase reactor units were carried out from CPRI, Bangalore in 2019. As per RLA report, the condition of Y-Phase and B- Phase reactors are critical and recommended for replacement.

As 02 units of single phase reactor were suggested to be taken out of service in RLA, the matter was taken up in 8<sup>th</sup> Consultation Meeting for Evolving Transmission Schemes in Eastern Region (CMETS-ER) where in it was agreed **(as per para 6.5(c) of minutes)** that **“As long as the 50MVA bus reactor-1 (3x16.67MVA single phase reactors) at Jamshedpur S/s (which is presently installed in parallel with a 125MVA bus reactor) is serviceable, the same may be operated and thereafter it may be decommissioned”**.

The Reactor Bank is being maintained by POWERGRID as per its maintenance strategy; however, its condition is getting deteriorated day by day. Recently during its routine oil testing, critically low BDV and high moisture content observed despite filtration done on many occasions.

Further, **emergency shut down of 3x16.67 MVA Bus Reactor-1 at Jamshedpur was taken on 25.08.2025 at 16:08Hr due to critically low BDV and high moisture content.** The drying out of units is planned but vacuum could not be achieved due to multiple leakages from various gasket joints as well as welded joints.

In view of the above, it is prudent that condition of said reactor bank is critical due to aging and is not serviceable. Further sudden failure of any unit may result in consequential damage to nearby equipment. **Therefore, 3X16.67 MVA (50MVA), Bus Reactor-1 at Jamshedpur Sub-station is proposed for de-commissioning w.e.f. 25.08.2025.**

**PGCIL may update. Members may discuss.**

#### **2.14 Critical condition of tower at location no. 1100 (DD + 0) of 400kV D/C New Purnea – Farakka & New Purnea -Gokarna Transmission Line due to unprecedented flood in river Ganga: PG ER1**

400kV D/C New Purnea-Farakka and New Purnea-Gokarna Line was commissioned in Nov'2019. The Line passes through river Ganga in Bhagalpur district. As per prevailing condition of the river, Pile foundations were made for the locations 1103 to 1111 (9 nos.) during construction of the Line. Later, due to encroachment of river Ganga, 2 no. Pile foundations at location no. 1101 & 1102 were also built and tower shifted on the Pile foundation.

Before onset of this monsoon on dtd. 30.06.2025, the tower at location no. 1100 was 430 Meter away from riverbank of Ganga and average encroachment of the river as per recent past was around 50-60 meter per year. During current monsoon season, heavy unprecedented flood is observed in the Ganga River and entire location was filled with approx. 2mtr. water, which further accelerated the soil cutting in the river at faster rate.

During the flood, regular patrolling of the location through boats was done. Entire location till location no. 1083 was waterlogged till 22/08/2025. As the water level decreased, and

riverbank became visible, location No 1100 was only 140mtr from riverbank. After this, in consultation with Flood Control Department, Bhagalpur, bamboo bundling along the riverbank was done in the location to limit further soil erosion.

Despite continuous efforts to limit the soil erosion through Bamboo bundling and Drum floating technique, the location was only 90 mtrs away from bank of river ganga on 06.09.2025. Due to further soil erosion, location no. 1100 was only 42 mtrs away on 13.09.2025 and it was then decided to switch off the Lines and proceed for de-stringing of the tower to avoid cascading damage to adjacent towers.

As on 18/09/2025, main river course is only 19 meters from tower no. 1100. Also, due to heavy rain, Location No. 1100 is flooded with water. As of now, de-stringing of four conductors could only be done in such adverse climatic conditions and tough task for making back stay. Nevertheless, the de-stringing shall be completed for rest of the conductor at the earliest possible time.

The location is under continuous monitoring by teams deployed at site. In the meantime, proposal for shifting the towers at location no. 1100 and 1099 on Pile foundation has been also processed and is under tendering.

Since the tower is in endangered condition, possibility of washing out of the tower due to above explained force majeure condition cannot be ruled out and, in such case, it will take considerable time in making the Line ready for charging.

**PGCIL may update. Members may discuss.**

## **2.15 Availability Certification of deemed ISTS Lines of WBSETCL & OPTCL-ERPC**

In reference to the directions issued by the Hon'ble Central Electricity Regulatory Commission (CERC) under:

- Para 63 of its Order dated **29.05.2025** in Petition No. 309/TT/2023 (**Annexure B.2.15.1**),
- Para 43 of its Order dated **31.05.2025** in Petition No. 324/TT/2023,
- and as per CTUIL letter dated **26.08.2025** (**Annexure B.2.15.2**),
- along with the relevant provisions of the **CERC Tariff Regulations, 2024**,

**SLDC, West Bengal** is required to **submit the verified tripping details** for the following transmission lines from the year 2014 onwards to ERPC at the earliest,. This is essential to enable the issuance of Availability Certification for the following **deemed ISTS/natural ISTS lines** of WBSETCL, which are carrying Inter-State Power:

1. **400 kV S/C Kolaghat–Baripada Transmission Line** – 98.60 km  
(Kharagpur–Baripada ISTS Portion including Loop-out ISTS part)
2. **220 kV S/C Santaldih–Chandil Transmission Line** – 73.9 km

Further, in reference to the Hon'ble CERC Order dated **26.02.2025** in Petition No. 288/TT/2023, and CTU letter no. **CTU/BCD/AVC/01 dated 26.08.2025** (**Annexure B.2.15.2**), **SLDC, Odisha** is also requested to submit the **verified tripping details** for **9 (nine) non-ISTS lines** (as listed in **Annexure B.2.15.3**), which are carrying ISTS power

for the tariff block **2024–29**. These details are required to issue the **Availability Certification** for the relevant **deemed ISTS/natural ISTS lines** of OPTCL. All concerned SLDCs are requested to treat this matter as **urgent** and submit the required data to **ERPC at the earliest** to ensure timely issuance of the certifications.

**WBSETCL & OPTCL may update. Members may discuss.**

## 2.16 Methodology for computation of Average Monthly Frequency Response Performance, Beta 'β': ERLDC

NLDC vide letter dated 07.01.2025 and an addendum dated 10.01.2025 had forwarded stakeholders comments to CERC for amendment in CERC approved Beta 'β' methodology. CERC vide letter to Grid-India dated 19.08.2025 has clarified that no changes are required in the already approved methodology for computation of Beta 'β'.

Proposed	Existing	CERC Response	Proposal by
In case, there was no reportable event during the billing month, Beta 'β' for that billing month shall be the median of last ten (10) reportable events.	Beta is zero if no reportable event in the billing month.	No Change	NTPC (also raised in ER OCC) & NHPC
In case of generators whose tariff is determined by CERC and are falling under the jurisdiction of SLDCs, concerned SLDC will certify the Beta 'β'	Beta is furnished by concerned LDCs and certified and issued by the RPC	No Change	Proposed by SRPC. ERPC agreed in-principle in 222nd OCC meeting.

**Members may note.**

## 2.17 Ensuring Data Availability and Accuracy in RTG Monitoring Portal: ERLDC

NLDC is assessing the quantum of secondary and tertiary reserves on year-ahead basis, to be maintained at the inter-state and intra-state levels. As per Grid Code , the states shall ensure the availability of reserves and if state falls short of maintaining reserve capacity as allocated to it, the NLDC through RLDC shall procure such Secondary reserve capacity on behalf of the State under advance intimation to the concerned state and allocate the cost of procurement of such capacity to that state based on the methodology as per the detailed procedure which is to be issued by the NLDC. Hence monitoring of reserve is of utmost

importance from the present grid operation point of view. For this purpose, a Real-Time Generation (RTG) monitoring portal has already been developed to monitor the real-time data of Declared Capacity (DC), Schedule and actual generation (in MW) of all intra-state thermal plants. Thus, all states/thermal plants are requested to Ensure availability and accuracy of data (DC, Schedule, Margin) in the RTG portal for effective reserve monitoring.

**Members may discuss.**

#### **2.18 Submission of data for National Short-term Resource Adequacy Assessment FY 2026-27: ERLDC**

As per Clause 3.2 of Section-3 of CEA Guidelines for Resource Adequacy, "NLDC shall annually publish a one-year look-ahead Short-term National Resource Adequacy Plan ....". Further as per the provisions of Regulation 5.3(d) of the Indian Electricity Grid Code (IEGC), the concerned agencies are required to furnish the requisite technical data to NLDC through respective RLDCs every year, for carrying out a national level generation resource adequacy assessment. Accordingly, NLDC has already published National Resource Adequacy Plan for 2024-25 and 2025-26. For preparation of National Resource Adequacy plan for 2026-27 the concerned utilities have been requested to submit the following data vide mail dated 09<sup>th</sup> September 2025:

1. Electricity Demand Data (as per format RA-1)
2. Reserve Requirement (as per format RA-2)
3. Tie Line Details (as per format RA-3)
4. Transfer Capability (as per RA-4)
5. Generation Data (as per RA-5)

However, ERLDC is yet to receive data from concerned agencies except Sikkim and Jharkhand. All concerned utilities are requested to submit the data at the earliest for timely completion of the National Resource adequacy assessment.

**Members may discuss.**

### 3. PART-C: ITEMS FOR UPDATE/FOLLOW-UP/INFORMATION

#### 3.1. ER Grid performance during August 2025

The average and maximum consumption of Eastern Region and Max/Min Demand (MW), Energy Export for the month August-2025 were as follows:

AVERAGE CONSUMPTION (MU)	MAXIMUM CONSUMPTION(MU)/ DATE	MAXIMUM DEMAND (MW)	MINIMUM DEMAND (MW)	SCHEDULE EXPORT	ACTUAL EXPORT
		DATE / TIME	DATE / TIME	(MU)	(MU)
617 MU	673 MU, 12.08.2025	31331 MW, 16.08.2025 at 23:01 Hrs.	21717 MW, 24.08.2025 at 07:32 Hrs.	2247	2356

ERLDC/ERPC may highlight the performance of the ER grid.

#### 3.2. Non-Submission of FRC data in stipulated time-frame: ERLDC

Adhering to IEGC clauses 30.8 and 30.10.(a) to 30.10.(q), generating stations within the Eastern region are required to submit essential data to ERLDC within two days of receiving a notification regarding a reportable frequency event. Additionally, according to clause 30.10.(n), all control areas within the eastern region must assess their frequency response characteristics and share the evaluation, along with high-resolution data, with the ERLDC. Therefore, timely submission of primary response data is crucial for compliance with the IEGC.

##### **In 230th OCC Decision: -**

All generators were advised to regularly share high resolution data against each reportable frequency event with ERLDC on time to facilitate accurate assessment of FRP for respective control areas.

All generating utilities were also urged to update the google sheet (link mentioned above) with email address where notifications of reportable events will be shared.

Hence all are again requested to follow the stipulated timeline and submit the data to ERLDC and also fill the google sheet below to include the email address where notifications of reportable events should be sent.

The latest data receipt status is given below: (as on 11.09.2025):

STATIONS		11-05-2025 16:51 HRS	12-06-2025 13:34 HRS	16-06-2025 11:51 HRS	22-07-2025 19:46 HRS	29-07-2025 14:55 HRS
FSTPP #STG 1 & 2	ISGS					
FSTPP # STG 3	ISGS					
KhSTPP #STG 1	ISGS					
KhSTPP #STG 2	ISGS					
TSTPP #STG 1	ISGS					
Barh stage-1	ISGS					
Barh stage-2	ISGS					
BRBCL	ISGS					
Darlipalli	ISGS					
North Karanpura	ISGS					
NPGC	ISGS					
TEESTA V	ISGS					
Dikchu						
IBEUL (JSW UTKAL)/INDBHARAT	IPP					
GMR	CPP					
MPL	CPP					
ADHUNIK	CPP					
JITPL	CPP					
TEESTA III	CPP					
Bihar	STATE					
Jharkhand	STATE					
DVC	STATE					
OPTCL	STATE					
WB	STATE					
Updated as on	11.09.2025					
	Received					
	Not Received					
	Plant Out					
	Data freeze at plant					

Hence all are again requested to follow the stipulated timeline and submit the data to ERLDC and also fill in the google sheet below to include the email address where notifications of reportable events should be sent.

[https://docs.google.com/spreadsheets/d/1slvAOmQIEQVIMn0LnB78eKMa2sz2QYICZ-sPEpeV\\_jk/edit?usp=sharing](https://docs.google.com/spreadsheets/d/1slvAOmQIEQVIMn0LnB78eKMa2sz2QYICZ-sPEpeV_jk/edit?usp=sharing)

**ERLDC may explain and all SLDCs may update. Members may discuss.**

### 3.3. Regarding Non-Submission of Forecasting Data from States: ERLDC

Clause 2 of Regulation 31 of IEGC 2023 has mandated all the SLDCs to timely submit the demand estimate data to the respective RLDC and RPC.

