



भारत सरकार / Government of India
विद्युत मंत्रालय / Ministry of Power
पूर्वी क्षेत्रीय विद्युत समिति / Eastern Regional Power Committee

सं /NO. ERPC/EE/OPERATION/2026/365

DATE:18.05.2026

सेवा में /To
संलग्न सूची के अनुसार /As per list enclosed.

विषय : 13.05.2026 (बुधवार) को ईआरपीसी सचिवालय, कोलकाता में भौतिक रूप से आयोजित 239वीं ओसीसी बैठक के कार्यवृत्त - के संबंध में

Sub: Minutes of 239th OCC Meeting held on 13.05.2026 (Wednesday) physically at ERPC Secretariat, Kolkata – reg

महोदय/महोदया,
Sir(s)/Madam,

कृपया अपनी जानकारी और आवश्यक कार्रवाई के लिए **13 मई 2026 (बुधवार)** को आयोजित **239वीं ओसीसी बैठक** के कार्यवृत्त संलग्न देखें। यह ईआरपीसी वेबसाइट (www.erpc.gov.in) पर भी उपलब्ध है।
Please find enclosed **Minutes of 239th OCC Meeting** held on **13.05.2026 (Wednesday) physically** at **ERPC Secretariat, Kolkata** at **10:30 hrs.** This is for your **kind information** and **necessary action.** The same is also available at ERPC website (www.erpc.gov.in).

टिप्पणियाँ, यदि कोई हों, कृपया यथाशीघ्र इस कार्यालय को अग्रेषित करें।
Observations, if any, may please be forwarded to this office at the earliest.

इसे सदस्य सचिव के अनुमोदन से जारी किया जाता है।
This issues with the approval of Member Secretary.

भवदीय /Yours faithfully

(R.K.Meena)/आर.के.मीना
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Eastern Regional Power Committee

**AGENDA
FOR
239th OCC MEETING**

Venue: ERPC Secretariat, Kolkata

Date: 13.05.2026

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EASTERN REGIONAL POWER COMMITTEE

MINUTES OF 239TH OCC MEETING HELD ON 13.05.2026 (WEDNESDAY) AT 10:30 HRS

Member Secretary, ERPC welcomed all OCC members and other participants who were present physically as well as those who had joined virtually to the 239th OCC Meeting.

Thereafter he requested all the participants to give brief introduction.

□ He outlined the performance of ER grid during **April -2026** highlighting the following points:

- In **April-2026**, energy consumption of ER was **18955 MU** which is **8.6 % more** than **April-2025**.
- In **April-2026**, Peak demand met of ER was **32758 MW** which is **4.5 % lower** than **April-2025**.
- ❖ Thermal **PLF** of **ER** during **April -2026** was **74.6%** whereas National average is **66%**.
- ❖ Generating stations whose PLF was more than **90%** during **April-2026**:

Utility	Generating station	PLF(%)
WBPDC	BAKRESWAR TPS	92
IPP	HALDIA TPP (HEL)	98
	KAMALANGA TPS(GMR)	92

- ❖ During **April-2026**, **74.6 %** of the time, the ER grid frequency was within IEGC Band (49.90Hz-50.05Hz).

Coal stock position (As on 10.05.2026) is as follows:

SL.	Name of States/Power Stns.	% of Actual Stock vis-à-vis Normative Stock
1.	Jharkhand (TVNL)	283%
2.	Odisha (IB TPS)	76%
3.	West Bengal (WBPDC)	79%
4.	D.P.L. TPS	27%
5.	DVC	83%
6.	NTPC	83%

He also highlighted recent developments w.r.t some persistent issues as follows:

- A meeting was held on 9th April 2026 under chairmanship of Member(Power System),CEA regarding reconductoring of the Chukha transmission line wherein decision has been taken to re-tender the package through Powergrid.
- 7th ICT at Subhasgram(PG) has been accorded permanent status as per decision in the meeting under Member (Power Systems), CEA on 06th April, 2026.

ED, ERLDC touched upon the following key areas:

- During high evening demand periods, frequency had briefly fallen to around 49.48 Hz due to thermal unit outages.*
- Overdrawal was observed in some other regions, while Eastern Region constituents largely remained within schedule.*
- Fast-acting reserves and spinning reserves with rapid ramping capability are increasingly necessary for grid security.*
- Gas-based generation availability remains uncertain due to geopolitical developments affecting gas supply.*

*List of participants attached at **Annex-A**.*

Member Secretary, ERPC requested S.E(Operation) to take up the agenda for discussion.

1. PART-A: CONFIRMATION OF MINUTES

1.1. Confirmation of Minutes of 238th OCC Meeting held physically at ERPC Secretariat on 17th April 2026

The Minutes of 238th Operation Coordination Sub-Committee meeting held on 17.04.2026 was circulated vide letter dated 25.04.2026.

Deliberations in the meeting

Since no comments have been received so far, the Minutes of 238th OCC meeting were confirmed.

2. PART-B: ITEMS FOR DISCUSSION

2.1 Update on follow up agenda: ERPC

a) **Intrastate Transmission Network Assessment & Mitigation-Odisha**

Reference:

Implementation of the Under Voltage Load Shedding (UVLS) scheme in the Odisha system has been under review since the 231st, 232nd, 233rd, and 234th OCC Meetings held on 22.09.2025, 24.10.2025, 22.11.2025, and 23.12.2025 respectively.

The matter was also discussed in the recently concluded 55th TCC/ERPC meeting held on 16.12.2025 and 17.12.2025 at Kalimpong, West Bengal. As per deliberation in 55th TCC Meeting, **300MW load** has been identified and it will be operationalized before **Summer '26**.

The continued delay in implementation is posing increasing risks not only to the Odisha system but also to the Eastern Region as a whole during the forthcoming Summer-2026 period.

As per 238th OCC:

SLDC Odisha updated that the order for implementing UVLS will be placed to the same vendor as for ADMS, on nomination basis. But placing order on nomination basis calls for recommendation from any authorised government entity.

238th OCC Decision

- OCC opined that minutes of OCC meetings and previous ERPC meetings may be referred by OPTCL & SLDC Odisha for expediting the work and further implementation of UVLS scheme.
- OCC advised ERLDC to convene a special meeting involving all concerned stakeholders to expedite UVLS implementation in the intra-state network of Odisha.

Update:

One meeting was convened on **30.04.2026** over video conference regarding the status update wherein following emerged:

- Director (Operation), OPTCL informed that implementation of the UVLS scheme in Odisha is being taken up on a fast-track basis as proposed in various OCC meetings. To expedite execution and

avoid procedural delays, the scheme is being treated as a “top-up” or extension of the existing ADMS contract.

- He added that since SLDC Odisha has already implemented the ADMS system, the work of implementation of the UVLS scheme has been entrusted upon SLDC, being an extension of the ADMS project.
- SLDC Odisha and CGM, OPTCL confirmed that quotation for executing the UVLS scheme has been received from the existing ADMS implementing agency and are under review by the Telecom wing of OPTCL. Additionally, 31 feeders from TPCODL (Discom) and 23 feeders from TPNODL (Discom) have been identified under the scheme. The completion timeline targeted by **June 2026**.

Record notes of the meeting are attached as **Annexure 2.1.a**

Deliberations in the meeting

Odisha representative updated:

The vendor of ADMS has been entrusted for implementation of the UVLS in Odisha system and the same will be operational by end of June 2026.

OCC Decision

- ✓ OCC expressed serious concern over inordinate delay in implementation of UVLS in Odisha system, especially amid demand surge in ongoing Summer that renders intra-state network of Odisha vulnerable to low voltage condition.
- ✓ SLDC Odisha was advised to share weekly update on the status of implementing UVLS for identified loads around Bhubaneswar to ERLDC & ERPC
- ✓ OCC referred the matter to TCC for deliberation.

b) Status of ERS in Eastern Region

- Transmission lines are the arteries of the electricity grid and these are most prone to damage due to earthquakes, cyclones, floods etc. In case of damage to the transmission line, temporary arrangements for the restoration of power supply can be made with the help of ERS, which consists of a special type of lightweight modular structures, with lightweight polymer insulators and number of stays. In this regard CEA has issued guidelines for requisition of ERS and also an advisory has been issued by Ministry of Power to all state utilities.
- As per Central Electricity Authority (grid standards) regulations, 2010 and “Disaster Management Plan for Power Sector” the following are mandated in case of the ERS:
 - i. Each transmission licensee shall have an arrangement for the restoration of transmission lines of 400 kV and above and strategic 220 kV lines through the use of Emergency Restoration System in order to minimise the outage time of the transmission lines in case of tower failures.
 - ii. Strategic locations should be decided for spares on centralized/ regional /zonal basis.

As per 227th OCC:

- PowerGrid informed that mock drill is being conducted annually for testing of ERS.
- OPTCL informed that testing in two no. of ERS will be conducted in month of June, 2025.

227th OCC Decision

- ✓ All utilities were advised to maintain adequate ERS inventory for all voltage levels as per norms.
- ✓ All Trancos were advised to periodically test the operational readiness of ERS.

Details of Available ERS enclosed at **Annexure 2.1.b**.

Deliberations in the meeting

Powergrid informed:

- 765 kV ERS towers are available in ER-I and Odisha regions only such that nearby ER-I and Odisha facilities can support emergency restoration requirements for ER-II systems.
- One 400 kV ERS set is under procurement for Berhampur.

WBSETCL informed that 16 towers are presently available. Based on the standard norms, the available infrastructure corresponds to approximately 1.6 ERS sets.

OPTCL updated that 30 towers are available for 400 kV level while 14 towers are available for 220 kV system.

DVC informed that only limited ERS towers are presently available, which is insufficient as per the requirement.

OCC Decision

- ✓ OCC opined that a common framework needs to be devised to assess the adequacy of ERS infrastructure of all transmission licenses in line with MOP guidelines (**Annex B.2.1.b**). Thus, one ERS set was defined as a set of 15 ERS towers (9 Tension towers & 6 Suspension towers)
- ✓ All transmission utilities were advised to submit ERS details in terms of “sets” rather than number of available ERS towers within one week.
- ✓ Transmission utilities having insufficient ERS infrastructure shall initiate procurement action as per guidelines of Ministry of Power(**Annex B.2.1.b**).
- ✓ This is referred to TCC for sensitization.

c) Establishment of proposed TCF-II(Teesta Canal Fall) 220/132/33 KV S/S

- Proposal for TCF-II 220/132 KV SS is an Intra-State sub-station with ISTS connectivity [D/C LILO of Siliguri PG-Kishanganj 220 KV D/C Line with HTLS conductor proposed]. The sub-station has been considered for meeting the growing load demand in and around Ghoshpukur and TCF area as projected by WBSEDCL which includes increasing demand of Dinajpur(N) and Darjeeling district of West Bengal.
- The proposal had already been discussed at CMETS-ER level for last few months [since May-2025] considering different scenarios and multiple operational aspects.
- The latest PSSE studies were submitted prior to the last 48th CMETS-ER meeting held on 30-10-2025. It was found as per the study that loading of Binaguri PG - Siliguri PG under N-1 condition is 393 MW [considering 1500 MW setting for APD-Agra DC Link as suggested by Grid India] which is within the 90% of thermal limit of the line [considering 450 MW rating of HTLS conductor].
- Observations of Grid India has been obtained on 14-11-2025. It is understood that Grid India has further considered 1000 MW setting for APD-Agra DC Link instead of 1500 MW during N-1 condition of peak load scenario creating additional contingency over and above N-1 condition.

- However, loading of one circuit of Binaguri PG - Siliguri PG even under this additionally contingent condition is found to be 426 MW which is also well within the thermal limit of the line [considering 450 MW rating of HTLS conductor] as per CI-4.4.2 of CEA's Manual on Transmission Planning Criteria-2023. It is also noteworthy that this quantum of power will flow for a limited period of time only satisfying the special conditions pointed out by Grid India.
- In the last CMETS-ER meeting CTU proposed to pose the proposal before CEA to discuss with Resource Adequacy Plan for West Bengal by the Year 2034-35 which is in progress and may take time. Considering the immediate requirement, WBSETCL requested CTU to resolve the issue at CMETS-ER level.

As per 55th TCC meeting

WBSETCL informed that as per the system study conducted by them, there is no N-1 violation in Binaguri PG - Siliguri PG in 5 years resource adequacy plan.

- CTU updated that the matter is presently under consideration of CEA and as per the resource adequacy plan of CEA keeping in view of the surge in demand of WB in near future it would be prudent to go for 400KV substation in TCF-II instead of 220KV substation proposed by WBSETCL.
- In response WBSLDC submitted that there is a urgent requirement of TCF-II 220/132/33 KV SS since the proposed scheme is to cater the load 100-120 MW loading for the forthcoming Ghoshpukur 132 kV sub-station which is urgently needed by the DISCOM to accommodate "Data Centre Load". This was further mentioned that as per policy of the Central Govt to encourage Data Centre establishment, this initiative is in line with the facilitation of establishing data center as desired by CEA through online meeting in 2nd December 2025.

55th TCC Decision:

- TCC opined that in order to meet the additional load requirement of 120MW including data center load in immediate future, it would be prudent to go for 220/132/33 KV SS instead of 400kV system as of now for early implementation of the proposed scheme and the 400 kV scheme may be considered subsequently.
- TCC referred the matter to ERPC for further deliberation.

As per 55th ERPC meeting

- Member (PS), CEA opined that the requirement of the TCF-II ss would be finalized based on resource adequacy study of West Bengal.
- ERPC emphasized the requirement of 220/132/33 KV SS at TCF-II by LILO of 220 kV Siliguri-Kishanganj D/C line to meet the additional load requirement of 120 MW under yearly rolling plan and requested CEA to consider the above requirement.

As per 235th OCC meeting

WBSETCL submitted:

- ✓ In the CEA meeting on resource adequacy dated 24.12.2025, 220 kV substation has been proposed that may be upgraded to 400 kV as per future requirement. This was not agreed by CEA and establishment of 400 kV system was insisted in the present timeframe.
- ✓ Upgrading to 400 kV will be convenient in absence of ROW issues owing to close proximity of 400

kV line (within 500m-1 km).

WBSLDC submitted:

- ✓ Many critical transmission proposals are being repeatedly deferred by linking them to long-term (2034–35) resource adequacy studies, resulting in unacceptable delays.
- ✓ For meeting a load of 110 MW, opting for 400 kV supply is not possible as per WBERC guidelines.
- ✓ Without timely establishment of Ghospukur S/S, data centre cannot be setup on priority in line with Govt of India policy. Moreover, there is no other source(adjacent generating station/line) to meet the load of upcoming 132 kV S/S at Ghospukur.
- ✓ With load requirement of only ~110 MW, there is adequate N-1 compliance with Clear provision of land and corridor for future 400 kV upgradation
- ✓ All relevant data have already been shared with CEA and nothing is pending.

235th OCC Decision

- OCC acknowledged the requirement of 132 kV S/S at Ghospukur for meeting the immediate power requirement of the upcoming data center and of adjoining areas.
- It was advised that matter may be taken up with CEA by WBSETCL.

Deliberations in the meeting

WBSETCL submitted :

- *This proposal is regarding establishment of a substation to cater to proposed data center load in North Bengal.*
- *Approximately 100 MW load has been projected in the region. In this context, establishment of a 400 kV substation for an initial load of only around 100 MW may not be economically viable and may face investment approval challenges.*
- *On the other hand, initial implementation at 220 kV level, while keeping provision for future expansion to 400 kV level is a more feasible option. Accordingly, a 220 kV substation at TCF has been proposed that includes LILO of the Siliguri PG – Kishanganj transmission line.*

OCC Decision

- ✓ *OCC noted that as per CEA Resource Adequacy study, LILO is not recommended at 220 kV level for catering the forthcoming data centre load at Ghospukur area of WBSETCL. Thus, the modalities for meeting the additional demand of data centre as proposed by WBSETCL may only be finalized with the consent of Power System wing ,CEA.*
- ✓ *OCC referred the matter to upcoming TCC for further deliberation.*

d) Upgradation of 220kV Network in Kolkata Region

Vide **217th OCC** dated 24.07.24 Due to persistent N-1 violation, Upgradation of these 220 KV feeders to be planned:

- 220kV Subhasgram (WB)-Lakshmikantpur D/C
- 220 kV Jeerat-Barasat D/C

□ 220 kV Barasat-Kasba D/C

- In **229th OCC Meeting**, WBSETCL updated that the approval for PSDF grant has not yet been received.

They also apprised that only the following lines have been listed for upgradation.

- ✓ 220 kV Jeerat-Barasat D/C
- ✓ 220 kV Barasat-Kasba D/C
- ✓ 220 kV Subhasgram-Kasba
- ✓ 220KV Kolaghat-Foodpark
- ✓ 220KV Foodpark-Jangalpur

- OCC advised WBSETCL to expedite the upgradation work of above lines since it has already been delayed by more than 2 years and in case PSDF grant is not possible then other avenues of funding maybe explored since the loading of the above lines are going to be critical in the coming summer months.