Current data submission status is given in the table below: Hence it is again requested to all the concerned for timely submission of demand estimation data to ERLDC. This collaboration is essential for effective planning and preparedness to meet the region's electricity demands efficiently and reliably.

229th OCC Decision

- OCC advised all SLDCs for strictly adhering to the schedule of demand estimation as mandated in IEGC 2023, timely sharing with ERLDC in specified format as well as uploading of forecasting error on their respective websites.
- SLDCs who are submitting day ahead forecast was advised to also share the forecasting data for their respective control areas on weekly as well as monthly basis with ERLDC.
- All SLDCs were urged to regularly furnish resource adequacy data besides demand forecast.

	Bihar	Jharkhand	DVC	Odisha	West Bengal	Sikkim	Date
							31-08-25
							30-08-25
							29-08-25
							28-08-25
							27-08-25
							26-08-25
							25-08-25
							24-08-25
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							04-08-25
							03-08-25
							02-08-25
							01-08-25

	Status of Furnishing of Week Ahead Forecast data by ER States					Status of Furnishing of Week Ahead Resource Adequacy data by ER States				
Bihar										
Jharkhand										
DVC										
Odisha										
West Bengal										
Sikkim										
Date	25-08-25 to 31-08-25	18-08-25 to 24-08-25	11-08-25 to 17-08-25	04-08-25 to 10-08-25	2025-07-28 to 2025-08-03	25-08-25 to 31-08-25	18-08-25 to 24-08-25	11-08-25 to 17-08-25	04-08-25 to 10-08-25	2025-07-28 to 2025-08-03
			RECEIVED			NOT RECEIVED			DELAYED RECEIVED	
	Status of Furnishing of Month Ahead Forecast data by ER States					Status of Furnishing of Month Ahead Resource Adequacy data by ER States				
Bihar										
Jharkhand										
DVC										
Odisha										
West Bengal										
Sikkim										
Date	01-08-2025 to 31-08-2025 (August 2025)					01-08-2025 to 31-08-2025 (August 2025)				
			RECEIVED			NOT RECEIVED			DELAYED RECEIVED	



#### 4. PART-D: OPERATIONAL PLANNING

##### 4.1. Anticipated power supply position for September-2025

The abstract of peak demand (MW) vis-à-vis availability and energy requirement vis-à-vis availability (MU) for the month of September-2025 is prepared by ERPC Secretariat (**Annexure D.1**) on the basis of LGBR for 2025-26 and feedback of constituents, keeping in view that the units are available for generation and expected load growth etc.

**Members may update.**

##### 4.2. Major Thermal Generating Units/Transmission Element outages/shutdown in ER Grid ( as on 14-09-2025)

###### a) Thermal Generating Stations outage report:

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	KHSTPP	BIHAR	NTPC	2	210	Annual overhauling	28-Aug-2025
2	NABINAGAR(BRBCL)	BIHAR	NTPC	4	250	Annual Overhauling	25-Aug-2025
3	SOUTHERN	WEST BENGAL	CESC	2	67.5	For carrying out planned maintenance jobs related to unit reliability	30-Aug-2025
4	OPGC3	ODISHA	OPGC	3	660	Annual Overhauling	24-Aug-2025
5	BAKRESHWAR	WEST BENGAL	WBPDC	1	210	Boiler Overhauling activities	24-Aug-2025
6	KBUNL	BIHAR	NTPC, BSPHCL	2	195	TG shaft high vibration	12-Sep-2025
7	BARH	BIHAR	NTPC	1	660	Abnormal sound from boiler.	12-Sep-2025
8	JSWEUL	ODISHA	JSWEUL	2	350	To attend issue observed in the turbine lube oil system.	08-Sep-2025



9	OPGC	ODISHA	OPGC	4	660	Tripped on boiler tube leakage	12-Sep-2025
10	CHANDR APURA TPS	DVC	DVC	7	250	Boiler Tube Leakage	11-Sep-2025
11	RTPS	DVC	DVC	1	600	Initially tripped due to boiler tube leakage. Later found crack and oil leak in a turbine main oil tank.	02-Sep-2025

**All Generating stations are requested to update expected restoration time and reason outage to ERLDC/ERPC on weekly basis in case of any change at their end.**

**b) Major Generating stations Out on Reserve Shutdown due to low system demand:**

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUT AGE DATE
NIL							

**c) Hydro Unit Outage Report:**

S. NO	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUT AGED DATE
1	TEESTA STG III Hep	SIKKIM	TUL	1	200	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam &	04 - Oct-2023
2	TEESTA STG III Hep	SIKKIM	TUL	2	200		
3	TEESTA STG III Hep	SIKKIM	TUL	3	200		
4	TEESTA STG III Hep	SIKKIM	TUL	4	200		

5	TEESTA STG III Hep	SIKKIM	TUL	5	200	downstream Powerhouses	
6	TEESTA STG III Hep	SIKKIM	TUL	6	200		
7	TEESTA HPS	SIKKIM	NHPC	1	170	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04 - Oc t- 20 23
8	TEESTA HPS	SIKKIM	NHPC	2	170		
9	TEESTA HPS	SIKKIM	NHPC	3	170		
10	RANGIT HPS	SIKKIM	NHPC	1	20	Due to high inflow and high PPM	14 - Se p- 20 25
11	RANGIT HPS	SIKKIM	NHPC	2	20	Due to high inflow and high PPM	14 - Se p- 20 25
12	RANGIT HPS	SIKKIM	NHPC	3	20	Due to high inflow and high PPM	14 - Se p- 20 25
13	BALIMELA HPS	ODISHA	OHPC	5	60	Repair and maintenance work	16 - Ja n- 20 25
14	BALIMELA HPS	ODISHA	OHPC	6	60	Initially unit was out due to Severe water leakage from turbine, later unit was taken under Repair and maintenance	06 - Ja n- 20 25

						workfrom 00:00 hrs of 16.01.25	
15	CH IPLIMA HPS / HIRAKUD II	ODISHA	OHPC	1	24	Capital Overhauling	15 - De c- 20 23

**d) Long outage report of transmission Element (MORE THAN 01 WEEK) (As on 14.08.2025):**

Transmission Element / ICT	Outage From	Reasons for Outage
220/132 KV 100 MVA ICT II AT LALMATIA	22-01-2019	220/132KV, 100MVA Transformer (NTPC side) is charged on 07.02.2024 from HV side on no load. Now, it is in idle charged condition
220KV-FSTPP-LALMATIA-I	21-04-2021	Two nos. of tower collapsed on 29.05.2024 near to Lalmatia GSS in the Loc. No. 246 & 247. Presently 220 kV Farakka-Lalmatia line is charged(from loc no 241 to loc 84) at 132 kV voltage level for anti-theft purpose by tapping at loc. No. 100-101.
220KV-WARIA-BIDHANNAGAR-1	08-06-2022	To control overloading of 220 kV Waria-DSTPS (Andal) D/C line
220KV-WARIA-BIDHANNAGAR-2	08-06-2022	To control overloading of 220 kV Waria-DSTPS (Andal) D/C line
132KV-BARHI-RAJGIR-1	25-03-2023	Dismantling of tower no. 227, 228, and 229 crossing the premises of Mahabodhi Cultural centre along with Destraining of conductor of both circuits and Earthwire between tension tower no. 218-237 in same line.
132KV-NALANDA-BARHI(DVC)-1	25-03-2023	Dismantling of tower no. 227, 228, and 229 crossing the premises of Mahabodhi Cultural centre along with Destraining of conductor of both circuits and Earthwire between tension tower no. 218-237 in same line.
400KV-RANGPO-TEESTA-V-1	04-10-2023	Tower near gantry of Teesta V powerhouse collapsed due to sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses

400KV-RANGPO-TEESTA-V-2	04-10-2023	Tower near gantry of Teesta V powerhouse collapsed due to sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses
132KV-RANGPO-SAMARDONG-1	22-05-2024	Rangpo:Y_N fault with fault distance 0.157 KM ,14.562kA Samardong: NA
132KV-CHANDIL-MANIQUEI-1	05-06-2024	Power assistance withdrawn
400KV/220KV 315 MVA ICT 1 AT NORTH KARANPURA	12-09-2024	Tripped on Differential protection
132KV-MADHEPURA (BH)-SAHARSA(PMTL)-1	23-09-2024	To control loading on 132kV Madhepura-Sahrsa line
400KV/220KV 315 MVA ICT 1 AT TSTPP	01-11-2024	Tripped on PRD protection
132KV-PATRATU-PATRATU-1	16-11-2024	Diversion/Heightening of line due to inadequate clearance from under construction railway Line by PVUNL
132KV-PATRATU-PATRATU-2	16-11-2024	Diversion/Heightening of line due to inadequate clearance from under construction railway Line by PVUNL
400KV/220KV 315 MVA ICT 2 AT MEJIA-B	20-01-2025	Tripped during charging of ICT#1 bay with cable from 220 kv GIS side
400KV/220KV 315 MVA ICT 1 AT LATEHAR	22-04-2025	R phase LA of 400/220/33 KV ICT - I got bursted
400KV/220KV 315 MVA ICT 2 AT LATEHAR	16-04-2025	Transformer REF protection operated
400KV/220KV 315 MVA ICT 2 AT KODERMA	02-06-2025	Transformer Differential Protection operated
132KV-RAXAUL(NEW)-PARWANIPUR-2	03-07-2025	To carry out Gantry erection works at near by Parsauni 132/66/33 kV Substation of Nepal
132KV-RAXAUL(NEW)-PARWANIPUR-1	03-07-2025	To carry out Gantry erection works at near by Parsauni 132/66/33 kV Substation of Nepal
220KV-RAJARHAT-NEW TOWN(AA-II)-1	10-07-2025	Emergency shutdown for BCU replacement work at Rajarhat. Charging attempted but tripped on SOTF. B_ph cable faulty
220KV-PATNA-KHAGAUL-1	02-08-2025	Tower No. 63 has bent significantly on one side
400KV/220KV 315 MVA ICT 2 AT KEONJHOR(PG)	05-08-2025	Buchholz relay operated
400KV MAIN BUS - 2 AT DIKCHU	05-08-2025	Bus bar protection operated

400KV-DIKCHU-RANGPO-2	05-08-2025	Damaged insulator replacement work. While charging the line bus bar protection operated at Dikchu
400KV-ALIPURDUAR (PG)-PUNASANGCHUN-1	09-06-2025	CONNECTION OF ALL PHASE JUMPERS AT LOC. 177
400KV-PVUNL-PATRATU-2	19-08-2025	Patratu end:General trip,DT received & overvoltage protection.Repair work going on isolator chamber,expected by 15.9.2025
400KV-ARAMBAGH-NEW PPSP-2	04-01-2025	Damage in GIS chamber at new ppsp ss for Arambag ckt.Expected in January 2026
220/132 KV 100 MVA ICT II AT LALMATIA	22-01-2019	220/132KV, 100MVA Transformer (NTPC side) is charged on 07.02.2024 from HV side on no load. Now, it is in idle charged condition
220KV-FSTPP-LALMATIA-I	21-04-2021	Two nos. of tower collapsed on 29.05.2024 near to Lalmatia GSS in the Loc. No. 246 & 247. Presently 220 kV Farakka-Lalmatia line is charged(from loc no 241 to loc 84) at 132 kV voltage level for anti-theft purpose by tapping at loc. No. 100-101.
220KV-WARIA-BIDHANNAGAR-1	08-06-2022	To control overloading of 220 kV Waria-DSTPS (Andal) D/C line
220KV-WARIA-BIDHANNAGAR-2	08-06-2022	To control overloading of 220 kV Waria-DSTPS (Andal) D/C line
132KV-BARHI-RAJGIR-1	25-03-2023	Dismantling of tower no. 227, 228, and 229 crossing the premises of Mahabodhi Cultural centre along with Destraining of conductor of both circuits and Earthwire between tension tower no. 218-237 in same line.
132KV-NALANDA-BARHI(DVC)-1	25-03-2023	Dismantling of tower no. 227, 228, and 229 crossing the premises of Mahabodhi Cultural centre along with Destraining of conductor of both circuits and Earthwire between tension tower no. 218-237 in same line.
400KV-RANGPO-TEESTA-V-1	04-10-2023	Tower near gantry of Teesta V powerhouse collapsed due to sudden cloudburst at glacier fed LOHNAK Lake followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses
400KV-RANGPO-TEESTA-V-2	04-10-2023	Tower near gantry of Teesta V powerhouse collapsed due to sudden cloudburst at glacier fed LOHNAK Lake

		followed by huge inrush of water in TEESTA river and damage of Teesta III Dam & downstream Powerhouses
132KV-RANGPO-SAMARDONG-1	22-05-2024	Rangpo:Y_N fault with fault distance 0.157 KM ,14.562kA Samardong: NA
132KV-CHANDIL-MANIQUEI-1	05-06-2024	Power assistance withdrawn
400KV/220KV 315 MVA ICT 1 AT NORTH KARANPURA	12-09-2024	Tripped on Differential protection
132KV-MADHEPURA (BH)-SAHARSA(PMTL)-1	23-09-2024	To control loading on 132kV Madhepura-Sahrsa line
400KV/220KV 315 MVA ICT 1 AT TSTPP	01-11-2024	Tripped on PRD protection
132KV-PATRATU-PATRATU-1	16-11-2024	Diversion/Heightening of line due to inadequate clearance from under construction railway Line by PVUNL
132KV-PATRATU-PATRATU-2	16-11-2024	Diversion/Heightening of line due to inadequate clearance from under construction railway Line by PVUNL
400KV/220KV 315 MVA ICT 2 AT MEJIA-B	20-01-2025	Tripped during charging of ICT#1 bay with cable from 220 kv GIS side
400KV/220KV 315 MVA ICT 1 AT LATEHAR	22-04-2025	R phase LA of 400/220/33 KV ICT - I got bursted
400KV/220KV 315 MVA ICT 2 AT LATEHAR	16-04-2025	Transformer REF protection operated
400KV/220KV 315 MVA ICT 2 AT KODERMA	02-06-2025	Transformer Differential Protection operated
132KV-RAXAUL(NEW)-PARWANIPUR-2	03-07-2025	To carry out Gantry erection works at near by Parsauni 132/66/33 kV Substation of Nepal
132KV-RAXAUL(NEW)-PARWANIPUR-1	03-07-2025	To carry out Gantry erection works at near by Parsauni 132/66/33 kV Substation of Nepal
220KV-RAJARHAT-NEW TOWN(AA-II)-1	10-07-2025	Emergency shutdown for BCU replacement work at Rajarhat. Charging attempted but tripped on SOTF. B_ph cable faulty
220KV-PATNA-KHAGAUL-1	02-08-2025	Tower No. 63 has bent significantly on one side
400KV/220KV 315 MVA ICT 2 AT KEONJHOR(PG)	05-08-2025	Buchholz relay operated
400KV MAIN BUS - 2 AT DIKCHU	05-08-2025	Bus bar protection operated
400KV-DIKCHU-RANGPO-2	05-08-2025	Damaged insulator replacement work. While charging the line bus bar protection operated at Dikchu

400KV-ALIPURDUAR (PG)-PUNASANGCHUN-1	09-06-2025	CONNECTION OF ALL PHASE JUMPERS AT LOC. 177
400KV-PVUNL-PATRATU-2	19-08-2025	Patratu end:General trip,DT received & overvoltage protection.Repair work going on isolator chamber,expected by 15.9.2025
400KV-ARAMBAGH-NEW PPSP-2	04-01-2025	Damage in GIS chamber at new ppsp ss for Arambag ckt.Expected in January 2026

Transmission licensees/ Utilities are requested to update expected restoration date & work progress regarding restoration regularly to ERPC/ERLDC on monthly basis by 5<sup>th</sup> of each month so that status of restoration can be reviewed in OCC. Utilities are also requested to update outage of any elements within their substation premises like isolator/breaker to ERPC/ERLDC regularly. (Reported as per Clause 5.2(e) of IEGC).

#### 4.3.Commissioning of new units and transmission elements in Eastern Grid in the month of July-2025.

The details of new units/transmission elements commissioned in the month of May-2025 based on the inputs received from beneficiaries:

NEW ELEMENTS COMMISSIONED DURING July, 2025							
उत्पादन इकाइयाँ / GENERATING UNITS							
S I. N o	स्थान Location / Pooling Station	मालिक/यूनिट का नाम OWNER/UN IT NAME	यूनिट संख्या/ स्रोत Unit No/S ourc e	संकलित क्षमता (मेगावाट) Capacity added (MW)	कुल/स्थापित क्षमता (मेगावाट) Total/Insta lled Capacity (MW)	दिनांक DATE	टिप्पणी Remarks क्र
1	Chausa, Buxar, Bihar	Buxar TPP - UNIT 1	1/Coa 1	660	660	21-08- 2025 20:55	
आई.सी.टी./जी.टी./एस.टी / ICTs/ GTs / STs							
क्र S I.	एजेंसी/मालि क Agency/O wner	उप-केन्द्र SUB- STATION	आईसीटी संख्या ICT NO	वोल्टेज (केवी) Voltag e	क्षमता (एमवीए) CAPACIT Y (MVA)	दिनांक DATE	टिप्पणी Remarks

N o.				Level (kV)			
1	OPTCL	NEW DUBURI	400KV/2 20KV 500 MVA ICT 3 AT NEW DUBUR I	400/22 0	500	29-08- 2025 21:53	First time loaded

**प्रेषण लाइन / TRANSMISSION LINES**

क्र. S I. N o.	एजेंसी/मालि क Agency/O wner	लाइन का नाम LINE NAME	लंबाई (किमी) Length (KM)	कंडक्टर प्रकार Conducto r Type	दिनांक DATE	टिप्पणी Remarks
1	JUSNL	400KV-PVUNL- PATRATU-2	6.6	ACSR Moose	03-08- 2025 16:31	
2	JUSNL	400KV-PVUNL- PATRATU-1	6.6	ACSR Moose	03-08- 2025 16:40	

**लिलो / प्रेषण लाइन की पुनर्व्यवस्था / LILO/RE-ARRANGEMENT OF TRANSMISSION LINES**

क्र. S I. N o.	एजेंसी/मालि क Agency/O wner	लाइन का नाम / लिलो पर Line Name/LILO at	लंबाई (किमी) Length (KM)	कंडक्टर प्रकार Conducto r Type	दिनांक DATE	टिप्पणी Remarks
1	PGCIL ER_II	132 KV Siliguri-Melli TL	92.346		08-08- 2025 16:47	Back to original Configuration
2	PGCIL ER_II	132 KV Rangit- Kurseung TL	61.205		08-08- 2025 16:50	Back to original Configuration
3	BSPTCL	132KV- CHANDAUTI (PMTL)- Daudnagar(New)-1	LILO length- 24.2 kms/total	HTLS equivalent to panther	24-08- 2025 19:57	Idle charged from Chandauti(P MTL) end).



			length- 106 kms			
<b>बस/लाइन रिेक्टर / BUS/LINE REACTOR</b>						
क्र . S I. N o .	एजेंसी/मालि क Agency/O wner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB- STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks
1	PGCIL ER-I	63MVAR SWITCHABLE L/R OF 400KV- DURGAPUR- KHSTPP-1 AT KHSTPP	400	63	29-08- 2025 23:59	
2	PGCIL ER-I	63MVAR SWITCHABLE L/R OF 400KV- DURGAPUR- KHSTPP-2 AT KHSTPP	400	63	18-08- 2025 17:57	
3	SJVN	125MVAR 400KV B/R-1 AT BUXAR TPP	400	125	11-08- 2025 16:12	
N						
<b>बस / BUS</b>						
क्र . S I. N o .	एजेंसी/मालि क Agency/O wner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB- STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks
NIL						
<b>एच.वी.डी.सी/ए.सी फिल्टर बैंक/फैक्ट्स डिवाइस संबद्ध प्रणाली / HVDC /AC Filter bank / FACTS DEVICE associated System</b>						
क्र . S I. N o .	एजेंसी/मालि क Agency/O wner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB- STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks

<b>N o .</b>						
<b>NIL</b>						
<b>बे / BAYS</b>						
<b>क्र . S I. N o .</b>	<b>एजेंसी/मालि क Agency/O wner</b>	<b>एलेमेंट का नाम Element Name</b>	<b>उप-केन्द्र SUB- STATION</b>	<b>वोल्टेज (केवी) Voltage Level (kV)</b>	<b>दिनांक DATE</b>	<b>टिप्पणी Remarks</b>
1	SJVN	400KV MAIN BAY OF GT-1 AT BUXAR TPP	BUXAR TPP	400	21-08- 2025 20:55	
2	WBSETCL	400KV MAIN BAY OF TURGA-2 AT NEW PPSP	NEW PPSP	400	19-08- 2025 20:16	
3	WBSETCL	400KV MAIN BAY OF TURGA-1 AT NEW PPSP	NEW PPSP	400	19-08- 2025 20:11	
4	WBSETCL	400KV TIE BAY OF ( TURGA-1 AND TURGA-2) AT NEW PPSP	NEW PPSP	400	19-08- 2025 17:48	
5	SJVN	400KV TIE BAY OF ( 500 MVA ICT 1 AND 125MVAR B/R-1) AT BUXAR TPP	BUXAR TPP	400	07-08- 2025 13:55	
6	SJVN	400KV MAIN BAY OF 125MVAR B/R- 1 AT BUXAR TPP	BUXAR TPP	400	07-08- 2025 13:54	
7	PVUNL	400KV MAIN BAY OF PATRATU(JUSNL)- 2 AT PVUNL	PVUNL	400	04-08- 2025 23:03	
8	OPTCL	400KV MAIN BAY OF 500 MVA ICT 3 AT NEW DUBURI	NEW DUBURI	400	29-08- 2025 21:53	
9	OPTCL	220KV MAIN BAY OF 500 MVA ICT 3 AT NEW DUBURI	NEW DUBURI	220	28-08- 2025 10:16	

**Members may note.**

#### 4.4. UFR operation during the month of August 2025

Frequency profile for the month as follows:

MONTH	MAX	MIN	% LESS IEGC BAND	% WITHIN IEGC BAND	% MORE IEGC BAND
	(DATE/TIME)	(DATE/TIME)			
August, 2025	50.35 Hz on 28- 08-2025 at 13:01 Hrs	49.46 Hz on 21- 08-2025 at 19:14 Hrs	6.63	76.22	17.15

Hence, no report of operation of UFR has been received from any of the constituents.

**Members may note.**

\*\*\*\*\*

Ref: PG/ODP/RTAMC/ 1005

Dated: 25.08.2025

To

**The General Manager,**  
EHT (O&M) Circle, Jajpur Road,  
OPTCL, AT: TTS Colony, Dhabalagiri,  
Odisha - 755019  
Mob: 9438907974

**Sub: Repeated Faults in 220kV Keonjhar(PG)-Turumunga Transmission Line-I**

Dear Sir,

In the period between 18.06.2025 to date, there have been five instances of line fault in 220kV Keonjhar(PG)-Turumunga line-I. Trip details are as mentioned below:

220kV Keonjhar(PG)-Turumunga line-I tripping history from 18.06.2025 Onwards				
Sr. No.	Date	Relay details at PG end	A/R at PG end	A/R at OPTCL end
1	18.06.2025	Z1 Optd., R-Ph to Ground Fault, IF- 2.88 kA, Fault Distance - 12.1KM	Successful	Unsuccessful
2	23.06.2025	Z1 Optd., R-Ph to Ground Fault, IF- 5.12kA, Fault Distance - 6.9KM	Successful	Unsuccessful
3	15.08.2025	Z1 Optd., R-Ph to Ground Fault, IF- 2.92kA, Fault Distance - 11.8KM	Successful	Unsuccessful
4	23.08.2025	Z1 Optd., R-Ph to Ground Fault, IF- 2.91kA, Fault Distance - 11.6KM	Successful	Unsuccessful
5	24.08.2025	Z1 Optd., R-ph to Ground Fault, IF- 2.98kA, Fault Distance - 11.3KM	Successful	Unsuccessful

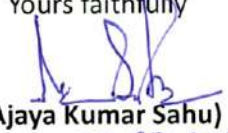
This is causing stress on the 315 MVA, 400/220kV ICTs of our Keonjhar Substation and other bay equipments. It is also observed that the Auto-reclosure function at OPTCL end is not functional for this line.

You are requested to take immediate urgent action towards making the line fault-free and also intimate us about the A/R status your end.