As per 55th TCC meeting:

WBSETCL updated that tender has been done for upgradation of following lines:

- ✓ 220 kV Barasat-Kasba D/C
- ✓ 220 kV Subhasgram-Kasba D/C
- ✓ 220 kV Rajarhat-KLC S/C

- ♦ For remaining lines, the upgradation work will be taken up progressively as per the system requirement.
- ♦ They updated that the tentative timeline to complete the upgradation work of above three lines is **9(nine) months**.

Deliberations in the meeting

WBSETCL updated:

- *The tendering process was delayed due to restrictions during the State Assembly election period.*
- *Tendering process has already been issued for 220 kV Barasat–Kasba, 220 kV Subhashgram–Kasba, and 220 kV Rajarhat–KLC.*
- *Upgradation of 220 kV Kodalghat–Food Park and 220 kV Food Park–Jamalpur lines is still under internal approval.*

OCC Decision

- ✓ *WBSETCL was advised to submit the exact tender issuance dates along with revised timeline for upgradation i.r.o all the concerned 220 kV lines.*
- ✓ *Progress of the reconductoring works shall be henceforth reviewed in OCC meetings.*

e) Upgradation of 66/11 kV Bulbuley Sub-station to 132 kV Level and associated Transmission Infrastructure Works in Gangtok

Upgradation of 66/11 kV sub-station at Bulbuley (Gangtok) to 132 kV voltage level, establishment of AIS extension bay at POWERGRID 132/66 kV sub-station at Lagyap and GIS bays at Bulbuley along

with installation of 132/66 kV, 2x25 MVA transformers at Bulbulay along with construction of 132 KV LILLO arrangement at 132 kV D/C transmission line.

Estimated Cost: Rs. 167.42 Crore.

Bulbulay is the only major substation within Gangtok proper that still has scope for upgradation and availability of ROW corridor for construction of transmission line. Capacity augmentation is not possible in remaining two other 66/11 kV sub-stations within Gangtok proper, i.e. Tadong and Sichey, owing to space and ROW constraints. These areas are now completely built up and commercialized. Urgent need to upgrade the main power supply to main Gangtok city area to 132 kV voltage level due to current condition of the existing lines all of which are 66 kV lines. Need to undertake the work soon since there will not be any ROW availability nor space for expansion of sub-station in Gangtok proper in the near future.

In 55th CCM meeting,

Representative of Sikkim explained the issue.

- Representative of Powergrid submitted that the issue is placed for the first time in this meeting and requested Sikkim to provide the single line diagrams and other necessary documents to Powergrid at the earliest for study at their end.
- Committee was of the view that the issue should have been placed before OCC forum. However, considering the urgency as expressed by Sikkim, advised Powergrid to carry out a detailed study in coordination with Sikkim and submit a report in the upcoming 55th TCC & ERPC meetings for their consideration and further decision on the issue.

Deliberation in 55th TCC meeting

- Representative of Power Dept, Sikkim informed that the proposal for upgradation of 66/11 kV Bulbulay substation to 132 kV Level & other associated transmission work is put up considering the load growth of Gangtok in coming 10- & 15-years' timeframe and considering the constraints in constructing new transmission lines in the Gangtok area due to rapid urbanization.
- Powergrid submitted that as per their preliminary survey, there would be clearance issues for extension of the bus at 132 kV Gangtok S/s and therefore he suggested for joint site inspection to assess the site feasibility for the proposed plan.
- CTUIL informed that the present proposal is already under discussion at CEA level and as per the preliminary observation by CEA, the present upgradation is not required for Sikkim. However, in case of fresh proposal considering the change in load growth, the scheme may be put up to CEA for deliberation.

55th TCC Decision

TCC noted the concern of Sikkim for requirement of upgradation of Bulbulay S/s at 132 kV level keeping in view reliable power supply at Gangtok with enhanced demand and RoW issues & Space constraints in the vicinity. TCC advised ERPC Secretariat to plan a onsite visit comprising representatives from Powergrid, Power Dept Sikkim, ERLDC & ERPC.

TCC advised Power Dept, Sikkim to forward the proposal to CEA with proper justification for further deliberation and consideration.

55th ERPC Decision

ERPC noted the decision of TCC and ERPC Secretariat was advised to plan a onsite visit comprising representatives from Powergrid, Power Dept Sikkim, ERLDC & ERPC.

Recommendations of CEA:

- With the present and under implementation transmission system, the proposal of upgradation of Bulbuley 66/11 kV S/s to 132 kV level is not technically justified.
- The Power Department and POWERGRID shall endeavor to commission the Perbing 132/66 kV S/s and its transmission lines at the earliest.

Communication from CEA regarding DPR for upgradation attached at **Annex B.2.1.e**

Deliberations in the meeting

OCC Decision

- ✓ OCC noted the recommendations of CEA in respect of upgrading the Bulbuley 66/11 kV S/s to 132 kV level.
- ✓ OCC opined for expeditious commissioning of the Perbing station to strengthen supply reliability in the Gangtok area of Sikkim. Powergrid ER-II was advised to submit the status of commissioning of the Perbing 132/66 kV S/S and associated transmission lines in the next OCC.
- ✓ OCC referred the matter to ensuing TCC for information.

f) Spare Reactor procurement under Eastern Regional Pool as per CEA norms

In 52nd ERPC meeting, estimated expenditure of **Rs. 55.67 Crores** (exclusive of GST but including transportation cost) was concurred towards procurement of spare reactors in ER pool by Powergrid ER-II as per CEA spare norms.

STATE	VOLTAGE	SIZE	STORAGE PLACE
WEST BENGAL	400 KV	125 MVAR	DURGAPUR SS
		80 MVAR	BINAGURI SS
SIKKIM	220 KV	31.5 MVAR	NEW MELLI SS
JHARKHAND	400 KV	125 MVAR	NEW RANCHI SS
ODHISSA	400 KV	63 MVAR	ROURKELLA SS

In 54th TCC meeting, Powergrid intimated that the tender evaluation is on progress.

As per 55th TCC meeting:

- ✓ POWERGRID updated that tender has been awarded for the reactors except 31.5 MVAR reactor.
- ✓ Since the 31.5 MVAR reactor is seldom used at present, hence they have segregated it from the rest of the population and it will be done separately.

Deliberations in the meeting

Powergrid apprised the details as follows:

STATE	VOLTAGE	SIZE	STORAGE PLACE	UPDATE
WEST BENGAL	400 KV	125 MVAR	DURGAPUR SS	Evaluation under progress and final award to be placed shortly.
		80 MVAR	BINAGURI SS	Procurement to be completed by July 2026
SIKKIM	220 KV	31.5 MVAR	NEW MELLI SS	In bidding stage.
JHARKHAND	400 KV	125 MVAR	NEW RANCHI SS	No update received
ODHISSA	400 KV	63 MVAR	ROURKELLA SS	No update received

OCC Decision

- ✓ Powergrid was advised to expedite procurement and update on progress to be shared henceforth in OCC meetings.
- ✓ Powergrid was also advised to share the current status in procurement of 125 MVAR & 63 MVAR reactors at New Ranchi & Rourkella substations respectively.

g) Restoration of 220KV FSTPP LALMATIA Line.

The line is out of service since long due to tower collapse. 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.

As per 55th TCC meeting:

- ✓ JUSNL updated that tower no 1 to 18 falls under West Bengal area out of these, foundation of tower 1 to 12 are pending due to local issues.
- ✓ They have taken up the matter with concerned District Administrations of West Bengal.
- ✓ TCC advised WBSETCL to extend all support to JUSNL in this regard.

As per 235th OCC meeting

JUSNL updated:

- ✓ Presently the line is charged over location 248 to Location 33 from Lalmatia end
- ✓ Foundation is reaming in 8 locations.
- ✓ Tower erection is pending in 17 locations.

235th OCC Decision

OCC advised JUSNL to expedite restoration of remaining towers and share the progress update regularly. The line may be brought to service before summer 2026.

Deliberations in the meeting

JUSNL updated:

- The delay in restoration of the line is mainly attributed to ROW issues, administrative constraints, and impacts during the COVID period.

- Line charging has been completed up to location no. 24. Foundation works is pending at one location while erection of three towers remains pending.
- Approximately 3.74 km of stringing work is left for execution .
- The line is expected to be ready by June 2026.

OCC Decision

- ✓ JUSNL was advised to ensure completion of the balance works and commissioning of the line within the targeted timeline(June 2026).
- ✓ This was referred to upcoming TCC meeting for information.

h) Review of JUSNL's SAMAST implementation and readiness for commencement of PVUNL scheduling along with development of intrastate DSM and settlement mechanisms.

As per the directions of Hon'ble CERC in Petition No. 658/MP/2025, ERLDC commenced scheduling of Patratu Stage-1 w.e.f. 05.11.2025 upon COD of Unit-1 and in accordance with the share allocation issued by ERPC. In line with the deliberations of the 229th OCC Meeting held on 25th July 2025, JUSNL is required to take over the scheduling of PVUNL units from January 2026 subsequent to the completion of SAMAST implementation.

In 233rd OCC Meeting:

JUSNL informed that SAMAST scheme is under implementation and it's expected to be completed by December 2025. Thereafter scheduling of PVUNL shall be taken up by SLDC, Ranchi.

- ERLDC apprised that for billing and settlement of account, an intrastate DSM mechanism and pool account needs to be developed by JUSNL.
- OCC advised JUSNL to expedite the SAMAST implementation and complete within Dec 2025 so that scheduling of PVUNL shall be commenced by JUSNL from 1st Jan 2025 as per the direction of CERC.
- OCC also advised SLDC, Ranchi to highlight the need of DSM Mechanism and Pool account for settlement and billing to the higher management and simultaneously take up the matter with SERC for implementation of the same.
- OCC referred the matter to TCC for further deliberation. OCC noted the modalities of scheduling and accounting of Patratu Stage-1 highlighted by ERLDC.

As per 55th TCC meeting

JUSNL updated that they have filed petition to CERC for extension of the scheduling of PVUNL by ERLDC till June 2026 for which the hearing is scheduled on 19th Dec'25.

TCC noted.

Deliberations in the meeting

JUSNL informed that:

- SAMAST setup has been completed and Trial scheduling commenced recently.
- Parallel scheduling with RLDC will continue up to June while full operational takeover is planned from 1st July.

- *Current DSM calculations for Railways and JUSNL DISCOM are continuing under the existing arrangement until establishment of the pool account.*

Further, it was appraised that CERC has allowed continuation of the existing arrangement till June 2026 or implementation of SAMAST, whichever is earlier.

ERLDC informed:

- *A revised NOC is required for approximately for scheduling of the second unit through the STU network. Also, Actual auxiliary consumption may be higher than that considered in the existing NOC.*

OCC Decision

- ✓ *SLDC Jharkhand shall ensure operationalization of SAMAST w.e.f 1st July 2026.*
- ✓ *SLDC Jharkhand shall prepare DSM settlement accounts i.r.o Patratu TPP after SAMAST implementation.*
- ✓ *Patratu TPP shall arrange revised NOC for the second unit before COD-based scheduling. Jharkhand STU shall revise the NOC(for GNA) considering the updated percentage of auxiliary consumption.*

i) Discrepancy i.r.o Reactive Energy billing at Subhasgram (PG)

During the month of **December 2025**, the Reactive Energy billing data indicates a reversal in the direction of MVAR flow between two groups of ICTs at Subhasgram (PG) Sub-station. One group comprising ICT-I and ICT-II shows positive MVAR flow, while the other group comprising ICT-III, ICT-IV, ICT-V, and ICT-VII shows negative MVAR flow. Since all ICTs are operated in parallel, such divergence in the direction of reactive power flow appears anomalous and technically inconsistent.

In **235th OCC** Meeting, WB SLDC briefed the observed discrepancy in energy billing data w.r.t Subhasgram (PG) and submitted:

- ✓ In two ICTs, MVAR charges are negative while in other four ICTs, the charges are positive.
- ✓ All transformers are operating in parallel, so this trend is unusual. This behaviour was not seen last year. Comparative data for the last few weeks shows a consistent anomaly.
- ✓ This discrepancy should be rectified to ensure accurate meter data and should be implemented in billing with retrospective effect.
- ✓ ERLDC appraised that the discrepancy is predominant in those ICTs where meters replaced from Genus make to Secure make.

As per 238th OCC:

➤ Powergrid submitted:

- ✓ The import-export logic in four meters at Subhasgram (PG) corresponding to HV and LV side meter of ICT -6 along with 220 kV Subhashgram (WB) and 220 kV KLC Bantala (WB) feeders were modified on 08.04.2026. The details of the meters along with observations have been shared with ERLDC via email.
- ✓ Reactive energy validation challenges were highlighted due to lack of independent validation mechanism (unlike active energy) and billing is based on cumulative registers, not block-wise data

- ✓ It was further stated that, upon confirmation from ERLDC, the same logic will be implemented in all the SECURE make meters of ER.

➤ ERLDC apprised:

Reactive MVARH data for all seven ICTs and associated feeders at Subhashgram (PG) was presented for the period from 06.04.2026 to 12.04.2026 and the same is tabulated below:

	SUBHASGRAM-ICT-01 (HV SIDE)	SUBHASGRAM-ICT-02 (HV SIDE)	SUBHASGRAM-ICT-06 (HV SIDE)	SUBHASGRAM-ICT-03 (HV SIDE)	SUBHASGRAM-ICT-04 (HV SIDE)	SUBHASGRAM-ICT-05 (HV SIDE)	SUBHASGRAM-ICT-07 (HV SIDE)	220 kV Subhasgram (PG)-Subhasgram(WB)	220 kV Subhasgram(PG)-KLC(WB)	SUBHASGRAM-ICT-06 (LV SIDE)
	ER-1534-A	ER-1483-A	NS-2973-A	NS-3000-A	NS-2930-A	NS-2935-A	NS-2919-A	NS-2942-A	NS-2921-A	NS-2996-A
DATE										
06-04-26	-176.1	-161	233.5	147.3	144.9	158.9	266.2	242.6	59.2	-347.8
07-04-26	-190.3	-172.6	278.9	159.3	158.2	149.8	293.5	389.4	82.6	-369.3
08-04-26	-183.5	-162.5	342448	150.5	147.1	163.6	264	9370.6	319059.2	-289484.5
09-04-26	-150.5	-144.7	-231.6	129.6	129.4	170.2	234.9	-406.7	-49	321.6
10-04-26	-155.3	-147.3	-216.4	135.9	135.5	92.7	241.8	-380.2	-43.5	289.9
11-04-26	-121.3	-115	-182.5	101.9	101.2	108.4	186.9	-244.8	-20.2	216
12-04-26	-36	0	-24.4	25.5	23.1	0	43.3	-119	-11.2	120

*All values are in MVARH. The highlighted sections represent the cases where the meter logic has been modified.

- Based on the Reactive register data, ERLDC informed the forum that, from 09.04.2026 onwards, the direction of reactive power flow on the HV side of ICT-6 is same as that of the Genus make meters installed at ICT-1 and ICT-
- WBSEDCL stated that the discrepancy in logic is impacting the Reactive energy accounting, hence corrective action should be taken at the earliest. Moreover, there should be mechanism of validation of VAR data as it is posing significant commercial implications.

➤ WB SLDC submitted :

Similar issue of reactive energy flow in reverse direction is being experienced in tie-lines of Binaguri-NJP ckt-I&II.

- DVC informed that they will test and validate the reactive energy meters in their lab and inform OCC forum accordingly.

238th OCC Decision

- ✓ The forum noted the modification in logic done by PowerGrid in secure make meter at Subhashgram(PG). Further, forum advised PowerGrid to implement the same logic correction across all remaining SECURE make meters(176) of ER. Powergrid to share detailed information with ERLDC regarding Meter no, location, date & time whenever any change in meter logic is carried out.
- ✓ WB SLDC to share the list of tie lines where similar issue of reactive energy recording is encountered.
- ✓ OCC suggested for escalating the issue of reactive energy meter reading validation to NPC forum for standardization across all regions.

Deliberations in the meeting

It was apprised that the issue of Discrepancy i.r.o Reactive Energy billing at Subhasgram (PG) has been deliberated in Commercial sub-committee meeting held on 07.05.2026.

OCC Decision

OCC noted.

j) Update on islanding schemes in ER.

A special sub-group shall be constituted for the identification and implementation of islanding schemes in the capital cities of ER states.

1. Ranchi Islanding Scheme

- Nomination for ER sub-group of islanding scheme implementation was received from JUSNL.
- The kick-off meeting for the implementation of the Ranchi City Islanding Scheme was held on **23rd April 2026** under chairmanship of ERPC. Record Notes attached at **Annex B.2.1.n**
- To accurately define the electrical boundaries and load behaviour of the island, SLDC Jharkhand was requested to share:
 - **Island Boundary & Feeder Logic:** Clearly define the islanded area and provide a comprehensive list of feeders that must be disconnected to ensure successful island formation.
 - **Load Profiles:** Node-wise load data (Maximum, Minimum, and Average) for the identified area to ensure generation-load balancing.
 - **Defense Mechanism Data:** Current node-wise loads of Jharkhand that are already covered under **AUFLS** (Automatic Under Frequency Load Shedding) and **ADMS** (Automatic Demand Management System).
 - **Infrastructure Timeline:** Confirmation of the expected commissioning date for the **400kV Latehar New – Patratu New D/C** line, as this must be integrated into the islanding model.

2. Patna Islanding Scheme under PSDF

- In 54th TCC meeting held on 23.06.2025, BSPTCL had proposed to implement Patna Islanding Scheme through Internal Resource Fund.
- However, a meeting was held on 24th June 2025 under the chairmanship of the Hon'ble Minister of Power and Housing & Urban Affairs, wherein the matter of Islanding Patna city was discussed. In the meeting, it was decided that the State of Bihar would submit a proposal for funding the Islanding scheme by the Ministry of Power).
- In compliance to minutes of the meeting held on dt. 24.06.2025, Board of Directors, BSPTCL has approved for implementation of Patna Islanding Scheme through PSDF in 131st BOD meeting held on dt. 17.07.2025 vide its resolution no. 131-06.
- In line with the above, a proposal has been submitted for Implementation of Patna Islanding Scheme under PSDF to NLDC vide this office letter no. 549 dt. 18.07.2025 along with all the required documents in compliance to minutes of meeting held on dt. 24.06.2025.

- Further, Chief Engineer (Generation), CEA has requested the recommendation of ERPC for implementation of Patna Islanding Scheme through PSDF.

55th TCC deliberation:

ERPC Secretariat informed that BSPTCL has requested for appraisal report of the islanding scheme in A5 format of PSDF and the same has already been sent to them for onward submission to PSDF.

As per 238th OCC:

OCC suggested for formation of a sub group committee under chairmanship of S.E. (Operation), ERPC comprising members from ERPC, ERLDC, concern SLDC and Generating company for regular monitoring of islanding scheme formation and implementation in the ER States. **The committee shall coordinate with stakeholders and submit progress report in OCC.**

3. IB Valley TPS Islanding Scheme (Odisha)

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).

In 233rd OCC Meeting,

OPTCL updated that DPR i.r.o IB Valley TPS Islanding Scheme is not yet prepared and the proposed scheme is under review of Director, OPTCL.

- OCC took a serious note on slow progress in implementation of IB Valley TPS Islanding Scheme since this scheme has been pursued by ERPC since last five months.
- OCC advised OPTCL to highlight the importance of IB Valley TPS Islanding Scheme at the appropriate level and revert back within fortnight of December and the matter is referred to TCC for detailed deliberations.

As per TCC meeting

Director(Op), OPTCL stated that they need a clarification regarding load quantum required for islanding operation and as per their assessment load of 140-160 MW can be arranged at Budhipadar end for islanding operation.

OPGC representative replied that minimum load of 150 MW is required for islanding operation with one unit of IB TPS.

55th TCC decision

- After deliberation, it was finalized that the scheme will be implemented with minimum load quantum of 140 MW at Budhipadar along with one unit of IB TPS generation.
- TCC pointed out the inordinate delay in implementing the scheme and opined that OPTCL & OPGC shall take necessary steps to implement the scheme within six months.

As per 238th OCC:

OPTCL updated:

Work order has been reportedly issued by OPGC to PRDC

ERLDC apprised:

- Multiple revisions have been done in the scope of this islanding scheme. While earlier it was a two-unit configuration, in revised scheme one-unit configuration has been proposed with reduced load.
- Dynamic study of the original scheme had earlier been carried out by ERLDC.

238th OCC Decision

- ✓ OPGC was advised to clarify the role of vendor whom the work order has been placed, i.e whether it is for study or implementation of the scheme.
- ✓ ERLDC was advised to complete the revised study of IB Valley TPS islanding scheme with one-unit configuration.
- ✓ OCC sub-group to be formed as suggested that will coordinate with stakeholders and submit progress report in OCC.

4.Bhubaneswar Islanding Scheme (Odisha)

Nomination for sub-group of islanding scheme implementation in ER is still awaited.

5. Farakka islanding scheme

This is presently not in service due to long outage of 220 kv Farakka-Lalmatia line.

Deliberations in the meeting

Ranchi Islanding Scheme(Jharkhand)

SLDC Jharkhand apprised:

- *Approximately 500 MW minimum islanded load zone has already been identified.*
- *Patratu generating station has been identified as the source generation station for the islanding scheme.*

OCC Decision

- ✓ *SLDC Jharkhand shall submit all pending details of line feeders and feeder segregation plan by 18.05.2026 . Essential loads should not be included in UFLS operation.*
- ✓ *The proposal shall be prepared and to be shared with ERPC at the earliest.*

Bhubaneswar Islanding Scheme (Odisha)

Odisha representative updated that:

- *BPBL(Bhubaneswar Power Limited) units (65X2=130 MW) have been identified for islanding of the capital city of Bhubaneswar. Bhubaneswar islanding is slightly challenging due to absence of nearby generating stations.*
- *PRDC is carrying out feasibility studies in connection with the proposed Bhubaneswar Islanding Scheme.*

OCC Decision

OCC advised SLDC Odisha and OPTCL to send nominations for recently constituted islanding sub-group of ER positively by the next week.

□ **IB Valley TPS Islanding Scheme (Odisha)**

OPTCL updated:

An MoU has been signed with OPGC. Approximately 140 MW load has been identified. Discussions regarding some minor loads are also underway.

ERLDC informed that base case for the revised study of IB Valley TPS islanding scheme with one-unit configuration has been sought from SLDC Odisha.

OCC Decision

OCC advised ERLDC & SLDC Odisha to share the revised study in upcoming OCC.

□ **Patna Islanding Scheme(Bihar)**

SLDC Bihar apprised:

- L1 bidder has already been finalized.
- Revised Board approval for 70% PSDF funding was obtained on 16 March.
- The proposal has been submitted to NLDC on 26 March for sanction of funds.

OCC Decision

OCC opined that the issue may be pursued with PSDF committee to expedite approval process.

This is referred to TCC for information.

k) Status of upcoming thermal generation capacity addition in Eastern Region:

Sr. No.	Plant Name/Agency	Unit No	Capacity (MW)	Status Update in 239 th OCC
2	Buxer TPP (SJVN)	2	660	Synchronization by end of April 2026.Expected COD: 31.05.2026

OCC Decision

In view of impending high demand season , it is imperative for the concerned thermal generating units to commence commercial operation as per scheduled timeline.

l) Review of AUFLS in Eastern Region: SCADA Integration & Data Updation

- ◆ Based on the recommendation and decisions in 14th NPC meeting held on 05.02.24, 214th OCC meeting and special meeting on 10.07.2024, a load relief quantum of 6916MW was finalized for Eastern Region. UFR Feeders real time monitoring has been discussed in NPC as well as various fora of ERPC.
- ◆ Further, with new IEGC 2023 the same has been mandated as quoted below: IEGC 2023, Clause 13.d: "SLDC shall ensure that telemetered data of feeders (MW power flow in real time and circuit breaker status) on which UFR and df/dt relays are installed is available at its control centre. SLDC shall monitor the combined load in MW of these feeders at all times.
- ◆ SLDC shall share the above data with the respective RLDC in real time and submit a monthly exception report to the respective RPC. RLDC shall inform SLDCs as well as the concerned RPC on a quarterly basis, durations during the quarter when the combined load in MW of these feeders was below the level considered while designing the UFR scheme by the RPC. SLDC shall take

corrective measures within a reasonable period and inform the respective RLDC and RPC, failing which suitable action may be initiated by the respective RPC.”

As per 238th OCC meeting:

Both Bihar & Jharkhand updated to Complete AUFLS implementation as well as SCADA integration by end of May 2026.

Deliberations in the meeting

SLDC Bihar highlighted pending RTU upgradation as a potential cause in delay of SCADA integration of AUFLS feeders.

SLDC Jharkhand informed:

- *UFLS enabling orders have been issued.*
- *Implementation is expected to take another one to two months.*
- *RTU rectification and replacement activities are in progress.*

OCC Decision

- ✓ *Bihar and Jharkhand utilities shall expedite RTU rectification and SCADA integration works. Completion target is by June 2026.*

2.2 Issues for follow-up: ERLDC

a) SPS for ACCP-II/JSPL

- Following the 233rd OCC meeting, a special meeting was held on November 26, 2025, to discuss the implementation of System Protection Schemes (SPS) for the new ACCP-II plant, during which OPTCL was advised to assess existing protection adequacy at the JSPL site.
- Although the site visit was eventually conducted on January 11, 2026, the overall implementation remains significantly delayed. While JSPL has implemented one SPS for injection control, a second scheme designed to restrict drawal at the Meramandali end is currently pending the transmission of Talcher-Meramandali power flow data from OPTCL. Consequently, OPTCL has apprised that installing the necessary RTU at Meramandali for data visibility will require approximately two months.
- In 235th OCC meeting, forum directed both JSPL and OPTCL to expedite the finalization and implementation of the remaining scheme to ensure grid stability. 237th OCC meeting, it was advised to SLDC/OPTCL to expedite the implementation.

As per 238th OCC meeting:

OPTCL updated:

JSPL has placed purchase order for procurement of RTU required for data telemetry of 400kV Talcher-Meramundali lines to JSPL for SPS action. The delivery of the RTU is expected in two weeks. Thereafter SPS for drawl restriction would be configured at JSPL end.

238th OCC Decision

OCC advised OPTCL to coordinate with JSPL so that the proposed SPS gets implemented on time.

Deliberations in the meeting

OPTCL apprised:

- Injection restriction SPS has already been implemented while Drawal restriction SPS related to 400 kV Talcher–Meramundali overload condition is pending due to RTU installation requirements.
- RTU procurement order has already been placed and materials are in delivery stage. The RTU will be installed within 10 days after its receipt.
- Subsequently, implementation of the SPS for shedding JSPL load to limit 400 KV TSTPS-MMND flow on sudden loss of ACPP-II generation, will be completed.

OCC Decision

OCC advised OPTCL to coordinate with JSPL so that the proposed SPS gets implemented as per submitted timeline.

2.3 Bus split operationalization at NTPC Kahalgaon: ERLDC

- ❑ Bus splitting of Kahalgaon, approved in the **24th ERPC** meeting on 27.04.2013 to reduce fault level but couldn't be operationalized due to the non-availability of 400/132 kV ICTs in Bus Sections for feeding auxiliaries of Stage-II units of Kahalgaon.
- ❑ As decided in **219th OCC** Meeting, a committee comprising of members from ERPC and ERLDC visited NTPC Kahalgaon on 17-10-2024 to assess the status of Bus splitting at 400kV level and way forward for operationalization of 400 KV Bus sectionalizer.
- ❑ After several follow-up & deliberation, segregation of auxiliary system at 132kV level for stage 2 was completed after commissioning of 400/132kV ICT 3 & 4 at Kahalgaon by NTPC in April 2026.
- ❑ **238th OCC decision:** OCC advised NTPC to strictly adhere to the submitted timeline(25 April 2026) for completion of bus splitting at 400 kV Kahalgaon station.
- ❑ Finally, bus split scheme was operationalized on **05.05.2026**.
- ❑ Impact assessment of Bus split was done, it is noticed that, following to the bus split, 16% power flow (50MW) increment was observed in each circuit of 400kV Farakka - Kahalgaon D/C. Similar, power flow increment was indicated in steady state power flow study.

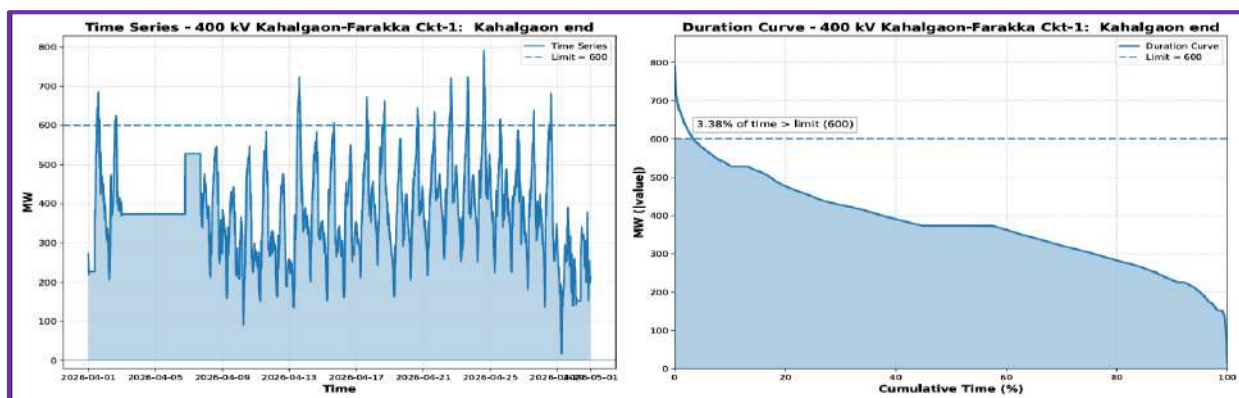


Figure 2-1: 400kV Farakka-Kahalgaon D/C power flow pattern (time Series & duration curve)

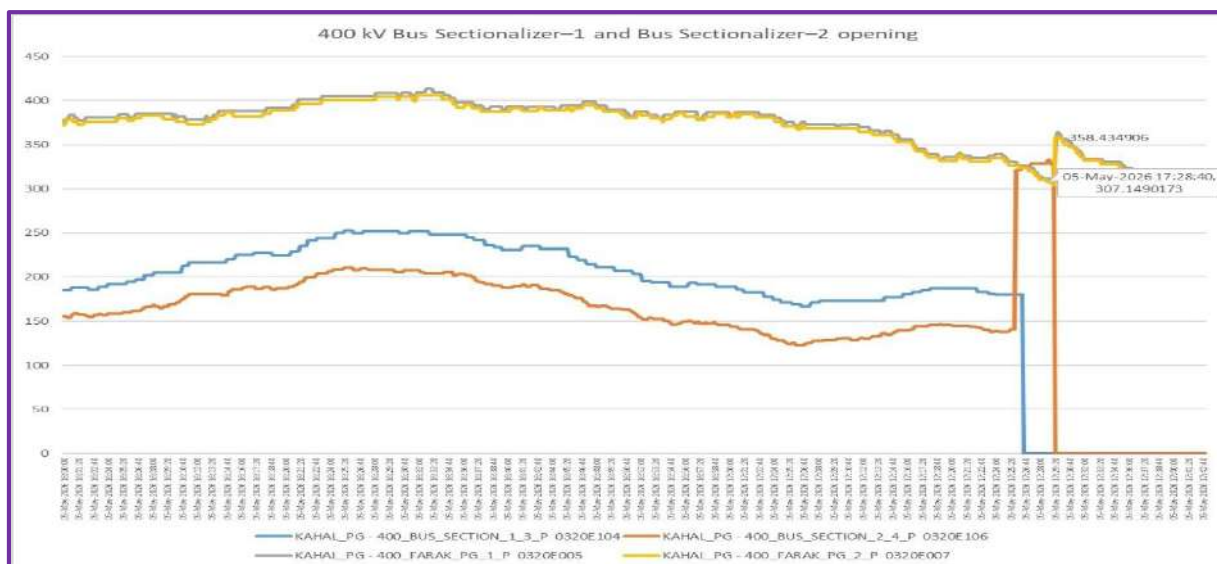


Figure 2-2: Power flow of 400kV Farakka-Kahalgaon D/C before & after Bus spit operationalization

- 400 kV Farakka–Kahalgaon D/C is a major power import corridor for West Bengal and remains critically loaded during solar hours, particularly during the summer season. A maximum power flow of 790 MW per circuit has been recorded with both circuits in service, rendering the corridor N-1 non-compliant.
- Although reconductoring of the 400 kV Farakka–Kahalgaon D/C corridor was planned for enhancing the corridor capacity, the work is yet to be completed. Under the present network condition, any additional increase of around 50–70 MW in line loading during peak summer may further aggravate the loading condition.
- Keeping in view the anticipated high demand during the upcoming couple of months of peak summer period, a decision may be taken regarding operation of the Bus Sectionalizer at Kahalgaon considering both system reliability and fault level constraints.