Matter urgent

Thanking You

Yours faithfully

  
(Ajaya Kumar Sahu)

25.08.2025

DGM (RTAMC), Bhubaneswar

Copy for kind information: Sr GM(AM), BBSR

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड  
POWER GRID CORPORATION OF INDIA LIMITED

(A Government of India Enterprise)  
B-9, Outub Institutional Area, Katweria Safai, New Delhi-110 016



Ref: No. C-LDC-URTDSM-Alstom-167

Date: Dec 9, 2015

To

The Project Director  
M/s Alstom T&D India Ltd., NMS-EMI, Ground Floor  
A-7, Sector 65, Noida – 201301, Uttar Pradesh

Attn: Mr. Nilesh Raju

Subject: - WAMS System for Package-I and Package-II under Unified Real Time Dynamic State Measurement (URTDSM) Project – Approval of PMU Site Acceptance test (SAT) Procedure.

Ref: Supply Contract Agreement No. CC-CS/363-NR1/SCADA-2161/3/G1/R/NOA-II/4857  
and  
Supply Contract Agreement No CC-CS/363-WR1/SCADA-2162/3/G1/R/NOA-II/4859

Dear Sir,

This is with reference to the documents submitted vide your transmittal No. 3818-ATDIL-PG-URTDSM-TECH-0353 dated 09.12.2015. Approval for the following document is attached at Annexure-I.

1. WAMS- PMU Site Acceptance test (SAT) Procedure) – Rev D (Doc No. POWERGRID-URTDSM-A/GEN-3-600)

Approval/Comments conveyed herein neither relieves the Contractor of his contractual obligations and his responsibilities towards weights, qualities, design details, assembly fits, performance particulars and conformity of the supplies with the Indian Statutory Laws as may be applicable nor does it limit the purchaser's right under the contract

Yours faithfully,

(Sunil Kumar)  
Asst. General Manager (LD&C)

Corporate office: "Saudamini" Plot No. 2, Sector-29, Gurgaon- 22001 Haryana, India  
Phone: +91 124 2571700-19, Extn : 3109 Fax: +91 124 2571981, E-Mail: [sunilkumar@powergridindia.com](mailto:sunilkumar@powergridindia.com)



पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड  
(एक सरकारी उद्यम)  
**POWER GRID CORPORATION OF INDIA LIMITED**

(A Government of India Enterprise)  
B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110 016



Ref: No. C-LDC-URTDSM-Alstom-167 Dated Dec 9, 2015

Annexure-I

Sl. No	Document Title Reference Number	Rev	Category	Remarks
1.	2. WAMS- PMU Site Acceptance test (SAT) Procedure) – Rev D (Doc No. POWERGRID-URTDSM-A/GEN-3-600)	D	I	

Category I, II, III, IV means:

- I: Approved/Released for implementation.
- II: Approved/Released for implementation subject to incorporation of comments. Revised drawing/document required
- III: To be resubmitted for approval after incorporating the comments.
- IV: For information and record.

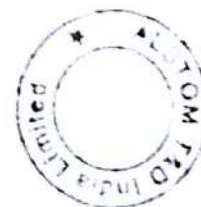
Note: - The approvals of the drawing/document vide this letter does not cover the approval of sub-vendor for make of the items. The approval in this respect is to be obtained from QA&I deptt.

Corporate office: "Saudamini" Plot No. 2, Sector-29, Gurgaon-122001 Haryana, India

Phone: +91 124 2571700-19, Extn : 3109 Fax: +91 124 2571981, E-Mail : [sunilkumar@powergridindia.com](mailto:sunilkumar@powergridindia.com)

Compliance for Comments Dated :08.10.2015 & 08.12.2015

S.No	M/s PGCIL Comments	Alstom Reply
1	Annexure-I : Comments on compliance for comments dated 25.08.2015	a,b This test will be conducted during system availability test & is included in CC Availability test procedure.
2	Annexure-I : Point No. - 1	Reference documents included in section 1.1.3 1. Approved BOQ of the substation. 2. Approved typical scheme referred in BOQ. 3. Installation guide. 4. PMU database (DB) (System generated copy)
3	Annexure-I : Point No. - 2	Complied
4	Annexure-I : Point No. - 3.2	Complied
5	Annexure-I : Point No. - 3.3	This software shall be utilized for local configuration of Intelligent Electronic Devices (PMU).
6	Annexure-I : Point No. - 4.1	Approved BoQ and system generated PMU database is included in Document reference. System generated PMU database will be furnished as a S/S specific document
7	Annexure-I : Point No. - 4.2.1	Complied as 4.2.1 Check for BOQ, Technical details, & Wiring as per approved typical scheme referred in BOQ
8	Annexure-I : Point No. - 4.2.3	Dual DC supply check has been included in 6.1
9	Annexure-I : Point No. - 5.1	4. This alarm will be reported to Alarm Management System & the same is mentioned in PDC system design document. This will be demonstrated in integrated CC FAT in factory 6.Complied & Added in procedure.
10	Annexure-I : Point No. -6.1	Dual DC supply check has been included
11	Annexure-I : Point No - 6.2	Complied
12	Annexure-I : Point No. -6.3	Complied
13	Annexure-I : Point No. -9.1.1	Point No. 9 (Tests at PDS) has been removed from SAT procedure
		15. Complied
14	Comments on the table in Annexure-	Complied
15	General compliance	Visibility of data at PDS/PDC is subject to availability of link between PMU and PDS/PDC at control center. The test stands completed with the data Visibility at PMU HMI in the absence of link between PMU and PDS/PDC at control center.





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Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD.	Rev	0
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9 12 2015
MDL Ref.	POWERGRID-URTDSM-A/GEN-3-600	Page	2 of 20

**ALSTOM**TRANSMISSION & DISTRIBUTION  
Network Management Solutions**Unified Real Time Dynamic State Measurement (URTDMS)**


CC-CS/363-NRI/SCADA-2161/3/G1/R/CA-I/4857 dt 31 03.2014

CC-CS/363-NRI/SCADA-2161/3/G1/R/CA-II/4858 dt 31 03.2014

**Transmittal No. 3818-ATDIL-PG-URTDMS-TECH- 353**From: **RAJASEKHAR REDDY**Date: **09/12/2015**Original Sent By: **By Hand**Action Requested : **For Approval**

S.No	Designation	Document N°	Revision N°
1	PMU SITE ACCEPTANCE TEST(SAT) PROCEDURE	POWERGRID-URTDMS-A/GEN-3-600	D

<u>DISTRIBUTION LIST</u>	Original Set	Copy With enclosures	Copy Without enclosures
<b>POWERGRID</b>			
Mr. Sunil Kumar (Asst. GM, LD&C)	1		
LD&C Wing, Ground Floor, Plot no. 2, Saudamini, Sector 29, Gurgaon-122001			

  
(Rajasekhar Reddy)  
Project Manager  
For ALSTOM T&D

## SITE ACCEPTANCE TEST PROCEDURE FOR PHASOR MEASUREMENT UNIT, PANELS WITH GPS & LAN SWITCH UNDER URTDSM PROJECT

**CUSTOMER :** POWERGRID CORPORATION OF INDIA LTD.

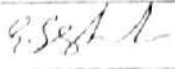
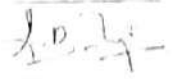

**TITLE :** SITE ACCEPTANCE TEST (SAT) PROCEDURE

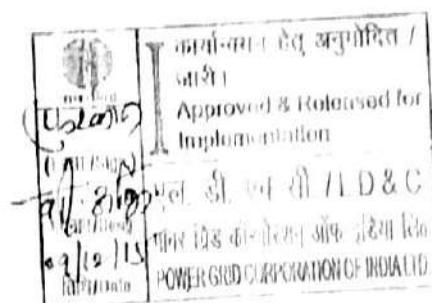
**DOCUMENT NO. :** POWERGRID -URTDSM-A/GEN-3-600

**ISSUE & DATE :** Rev. D, 09.12.2015

**P.O. No :** CC-CS/363-NR1/SCADA-2161/3/G1/R/NOA-I/4857  
CC-CS/363-WR1/SCADA-2162/3/G1/R/NOA-I/4859  
Dated: 15/01/2014

**PROJECT NAME :** WAMS - PKG-I & II UNDER URTDSM

	NAME	SHORT NAME	SIGNATURE
Prepared	G.SIVASANKAR	GSS	
Checked	S. BALAJI	SB	
Approved	RITESH BHARAT	RB	





## 1 ORGANIZATION OF VALIDATION TASKS

### 1.1 SITE ACCEPTANCE SESSION

#### 1.1.1 Definition

The Site Acceptance Test document deals with the acceptance of the panels at respective sites by customer. It aims at checking, in accordance with approved documents

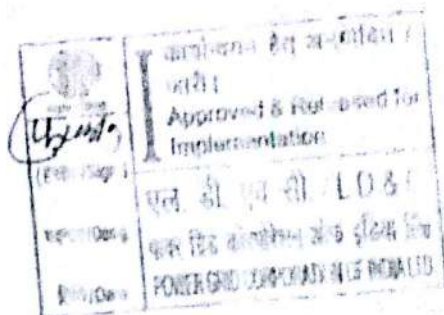
#### 1.1.2 Program

The different steps of the Site Acceptance test include:

- Physical verification of hardware as per approved drawings.
- Functional verification of hardware.
- Connectivity with Phasor Development Server (PDS)/Phasor Data Concentrator(PDC).

#### 1.1.3 Reference documents

1. Approved BOQ of the substation.
2. Approved typical scheme referred in BOQ.
3. Installation guide.
4. PMU database (DB) (System generated copy)



#### 1.1.4 Results

Upon completion of SAT, the final acceptance meeting assesses the acceptance of the system by the customer.

The assessment of the acceptance is based on the test results on the Site Acceptance Tests. The purposes of the review are:


- To state about the conformity between the offered system and the approved documents.
- To verify that every tests has been performed successfully.
- To issue the acceptance certificate.

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD.	Rev	D
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9.12.2015
MDL Ref	POWERGRID-URTDSM-A/GEN-3-600	Page	3 of 20



## 2 Sub-station Details

1	Region	East Region					
2	Site ID	—					
3	Sub-Station	JTPL 400kv Switch yard					
4	Utility	Power Generation					
5	Sub-Station Type	KROSK type.					
6	Voltage level	400kv					
7	Feeder Qty	2					
8	PMU Qty	1					
9	PMU Panel Location	KROSK-1					
10	Reporting Destination						
11	PMU IP DETAILS	PMU Ref	Panel Ref	IP	PMU Ref	Panel Ref	IP
		PMU-1	K1179	172.19.21.162	PMU-8		
		PMU-2			PMU-9		
		PMU-3			PMU-10		
		PMU-4			PMU-11		
		PMU-5			PMU-12		
		PMU-6			PMU-13		
		PMU-7			PMU-14		
12	LAN SWITCH IP DETAILS	EFS Ref	Panel Ref	IP	EFS Ref	Panel Ref	IP
		EFS-1	K1179	172.19.21.161	EFS-8		
		EFS-2	MUX	172.19.21.161	EFS-9		
		EFS-3			EFS-10		
		EFS-4			EFS-11		
		EFS-5			EFS-12		
		EFS-6			EFS-13		
		EFS-7			EFS-14		


  
 Approved & Released for Implementation.
   
 एल डी एच सी / LD&C
   
 एल डी एच सी ऑफ इंडिया लि

Title	SITE ACCEPTANCE TEST PROCEDURE OF INDIA LTD.	Rev	0
Customer	POWERGRID CORPORATION OF INDIA LTD.	Date	9/12/2015
Project	WAMS - PKG-I & II UNDER URTDSM	Page	4 of 20
MDL Ref	POWERGRID-URTDSM-A/GEN-3-600		



### 3 SAT REQUIREMENTS

#### 3.1 Scope of Tests

The Site Acceptance Test (SAT) for Phasor Measurement Unit (PMU) Panels with Global Positioning System (GPS) Clock and Ethernet LAN switch will be performed at the respective substation. The tests shall verify that the PMU functions are normal during the test.

The SAT tests have been divided into relevant sections in order to perform the tests systematically. Upon successful verification of the tests in each section, pertinent forms and test results shall be signed by the customer or his representative.

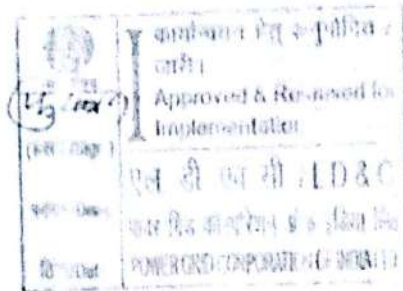
#### 3.2 Hardware Environment

The following hardware equipment is to be made available during SAT and in line with approved document.

- Phasor Measurement Units.
- Ethernet Switches.
- Time Synchronizing Equipment (GPS)

List of testing equipment's used

- Multimeter for AC/DC measurements
- Clamp on meter
- Laptop with connecting cable



#### 3.3 Software Environment

The following software shall be used for conducting the tests.

- MiCOM S1 Agile (IED configuration software).
- PMU data analyzer.