Deliberations in the meeting

ERLDC submitted :

- *The Bus Split Scheme at NTPC Kahalgaon has been operational since 05.05.2026 for reduction of fault level. A detailed analysis (attached as **Annexure B.2.3**) also presented on the Bus Split arrangement and its impact on the loading of associated transmission lines.*
- *The loading of 400 kV Farakka–Kahalgaon D/C generally remains high during solar hours due to low schedule of thermal ISGS plants like Farakka and those in W. Bengal. It has been observed that after July, loading in Farakka-Kahalgaon line usually reduces significantly due to reduction in demand and availability of hydro-generation.*
- *Under Bus Split operation, 400 kV Farakka-Kahalgaon line loading would violate the N-1 security limit as the 2nd ckt of the line is yet to be uprated with HTLS conductor. It was reiterated that the 400 kV Farakka–Kahalgaon D/C is a critical import corridor for the West Bengal system and therefore maintaining line loading within permissible limits is essential, particularly to meet summer peak demand.*
- *Keeping the bus sections at KHSTPS coupled for the limited period in which its role becomes critical would help to maintain the loading of 400 kV Farakka–Kahalgaon D/C within permissible limits, although the purpose of reduction in fault level at NTPC Kahalgaon will not be fulfilled.*

- *Frequent switching of the bus sectionalizer breakers for splitting / coupling the bus sections at NTPC Kahalgaon on a daily basis during solar and post-solar hours is neither technically feasible nor operationally prudent for a generating station.*
- *After the summer season, once the loading on the Farakka–Kahalgaon corridor reduces and remains within safe operational limits, the Bus Split arrangement may be restored as the desired mode of operation.*

OCC Decision

- ✓ *In view of the anticipated high demand during the summer months, Forum agreed for Bus arrangement at NTPC Kahalgaon to operate in coupled mode to ensure reliable power supply to Kolkata and South Bengal areas while permanent split operation may be resumed once the ER/WB demand subsides and system conditions become conducive.*

2.4 Finalization of System Protection Scheme (SPS) for Godda TPS and Approval of Implementation Logic:ERLDC

- In the 236th OCC meeting dated 20.02.2026, under agenda item 2.4, the requirement for an SPS at Godda STPS was discussed and agreed upon to ensure grid stability following the steady-state interconnection studies. The minutes of that meeting established that while the broad philosophy was set, the final logic—including alarming conditions, time delays and trigger thresholds—would be determined through detailed dynamic and Electromagnetic Transient (EMT) simulation studies once the generator, exciter and governor models were provided. It was further mandated that the implementation of this SPS, along with the Kahalgaon bus splitting, must be completed prior to the interconnection of the Godda units.
- Following the submission of the requisite technical data, a comprehensive dynamic feasibility study was conducted to refine the protection requirements. To discuss the findings of this study and the resulting technical parameters, a coordination online meeting was held on May 5th, 2026, between ERLDC, ERPC, and Godda STPS. During this session, the simulation results were reviewed and SPS logic was finalized to ensure robust performance during various grid contingencies.
- The final recommendations and the specific SPS logic derived from these studies are presented below for the formal review and approval of the OCC.
 - I. Protection to ensure faster fault clearance (not more than 100 msec. under any conditions).
 - II. SPS needs to be implemented as per the logic below:

SPS-1: SPS for Godda Generation

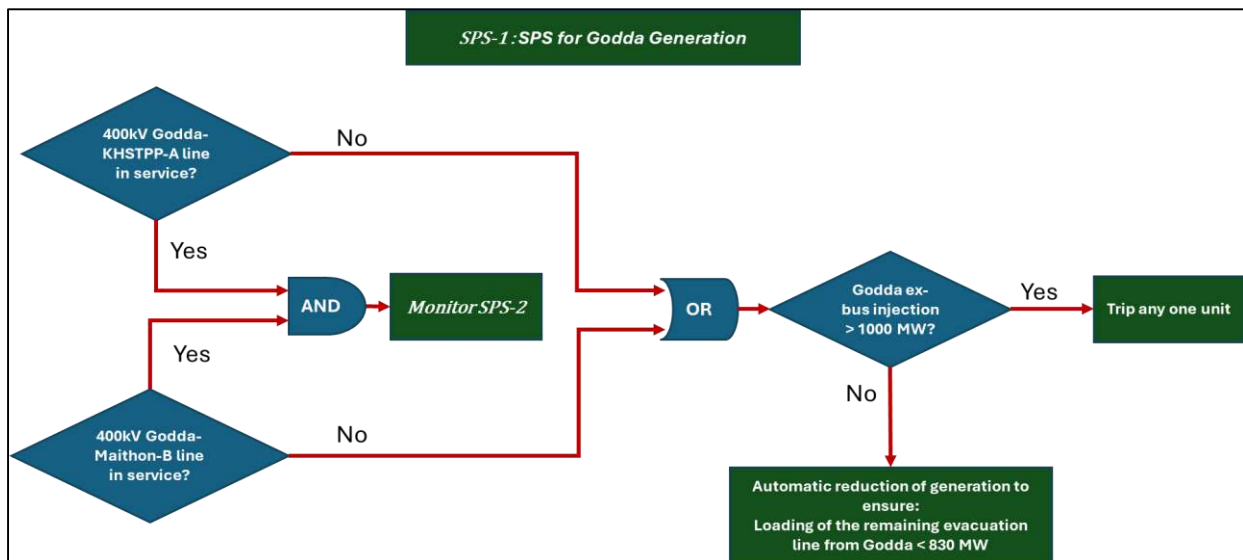


Figure 15: SPS-1 - SPS for Godda Generation

In case of tripping of any one evacuation paths from Godda (either 400kV Godda – KHSTPP-A or 400kV Godda – Maithon-B CKT), the loading in the remaining evacuation path is bound to go beyond the thermal limit of the line unless Godda net ex-bus injection is below 874 MVA.

In case of tripping of any one of the evacuation paths from Godda:

- If Godda ex-bus injection > 1000 MW = Trip any one unit
- If Godda ex-bus injection < 1000 MW = Automatic reduction of generation to tech. min. so that the loading in the remaining CKT goes below 830 MW (874 MVA, 0.95 pf)

SPS-2: SPS for Godda evacuation path

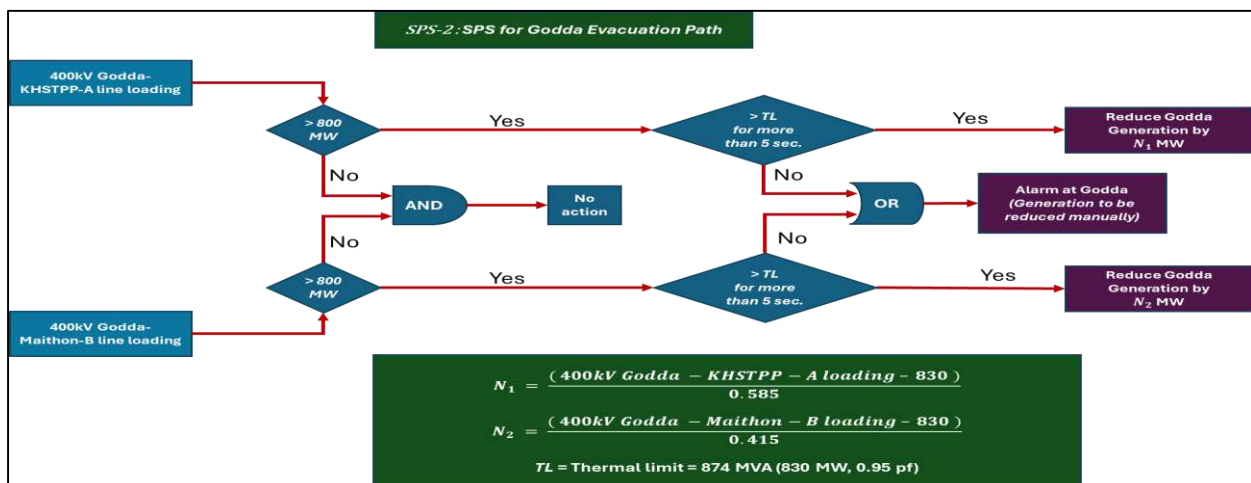


Figure 16: SPS-2 – SPS for Godda evacuation path

If both the lines from Godda are in service, in that case also, loading can reach beyond thermal limit in any one of the lines.

In such cases also, one SPS is required to be implemented such that:

- If the loading in any one of the lines crosses 800 MW, an alarm is to be set for manual reduction of generation.
- If the loading in any one of the lines crosses the thermal limit of 830 MW (8
- 74 MVA, 0.95 pf) for 5 seconds, then Godda generation may be reduced so that the loading goes below the thermal limit.
- Sensitivity of Godda generation on:
 - 400kV Godda – KHSTPP-A = 58.5%
 - 400kV Godda – Maithon-B = 41.5%

Godda STPP may implement the above agreed SPS logic before synchronisation of any Unit.

Deliberations in the meeting

ERLDC briefly explained the logic for SPS in Godda Generation & evacuation path as per comprehensive dynamic feasibility study being carried out jointly with Godda STPS.

OCC Decision

OCC noted and consented for implementation of the proposed Special Protection Schemes prior to interconnection of Godda TPS units.

2.5 Restoration issues i.r.o. 400kV PVUNL-Tenughat line: ERLDC

- 400KV PVUNL–Tenughat line tripped on single-phase to ground fault on 29.04.2026 at 15:16 hrs. Subsequently, the line was charged on 02.05.2026. Persistent high voltage at the 400 kV bus of Tenughat was observed to be the primary reason for delay in restoration of the line. Similar incidents of high voltage had also been observed earlier, wherein restoration and line charging could not be carried out after tripping of the line.
- To address the persistent issue, an online meeting was convened on 04.05.2026 to deliberate upon the difficulties faced during synchronization and restoration of the line. The meeting was attended by representatives from ERLDC, SLDC Jharkhand, JUSNL, PVUNL and TVNL. Minutes of the meeting are enclosed at **Annexure–B.2.5**
- The following are the salient points of the meeting:
 - At the Tenughat end, Auto Reclosure (A/R) was unsuccessful during the tripping event. Tenughat agreed to resolve the issue related to unsuccessful A/R operation.
 - GT tap position at Tenughat was found to be maintained at ‘1’ instead of the nominal position, which was identified as a major contributing factor for the high voltage observed at Tenughat buses. The forum advised Tenughat to maintain GT taps at the nominal position. Tenughat agreed to take up the matter with OEM, M/s BHEL, for detailed analysis and further corrective action.
 - A standard operating procedure (SOP) for prompt restoration of the line following tripping was discussed and agreed upon by all stakeholders.
- Since the **400 kV PVUNL–Tenughat** line is an important line for reliability of the Jharkhand system as well as evacuation of PVUNL generation, the issue related to GT tap setting at Tenughat may be taken up on priority for necessary corrective action.

Deliberations in the meeting

ERLDC stated:

- ✓ *Overvoltage issues are presently occurring at Tap Position–1, corresponding to a turns ratio of 15.4/245 kV (245.7 kV on HV side) of the GT(Generating Transformer). This is the primary cause of high voltage at Tenughat 220kV Bus.*
- ✓ *Changing the tap position to Position–5, the nominal position, corresponding to a turns ratio 15.4/234 kV may improve 220 kV side voltage to approximately 234 kV (nominal) and avoid synchronization issues. So, there is an expected improvement of 10kV and thereby maintaining system voltage within nominal range and reducing continuous reactive power injection from the generating units.*

TVNL submitted :

- ✓ *The GT tap position has been intentionally maintained at 1st position since commissioning of the units*
- ✓ *The existing tap position was originally set by BHEL. Earlier low-voltage conditions existed due to radial load feeding arrangements while present operating conditions have changed.*
- ✓ *Change in Tap position of GT would require manual offline adjustment and shutdown of both the generating units at a time.*

DVC informed that GT tap positions in most of their units are generally maintained at the nominal 5th position, while a few units are operating at 6th position.

OCC Decision

TVNL shall consult the concerned OEM and finalize suitable tap settings in the Generating Transformer. Changing the GT tap position to nominal position should be explored. Necessary shutdown of both units shall be planned accordingly for implementation of correct tap position.

2.6 Transition of Scheduling & Accounting Functions of Patratu Stage-I from ERLDC to SLDC Jharkhand: ERLDC

- *The Hon'ble CERC vide RoP for hearing dated 08.07.2025 against Petition No. 658/MP/2025 permitted ERLDC to carry out scheduling and accounting functions for Patratu Thermal Power Station, Stage-I (3x800 MW) as an interim arrangement till December 2025 or till operationalisation of SAMAST Portal of SLDC Jharkhand. Subsequently, vide RoP for hearing dated 19.12.2025, the Hon'ble Commission extended the interim arrangement up to June 2026 or till SAMAST becomes operational, whichever is earlier.*
- *At present, scheduling and accounting activities of PTPS-I are being carried out by ERLDC. As per the directions of Hon'ble CERC, scheduling and accounting activities of PTPS-I are to be taken over by SLDC Jharkhand after June 2026 or upon operationalisation of SAMAST, whichever is earlier. Thus, scheduling of PTPS-I shall not be undertaken by ERLDC beyond June 2026.*
- *In view of the above, SLDC Jharkhand is requested to provide information regarding readiness of the SAMAST portal at SLDC Jharkhand and their preparedness for taking over scheduling and accounting activities of PTPS-I from ERLDC.*

Deliberations in the meeting

*The issue has already been deliberated at length at **Agenda 2.1.***

2.7 Replacement of CLR insulators of PMJTL lines: ERLDC

Replacement of faulty insulator (Decan make) in the In765 kV New Ranchi – Medinipur D/C, 765 kV Medinipur – New Jeerat D/C, 400 kV New Jeerat – Subhasgram D/C and 400 kV New Jeerat – Jeerat D/C transmission corridors has been discussed in various ER OCC meetings to ensure reliability of power supply to Kolkata and adjoining areas of South Bengal.

In 229th OCC meeting, Powergrid submitted:

- Insulator failure in the 400 kV line is mainly due to insulator flashover and in the 765 kV line due to breakdown of insulator FRP rod.
- Following is the breakup of insulators installed in the PMJTL line:

Voltage level(kV)	Insulators	Decan insulators	Identified defective Decan insulators	Defective insulator replaced
765	58092	17795	1082	1044
400	16162	10273	3619	3500
Total	74254	28068	4701	4544

(As on 25.07.2025)

Long term planning: Replacement of balance Decan insulators (excluding the already replaced and identified defective ones) will be completed by Feb'26 for 400 kV lines and by Oct'26 for 765 kV lines.

- OCC took a serious note of the repeated failures of CLR insulators in the above-mentioned lines jeopardizing the critical power corridor of Kolkata.
- OCC advised Powergrid that Deccan make insulators being installed as replacement may be tested by any certified testing agency like CPRI to ensure its reliability and the testing certificate maybe shared with ERPC.

The matter was also referred to the 55th TCC/ERPC Meeting

As per 55th TCC meeting:

- Powergrid reiterated that the replacement of balance insulators for 400 kV lines will be completed before summer of 2026.
- SLDC, WB suggested that insulator replacement in railway crossings for 765 kV lines may be completed before commencement of summer as it would be difficult to allow emergency shutdowns during the summer. Powergrid agreed with SLDC WB and stated that they would submit the detailed action plan for replacement of insulators in strategic locations of 765 kV lines.

However, frequent emergency shutdown requests have been receiving i.r.o 765 kV New Ranchi – Medinipur D/C and 765 kV Medinipur – New Jeerat D/C lines.

In the short term, a suitable methodology needs to be finalized to address and manage these recurring emergency shutdown requests. A reconciliation of shutdowns availed for replacement of failed CLR insulators during the period from 01.04.2025 to 30.04.2026 is furnished below:

Name of Element	Availed By ER-I		Availed By ER-II		Total	
	No. of Times	Total Outage Duration (In Hrs)	No. of Times	Total Outage Duration (In Hrs)	No. of Times	Total Outage Duration (In Hrs)
400KV-JEERAT-NEW JEERAT-1	-	-	3	25.7	3	25.7
400KV-JEERAT-NEW JEERAT-2	-	-	5	49.0	5	49.0
400KV-NEW JEERAT-SUBHASGRAM(PG)-1	-	-	12	124.0	12	124.0
400KV-NEW JEERAT-SUBHASGRAM(PG)-2	-	-	1	14.9	1	14.9
Total SD of 400KV System					21	
765KV-MEDINIPUR-NEW JEERAT-1	-	-	16	110.8	16	110.8
765KV-MEDINIPUR-NEW JEERAT-2	-	-	12	96.1	12	96.1
765KV-NEW RANCHI-MEDINIPUR-1	5	40.4	10	80.3	15	120.8
765KV-NEW RANCHI-MEDINIPUR-2	5	29.4	15	117.1	20	146.5
Total SD of 760KV System					63	
Grand Total	10	69.8	74	617.9	84	687.7

- It is evident from the above table that POWERGRID has sought shutdowns of the **765 kV New Ranchi – Medinipur – New Jeerat corridor** as many as **63 times** during the **last one year**. Further, during the ongoing summer period alone, i.e., in April 2026, **7 nos** such emergency shutdowns have already been facilitated in real time, thereby exposing the system to high operational risk.
- In view of the above, a suitable modus operandi may be finalized for facilitating such shutdowns, particularly during the ongoing summer period, while ensuring reliability and security of the grid.

Deliberations in the meeting

ERLDC submitted:

- *During the last financial year, 63 emergency shutdown requests were processed while from March onwards(this year), around 15 emergency shutdown requests had already been received.*
- *Frequent emergency shutdowns are creating operational difficulties during high-demand conditions in West Bengal. Moreover, coordination with NLDC is required for every 765 kV shutdown.*
- *Shutdown of any one circuit of the 765 kV New Ranchi – Medinipur – New Jeerat corridor and subsequent forced outage of the parallel ckt (during the ongoing summer period when West Bengal*

demand is consistently above 10 GW), poses a serious threat to the reliability/ security of power supply to Kolkata and adjoining areas of S. Bengal.

- As a **short term measure**, it was suggested that the entire 765 kV New Ranchi – Medinipur – New Jeerat corridor may be patrolled on a fast-track basis and list of defective insulators/strings requiring urgent replacement may be detailed and shared with ERLDC / ERPC to facilitate a more structured and coordinated shutdown planning process.

SLDC West Bengal reiterated the concerns raised above and commented that several shutdown requests are being sought on emergency basis under near-breakdown conditions citing damaged insulator strings may collapse the line at that point any time. It was further highlighted that simultaneous outage of both circuits could seriously impact reliability of supply to Kolkata and South Bengal areas.

POWERGRID clarified that most shutdowns are being sought based on patrolling and identification of damaged insulators before actual tripping/failure occurs. It was informed that immediate shutdowns are sometimes unavoidable due to safety concerns arising from damaged suspension/tension strings and the possibility of conductor snapping.

As a **long term measure**, POWERGRID informed:

- Around 5000nos. Of faulty (Decan make) clr insulators in various 400 kv lines have already been replaced and subsequently, tripping/shutdown incidences of those 400 kv lines have reduced significantly compared to last year.
- Supply of new insulators for 765 kv lines expected by March 2026, has been delayed due to limited availability of suppliers in India and is now expected by June 2026. However, POWERGRID confirmed that replacement of faulty insulators in the identified 765 kv corridors shall be completed by October 2026.
- Replacement of faulty Decan make insulators in both 400 kv and 765 kv systems is being carried out using Decan make insulators from different manufacturing batches to avoid recurrence of similar failures.

OCC Decision

- Powergrid shall carry out detailed patrolling & online condition monitoring of lines and shall submit a detailed report to ERLDC/ERPC/SLDCs, encompassing work already completed, identified defective locations along with remaining locations vulnerable to the impact of Nor'Wester storms/rain, thermovision scanning details, PID assessment of the entire length of line and planned replacement methodology. Tower footing resistance checking should be integrated with insulator replacement activities.
- POWERGRID was also advised to expedite the insulator replacement activities and adhere to the committed timelines for completion of balance works in 400 kV and 765 kV systems.
- Shutdown planning should be improved by Powergrid to reduce frequency of emergency shutdowns. Instead of seeking shutdowns for isolated locations on a day-to-day basis, POWERGRID may identify and compile all faulty insulator locations requiring emergency shutdowns over a weekly horizon and plan such shutdowns preferably during weekends or low-demand periods, so as to minimise system reliability risks.
- Multiple locations should be covered during any shutdown period by deploying multiple gangs to maximise replacement works and expedite completion of activities within the allowed shutdown

opportunity. Railway crossings and public safety-sensitive locations should continue to receive priority.

- Weekly planned shutdowns should be preferred over repeated emergency shutdowns wherever feasible while Emergency shutdowns can be availed only for genuinely critical cases. To avail emergency shutdowns during the summer months, efforts shall be made to consolidate such requirements on a weekly basis and to avail the same preferably during weekends or other low-demand periods.

2.8 Endangering Grid connectivity, security & stability of 400 KV Sundargarh-Raigarh Ckt – 3 & 400KV Sundargarh- Rourkela#1 D/C line near Sundergarh due to over crossing of dead LILO line of M/s Vedanta Ltd, Jharsuguda: Powergrid Odisha.

- As per the agreement dated 22.12.2010 between M/s Vedanta Ltd. And Powergrid, the connectivity to Vedanta Ltd sub-station was carried out from LILO of 400 KV Sundargarh- Raigarh D/C line # 3 between Tower No – 834 (DD+0) & 835 (DD+0) and 400 KV Sundargarh-Raigarh D/C line # 4 between Tower No – 299 (DD+0) & new Vedanta Tower No-VL3 (DD+0) was done during the year 2011. This activity was taken up as per direction of CERC and instruction of ERLDC/WRLDC in order to charge the Vedanta switchyard at Jharsuguda for sending and receiving of power at Vedanta end with CTU transmission system.
 - I. LILO-1 in 400KV Sundargarh-Raigarh Line #3 between existing tower No-834(DD+3) & 835(DD+0).
 - II. LILO-2 in 400KV Sundargarh-Raigarh#4 between tower No-299(DD+0) & towerno.298(DA+0) by inserting a Tower V1 (DD+0) in between Loc. 298 & 299 and over crossing POWERGRID 400KV Sundargarh-Raigarh#3 & 400KV Sundargarh- Raourkela#1 D/C line.
- After direct connectivity of Vedanta 400 KV sub-station with 765/400 KV sub-station of Powergrid at Sundergarh, the tapping points of LILO portion of line # 3 & # 4 was disconnected by M/s Vedanta Pvt. Ltd. In the year 2014 & 2017 respectively and direct connectivity for Powergrid was completed in above-mentioned LILO lines in 2022 & 2023 respectively. However, removal of over crossing conductor of LILO-2 over D/C line **400KV Sundargarh-Raigarh#3** & 400KV Sundargarh-Rourkela#1 is still pending.
- In this regard, the authority of **M/s Vedanta** has been informed many times to take necessary steps to de-string the over crossing line for keeping the tower in safe condition and to take urgent action for direct connectivity of both LILO points.
- M/s Vedanta submitted through email that they will use the LILO for CTU connectivity with POWERGRID Sundargarh S/s. But till date no proper approval has been submitted by them.
- In spite of several correspondences and discussions with M/s Vedanta Ltd., the over crossing lines have not been removed by them till date. This is causing severe danger to POWERGRID lines 400KV Sundargarh-Raigarh#3 & 400KV Sundargarh- Rourkela#1 line.
- POWERGRID submission: M/s Vedanta to remove the over crossing LILO line immediately so that there shall not be any damage to Powergrid system due to failure of over crossing conductors of dead LILO line.
- This agenda was submitted by POWERGRID, Odisha Projects for further deliberation in the **228th OCC Meeting** of ERPC held on 17.06.2025. During the discussion in the meeting. In the minutes of the meeting of **228th OCC Meeting**, it was advised to **refer the matter for discussion in the CMETS-ER Meeting**.

As per the minutes of the meeting of **228th OCC Meeting**, this issue was put up for inclusion in the agenda points of **CMETS-ER Meeting**, however, **CTU rejected this agenda point of POWERGRID, Odisha Projects citing the reason that, the issue does not require any technical deliberation in the CMETS-ER Meeting.**

Submitted again for further deliberation on the matter.

Deliberations in the meeting

Powergrid updated:

- *Temporary LILO arrangements were earlier used for Vedanta power evacuation.*
- *Dedicated transmission lines have now been commissioned.*
- *However, portions of the old LILO arrangement remain physically connected though unused.*

OCC Decision

Since Vedanta representatives were not present during the meeting, no final decision could be taken. OCC, thereby, opined to convene a separate meeting with Vedanta representatives and all concerned stakeholders.

2.9 Shutdown of 400 KV Baripada-Duburi-Pandiabili line: Powergrid Odisha.

- ❑ Shutdown of both 400kV Baripada-Pandiabili Line and 400kV Pandiabili-Duburi Line were approved in the 237th OCC Meeting of ERPC for the month of April'2026 for the replacement of old Decosil Polymer insulator at Location No.- 665 inside the river Mahanadi and at other locations identified as critical in thermovision scanning.
- ❑ The shutdown of both transmission lines requested by POWERGRID in April 2026 was denied by ERLDC due to prevailing system constraints, as such an outage would have impacted grid stability. Moreover, the shutdown window that was allotted was not feasible for execution since the required work was scattered across multiple locations, making it impractical to complete within the given time frame.
- ❑ In July 2025, one CLR at location no. 665 of the 400 kV Duburi–Pandiabili line, situated inside the Mahanadi River, was de-capped under forced water flow conditions, creating severe challenges for the POWERGRID team during replacement; learning from that experience, the team has now scheduled the replacement of the other CLR at the same location for April 2026, when water levels and flow are expected to be lower, thereby reducing risks and easing logistics for safe and efficient execution.
- ❑ As per POWERGRID maintenance standards, thermovision monitoring of CLRs has revealed 12 CLRs as critical, with insulators under severe electrical stress due to continuous high loading and adverse weather conditions; hence, immediate replacement of these components is essential to prevent potential failures that could otherwise result in forced outages and compromise overall system reliability.
- ❑ Considering the above facts, it is requested to grant permission for availing the shutdown of both 400kV Baripada-Pandiabili Line and 400kV Baripada-Duburi Line at the earliest for improvement of reliability and preventive maintenance of both the critical lines.

Deliberations in the meeting

Powergrid Odisha submitted :

- *A recent failure occurred in the Mahanadi river-course area, where restoration activities became extremely difficult.*
- *During monsoon, river current increases significantly and several towers are located inside river stretches. Therefore, the replacement work should preferably be completed before the monsoon season.*
- *Shutdown before monsoon is necessary so that preventive maintenance can be carried out with support from NDRF and other agencies. Special logistics arrangement including deployment of NDRF team will be required to carry out the replacement work. Thus, at least two days' advance intimation is required for preparations.*
- *After mid-June, river conditions and rainfall intensity are expected to worsen, making maintenance increasingly difficult. Once heavy rainfall begins, insulator failures may increase rapidly and restoration accessibility will reduce significantly.*

ERLDC presented system simulation studies and explained that the requested transmission lines are crucial for supplying power to the state capital of Odisha and nearby areas. Since Odisha's power demand is currently high, especially during daytime solar hours, allowing a full-day shutdown could pose risks to the network in case of further contingency. Hence, it will be prudent to allow the shutdowns once the state demand reduces.

ERLDC and Odisha utilities informed:

- *Odisha demand is presently touching around 7,000 MW.*
- *The state capital region is heavily dependent on the Mendhasal, Meramundali, and Pandiabali corridors.*
- *Outage of one circuit along with another contingency may create a high probability of voltage collapse in the capital region.*

OCC Decision

- ✓ *OCC acknowledged the operational difficulties highlighted by POWERGRID and advised ERLDC to facilitate the required shutdowns at the earliest possible opportunity during weekends or holidays, depending on system conditions.*
- ✓ *Odisha utilities and Powergrid shall identify suitable Saturday–Sunday windows for carrying out shutdown activities. Shutdowns shall be taken one circuit at a time i.e PGCIL to avail shutdown of only one 400 KV line at a time instead of the earlier proposed simultaneous shutdown of 400 kV Baripada – Pandiabali and 400 kV Baripada – Mendhasala lines.*
- ✓ *OPTCL shall expedite implementation of UVLS within one month.*
- ✓ *Shutdown planning, manpower mobilisation, and resource deployment shall be coordinated in advance considering monsoon constraints.*

2.10 Shutdown of 400 KV Rourkela-Talcher line: Powergrid Odisha.

- *Shutdown of both 400kV Rourkela-Talcher Ckt 1 & 2 were approved in the 238th OCC Meeting of ERPC for the month of May'2026 for the replacement of old Decosil Polymer insulator and identified CLR insulator as critical in thermovision scanning.*

- The shutdown of both transmission lines requested by POWERGRID in May 2026 was denied by ERLDC due to prevailing system constraints, as such an outage would have impacted grid stability. Moreover, the shutdown window that was allotted was not feasible for execution since the required work was scattered across multiple locations with geographically challenging, making it impractical to complete within the given timeframe.
- That's a very concerning observation. Seven numbers of CLR de-capping incidents on both 400 kV Rourkela–Talcher circuits within a single financial year 2025-26 is indeed significant.
- As per POWERGRID maintenance standards, thermovision monitoring of CLRs has revealed 332 CLRs as critical, with insulators under severe electrical stress due to continuous high loading and adverse weather conditions; hence, immediate replacement of these components is essential to prevent potential failures that could otherwise result in forced outages and compromise overall system reliability
- Considering the above facts, it is requested to grant permission for availing the shutdown of both 400kV Rourkela-Talcher#1&2 Line at the earliest for improvement of reliability and preventive maintenance of both the critical lines.

Deliberations in the meeting

Powergrid Odisha submitted:

- *Shutdown for three full-days has been requested.*
- *Major portions of the said line pass through forest areas. Thus, mobilisation of manpower and resources to work locations requires substantial time. Hence, short-duration shutdown windows may not always be operationally practical. Difficulties in executing the work during early morning hours as locations are remote, involving river crossings/ forest were highlighted.*
- *7 nos. incidents of insulator de-capping had occurred during the last financial year, demanding condition assessment of insulators. Based on the assessment, 332 nos. insulator strings were identified for replacement to avoid any unwanted outages.*

ERLDC presented system studies and explained that outage of the 400 kV Talcher–Rourkela lines would increase loading in the 400 kV OPGC–Lapanga D/C and 400 kV Lapanga–Meramundali D/C lines, which are already facing N-1 violation risks during solar hours and high summer demand in Odisha.

It was further submitted:

- *During solar hours and high summer demand in Odisha, The Lapanga–Meramundali corridor is already operating beyond N-1 limits. Under N-1 conditions, loading levels may become operationally critical. Additional loading due to shutdown of the 400 kV Talcher–Rourkela lines may significantly increase stress on:*
 - *Lapanga–Meramundali corridor.*
 - *OPGC–Lopanga corridor*
- *Power flow circulation through Talcher–Chaibasa–Jamshedpur–TISCO areas may result in voltage reduction.*
- *Non-implementation of UVLS further increases voltage collapse risk.*
- *Permitting such shutdowns under present conditions could lead to cascading failures in the state network in case of any further contingency occurs. It was suggested that POWERGRID may*

avail shutdown either during morning hours, (similar to other transmission licensees) or plan the shutdown after the state demand reduces.

OCC Decision

- *OCC observed that other projects in similar forest corridors are executing maintenance during limited morning shutdown windows. Thus, temporary arrangements and nearby field offices may be explored to improve execution capability. Support from district administration and forest authorities may be sought wherever required.*
- *OCC advised POWERGRID to explore possibilities of carrying out the insulator replacement works in the morning hours. Alternately, the work may be taken up after reduction in state demand.*

2.11 Diversion of RPC approved Spare Transformers and Reactors to the constituents / State Transmission Utilities: ERPC

- **Chairperson, CEA/NPC** opined that private Transmission Service Providers (TSPs) may be considered for diversion of RPC approved spare transformers and reactors on a case-to-case basis, subject to discussion in the respective Regional Power Committee (RPC) forum.
- **Chairperson, CEA/NPC** further suggested that a suitable mechanism for periodic rotation/usage of spare transformers and reactors within the utility or among the constituents / State Transmission Utilities (STUs) may be explored. This would ensure that spare transformers and reactors do not remain unused for prolonged periods and become too old without operational utilization.
- It was suggested that all RPCs may review the existing Standard Operating Procedures (SOPs) prepared by SRPC (attached at **Annexure-B.2.11**) and NRPC (attached at **Annexure-B.2.11**) in their respective forums, obtain comments from stakeholders, and submit their suggestions. The matter may thereafter be deliberated in the Operation Sub-Group of the NPC for finalization of a uniform SOP at the national level.

As per 17th NPC decision:

- All RPCs to explore a suitable mechanism for periodic rotation/usage of spare transformers and reactors within the utility or among the constituents / State Transmission Utilities (STUs) and also examine the inclusion of Private Transmission Service Providers in the scheme. All RPCs may also review the existing Standard Operating Procedures (SOPs) prepared by SRPC and NRPC in their respective RPC forums.

Deliberations in the meeting

Powergrid informed that:

- *NPC has also sought views regarding inclusion of private transmission licensees within the mechanism.*
- *Spare transformers have already been diverted earlier to utilities such as DVC and West Bengal under existing arrangements.*

OCC Decision

- OCC noted that NPC had earlier directed all RPCs to develop mechanisms for periodic rotation and utilisation of spare transformers and reactors wherein the SOP of Northern Region was referred to as a model mechanism. The proposed SOP includes the following penalty clause:
“In event of delay in return or replacement of spare equipment beyond the agreed time period, maximum 24 months from diversion date, a penalty of 15% of approved tariff for the diverted equipment will be imposed on the borrower for the duration of deployment. RPC may allow extension up to 12 months in genuine cases.”
- All constituents shall review the SOP(**Annex B.2.11**) as approved in NPC and submit comments within one week. Stakeholders shall specifically provide comments on the proposed 15% penalty clause w.r.t applicability of the penalty clause and utilisation of collected penalty amounts , i.e whether penalty amounts would accrue to Powergrid, pool account, or any separate reliability fund.
- OCC referred to TCC for further deliberation.

2.12 Multiple shutdown proposals for re-orientation of lines connected to New Purnea due to change of river course: ERLDC

- Multiple shutdown proposals of transmission lines connected to a single node of 400 kV New Purnea S/S were proposed by the transmission utilities of ER for carrying out tower shifting/pile foundation works necessitated due to change in river course, during the 238th OCC Meeting held on 17.04.2026 at ERPC Secretariat.
- Considering the criticality of the corridor and the simultaneous shutdown requests from the same node, OCC opined that a special meeting involving all stakeholders may be convened to finalize the planned shutdown schedule while ensuring grid security and reliability.
- Accordingly, an online meeting was convened with the concerned transmission licensees on 20.04.2026 to assess the shutdown requirements and prepare a shutdown plan considering network security and reliability.