This software shall be utilized for local configuration of Intelligent Electronic Devices (PMU).

Sub-station specific configuration files shall be prepared offline for all the PMU's and downloaded to the PMU for testing

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD.	Rev	0
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9.12.2015
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## 4 SAT Tests

## 4.1 Document Verification

Purpose

This test verifies that the applicable approved drawings and documents for the equipment / system under test are referred during the Site Acceptance Test and in case of dispute contract specification shall prevail.

Setup

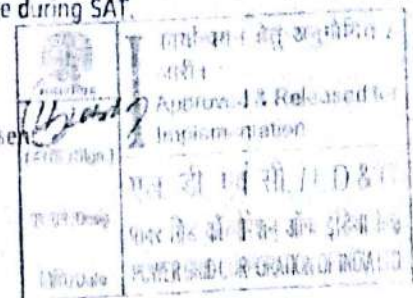
Ensure that the documentations are readily available for reference during SAT.

Procedure

Verify the drawings (printed) of all assembled equipment are present.

Expected results

All documents are available as per the below table



S.N.	Document Reference	Available / Not available
1	Site Survey Report	✓
2	Approved Bill of Quantity (BOQ)	✓
3	Sub-station specific panel drawings – General Arrangement, Legend, Schematic Drawing	✓
4	Typical Adaptation Drawing	✓
5	System generated PMU database	✓

Test Result:

☒ PASS
 ☐ FAIL
 ☐ NOT TESTED

9523040605  
11/10/2018  
Customer Representative

9500180238  
11/10/18  
ALSTOM Representative

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD	Rev	0
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9 12 2015
MDL Ref.	POWERGRID-URTDSM-A/GEN-3-600	Page	6 of 20



## 4.2 Equipment Verification

## 4.2.1 Check for BQO, Technical details, &amp; Wiring as per approved typical scheme referred in BQO.

Purpose:

To verify that all hardware equipment required are as per approved document

Setup:

Ensure that the PMU panels are readily available in SAT location

Procedure:

1. Visually inspect the equipment in panel for cleanliness and ensure that they are free from damage / foreign material (dust, solid material etc.)
2. Inspect the yard wiring terminated in panel for correctness and ensure that they are free from insulation damage
3. Ensure that all earth ground connections are correctly bonded from the panels to the substation earth.
4. Check the connectivity of all the equipment's are as per approved schematic drawings.

Expected results:

1. Equipment in the panel is free from damage, rust and dust.
2. Terminated yard wiring in the panel are insulated and free from damage
3. Panel earth/ground is connected to sub-station earth
4. All Equipment connections are as per the approved schematic

Test Result:

<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NOT TESTED
--	-------------------------------	-------------------------------------

Customer Representative

ALSTOM Representative

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD	Rev	D
Project	WAMS PKG-I & II UNDER URTISM	Date	9/11/2018
MDL Ref	POWERGRID-URTISM-AGEN-8-600	Page	7 of 20

## 4.2.2 Physical Verification of Equipment

Check the Bill of Material as per approved PMU Panel drawings and Approved BOQ

Expected results

All equipment is in line with the Panel drawings and Approved BOQ

S.NO.	Equipment	Ok / Not Ok
1	PMU ✓	Ok
2	GPS ✓	Ok
3	EFS ✓	Ok.

 (Signature/Sign) पदवाचन/Design तिथि/Date	कार्यान्वयन हेतु अनुमोदित / जारी। Approved & Released for Implementation
	एन टी एवं सी / LD & C पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लि. POWER GRID CORPORATION OF INDIA LTD.

**Test Result:**

<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NOT TESTED
--	-------------------------------	-------------------------------------

Customer Representative

ALSTOM Representative

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD	Rev	D
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9 12 2015
MDL Ref.	POWERGRID-URTDSM-A/GEN-3-600	Page	8 of 20



## 4.2.3 Power Checks

Purpose

To ensure that the equipment installed in the panels are operating when connected to the nominal specified power supply (Substation specific DC voltage)

Setup

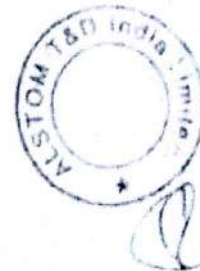
Perform the steps below to confirm correct operation of all equipment connected to the power supplies.

Procedure

1. Verify that all equipment's (PMU, GPS, and EFS) in panels are powered at the nominal AC/DC supply voltage input (Substation specific DC voltage). If required, using a Digital Multimeter verify the presence of nominal supply voltage
2. Verify that there are no abnormalities seen when the equipment are turned ON.
3. Verify that all equipment's are operating normally

Expected Result

- 1) DC voltage is available for the panel as per substation specific drawing
- 2) All equipment is powered up

**Test Result:**

<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NOT TESTED
--	-------------------------------	-------------------------------------

950830605  
 11/10/2018  
 Customer Representative

9500180228  
 11/10/18  
 ALSTOM Representative  
 Penza Sony. n.

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD	Rev	D
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9.12.2015
MDL Ref	POWERGRID-URTDSM-A/GEN-3-600	Page	3 of 20

## 5 Time Synchronization Equipment Tests

### 5.1 Time Synchronization Equipment Functional Check

The time synchronization test shall be performed by making GPS as the time reference for synchronizing PMU's as per schematic drawing

#### Setup

- Ensure that the test equipment is available in SAT location.

#### Procedure

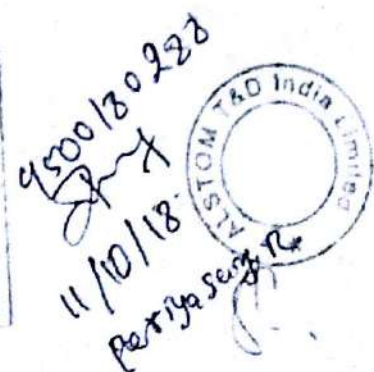
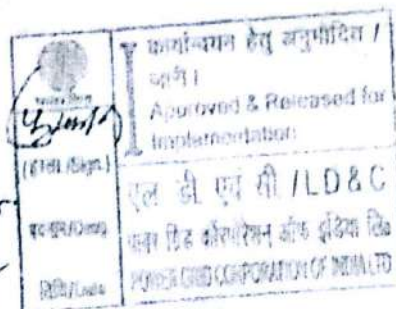
1. Verify the antenna installation.
2. Check how many satellites are visible to the GPS and ensure that the GPS is locked to the satellites before starting any test.
3. Check that the PMU does not have any GPS related alarm.
4. Disconnect IRIG-B and/or PPS input from PMU and observe the alarms on the PMU along with error bit.
5. Reconnect the above and check all alarms reset.
6. Check the GPS configuration for PPS / IRIG-B settings using the laptop.  
For configuration details refer GPS setting screenshot below
7. Repeat step-1 to 6 for all other PMU's available in the substation.

#### Expected Result

- 1) No GPS related alarms displayed in PMU after installation.
- 2) Error displayed in PMU upon disconnection of IRIG-B and/or PPS input to PMU.

958306065

11/10/2018  
D.P. Sridharan  
J.P.L.



Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD	Rev	0
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9.12.2015
MDL Ref	POWERGRID-URTDSM-AGEN-3-600	Page	10 of 20




ALSTOM

# GPS Setting

ALSTOM

RT430 GPS Configuration Check

Item	Value	Unit	Range
1. GPS Mode	RTK		RTK, L1, L2
2. GPS Frequency	1176.4	MHz	1176.4, 1176.5, 1176.6
3. GPS Antenna	1		1, 2, 3
4. GPS Port	1		1, 2, 3
5. GPS Baud Rate	115200	bps	115200, 57600, 28800
6. GPS Data Format	RTCM		RTCM, NMEA
7. GPS Data Rate	100	Hz	100, 200, 400
8. GPS Data Filter	0.1	m	0.1, 0.2, 0.3
9. GPS Data Smoothing	0.1	m	0.1, 0.2, 0.3
10. GPS Data Averaging	0.1	m	0.1, 0.2, 0.3

 (Signature) पदस्थ/Design दिनांक/Date	कर्मचारी द्वारा अनुमोदित / जारी है। Approved & Released for Implementation
	एल. टी. सी. लि. / LD & C पावर ग्रीड कॉर्पोरेशन ऑफ इंडिया लि. POWERGRID CORPORATION OF INDIA LTD.

## Test Result:

<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NOT TESTED
--	-------------------------------	-------------------------------------

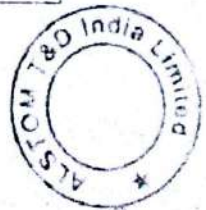
9583040605.  
 B.P. Saha  
 11/10/2018

Customer Representative

9583040605.  
 11/10/18

ALSTOM Representative

Punya Sengupta



Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD.	Rev	0
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9/12/2015
MDL Ref.	POWERGRID-URTDSM-A/GEN-3-600	Page	11 of 20

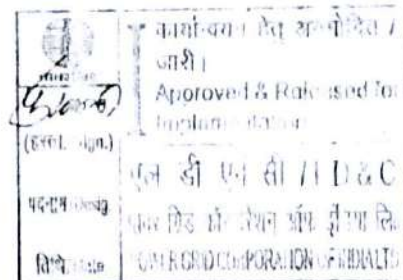
### 6.3 PMU Digital Input Data Retrieval

This test is conducted to check the Digital Inputs are mapped as per the approved drawing / BOQ.

- 1) Verify that the changes of state of Digital Input points are updated in the PMU local display.
- 2) External signal to be connected to the DI circuit and status to be verified

#### Expected Result

- 1) Digital inputs are configured as per approved drawings / BOQ
- 2) The status of the DI is high/low based on the external signal.



#### Test Result:

☒ PASS ☐ FAIL ☐ NOT TESTED

958304065  
 11/10/2018  
 Customer Representative

ALSTOM Representative

Periyasamy R.

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD.	Rev	D
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9.12.2015
MDL Ref.	POWERGRID-URTDSM-A/GEN-3-600	Page:	13 of 20



Connect current & voltage signals from CT/PT circuit.

- ected Result

- 1) Analog phasors are displayed in PMU Data analyzer

To download & check the configuration settings of PMU.

1. Power up the PMU with nominal power supply (Substation specific DC voltage)
2. The Healthy LED should turn ON.
3. Set the IP address of PMU manually or using the front RS232 serial port.
4. Download configuration to the PMU.
5. Modify some of the parameters manually and up load the configuration file to the laptop.
6. The changes done manually should be reflected on the configuration file in laptop.
7. Now change settings in configuration file in laptop and download to the PMU.
8. The changes done in step 7 should be reflected in the PMU.
9. Enable/Disable some phasors in the PMU configuration
10. In the PMU data analyzer software only the relevant phasors should be displayed.
11. Verify that Phasors and DI names are as per station specific documents.
12. Repeat step 1 to 11 for all the PMU's available in the S/S.

Expected Result

- 1) Modified configuration parameters are displayed in laptop and displayed in PMU on downloading the same to PMU.
- 2) Phasors displayed in PMU Data Analyser is as per the modified phasor list
- 3) Final configuration are ensured as per the station specific documents

3) Final configuration are ensured as per the station specific documents

3040602.

10/10/2018

POWER GRID CORPORATION OF INDIA LTD.

Title	SITE ACCEPTANCE TEST PROCEDURE			
Customer	POWERGRID CORPORATION OF INDIA LTD.		Rev	D
Project	WAMS - PKG-I & II UNDER URTDSM		Date	9/12/2015
MDL Ref	POWERGRID-URTDSM-A/GEN-3-600		Page	14 of 20



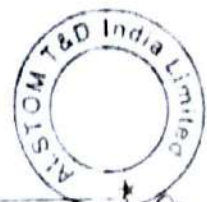
### 7.3 Check for auto restoration of PMU on DC power recovery after its failure

To ensure that PMU starts communicating with PMU data analyzer on resumption of power supply and no erroneous command is generated during DC power failure & start up.

1. Set the PMU to UDP multicast spontaneous mode
2. In power on condition, test the PMU communication with PMU data analyzer
3. Monitor the analog phasors, and Digital status with PMU data analyzer.
4. Switch OFF main DC supply and check that protocol test tool communication with PMU is stopped.
5. Switch the DC supply ON and check that the PMU has started up without any manual assistance and starts communication with the PMU data analyzer automatically.
6. Check that no erroneous command is generated during DC power failure or DC power starts up.
7. Repeat step-1 to 6 for all the PMU's available in the S/S

#### Expected Result

- 1) Communication established after error resumption of DC fail



#### Test Result:

☒ PASS ☐ FAIL ☐ NOT TESTED

9583040605  
P. P. Induram  
11/10/2018  
Customer Representative

11-10-18 9500120228  
Penya Samy R.  
ALSTOM Representative

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD.	Rev	0
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9.12.2015
MDL Ref.	POWERGRID-URTDSM-A/GEN-3-600	Page	15 of 20

## 8 Station Level Architecture

This provides the overview of the PMU connectivity to SDH equipment in the substation. Typical architecture for is shown here for reference.

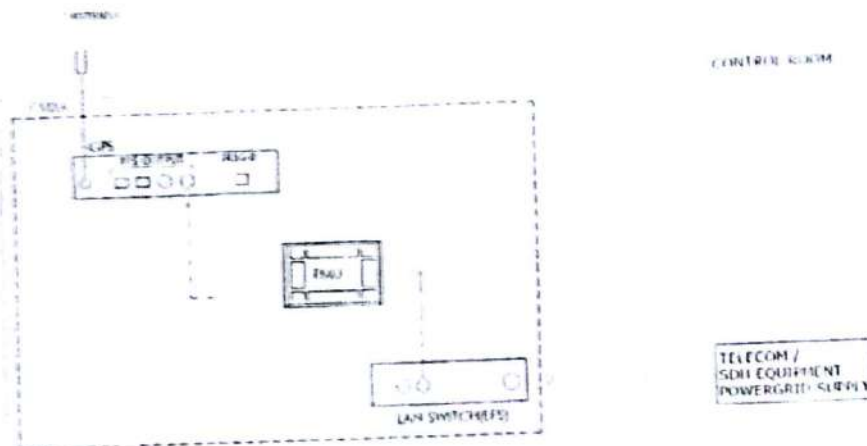
- i) Control Room Type S/s
- ✓ Bay Kiosk Type S/s

### Procedure

- 1) Check the Sub-Station Architecture is as per as per Typical Schematic drawing referred in Approved BoQ
- 2) Typical architecture shown below for reference

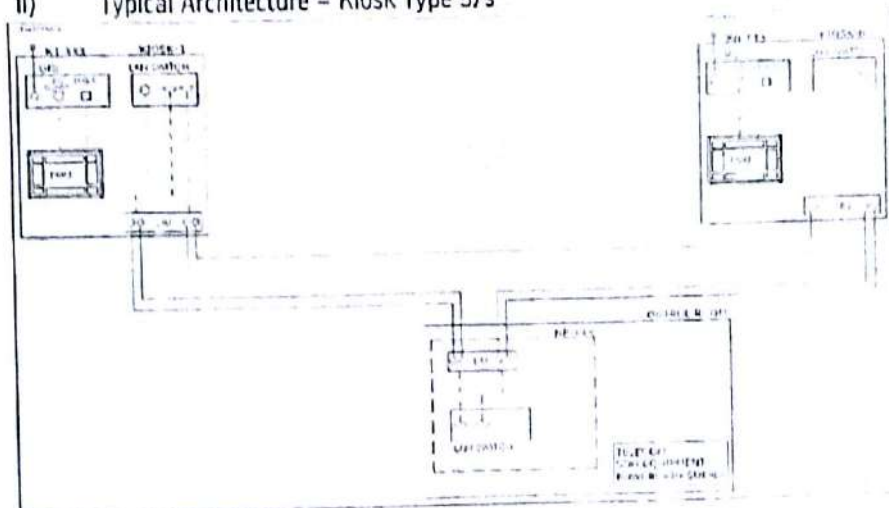
### Expected Result

- 1) Connections established as per the Typical architecture referred in the Approved BoQ.
- i) Typical Architecture – Control Room Type S/s



Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD.	Rev	D
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## ii) Typical Architecture – Kiosk Type S/s



 (Signature/Sign) पद नाम/Design दिनांक/Date	कार्यान्वयन हेतु अनुमोदित जारी।
	Approved & Released for Implementation.
	एल डी एल सी एल डी सी
	पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लि. POWER GRID CORPORATION OF INDIA LTD.



Test Result:

<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NOT TESTED
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9583040605  
  
 Customer Representative

9500180880  
  
 11/10/18.  
 ALSTOM Representative  
 Penra Samy.R.

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD.	Rev	D
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9.12.2015
MDL Ref.	POWERGRID-URTDSM-A/GEN-3-600	Page	17 of 20



## 9 Conclusion

Restore PMU for final setting and put PMU in service. Check for normal load current and voltage phasors values and record as per Annexure-01

 (हस्ताक्षर) पदनाम/Design तिथि/Date	कार्यान्वयन हेतु मंजूर / जारी। Approved & Released for Implementation.
	एन डी एन सी डी एल पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लि. POWER GRID CORPORATION OF INDIA LTD



## Test Result:

<input checked="" type="checkbox"/> PASS	<input type="checkbox"/> FAIL	<input type="checkbox"/> NOT TESTED
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9583060405  
 11/10/2018  
 Customer Representative

11.10.18  
 9500180228  
 Penya Sany R  
 ALSTOM Representative

Title	SITE ACCEPTANCE TEST PROCEDURE		
Customer	POWERGRID CORPORATION OF INDIA LTD	Rev	0
Project	WAMS - PKG-I & II UNDER URTDSM	Date	9.12.2015
MDL Ref.	POWERGRID-URTDSM-A/GEN-3-500	Page	18 of 20

## Annexure-01 - PMU Functional Test Report

GPS SI no:	R14303XCCA06A
IP Address:	192.168.0.254

## Time Sync Check (HMI):

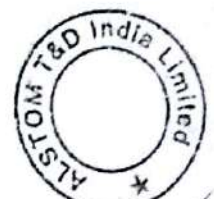
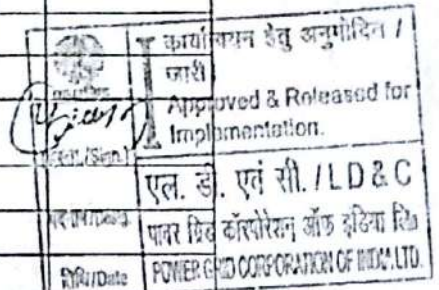
No of Satellites Visible	GPS locked	LED Status
11	locked	ON

GPS Clock Status check - ☒ OK ☐ NOT OK

PMU ID:	5629	Substation ID:	-
IP Address:	192.168.0.254	Substation Name:	JITPL 400KV Switchyard.

## METERING CHECKS Logical PMU-1

Feeder name	Phase Description	Visible at PMU HMI	Visible at PDS/PDC
* ANUGUL-2 (customer) connected down opporhty  P. P. Subhakar. 12/10/2018	A -ph Current (Ia)		
	B -ph Current (Ib)		
	C -ph Current (Ic)		
	Positive Sequence current Magnitude		
	A -ph Voltage (Va)		
	B -ph Voltage (Vb)		
	C -ph Voltage (Vc)		
	Positive Sequence voltage Magnitude		
	MW		
	MVAR		
	Frequency		
	df/dt		
PMU measured values are getting updated in real time <input type="checkbox"/> OK <input checked="" type="checkbox"/> NOT OK			



Title	: SITE ACCEPTANCE TEST PROCEDURE	Rev	D
Customer	: POWERGRID CORPORATION OF INDIA LTD.	Date	9.12.2015
Project	: WAMS - PKG-I & II UNDER URTDSM	Page:	19 of 20
MDL Ref.	: POWERGRID-URTDSM-A/GEN-3-600		

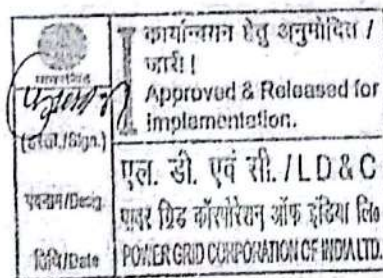


## METERING CHECKS Logical PMU-2

Feeder name	Phase Description	Visible at PMU HMI	Visible at PDS/PDC
AMUL-1	A -ph Current (Ia)		
	B -ph Current (Ib)		
	C -ph Current (Ic)		
	Positive Sequence current Magnitude		
	A -ph Voltage (Va)		
	B -ph Voltage (Vb)		
	C -ph Voltage (Vc)		
	Positive Sequence voltage Magnitude		
	MW		
	MVAR		
	Frequency		
	df/dt		
	PMU measured values are getting updated in real time <input type="checkbox"/> OK <input checked="" type="checkbox"/> NOT OK		

Note:

Visibility of data at PDS/PDC is subject to availability of link between PMU and PDS/PDC at control center. The test stands completed with the data Visibility at PMU HMI in the absence of link between PMU and PDS/PDC at control center.



Title	: SITE ACCEPTANCE TEST PROCEDURE	Rev	D
Customer	: POWERGRID CORPORATION OF INDIA LTD.	Date	9.12.2015
Project	: WAMS - PKG-I & II UNDER URTDSM	Page:	20 of 20
MDL Ref.	: POWERGRID-URTDSM-A/GEN-3-600		



**पावरग्रिड**  
**POWERGRID**

ANNEXURE B.2.11.2

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड

(भारत सरकार का उद्यम)

**POWER GRID CORPORATION OF INDIA LIMITED**

(A Government of India Enterprise)

Ref: POWERGRID/ODP/ULDC/PMU/

Date: 04/09/2025

To,  
HOD (Electrical)  
Jindal India Power Ltd.  
At/PO-Derang, Dist-Angul  
Odisha-759117

**Subject:** Extension of connection of CT & PT wiring in PMU installed at JITPL-Regarding

Ref:

- i) E-mail correspondence on 30.06.2025
- ii) E-mail correspondence on 30.07.2025

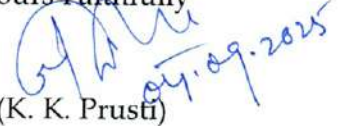
Dear Sir,

As you aware that PMU has been installed by POWERGRID at JITPL under URTDSM package for reporting of real time data to ERLDC. PMU was installed at JITPL and SAT was signed on 12.10.2018 with remark "CT & PT connection will be done by JITPL during opportunity shutdown" (SAT report attached). The optical link from JITPL to Angul has been commissioned and the PMU is reporting to ERLDC since 07.03.2025 only with digital signal. Analog signals are not reporting due to non-extension of CT & PT inputs from JITPL end. Vide e-mail communication mentioned under reference-(i) &(ii), JITPL was informed to extend CT/PT connection to PMU for the reporting of analog data to ERLDC. In reply JITPL has informed that CT/PT connection will be extended during line shut-down. (Mail communication attached)

As commissioning and complete data reporting of JITPL PMU to ERLDC is a critical long pending issue, hence it is requested to extend CT/PT connection to PMU at the earliest.

Thanking You

Yours Faithfully

  
(K. K. Prusti)

Sr. GM (AM/ULDC)

CC: for kind information please

1. CGM (Odisha)
2. Member Secy, ERPC, Kolkata

ओडिशा परियोजनाएं : प्लॉट नं-4, युनिट-41, निलाद्री विहार, चन्द्रशेखरपुर, भुवनेश्वर-751021, ओडिशा, दूरभाष : 0674-2720754  
Odisha Projects : Plot No. 4, Unit-41, Niladri Vihar, Chandrasekharpur, Bhubaneswar - 751021, Odisha, Phone : 0674-2720754

पंजीकृत कार्यालय : बी-9, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016, दूरभाष : 011-26560112, 26560121, 26564812, 26564892, सीआईएन : L40101DL1989GOI1038121  
Registered Office : B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016, Tel : 011-26560112, 26560121, 26564812, 26564892, CIN : L40101DL1989GOI1038121  
Website : www.powergrid.in



**Re: Deployment of Engineer for Commissioning of PMU at JITPL (Angul)****From** Ajay Kumar Sau {अजय कुमार सौ} <ajaysau@powergrid.in>**Date** Wed 7/30/2025 10:46 AM**To** electrical orissa <electrical\_orissa@Jindalgroup.com>**Cc** headelectrical orissa <headelectrical.orissa@Jindalgroup.com>; Rohan Prakash {रोहन प्रकाश} <rohanp@powergrid.in>; Pranab Kumar Sahoo {प्रणब कुमार साहू} <pranab.sahoo@powergrid.in>; Ajaya Kumar Sahu {अजय कुमार साहू} <ajaya.sahu@powergrid.in>; K K Prusti {के.के.} <kkp@powergrid.in>

1 attachment (2 MB)

Jindal MOM (1).pdf;

Sir,  
With reference to the trailing mail, it is once again requested to kindly confirm the connection of CT & PT wiring in PMU towards commissioning of the same and for applying trail operation certificate to ERLDC.