Shutdown proposals submitted by the respective licensees are as follows:

Name of Transmission Line	Owner	Reason	Continuous Shutdown Period
400kV N. Purnea-Muzaffarpur D/C	POWERLINKS	Shifting to pile foundation for change of course of River Kamala Balan	27.05.26 – 20.06.26
400kV N. Purnea-Farakka & 400kV N. Purnea – Gokarno	POWERGRID ER-I	Shifting line to pile foundation caused due to river erosion	15.05.26 - 25.06.26 (Plan A: 2 Piles + 1 Normal) 15.05.26 – 10.06.26 (Plan B: 1 Pile +2 Normal)
400kV N. Purnea-Binaguri D/C	POWERGRID ER-II	Shifting to pile foundation for change of course of River Parman	20.06.26 – 04.07.26

During the meeting, the following points were confirmed by the respective licensees:

- All the concerned licensees confirmed that the shutdowns of the above-mentioned transmission lines involve pile foundation works of towers, which are required to be completed before the onset of monsoon for better site accessibility. Hence, simultaneous shutdown requirements cannot be avoided.

- It was also confirmed by the respective indenters that deployment of temporary ERS is not feasible to keep the lines in service due to non-availability of adequate space near the riverside and the continuous stretch of span involving river crossings.

Although availability of all these lines is essential during the hydro season, considering the vulnerability of towers and the necessity of simultaneous shutdowns, the following proposal may be deliberated:

- Shutdown of 400 kV New Purnea – Muzaffarpur D/C and 400 kV New Purnea – Farakka & 400 kV New Purnea – Gokarno may be allowed, subject to strict adherence to the approved shutdown schedule without any time overrun.
- Temporary shorting arrangement for creation of a 400 kV Farakka – Gokarno line may be ensured for reliability of power supply at Gokarno, as requested by SLDC West Bengal.
- Shutdown of 400 kV New Purnea – Binaguri D/C is proposed to be avoided during the present period due to the potential threat of islanding of ER–NER system along with Bhutan and Sikkim hydro generation. Shutdown of 400 kV New Purnea – Binaguri D/C may instead be considered during the lean hydro season, i.e., during November 2026 – January 2027.

Deliberations in the meeting

ERLDC intimated revised timeline for the shutdown proposals as requested by utilities in OCC outage meeting as follows:

Name of Transmission Line	Owner	Reason	Continuous Shutdown Period
400kV N. Purnea-Muzaffarpur D/C	POWERLINKS	Shifting to pile foundation for change of course of River Kamala Balan	07.07.26-31.07.26
400kV N. Purnea-Farakka & 400kV N. Purnea – Gokarno	POWERGRID ER-I	Shifting line to pile foundation caused due to river erosion	01.06.26 – 20.06.26 (Plan B: 1 Pile +2 Normal)
400kV N. Purnea-Binaguri D/C	POWERGRID ER-II	Shifting to pile foundation for change of course of River Parman	20.06.26 – 30.06.26

Powergrid informed:

- Piling works under the ER-I package are in advanced stage and certain pile locations had come dangerously close to the Ganga river during previous floods.
- Pile works have already been completed and pile cap works are nearing completion. Shutdown requirements are mainly related to tower erection and stringing activities.
- Since the river flow is only 5 metres away from the affected tower, shifting the tower is unavoidable due to the unpredictable change in the river course.
- Restoration work of the 400 kV New Purnea–Farakka & 400 kV New Purnea–Gokarno lines (D/C) would be carried out under Plan-B.
- It was committed that, temporary shorting arrangements would be made so as to keep the Gokarno S/s as a well a connected node with Farakka generating station.
- I.r.o 400 kV Binaguri–Purnea line , concerns were raised on Mahananda river erosion. Although erosion protection measures had already been provided at the affected tower location in the 400 kV New Purnea–Binaguri D/C line, outage of the line is required for shifting the affected tower.

ERLDC submitted :

- Failure of Binaguri–New Purnea corridor during hydro season may severely affect evacuation of:
 - Bhutan hydro generation (~2,500 MW)
 - Sikkim hydro generation (~800 MW)

- Other NER hydro generation.

Approximately 4,000 MW hydro generation depends upon this evacuation path during hydro season.

- The network condition around the 400 kV New Purnea grid was presented (**Annex B.2.12**) and explained that long outage of the 400 kV New Purnea–Binaguri D/C line during the high hydro season and any subsequent contingency could be a potential risk of separation between Eastern Region and North-Eastern Region grids with Bhutan and Sikkim generations.

OCC Decision

- A special meeting may be conducted for coordinated shutdown planning.
- The forum concurred to shutdown proposals of 400kV New Purnea-Muzaffarpur D/C and 400kV N. Purnea-Farakka and 400kV N. Purnea-Gokarno with necessary shorting arrangements to form 400kV Farakka-Gokarno.
- Forum also requested POWERGRID to reschedule the proposed outage of 400kV Binaguri-N. Purnea line and explore other avenues to safeguard the affected tower location and intimate forum.

2.13 Certification of 400 kV STU Lines of OPTCL as Non-ISTS Lines Carrying ISTS Power: OPTCL

OPTCL had filed a petition before CERC for approval of transmission tariff for the period 2014–19 in respect of the following nine Non-ISTS lines owned by OPTCL, which are carrying ISTS power, for inclusion in the computation of PoC charges and losses in accordance with the **CERC (Sharing of Transmission Charges and Losses) Regulations, 2010**.

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 Moos e	1999
2	Rengali–Keonjhar- SC	400KV	Odisha, WB	115.530	Twin ACSR Moos e	1995
3	Keonjhar–Baripada-SC	400KV	Odisha, WB	104.243	Twin ACSR Moos e	1995
4	Baripada–Kharagpur (Up Odisha Border)-SC	400KV	Odisha, WB	21.727	Twin ACSR Moos e	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

Sl. No	Line Name	Voltage Level	Connecting Status	Ckt. Kms	Type Conductor	DOCO
7	Balimela PH–Upper Sileru	220KV	Odisha, AP	24.76 0	ACSR Zebra	1982
8	Joda–JSPL SC	220KV	Odisha, JSEB	14.11 0	ACSR Zebra	1984
9	Joda–Kenduposi SC	132KV	Odisha	49.90 0	ACSR	1985

The Hon'ble CERC, vide order dated 26.02.2025 in Case No. 288/TT/2023, has approved the tariff of seven lines and recommended their inclusion in the computation of PoC charges. It may be noted that the Balimela PH-Upper Sileru line was considered under idle charges, and the Rengali-Rengali PGCIL-DC line was not considered, which appears to be inadvertent and will be apprised to the Hon'ble Commission in the subsequent tariff filing.

In this regard, it is submitted that the following regulatory provisions were considered by the Hon'ble CERC for inclusion of the above assets as **non-ISTS lines owned by OPTCL carrying ISTS power.**

Para 2.1.3 of Annexure-I of the 2010 Sharing Regulations provides as under:

"Certification of non-ISTS lines carrying inter-State power, which were not approved by the RPCs on the date of notification of the Central Electricity Regulatory Commission (Sharing of Transmission Charges and Losses) Regulations, 2009, shall be done on the basis of load flow studies. For this purpose, STU shall put up proposal to the respective RPC Secretariat for approval. RPC Secretariat, in consultation with RLDC, using WebNet Software would examine the proposal. The results of the load flow studies and participation factor indicating flow of Inter State power on these lines shall be used to compute the percentage of usage of these lines as inter State transmission. The software in the considered scenario will give percentage of usage of these lines by home State and other than home State. For testing the usage, tariff of similar ISTS line may be used. The tariff of the line will also be allocated by software to the home State and other than home State. Based on percentage usage of ISTS in base case, RPC will approve whether the particular State line is being used as ISTS or not. Concerned STU will submit asset-wise tariff. If asset wise tariff is not available, STU will file petition before the Commission for approval of tariff of such lines. The tariff in respect of these lines shall be computed based on Approved ARR and it shall be allocated to lines of different voltage levels and configurations on the basis of methodology which is being done for ISTS lines."

- In line with the above directions, ERPC, vide letter dated **12.10.2018**, had provided certification of non-ISTS lines carrying inter-state power for the period from FY 2014-15 to 2018-19.
- Following the order dated 26.02.2025, OPTCL requested ERPC, vide letters dated 30.07.2025 and 12.09.2025, to provide certification for the periods 2019-24 and 2024-29, respectively, in line with the above regulatory provisions, for filing the tariff petition before CERC. However, OPTCL has not received the required certification from ERPC to date.

- In the **231st OCC** meeting of ERPC held on 22.09.2025, it was decided that OPTCL would submit the availability percentage and tripping data of the above transmission lines for FY 2019–24 (extract enclosed as Annexure-01). Accordingly, OPTCL, vide Letter No. 341 dated 15.12.2025, has submitted the details of the above lines (copy enclosed as **Annexure-B.2.13**).
- ERPC, vide email dated 26.03.2026, has informed that, as per the CERC Tariff Regulations, the verification of non-ISTS lines carrying ISTS power falls under the purview of CTUIL. RPC shall certify the same only after receipt of the verified status of such lines.
- With reference to the above, it may be noted that CTUIL, vide letter dated 26.08.2025, has stated 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 to their availability, for which the necessary mechanism 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.**
- Further, Clause 5 of Regulation 93 of Tariff Regulation, 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 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 CERC orders and provisions of Tariff Regulations, 2024, recovery ISTS charges to STU 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 direction/Regulations.
- In view of all above, all STUs whose intra-state lines /natural ISTS lines are included in ISTS system as per CERC Sharing Regulations, 2020 are requested to obtain availability certificate 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. Copy of the letter is attached at **Annexure-B.2.13**
- **Since the views of CTUIL, as conveyed vide letter dated 26.08.2025, differ from those of ERPC, as communicated via email dated 26.03.2026, the matter is placed before the 239th**

OCC Meeting for further deliberation, as OPTCL has been incurring revenue loss since 01.04.2019.

Deliberations in the meeting

OPTCL informed:

Certification of these non-ISTS lines carrying ISTS power for the period 2014–2019 had already been completed while certification for the 2019–2024 period remains pending.

During deliberation, it emerged that under revised sharing regulations, responsibility for certification changed after April 2019. For the period April 2019 to October 2020, certification responsibility remains with RPC and thereafter, the same is entrusted with CEA/CTU.

OCC Decision

✓ ERLDC was advised to carry out the necessary power flow study to ascertain flow pattern of ISTS power through non-ISTS lines of OPTCL. OPTCL shall provide all necessary operational and power flow data to ERLDC with copy to ERPC. As certification of these non-ISTS lines has significant financial implications, OCC opined to expedite the process and ERLDC will submit study report in the next OCC.

2.14 NOC for Crossing of 765 kV D/C Angul-Paradeep and Angul-Gopalpur Transmission Lines over JIPL's 400 kV D/C Angul-DER Transmission Line: JITPL

- This is with reference to the proposals submitted by **TP Paradeep Transmission Limited and TP Gopalpur Transmission Limited seeking issuance of a No Objection Certificate (NoC) for crossing their 765 kV D/c transmission lines over JIPL's existing 400 kV D/C Angul-DER transmission line.**
- At the outset, it is respectfully submitted that JIPL's aforesaid 400 kV D/C transmission line constitutes the sole evacuation corridor for its 2 x 600 MW generating station, presently operating at full load, with the entire 1200 MW generation capacity being evacuated through the said line and no alternate evacuation arrangement presently available. Any outage, disruption, derating, shutdown, or operational disturbance to this line would therefore have serious technical, operational, commercial, and grid stability implications, affecting not only JIPL, but also downstream beneficiaries and grid stakeholders.
- The proposed crossing involves Extra High Voltage (EHV) transmission infrastructure over an operational generating evacuation corridor carrying 1200 MW continuously. Such crossing activity inherently involves substantial engineering complexity and operational sensitivity.
- OCC may deliberate and provide guidance inter alia on:
 - Treatment of deemed availability/generation in case of disruption during Execution.
 - Recovery mechanism for fixed and variable charges under affected PPAs.
 - Framework for liability, indemnity and insurance obligations.
 - Minimum standards for ToR/Crossing Agreement.
 - Compliance verification of statutory/regulatory approvals.
 - Technical standards and safety protocols for live-line execution.

Details enclosed at **Annexure B.2.14.**

Deliberations in the meeting

JITPL submitted :

- The existing 400 kV double-circuit line is the only evacuation path for its 1,200 MW thermal power station.
- During crossing construction activities, any contingency may result in complete outage of the plant.
- Since the area is cyclone-prone, concerns regarding long-term reliability also exist.

Tata Power Projects informed that:

- The project already involves crossings over multiple existing transmission lines including:
 - OPTCL 220 kV and 132 kV lines
 - Power Grid 765 kV lines
 - HPPTCL 500 kV HVDC lines
- The activity is proposed as a live-line crossing with proper safety precautions.

OCC Decision

- ✓ OCC forum observed that similar line crossings are common and there is no such regulatory provision for compensation. Thus, JIPL was advised to issue NOC to Tata Power Projects provided all applicable CEA technical standards regarding clearances and safety are being complied with.
- ✓ Tata Power Projects shall strictly follow all live-line safety procedures during crossing activities. Tower erection work shall be completed first and conductor stringing activities may be aligned with the planned annual overhauling schedule of JITPL units wherever feasible.

2.15 Demolition & reconstruction of Residential Quarters under O&M ADD-CAP 2024-29 block: Powergrid

At Rengali, Jeypore and Indravati Substations under Jeypore Talcher Transmission System: Powergrid Odisha

- Under the **Jeypore-Talcher Transmission System (JTTS)** Project, Rengali, Jeypore and Indravati Substations in Odisha were constructed and are in operation since 1990. These stations have already completed more than 35 years of service.
- As part of this project, in addition to Substation equipment's, Residential Buildings were constructed at Rengali, Jeypore and Indravati for accommodation of employees and were allotted to employees in these years. These residential buildings have already completed more than 35 years of life.
- In spite of regular maintenance now, due to ageing these residential buildings are in dilapidated condition i.e. cracks in roofs, walls & floors, seepage in roofs & walls, wear & tear of window/ doors, cisterns etc. have developed. Present condition of these residential quarters has become uninhabitable and unsafe for the employees & their family members.
- Further, as Rengali, Jeypore and Indravati Substations are vital nodes in Eastern Grid, staff quarters are very much essentially required considering reliable operation of these vital sub-stations and Grid security aspects.
- In view of the facts mentioned above, it is proposed to demolish some of these staff quarters which are in uninhabitable & unsafe condition and construct some new quarters as per the present manpower policy. Tentative estimated cost for the said work comes at all the 3 No. above mentioned substations comes to around ₹ 21 crores.

- Considering the above facts, it is requested for kind consideration for approval of ERPC for demolition and reconstruction of Residential Quarters at Rengali, Jeypore and Indravati Substations under O&M ADD-CAP 2024-29 block under Jeypore Talcher Transmission System (JTTS).

At Malda, Maithon & Durgapur S/S: Powergrid ER-II

Durgapur S/S, Maithon S/S & Malda S/S of ER-II are more than 25 years in service as per details given below:-

Sl No.	Name of Sub-station	Seismic Zone	DOCO	Package
a	Maithon	3	1992	KTPS
b	Malda	4	1986	CTS
c	Durgapur	3	1987	FSTPP

Due to natural ageing/wear and tear the condition of Residential Quarters for employees at above mentioned sub-station have got seriously damaged. Buildings in the locations mentioned are of load bearing type structure (non RCC frame) and are in use for 30 years. With the passage of time, the said constructions have suffered severe structural and non-structural damage like cracks in wall, roof slab, spalling, differential settlement, seepages, scaling, popping out etc. Repairing of buildings at this stage will result in huge financial expenditure and will not provide any significant structural strength. Thus, repairing of these building at this stage is not viable.

Health assessment studies of the buildings have been carried out through third party reputed institute NIT Patna at POWERGRID Durgapur SS, Maithon SS & Malda SS. NIT Patna's report also highlighted that the condition of the buildings at the above mentioned sub-station is in very poor condition and based on the assessment, the institute indicated that repairing of said buildings at this stage is not feasible and recommended for demolition and re-construction of new buildings.

CERC vide order dated:28.04.2023 against petition no:276/MP/2022 for similar proposal have granted in-principle approval for incurring ACE during 2019-24 tariff period under Regulation 25(2)(a) of the 2019 Tariff Regulations towards re-construction of residential/non-residential buildings at 11(Eleven) Sub-stations of POWERGRID across different regions.

In line with that, for construction of new residential buildings at subject mentioned stations a tentative cost-estimate has been prepared which is tabulated below:-

In view of above, it is proposed to ERPC forum for according in-principle approval for incurring ACE during 2024-29 tariff block towards re-construction of residential / non residential buildings and associated services under clause © of sub-clause 2 of Regulation 25 of the expenditures (ACE and de-capitalization), if any, towards replacement of the said buildings.

Deliberations in the meeting

Powergrid presented the proposal for reconstruction of residential Quarters under O&M ADD-CAP 2024-29 block at Rengali, Jeypore, Indravati, Malda, Maithon & Durgapur Substations.

WBSEDCL raised objection on the proposal citing that similar proposals have been previously disagreed in various OCC as well as ERPC meetings.

OCC Decision

The forum decided that the decision taken in previous ERPC meeting (including 45th ERPC meeting dated 26.03.2022) will prevail and thus, the proposal was not agreed with.

2.16 Shutdown proposal of Thermal generating units: ERPC

Shutdown request of Kamalanga TPS: GMR

- The boiler operating licence of Unit 2 is expiring on **23rd July 2026** and **Unit 1** is expiring in **27th July 2026** .
- Moreover , in critical safety and reliability consideration, GKEL Uni#2 is facing significant operational challenges due to incipient risk to stable furnace pressure control caused by increasing in Bag Filter DP and reduced the operating margin of the ID Fan. With respect to the progression of parameters ,extending the operation of the Unit-2 beyond June 3rd week will pose a risk to safety and reliability of the unit.
- Considering that GKEL Unit#1 Boiler license is expiring on **July 27th**, we are forced to take an maintenance outage of Unit 2 from June 3rd week/last week and bring it back before Unit 1 license expiration.
- In view of the critical safety, reliability, and statutory compliance considerations, it is requested , kindly give approval for taking Unit-2 for annual overhauling as proposed from June 21st 2026 for a duration of 22days.**

Sl. No.	Plant/Unit Name	Capacity (MW)	Shutdown Proposal Period from Generators
2	GMR U#2	350	21.06.2026 to 12.07.2026
3	GMR U#1	350	19.07.2026 to 09.08.2026

Deliberations in the meeting

GMR requested for shutdown of the Unit#1 from 21st June 2026 due to expiry of boiler license.

SLDC Bihar submitted:

Despite return of NTPC units, Bihar may continue to face significant peak demand deficits during June–September.

OCC Decision

- ✓ *OCC opined to convene a special online meeting after synchronisation of major NTPC units wherein the proposal for S/D of GMR units shall be reviewed subsequently considering updated system conditions.*

2.17 Certification of FRO in respect of DVC Generating Stations for FY-2026-27: DVC

- In line with the Clause No. 4.4 (b) of the CERC Approved NLDC procedure for computation of Average Monthly Frequency Response Performance, Beta 'β', SLDCs have been directed to assess the FRO (Frequency Response obligation) in respect of the Generating Stations, whose tariff is determined by CERC & falling under jurisdiction of the SLDC. Accordingly, SLDC, DVC has

proposed the following methodology for distribution of FRO among all the DVC Generating Stations since these generators are under Section 62 of the EA-2003.

- FRO as allotted to the DVC State is = **459 MW/Hz** for **Solar Hrs** & **295 MW/Hz** for **Non-Solar Hrs** for **FY-2026-27** [ref. **Annexure-B.2.17: NLDC notification of Assessment of FRO of each control area under RLDC jurisdiction for FY-2026-27, Revision-2**].

Step-I: The Total MU demand-met data of DVC Control area has been computed from the SCADA for last FY and accordingly average MW demand data has been assessed.

Step- II: It has been assumed that ~ 4% of the Average demand contributes to the DVC C/A frequency response during any Frequency excursion event - Demand Response. **Ref. :** Methodology-III of the **Minutes of 48th FOLD meeting (Annexure-B.2.17)** produced below:

Method-III of 48th FOLD Minutes

FRO = (Average Generation of individual generating station/ (Sum of Avg. generation of all considered generating stations)) X (FRO allotted to state control area - Demand Response (=4% of Avg. Demand per Hz))

The demand response to be considered equal to the maximum 4% of Average Demand per Hz.

Step -III : The remaining FRO will be accountable to the Generating Stations under DVC Control area:
 = (FRO allotted to DVC C/A – Demand Response of 4%)

Step- IV: Total MU Generation and the Avg. MW Generation for each Station has been computed based on the monthly ORT Report, as received from Corporate OS Dept., DVC of the last FY. The remaining FRO has been allocated among the Plants in pro-rata of Avg. MW Generation for each station, as derived from the monthly ORT reports.

The detail computation & station-wise FRO figures has been depicted in the below table:

The Ex-bus Generation data of Generating Stations in MU for Last FY (2025-26) :

AG(MU)	Data Source ORT Data from Stations												
	BTPS	DSTPS	KTPS	RTPS	CTPS	MTPS-7	MTPS-7&8	MTPS-5	MTPS-6	MTPS-5&6	MTPS-1-3	MTPS-4	Total Thermal Generation
Apr-25	0.00	537.04	580.44	612.48	255.83	283.06	547.20	138.75	129.16	267.91	294	115	3209
May-25	72.12	525.86	531.15	489.32	263.54	268.36	511.16	109.25	131.55	240.80	310.78	115.10	3060
Jun-25	244.24	423.30	446.88	607.68	157.75	261.32	499.75	139.27	137.95	277.22	307.02	115.18	3079
Jul-25	282.15	536.95	531.45	588.66	119.48	240.15	506.80	130.06	128.57	258.63	328.11	111.92	3264
Aug-25	284.90	386.77	508.65	582.00	150.45	261.92	523.45	123.69	123.90	247.59	304.10	108.98	3097
Sep-25	261.54	388.88	447.94	371.53	205.45	250.74	500.58	119.61	101.05	220.65	321.55	104.51	2823

AG(MU)	Data Source ORT Data from Stations												
	BTPS	DSTPS	KTPS	RTPS	CTPS	MTPS-7	MTPS-7&8	MTPS-5	MTPS-6	MTPS-5&6	MTPS-1-3	MTPS-4	Total Thermal Generation
Oct-25	275.58	494.06	460.21	324.85	233.82	248.37	501.69	116.47	114.84	231.31	293.29	103.85	2919
Nov-25	107.47	435.18	494.09	382.83	236.24	249.19	495.34	121.45	120.41	241.86	297.46	28.28	2719
Dec-25	296.04	523.03	413.51	618.09	294.57	268.65	537.42	133.97	120.20	254.17	329.14	53.03	3319
Jan-26	170.77	538.25	303.41	573.82	303.96	270.42	517.12	120.24	48.76	168.99	221.49	116.85	2915
Feb-26	214.12	480.37	444.50	534.79	271.25	226.34	459.87	123.69	25.35	149.05	193.25	108.99	2856
Mar-26	191.29	586.29	532.80	731.64	322.57	0.00	268.52	142.40	132.84	275.23	226.22	124.00	3259
Total MU	2400	5856	5695	6418	2815	2829	5869	1519	1315	2833	3426	1205	36518
Avg. MW	274	668	650	733	321	323	670	173	150	323	391	138	4169

Accordingly, Station-wise FRO has been segregated as below for **FY-2026-27**:

FRO	Solar Hrs	Non-Solar hrs
DVC State	459	295
DVC Avg. Demand (MW) <i>[*Average DVC Demand of 2025-26 is ~2830 MW. Extrapolated as 2900MW in 26-27]</i>	2900	2900
DVC Avg. generation (MW)	4169	4169
Demand Response (4% of Avg. Demand)	116	116
Required Generator Response (State FRO - Demand Response)	343	179

Station	Solar Hrs	Non-Solar Hrs
BTPS	23	12
DSTPS	55	29
KTPS	53	28
RTPS	60	31
CTPS	26	14
MTPS-7&8	55	29

MTPS-5&6	27	14
MTPS-1-3	32	17
MTPS-4	11	6
	343	179

MTPS-5	14	7
MTPS-6	12	6
MTPS-7	27	14

Stations	May-25	Jun-25	Jul-25	Sep-25	Oct-25	Dec-25	Jan-26	Feb-26	Mar-26	Overall Avg. Yearly FRP
	β	β	β	β	β	β	β	β	β	β
BTPS	0%	100%	76%	24%	100%	4%	40%	100%	100%	68%
DSTPS	100%	50%	43%	71%	100%	0%	81%	100%	71%	68%
KTPS	100%	51%	2%	33%	100%	100%	100%	100%	23%	68%
RTPS	0%	0%	0%	32%	0%	0%	18%	47%	18%	13%
CTPS	100%	20%	50%	33%	0%	0%	24%	100%	0%	36%
MTPS-7&8	100%	100%	9%	67%	28%	100%	61%	100%	0%	63%
MTPS-5&6	100%	50%	27%	33%	0%	100%	6%	31%	100%	50%
MTPS-1-3	100%	0%	50%	62%	39%	0%	46%	100%	100%	55%
MTPS-4	0%	70%	46%	12%	0%	0%	44%	33%	42%	27%
MTPS-7	100%	100%	0%	96%	100%	100%	72%	71%	0%	80%
MTPS-5	100%	50%	67%	33%	93%	100%	50%	33%	100%	70%
MTPS-6	100%	50%	0%	33%	0%	100%	0%	0%	100%	48%

This is placed for necessary approval of the Forum.

Deliberations in the meeting

OCC Decision

OCC noted and the issue referred to Commercial wing of ERPC secretariat for further necessary action.

2.18 Data Collection for monitoring Pan-India Captive Generating Capacity: ERPC

- Present electricity generation figures reflect only the power generated by the utilities and do not capture the gross electricity generation from Captive Power Plants (CPPs). Accounting for

generation from these sources is essential to arrive at a comprehensive assessment of total energy generation and actual power consumption beyond utility-based generation.

- In the meeting taken by **Secretary (Power)**, Govt of India on **17.12.2025**, it was decided that the State Chief Electrical Inspectors (CEIs) / State Load Despatch Centres (SLDCs) shall act as the nodal agencies for collection of **Captive Generation & Open Access** data for their respective States.
- At present, the **Central Electricity Authority (CEA)** collects details of **Captive Power Plants** having an **installed capacity of 0.5MW** and above in Format-21 prescribed under **Central Electricity Authority (Furnishing of Statistics, Returns and Information) Regulations, 2007**.
- In order to collect monthly data of captive generation, an online portal (<https://intranet.cea.gov.in/captiveNew/>) for data collection has been developed in CEA and the monthly data collection process needs to be streamlined through this portal with the involvement of **Regional Power Survey Offices (RPSOs)**.

□ The current status of CPP registration for Eastern Region is as follows:

1. Total No. of CPPs as per Format 21 replies in FY2024-25: 226 Nos.
2. No. of CPPs registered on the portal from FY2024-25 list: 125 Nos.

Deliberations in the meeting

- *OCC was apprised that Ministry of Power has mandated collection of captive generation data and in this regard, CEA has developed a dedicated portal for registration and monthly data submission by captive generators.*
- *RPSO, CEA delivered a brief presentation on Captive Power Portal of CEA and apprised that, as on date, 125 entities of the Eastern Region have registered successfully on the CEA-Captive Power Portal (Registration Status Of CPPs attached at **Annex B.2.18**)*

OCC Decision

*OCC advised concerned SLDCs as well as DISCOMs in ER to ensure that all CPPs under their jurisdiction get registered on the said portal (<https://intranet.cea.gov.in/captiveNew/>) at the earliest and ensure submission of monthly captive generation data from April 2026 onwards. The modalities of registration and data submission on Captive Power Portal of CEA is enclosed at **Annex B.2.18**.*

ADDITIONAL AGENDA

2.19 Review Of Flue Gas Desulfurization For Ongoing And Operational And Upcoming Category 'C' Of Thermal Power Projects of NTPC: GRIDCO

- Aforesaid matter was discussed in 55th TCC & ERPC meeting held on 16.12.25 and 17.12.25 in Kalimpong, West Bengal where in **GRIDCO requested to stop the operation of the FGD System at Darlipali STPS, as it is no longer mandatory under the revised MoEF&CC notification. NTPC was requested to furnish the project-wise status of FGD implementation for all its generating stations in the Eastern Region along with the detailed financial assessment to compare the cost benefit of operating with FGD versus without FGD, ensuring beneficiaries are not burdened with unnecessary CAPEX and OP-EX.**
- After detailed deliberation, TCC also noted that Darlipalli STPS falls under Category 'C' thermal power plant. As per latest categorisation of TPPs by MoEF&CC, the plants fall under category 'C' are not required to install FGDs. Additionally, as per the minutes of meeting held on 12.12.2025 chaired by Secretary, Power Gol, for TPPs which have already installed FGD, the future course may be mutually decided by respective stakeholders.
- Accordingly, TCC advised NTPC to obtain consent of all beneficiaries for operation of the FGD system at NTPC Darlipalli STPS at the earliest and **the pros & cons of running the FGD may be analyzed at OCC forum.**
- **GRIDCO through correspondences letter dtd 19.01.2026, 17.02.2026** requested NTPC to obtain beneficiary consent for continued FGD operation as per 55th TCC-ERPC advice. Suggested ceasing of FGD Installation wherever feasible, at other category "C" Stations which will reduce the future financial burden on the consumers and did not give consent for operation of the FGD at Darlipali. **(Copy of the letter dtd 19.01.26 and 17.02.26 attached).**
- **In the above backdrop, NTPC may represent whether consent of all other beneficiaries obtained or not and as advised the pros and cons of running FGD are to be discussed by NTPC.**

Deliberations in the meeting

Gridco submitted:

- *Revised MoEF&CC notifications no longer mandate FGD operation for Category-C plants. Accordingly, discontinuation of FGD operation at Darlipali had been requested to NTPC.*
- *NTPC was also requested to furnish project-wise implementation status along financial comparison between operation with FGD and without FGD*

NTPC informed:

- *Projects where FGD implementation had not yet started have already been stopped.*
- *Darlipali FGD systems are already commissioned and operational:*
 - *Unit-1 commissioned on 27 January 2025*
 - *Unit-2 commissioned on 1 July 2024*
- *As per CEA guidelines, CAPEX recovery may continue, but OPEX recovery may not be applicable.*

OCC Decision

OCC referred to TCC for further deliberation.

2.20 Advisory regarding preparedness measures for ensuring reliable power supply and grid stability during Summer 2026:ERPC

- In view of the heat risks anticipated during the ongoing summer season certain priority actions have been identified by the National Disaster Management Authority (NDMA). Accordingly, it is advised to take necessary coordinated measures for ensuring uninterrupted power supply, grid security, and reliable operation of the power system during peak demand conditions. Special attention may be given to ensuring uninterrupted electricity supply to critical infrastructure and essential services such as hospitals, water supply systems, emergency services, cooling centres, transport systems, and other critical facilities during heatwave conditions.
- In this regard, the following measures may be closely monitored and implemented:
 - Fuel Availability, inter-regional transfer capacities may be monitored to resolve any incipient issue.
 - Proper maintenance of equipment may be ensured to minimize forced outages and maintain maximum possible generation availability on bar. Emergency Restoration Systems (ERS) may be kept in readiness to address urgent restoration requirements, and all planned maintenance activities may be completed within the committed timelines to ensure reliable system operation during the summer period.
 - Closely monitor progress of under-construction thermal and hydro generating units targeted for commissioning by June 2026 and facilitate necessary coordination for timely availability.
 - Facilitate and expedite grid connectivity, operational clearances, and system readiness for renewable energy projects, particularly wind power plants and Battery Energy Storage Systems (BESS).
 - Ensure optimized scheduling of hydro generation for conservation of reservoir storage and utilization during peak demand periods.
 - Maintain close coordination among NLDC, RLDCs, SLDCs, DISCOMs, and transmission utilities for advance demand forecasting, reserve management, inter-regional power transfer optimization, and contingency preparedness.
- The evolving demand-supply situation may be closely monitored and all necessary operational measures to ensure reliable and secure grid operation during Summer 2026 may be taken.

Deliberations in the meeting

OCC Decision

OCC noted and opined to prioritize the key actions i.r.o Summer preparedness for ensuring grid stability being delineated by National Disaster Management Authority and Ministry of Power(Govt of India).

2.21 Mapping of SPS in the SCADA Display for real time monitoring of all SPS: ERLDC

Real-time Telemetry of Special Protection Scheme (SPS) signals to the ERLDC Control Centre is essential for effective system monitoring and ensuring grid security. In this regard, NLDC has developed Guidelines on “Interfacing Requirements” through stakeholder consultations, in compliance with Regulation 7.4 read with Regulation 14.2 of the Communication System for inter-State Transmission of Electricity Regulations, 2017. The same was approved by CERC on 19.01.2024 (**Annexure**). As per the approved guidelines, all users are required to-

- Ensure real-time telemetry of SPS signals to respective control centers.
- Comply with relevant IEC standards.

- Share complete interface details with the concerned control center.

SI No	Description	Analog Points	Digital Points	Protection Signal
1	SPS Signal	NA	DIGITAL Enable/Disable, Operated/No Operated (Condition/Logic Wise)	NA

ERLDC has followed up vide emails dated 08.10.2025 and 23.03.2026 regarding transmission of the above digital points. However, at present, only Ind-Bharat SPS has been mapped in SCADA, while mapping of the remaining SPS is still awaited.

The Present status of SPS mapping is given below:

SI No	Name of SPS	Owner	SPS mapping status (YES/No)
1	SPS for HVDC Talcher-Kolar	NTPC Talcher (TSTPP)	NO
2	SPS for 220 kV EMSS-Subhashgram D/c	CESC	NO
3	SPS for generation runback at JIPL	JIPL	NO
4	SPS for 400/220 kV ICTs at Subhashgram	PG ER-II	NO
5	SPS for evacuation of JSW EUL generation through interim arrangement	JSW EUL/OPGC	YES
6	SPS for 400/220 kV ICTs at Rajarhat	PG ER-II	NO
7	SPS for 220 kV Maithon-Dumka D/c	JUSNL	NO
8	SPS at 132 kV Rammam HEP	Rammam (WB)	NO
9	SPS for secure power evacuation of North Karanpura STPS	North Karanpura STPS	NO
10	SPS at Sterlite Power (Sterlite)	Sterlite	NO
11	SPS at PVUNL	PVUNL	NO
12	SPS at BTPS	DVC	NO

Deliberations in the meeting

OCC Decision

All concerned entities as listed above (except JSW) shall coordinate with ERLDC to ensure proper integration and visibility of SPS signals in SCADA systems.