Regards  
A K Sau  
ULDC-BBSR  
POWERGRID  
Mob. No-7008755688

**From:** Ajay Kumar Sau {अजय कुमार सौ} <ajaysau@powergrid.in>**Sent:** Monday, June 30, 2025 3:41 PM**To:** electrical orissa <electrical\_orissa@Jindalgroup.com>**Cc:** headelectrical orissa <headelectrical.orissa@Jindalgroup.com>; Rohan Prakash {रोहन प्रकाश} <rohanp@powergrid.in>; Pranab Kumar Sahoo {प्रणब कुमार साहू} <pranab.sahoo@powergrid.in>; Ajaya Kumar Sahu {अजय कुमार साहू} <ajaya.sahu@powergrid.in>; K K Prusti {के.के.} <kkp@powergrid.in>**Subject:** Re: Deployment of Engineer for Commissioning of PMU at JITPL (Angul)

Sir,  
With reference to the trailing mail kindly confirm the connection of CT & PT wiring in PMU towards commissioning of the same and for applying trail operation certificate to ERLDC.

Regards  
A K Sau  
ULDC-BBSR  
POWERGRID  
Mob. No-7008755688

**From:** electrical orissa <electrical\_orissa@Jindalgroup.com>**Sent:** Monday, March 17, 2025 12:29 PM**To:** Mamidi Prasad {मामिडी प्रसाद} <mamidi.prasad@powergrid.in>**Cc:** headelectrical orissa <headelectrical.orissa@Jindalgroup.com>; Rohan Prakash {रोहन प्रकाश} <rohanp@powergrid.in>; Ajay Kumar Sau {अजय कुमार सौ} <ajaysau@powergrid.in>; Pranab Kumar Sahoo {प्रणब कुमार साहू} <pranab.sahoo@powergrid.in>; Somanath Nayak {एस. नायक} <snayak@powergrid.in>; electrical orissa <electrical\_orissa@Jindalgroup.com>**Subject:** RE: Deployment of Engineer for Commissioning of PMU at JITPL (Angul)

Dear Sir,

In refence with trailing mail, PMU and panel side( D.I) Breaker status and other signal already connected and remaining CT & PT wiring need to be connected at protection panels end during Line shutdown...Apart from that our SCADA Engineer last 5 days working on the Signal from IEC-101 to IEC-104 protocol .This is present status of IEC 104 communication protocol this FYI and noted.

Thanking You,



O.P.Sridharan

EMD

Jindal India Power Ltd,

M No 7077774083, 7978197349

Derang, Angul Dist, Odisha

Mail: electrical\_orissa@jindalgroup.com



**From:** headelectrical orissa <headelectrical.orissa@Jindalgroup.com>  
**Sent:** 13 March 2025 12:50  
**To:** electrical orissa <electrical\_orissa@Jindalgroup.com>  
**Subject:** FW: Deployment of Engineer for Commissioning of PMU at JITPL (Angul)

**From:** Mamidi Prasad (ममिडी प्रसाद) <mamidi.prasad@powergrid.in>  
**Sent:** 27 February 2025 17:48  
**To:** headelectrical orissa <headelectrical.orissa@Jindalgroup.com>  
**Cc:** Rohan Prakash (रोहन प्रकाश) <rohanp@powergrid.in>; Ajay Kumar Sau {अजय कुमार सौ} <ajaysau@powergrid.in>; Pranab Kumar Sahoo {प्रणब कुमार साहू} <pranab.sahoo@powergrid.in>; Somanath Nayak (एस. नायक) <snayak@powergrid.in>; electrical orissa <electrical\_orissa@Jindalgroup.com>  
**Subject:** Deployment of Engineer for Commissioning of PMU at JITPL (Angul)

Dear Sir,

It is known that erection of OPGW link of 400 kV Angul \_ Jindal link and communication equipments completed and testing is under progress.

For providing the DEMO to ERLDC towards establishment of above link PMU data/SCDA data is to be provided through above link up to ERLDC.

PMU is already installed at your site. However due to non-availability of communication link ,the PMU is not commissioned.

Now M/s GE engineer will arrive tomorrow to JIPTL site to carry out the following activity as it is more than 6 years that PMU panels were installed.

- To access the conditions of Equipment.
- To Power-on the Equipment.
- To make the connection between PMU Panel to SDH Panel for data reporting to CC.

Name :- Ajit kumar sahou  
 Aadhar no :- 2348-8419-7524

Please find attached herewith the SAT of JIPTL .As informed, due to non-availability of shutdown, the CT/PI connection were pending at the time of signing of the SAT. It is mentioned in the STA report that ,JIPTL official has agreed to complete the Interfacing of CT/PI during shutdown. Please intimate the status of the same.

In view of the above it is requested to allow the above GE engineer at your site for further completion of PMU Commissioning works.

अभिवादन/Regards

एम. प्रसाद /M.Prasad

उप महाप्रबंधक (ए.एम.), मुख्यालय - ओडिशा परियोजनाएँ

Deputy General Manager (AM), HQ, Odisha Projects

पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड

POWER GRID CORPORATION OF INDIA LTD

प्लॉट नं. 4 | यूनिट - 41 | नीलाद्रि विहार | चन्द्रशेखरपुर | भुवनेश्वर - 751 021 | ओडिशा | इंडिया

Plot no.4 | Unit-41 | Niladri Vihar | Chandrasekharpur | Bhubaneswar-751 021 | Odisha | INDIA

मोबाइल: +91 94379 62181 /8018780410 | ई-मेल: [mamidi.prasad@powergrid.in](mailto:mamidi.prasad@powergrid.in)

Mobile: +91 94379 62181/8018780410 | E-mail: [mamidi.prasad@powergrid.in](mailto:mamidi.prasad@powergrid.in)

<https://apps.powergrid.in/gridcon>

दावात्याग : यह ईमेल पावरग्रिड के दावात्याग नियम व शर्तों द्वारा शासित है जिसे <http://apps.powergrid.in/Disclaimer.htm> पर देखा जा सकता है। Disclaimer: This e-mail is governed by the Disclaimer Terms & Conditions of POWERGRID which may be viewed at <http://apps.powergrid.in/Disclaimer.htm>



<https://apps.powergrid.in/gridcon>

दावात्याग : यह ईमेल पावरग्रिड के दावात्याग नियम व शर्तों द्वारा शासित है जिसे <http://apps.powergrid.in/Disclaimer.htm> पर देखा जा सकता है। Disclaimer: This e-mail is governed by the Disclaimer Terms & Conditions of POWERGRID which may be viewed at <http://apps.powergrid.in/Disclaimer.htm>

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<http://www.jindalgroup.com/disclaimer.html>

**CENTRAL ELECTRICITY REGULATORY COMMISSION**  
**New Delhi**

**Petition No. 309/TT/2023**  
**alongwith I.A. No. 87/2023**

**Coram:**

**Shri Jishnu Barua, Chairperson**  
**Shri Ramesh Babu V., Member**  
**Shri Harish Dudani, Member**

**Date of Order: 29.05.2025**

**In the matter of:**

Petition under Section 62 read with Section 79 of the Electricity Act, 2003 along with Regulations 111 to 113 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, for determination of transmission tariff of the deemed inter-State transmission lines owned by the West Bengal State Electricity Transmission Company Limited with the transmission system operated by the Central Transmission Utility of India Limited in terms of the Commission's order dated 5.9.2018 in Petition No. 7/Suo-Motu/2017, for inclusion in PoC transmission charges for the period FY 2014-15 to FY 2018-19 in accordance with the Central Electricity Regulatory Commission (Terms And Conditions of Tariff) Regulations, 2014.

**And in the matter of:**

**West Bengal State Electricity Transmission Company Limited,**  
Vidyut Bhavan, Bidhannagar,  
Block-DJ, Sector-II,  
Kolkata-700091

**...Petitioner**

**Vs.**

- 1. Central Transmission Utility of India Limited,**  
B-9, Qutab Institutional Area Road,  
NRPC Colony, Block B,  
Katwaria Sarai,  
New Delhi-110019
- 2. Powergrid Corporation of India Limited,**  
B-9, Qutab Institutional Area,  
Katwaria Sarai, South Delhi,  
Delhi-110016

**...Respondents**

**Parties present :** Ms. Molshree Bhatnagar, Advocate, WBSETCL  
Shri Nimesh Jha, Advocate, WBSETCL  
Ms. Shaista Das, Advocate, WBSETCL  
Ms. Kavya Bharadwaj, CTUIL



approved in this order for the transmission assets shall be recovered in accordance with the applicable Sharing Regulations as per Regulation 43 of the 2014 Tariff Regulations and Regulation 57 of the 2019 Tariff Regulations. Further, the transmission charges allowed in this order shall be adjusted against the ARR approved by the State Commission.

63. In view of the above, we observe that once the transmission charges of non-ISTS lines are included in the ISTS pool, the availability of such lines needs to be verified by the respective RPCs, and the recovery of tariff should be linked to their availability. To facilitate this, the necessary mechanisms may be put in place by the RPCs. Accordingly, we direct that the YTC of such intra-State lines shall be included in the PoC Pool, subject to certification of each line's availability by the WRPC, in accordance with the provisions under the 2014 Tariff Regulations and the 2019 Tariff Regulations, as applicable.

64. We further direct the Petitioner to approach the State Electricity Regulatory Commission for the adjustment of such recovery against the ARR of the respective years of the Petitioner.

#### **Filing Fee and Publication Expenses**

65. The Petitioner has claimed reimbursement of the fee paid by it for filing the Petition and the publication expenses. The Petitioner shall be entitled to reimbursement of the filing fees and publication expenses in connection with the present Petition directly from the beneficiaries on a pro-rata basis in accordance with Regulation 52 of the 2014 Tariff Regulations.

#### **Licence Fee and RLDC fees and Charges**

66. The Petitioner has requested to allow the Petitioner to bill and recover License fee and RLDC fees and charges, separately from the Respondents. The Petitioner



**CENTRAL ELECTRICITY REGULATORY COMMISSION**  
**New Delhi**

**Petition No. 324/TT/2023**

**Coram:**

**Shri Jishnu Barua, Chairperson**  
**Shri Ramesh Babu V., Member**  
**Shri Harish Dudani, Member**

**Date of Order: 31<sup>st</sup> May, 2025**

**In the matter of:**

Petition under Section 62 read with Section 79 of the Electricity Act, 2003 along with Regulations 111-113 of the Central Electricity Regulatory Commission (Conduct of Business) Regulations, 1999, for determination of the transmission tariff of the deemed inter-State transmission lines owned by West Bengal State Electricity Transmission Company Limited with the transmission system operated by Central Transmission Utility of India Limited, for inclusion in PoC transmission charges for the period FY 2019-20 to FY 2023-24 under the Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2019.

**And in the matter of:**

**West Bengal State Electricity Transmission Company Limited,**  
Vidyut Bhavan, Bidhannagar,  
Block- DJ, Sector- II,  
Kolkata-700091.

**...Petitioner**

**Vs.**

1. **Central Transmission Utility of India Limited,**  
B-9, Qutab Institutional Area Road,  
NRPC Colony, Block B,  
Katwaria Sarai,  
New Delhi-110019.
2. **Power Grid Corporation of India Limited,**  
B-9, Qutab Institutional Area  
Katwaria Sarai, South Delhi,  
Delhi-110016.

**...Respondents**

**Parties present** : Ms. Molshree Bhatnagar, Advocate, WBSETCL  
Shri Nimesh Jha, Advocate, WBSETCL  
Ms. Shaida Das, Advocate, WBSETCL  
Ms. Kavya Bharadwaj, CTUIL  
Shri Ishrat Ali, CTUIL





transmission systems was governed by the provisions of the 2010 Sharing Regulations. However, with effect from 1.11.2020, the 2010 Sharing Regulations have been repealed, and the sharing of transmission charges is governed by the provisions of the 2020 Sharing Regulations. Accordingly, the transmission charges approved in this order for the transmission assets shall be recovered in accordance with the applicable Sharing Regulations as per Regulation 43 of the 2014 Tariff Regulations and Regulation 57(2) of the 2019 Tariff Regulations. Further, the transmission charges allowed in this order shall be adjusted against the ARR approved by the State Commission.

43. We observe that once the transmission charges of non-ISTS lines are included in the ISTS pool, the availability of such lines needs to be verified by the respective RPC, and recovery of tariff should be linked with its availability, for which necessary mechanisms may be put in place by the RPC. We direct that YTC of such intra-State lines shall be included in the PoC Pool based on the availability of each of the lines to be certified by the ERPC in terms of the provisions under the 2014 Tariff Regulations and the 2019 Tariff Regulations, as applicable.

44. We further direct the Petitioner to approach the WBERC for the adjustment of such recovery against the ARR of the respective years of the Petitioners.

45. To summarize, the Annual Fixed Charges (AFC) allowed in respect of the transmission asset for the 2019-24 tariff period in this order are as follows:

		(₹ in lakh)				
AFC	Line Length (Ckm)	2019-20	2020-21	2021-22	2022-23	2023-24
<b>Asset-1 (Claimed)*</b>	<b>98.6</b>	172.39	172.10	171.80	171.64	171.61
Asset-1A (Allowed)	94.726	215.51	216.98	218.47	220.34	222.90
Asset-1B (Allowed)	3.874	34.70	33.42	32.37	31.64	31.07







# 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: CTU/BCD/AVC/01

Date: 26.08.2025

To,  
As per distribution list

### Sub: Availability Certification of deemed ISTS lines/natural ISTS lines of STUs.

Sir,

Central Transmission Utility of India Ltd., as CTU, has been mandated for Billing, Collection and Disbursement of ISTS charges as per provisions of CERC Sharing Regulations, 2020. Billing for ISTS charges includes transmission lines of ISTS Licensees and intra-state lines considered as deemed ISTS lines/natural ISTS lines of STUs. Hon'ble CERC is determining tariff for such lines of STUs as per provisions of CERC Tariff Regulations applicable from time to time and CERC Suo-moto order 15/SM/2012 dtd. 14.03.2012 & 07/SM/2017 dtd 12.05.2017.

CERC while approving tariff in following tariff orders observed that once transmission charges of non-ISTS lines are included in the ISTS pool, the availability of such lines needs to be verified by the respective RPC and recovery of tariff should be linked with their availability, for which necessary mechanisms may be put in place by the RPCs. CERC further directed that YTC of such intra-State lines shall be included in the PoC Pool based on the availability of each of the lines as certified by the RPCs in terms of the provisions under the 2014 Tariff Regulations and the 2019 Tariff Regulations, as applicable.

Sr. No.	STU	Pet. No.	Tariff Block	Order date	Concerned RPC
1	WBSETCL	324/TT/2023	2019-24	31.05.2025	ERPC
2	WBSETCL	309/TT/2023	2014-19	29.05.2025	ERPC
3	TG Transco (Telangana)	330/TT/2022	2019-24	01.08.2024	SRPC
4	RRVNL	112/TT/2017	2014-19	02.08.2024	NRPC
5	RRVNL	215/TT/2017	2014-19	02.08.2024	NRPC
6	RRVNL	212/TT/2022	2019-24	20.03.2024	NRPC
7	OPTCL	288/TT/2023	2014-19	26.02.2025	ERPC
8	MSETCL	82/TT/2022	2014-19 & 2019-24	11.11.2024	WRPC
9	MPPTCL	329/TT/2022	2019-24	30.04.2024	WRPC
10	MPTCL	73/TT/2024	2014-19 & 2019-24	28.04.2025	WRPC
11	KPTCL	353/TT/2023	2019-24	07.05.2025	SRPC

Further, Clause 5 of Regulation 93 of Tariff Regulations, 2024 applicable for 2024-29 Tariff block also provides that Tariff of Non-ISTS Lines carrying Inter-State Power shall be approved based on provisions of these Regulations, and the fixed charges of such system shall be allowed based on the availability as certified by respective RPCs and shall be allowed to be recovered as per the mechanism specified in CERC (Sharing of Inter-State Transmission Charges and Losses), 2020.

In the absence of availability certificate of intra-state/natural ISTS lines of STUs, CTU is including transmission charges of intra-state /natural ISTS lines in ISTS pool on normative availability basis i.e. without any incentive/penalty, however, in light of above CERC orders and provisions of Tariff Regulations, 2024,

Office : 5<sup>th</sup> -10<sup>th</sup> Floor, Plot No. 16, Ircon International Tower-1, Sector 32, Gurugram, Haryana- 122003

Registered Address : 2<sup>nd</sup> Floor, Plot No -2, Sector 29, Gurugram, Haryana-122001

कार्यालय : 5वीं -10वीं मंजिल, प्लॉट नंबर 16, इरकॉन इंटरनेशनल टॉवर -1, सेक्टर 32, गुरुग्राम, हरियाणा- 122003

पंजीकृत कार्यालय : दूसरी मंजिल, प्लॉट नंबर -2, सेक्टर 29, गुरुग्राम, हरियाणा-122001

recovery of ISTS charges to STUs is subject to the availability of transmission system as certified by RPCs. Any under recovery /over recovery on account of certified transmission system availability needs to be adjusted in ISTS pool to comply the CERC directions/Regulations.

In view of the above, all STUs & DVC, whose intra-state lines/natural ISTS lines are included in ISTS system as per CERC Sharing Regulations, 2020, are requested to obtain availability certificates of their intra-state lines/natural ISTS lines from respective RPCs as directed by CERC in tariff orders/provisions of Tariff Regulations, 2024 and submit the same to CTU for necessary adjustment in ISTS pool.

Further, in some cases of intra-state/natural ISTS lines of STUs, where tariff has been approved by CERC for 2014-19 and 2019-24 tariff block and as per approved tariff, amount over recovered needs to be refunded in ISTS pool, therefore, STUs are requested to refund the over recovered amount in ISTS pool immediately.

STUs & DVC are also requested to file petition for determination of tariff for 2024-29 tariff block on priority basis and intimate the status of petition filing to CTU.

Thanking you,

Yours faithfully,



(V. C. Sekhar)

Sr. GM (Commercial)

**Distribution list:**

1. Rajasthan Rajya Vidyut Prasaran Nigam Ltd.  
Vidyut Bhawan, Jan Path, Jyothi Nagar, Lalkothi, Jaipur,  
Rajasthan 302005
2. Tamil Nadu Transmission Corporation Limited  
NPKRR Maaligai  
144, Annasalai, Chennai 600002  
Tamil Nadu, India
3. Madhya Pradesh Power Transmission Co. Ltd.  
Block No.2, Shakti Bhawan, Rampur,  
Jabalpur 482 008 (M.P.)
4. Chhattisgarh State Power Transmission Company Ltd  
O/o The Chief Engineer (EITC), Energy Info Tech Centre  
Daganiya, Raipur (CG) – 492013
5. Delhi Transco Limited  
Shakti Sadan, Kotla Marg,  
New Delhi-110002
6. Karnataka Power Transmission Corporation Limited  
Corporate Office, Kaveri Bhavan  
K. G. Road, Bengaluru-560009
7. Himachal Pradesh Power Transmission Corporation Ltd  
Himfed Bhawan, New ISBT Roa, Panjari (Below Old MLA Quarters),  
Shimla -171005
8. Transmission Corporation Of Andhra Pradesh (APTRANSCO)  
Vidyut Soudha, Gunadala, Eluru Rd,  
Vijayawada, Andhra Pradesh 520004
9. Damodar Valley Corporation  
DVC HEADQUARTERS DVC Towers, VIP Road,  
Kolkata-700054
10. Odisha Power Transmission Corporation Limited  
9th Floor, TECH Tower Building, Saheed Nagar,  
Bhubaneswar, Odisha-751007
11. Transmission Corporation of Telangana Limited (TG TRANSCO),  
Vidyut Soudha, Khairatabad, Hyderabad-500082

12. Power Transmission Corporation of Uttarakhand Limited  
Vidyut Bhawan, Near ISBT Crossing,  
Saharanpur Road, Majra, Dehradun-248002
13. Managing Director  
UP Power Transmission Corporation Ltd.  
7th Floor, Shakti Bhawan, 14-Ashok Marg,  
Lucknow-226001 (Uttar Pradesh)
14. Chief Engineer (STU)  
Maharashtra State Electricity Transmission Company Limited  
18, Private Road, E Block BKC, Bandra Kurla Complex,  
Bandra East, Mumbai - 400051, Maharashtra
15. Office of The Director(Transmission) ,  
Meghalaya Power Transmission Corporation Limited  
Short Round Road, Lum Jingshai,  
Shillong, Pin Code-793001(Meghalaya)
16. Chief Engineer (TRAC)  
KSEB Ltd.  
Vydyuthi Bhavanam, Pattom Palace,  
P.O- Thiruvanthapuram-695004 (Kerala)
17. Chief Engineer (Central Planning Deptt.),  
West Bengal State Electricity Trans. Co. Ltd.  
9th Floor, Vidyut Bhawan, Block-DJ, Sector-II, Bidhannagar,  
Kolkata -700 091 (West Bengal)
18. Chief Engineer (SO &Commercial)  
Haryana Vidyut Prasaran Nigam Limited (HVPNL)  
Shakti Bhawan, Sector-6, Panchkula- 134109 (Haryana)
19. Chief General Manager (LAR)  
Assam Electricity Grid Corporation Limited  
Bijulee Bhavan, Paltan Bazar,  
Guwahati- 781001 (Assam)





# ଓଡ଼ିଶା ବିଦ୍ୟୁତ୍ ଶକ୍ତି ସଂଚାରଣ ନିଗମ ଲି.8. ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Government of Odisha Undertaking)

Regd. Office: Janpath: Bhubaneswar-751007.

Telephone: (0674) 2540051 (EPABX), Website: [www.optcl.co.in](http://www.optcl.co.in)

CIN: U4102OR2004SGC007553

No. RT&amp;C-05/2023

330(4)

Date 12.09.2025

To,

The Member Secretary  
Eastern Regional Power Committee  
14, Golf Club Road,  
Tollygunge, Kolkata-700033

Sub: Certification of non-ISTS lines of OPTCL carrying ISTS Power for FY 2024-2029.

Ref: 1) Your letter no ERPC/COM-I/NON-ISTS/2018/5246 dated 12.10.2018.

2) CERC order dated 26.02.2025 in Petition No. 288/TT/2023.

3) CTU letter no CTU/BCD/AVC/01 dated 26.08.2025.

Sir,

With reference to the subject cited above, we would like to bring to your kind attention that, upon our request based on the requirement of CERC, the following 9nos. Non-ISTS lines carrying ISTS power were certified by ERPC for the period 2014–2019.

Sl. No.	Line Name	Voltage Level	Connecting Status	Ckt. Kms	Type Conductor	DOCO
1	Indravati–Indravati PG SC	400KV	Odisha, AP	3.970	Twin ACSR Moose	1999
2	Rengali–Keonjhar- SC	400KV	Odisha, WB	115.530	Twin ACSR Moose	1995
3	Keonjhar–Baripada-SC	400KV	Odisha, WB	104.243	Twin ACSR Moose	1995
4	Baripada–Kharagpur (Up Odisha Border)-SC	400KV	Odisha, WB	21.727	Twin ACSR Moose	1995
5	Jaynagar–PGCIL-DC	220KV	Odisha, CTU	15.460	ACSR Zebra	1990



6	Rengali–Rengali PGCIL-DC	220KV	Odisha, CTU	2.000	ACSR Zebra	1997
7	Balimela PH–Upper Sileru	220KV	Odisha, AP	24.760	ACSR Zebra	1982
8	Joda–JSPL SC	220KV	Odisha, JSEB	14.110	ACSR Zebra	1984
9	Joda–Kenduposi SC	132KV	Odisha	49.900	ACSR	1985

CTU vide letter dated 26.08.2025 has directed all STUs to file petitions for determination of tariff for the FY 2024–29 tariff block on a priority basis and to intimate the status of petition to CTU.

Regulation 93 of the CERC (Terms and Conditions of Tariff) Regulations, 2024 extracted below.

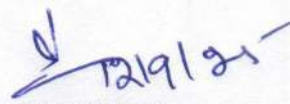
"Existing intra-state transmission lines other than Natural ISTS lines, as certified by CEA based on the **recommendations** of the STU and **RPC**, shall be considered as ISTS systems, provided that these transmission lines are being used for evacuation and transfer of inter-State power on a regular basis, as identified by CTU in consultation with the concerned **RPC** and RLDC."

In compliance with the above provisions and direction of CTU dated 26.08.2025 for filing of tariff petitions for the 2024–29 tariff block, we are in the process of preparing our petition for determination of tariff of Non-ISTS transmission lines of OPTCL that carry ISTS power.

Accordingly, we request ERPC to kindly issue the required certification/ recommendations for above Non-ISTS lines carrying ISTS power for the period from 01.04.2024 to 31.03.2029, to facilitate the petition filing before the Hon'ble CERC.

Yours faithfully

Encl: as above

  
Sr. GM (RT&C)

CC

1. Sr.PS to CMD, OPTCL, Bhubaneswar for kind information of CMD.
2. PS to Director (O), OPTCL, Bhubaneswar for kind information of Director (O).
3. PS to Director (F), OPTCL, Bhubaneswar for kind information of Director (F).