3. PART-C: ITEMS FOR INFORMATION

3.1. ER Grid performance during April 2026

The average and maximum consumption of Eastern Region and Max/Min Demand (MW), Energy Export for the month April -2026 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)
632 MU	723 MU, 25.04.2026	32758 MW, 24.04.2026 at 22:41 Hrs.	16679 MW, 29.04.2026 at 20:59 Hrs.	1073	1423

Deliberations in the meeting

The grid performance of ER for the month of April, 2026 was highlighted.

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.

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 **07.05.2026**):

STATIONS		14.01.2026 13:38 hrs	14.01.2026 14:05 hrs	14.01.2026 14:09 hrs	30.01.2026 11:08 hrs	13.02.2026 12:14 hrs	22.02.2026 22:56 hrs	22.02.2026 23:00 hrs	03.03.2026 11:42 hrs	13.04.2026 11:00 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									
PVUNL	ISGS									
Dikchu	IPP									
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	07.05.2026									
	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

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.

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. Latest Forecast and Resource Adequacy Data receipt status at ERLDC is shown below:

4. PART-D: OPERATIONAL PLANNING

4.1. Major Thermal Generating Units/Transmission Element outages/shutdown in ER Grid (as on 07-05-2026)

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	FSTPP	WEST BENGAL	NTPC	3	200	Problem in Excitation System	06-Apr-2026
2	NORTH KARANPURA	JHARKHAND	NTPC	2	660	High vibration and abnormal sound from HP Turbine	24-Mar-2026
3	BAKRESHWAR	WEST BENGAL	WBPDC	1	210	BTL and other allied maintenance jobs.	06-May-2026
4	BARAUNI TPS	BIHAR	NTPC	9	250	Boiler tube leakage	04-May-2026
5	RTPS	DVC	DVC	2	600	High Turbine Vibration	14-Apr-2026
6	MEJIA TPS	DVC	DVC	2	210	Stator earth fault	07-Jan-2026

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

SL No	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
NA							

Hydro Unit Outage Report: -

S. NO	STATION	STATE	AGENCY	UNIT NO	CAPACITY (MW)	REASON(S)	OUTAGE DATE
1	BURLA HPS/HIRAKUD I	ODISHA	OHPC	5	43.65	Annual Maintenance	19-Jan-2026
2	BALIMELA HPS	ODISHA	OHPC	5	60	Repair and maintenance work	16-Jan-2025
3	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 work from 00:00 hrs of 16.01.25	06-Jan-2025
4	CHIPLIMA HPS / HIRAKUD II	ODISHA	OHPC	1	24	Capital Overhauling	15-Dec-2023
5	TEESTA HPS	SIKKIM	NHPC	1	170	Sudden cloudburst at glacier fed LOHNAK Lake followed by huge	04-Oct-2023

6	TEESTA HPS	SIKKIM	NHPC	2	170	inrush of water in Teesta River and damage of Teesta III Dam & downstream Powerhouses	04-Oct-2023
7	TEESTA HPS	SIKKIM	NHPC	3	170		04-Oct-2023
8	TEESTA STG III Hep	SIKKIM	TUL	1	200		04-Oct-2023
9	TEESTA STG III Hep	SIKKIM	TUL	2	200		04-Oct-2023
10	TEESTA STG III Hep	SIKKIM	TUL	3	200		04-Oct-2023
11	TEESTA STG III Hep	SIKKIM	TUL	4	200		04-Oct-2023
12	TEESTA STG III Hep	SIKKIM	TUL	5	200		04-Oct-2023
13	TEESTA STG III Hep	SIKKIM	TUL	6	200		04-Oct-2023
14	U. KOLAB	ODISHA	OHPC	2	80	Heavy Leakage in guide vane	22-Jan-2026
15	BURLA HPS/HIRAKUD I	ODISHA	OHPC	4	32	Annual Maintenance	21-Apr-2026

4.2. Long outage report of transmission Element (MORE THAN 01 WEEK) (As on 07.05.2026):

Transmission Element / ICT	Outage From	Reasons for Outage
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. 220KV S/C Farakka-Lalmatia Transmission Line is in anti-theft charging condition from Loc no 248 (Lalmatia end) to Loc no 33. Foundation, erection, and stringing progress from loc 1 to 32
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 Earth wire between tension tower no. 218-237 in same line. The lines from Barhi (DVC) will be terminated at Barachatti (BH) and new line to be constructed from Barachatti to Rajgir (BH)
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 Earth wire between tension tower no. 218-237 in same line. The lines from Barhi (DVC) will be terminated at Barachatti (BH) and new line to be constructed from Barachatti to Nalanda (BH)
400KV-RANGPO-TEESTA-V-1	04-10-2023	Tower near gantry of Teesta V HEP collapsed during GLOF event in Oct 2023 also leading to damage in powerhouse. Tower subsequently

		erected on 15.06.2024. Teesta V HEP GIS damaged due to hill sinking on 20.08.2024. Presently, GIS under restoration and generation expected by 31.03.2026.
400KV-RANGPO-TEESTA-V-2	04-10-2023	Tower near gantry of Teesta V HEP collapsed during GLOF event in Oct 2023 also leading to damage in powerhouse. Tower subsequently erected on 15.06.2024. Teesta V HEP GIS damaged due to hill sinking on 20.08.2024. Presently, GIS under restoration and generation expected by 31.03.2026.
132KV-CHANDIL-MANIQUI-1	05-06-2024	Power assistance withdrawn
400KV/220KV 315 MVA ICT 1 AT NORTH KARANPURA	12-09-2024	Tripped on Differential protection
400KV/220KV 315 MVA ICT 1 AT TSTPP	01-11-2024	Tripped on PRD protection. Current status: The failed transformer has reached the vendor, the repair scope has been finalized, the PR is created, and the PO is in the advanced stage of processing. The repair, transportation, installation, and commissioning are expected to take about six months, with the unit likely to be available by 30.06.2026. A spare 315 MVA ICT on loan from PGCIL is being explored, and their response is awaited.
400KV/220KV 315 MVA ICT 2 AT MEJIA-B	20-01-2025	315 MVA ICT-2 at MTPS-B got damaged while charging from 220kV GIS bay. New procurement of ICT has been taken up & installation of the same may complete by end of Mar'28.
400KV-DIKCHU-RANGPO-2	05-08-2025	Damaged insulator replacement work. While charging the line bus bar protection operated at Dikchu. Issue in GIS chamber of Y ph Isolator between line cb and bus 2, Powder formation inside isolator chamber, Revival Expected by December 25 as per availability of GE person. Presently negotiation in place for offer
400KV MAIN BUS - 2 AT DIKCHU	05-08-2025	Bus bar protection operated, Issue in GIS chamber of Y ph Isolator between Rango ckt 2 line cb and bus 2, Powder formation inside isolator chamber, Revival Expected by December 25 as per availability of GE person. Presently negotiation in place for offer
220KV-PATNA-KHAGAUL-1	24-09-2025	LBB relay operated during rectification of DC grounding defect by M/S KRR at GSS khagaul. Earlier w.e.f 02-08-2025 12:06 Hrs, Tower No. 63 has bent significantly on one side
220KV-BIDHANNAGAR-WARIA-1	29-10-2025	To control loading of 220 kV Waria-Mejia D/C (Anti-theft charged from Waria end.)
220KV-BIDHANNAGAR-WARIA-2	29-10-2025	Initially line was opened to control line loading. In between B-phase CT Blast at Bidhannagar end. Now Line is charged as anti-theft from Waria end to control loading of 220 kV Waria-Mejia D/C.

220KV-BALIMELA-UPPER SILERU-1	21-11-2025	Idle charged from U. Sileru end. Power drawl by Odisha halted due to non-concurrence by Andhra Pradesh.
132KV-MADHEPURA (BH)-SAHARSA-1	18-12-2025	To control the line loading. Line kept idle charged from Saharsa.
220KV-RAJARHAT-NEW TOWN(AA-II)-2	08-02-2026	For cable swapping job with RAJARHAT-NEWTOWN IIC-2
132KV-PATRATU-PATRATU-2	09-02-2026	Power assistance withdrawn
400KV/220KV 315 MVA ICT 1 AT KODERMA	10-02-2026	DGA violation -rising actylene trend
132KV-RANGIT-SAGBARI-1	28-02-2026	Necessary jumpering modification at Sagbari station (EPDS)
400KV-TEESTA-III-RANGPO-1	15-03-2026	Rangpo: B_N, DEF, 0.68 kA
765KV-JHARSUGUDA-DHARAMJAIGARH-3	16-03-2026	For diversion of existing 765kv D/C Jharsuguda – Dharamjaygarh Ckt 3&4, due to upcoming railway line of IRCON
765KV-JHARSUGUDA-DHARAMJAIGARH-4	16-03-2026	For diversion of existing 765kv D/C Jharsuguda – Dharamjaygarh Ckt 3&4, due to upcoming railway line of IRCON
HVDC 800KV ALIPURDUAR (PG) Pole 3	19-03-2026	H/T ON VOLTAGE REGULATION
HVDC 800KV ALIPURDUAR (PG) Pole 4	19-03-2026	H/T ON VOLTAGE REGULATION
132KV-BANKA (PG)-SULTANGANJ-1	19-03-2026	For reconductoring work in transmission line.
400KV/220KV 315 MVA ICT 2 AT LAPANGA	14-04-2026	Differential Protection Operated causing tripping of ICT. As reported multiple bushings damaged. Expected restoration timeline yet to be intimated by OPTCL.
220KV-RAJARHAT-NEW TOWN(AA-II)-1	18-04-2026	Shutdown to attend smoke detected from underground cable
400KV-BINAGURI-NORBUGANG-1	20-04-2026	Binaguri end: RN fault, 108 km, 3.45 kA
132KV-ARRAH (PG)-JAGDISHPUR-1	23-04-2026	Site initiated Hand Trip
220KV-BUDHIPADAR-KORBA-2	24-04-2026	For modification/diversion work between loc. No. 77 (A+3m) – 80 (A+0m) (RL – 1.032 KM). Erection of 04 No. BN60 type towers and Dismantling 02 No. existing towers- 78 & 79 on request of M/s IRCON Ltd Bilaspur due to construction of new BG Urga- Dharamjaigarh Rail Corridor.
132KV-PATRATU-PATRATU-1	25-04-2026	For system requirement power order change
765KV-ANGUL-JHARSUGUDA-4	26-04-2026	H/T ON VOLTAGE REGULATION

Deliberations in the meeting

Members noted.

4.3. Commissioning of new units and transmission elements in Eastern Grid in the month of April -2026

The details of new units/transmission elements commissioned in the month of April-2026 based on the inputs received from beneficiaries:

NEW ELEMENTS COMMISSIONED DURING April, 2026							
उत्पादन इकाइयाँ / GENERATING UNITS							
क्र. सं. No.	स्थान Location / Pooling Station	मालिक/यूनिट का नाम OWNER/UNIT NAME	यूनिट संख्या/स्रोत Unit No/Source	संकलित क्षमता (मेगावाट) Capacity added (MW)	कुल/स्थापित क्षमता (मेगावाट) Total/Installed Capacity (MW)	दिनांक DATE	टिप्पणी Remarks
NIL							
आई.सी.टी./जी.टी./एस.टी. / ICTs/ GTs / STs							
क्र. सं. No.	एजेंसी/मालिक Agency/ Owner	उप-केन्द्र SUB-STATION	आईसीटी संख्या ICT NO	वोल्टेज (केवी) Voltage Level (kV)	क्षमता (एमवीए) CAPACITY (MVA)	दिनांक DATE	टिप्पणी Remarks
1	NTPC	NTPC KAHALGAON	ICT-3	400KV/132KV	200	08-04-2026	
2	NTPC	NTPC KAHALGAON	ICT-4	400KV/132KV	200	08-04-2026	
3	OPGC Ltd	OPGC	ICT-1	400KV/11KV	50	08-04-2026	
4	OPGC Ltd	OPGC	ICT-2	400KV/11KV	50	08-04-2026	
NIL							
प्रेषण लाइन / TRANSMISSION LINES							
क्र. सं. No.	एजेंसी/मालिक Agency/ Owner	लाइन का नाम LINE NAME	लंबाई (किमी) Length (KM)	कंडक्टर प्रकार Conductor Type	दिनांक DATE	टिप्पणी Remarks	
NIL							
लिलो / प्रेषण लाइन की पुनर्व्यवस्था / LILO/RE-ARRANGEMENT OF TRANSMISSION LINES							
क्र. सं. No.	एजेंसी/मालिक Agency/ Owner	लाइन का नाम / लिलो पर Line Name/LILO at	लंबाई (किमी) Length (KM)	कंडक्टर प्रकार Conductor Type	दिनांक DATE	टिप्पणी Remarks	

NIL						
बस/लाइन रिएक्टर / BUS/LINE REACTOR						
क्र. सं. Sl. No.	एजेंसी/मालिक Agency/Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	रेटिंग (एमवीएआर) Rating (MVAr)	दिनांक DATE	टिप्पणी Remarks
1	PGCIL ER-II	400 kV, 63 MVAr Switchable Line Reactor (along with associated 450 Ohm NGR, including NGR bypassing scheme) for 400 kV Malda-Purnea Ckt-1 at Malda SS.	400	63	23-04-2026	
एच.वी.डी.सी./ए.सी फिल्टर बैंक/फैक्ट्स डिवाइस संबद्ध प्रणाली / HVDC /AC Filter bank / FACTS DEVICE associated System						
क्र. सं. Sl. No.	एजेंसी/मालिक Agency/Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks
NIL						
बस - बे / BUS - BAYS						
क्र. सं. Sl. No.	एजेंसी/मालिक Agency/Owner	एलेमेंट का नाम Element Name	उप-केन्द्र SUB-STATION	वोल्टेज (केवी) Voltage Level (kV)	दिनांक DATE	टिप्पणी Remarks
1	NTPC	132KV MAIN BAY OF 200 MVA ICT-3 AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
2	NTPC	132KV BUS SECTIONALIZER BAY OF (132KV MAIN BUS-3 AND 132KV MAIN BUS-5) AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
3	NTPC	132KV MAIN BAY OF 200 MVA ICT-04 AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
4	NTPC	132KV BUS SECTIONALIZER BAY OF (132KV MAIN BUS-4 AND 132KV MAIN BUS-6) AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
5	OPGC Ltd	400KV TIE BAY OF (50 MVA ICT-1 & 50 MVA ICT-02) AT OPGC	OPGC	400 KV	08-04-2026	

6	NTPC	132KV BUS SECTIONALIZER BAY OF (132KV MAIN BUS-4 AND 132KV MAIN BUS-6) AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
7	NTPC	132KV BUS COUPLER BAY-1 AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
8	NTPC	132KV BUS COUPLER BAY-2 AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
9	NTPC	400KV MAIN BAY OF 200 MVA ICT-03 AT KAHALGAON (MAIN-I)	KAHALGAON	400 KV	09-04-2026	
10	NTPC	400KV MAIN BAY OF 200 MVA ICT-4 AT KAHALGAON(MAIN-I)	KAHALGAON	400 KV	09-04-2026	
11	NTPC	400KV MAIN BAY OF 200 MVA ICT-4 AT KAHALGAON(MAIN-I)	KAHALGAON	400 KV	13-04-2026	
12	NTPC	132KV MAIN BAY OF ST -05 AT KAHALGAON	KAHALGAON	132KV	25-04-2026	
13	NTPC	132KV MAIN BUS-3 AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
14	NTPC	132KV MAIN BUS-5 AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
15	NTPC	132KV MAIN BUS-6 AT KAHALGAON	KAHALGAON	132KV	08-04-2026	
16	NTPC	132KV MAIN BUS-4 AT KAHALGAON	KAHALGAON	132KV	08-04-2026	

Deliberations in the meeting

Members noted.

4.4. UFR operation during the month of April 2026

Frequency profile for the month as follows:

MONTH	MAX	MIN	% LESS IEGC BAND	% WITHIN IEGC BAND	% MORE IEGC BAND
	(DATE/TIME)	(DATE/TIME)			
April 2026	50.39 (on 19-Apr-26 at 17:04 Hrs.)	49.45 (on 03-Apr-26 at 10:19 Hrs.)	7.8	73.8	18.4

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

Deliberations in the meeting

Members noted.

Meeting ended with a vote of thanks to the chair.



Annex A

Participants in 239th OCC Meeting

Venue: ERPC Conference Hall, Kolkata

Time: 10:30 Hrs.

Date: 13.05.2025 (Wednesday)







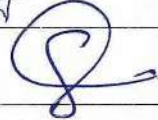
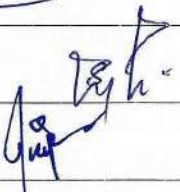


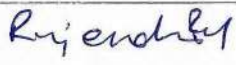

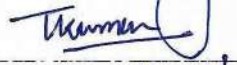
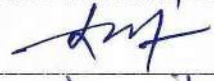

Sl.	Name	Designation	Organisation	Contact No.	E-mail Id	Signature
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2	S Banerjee	Executive Director	ERLDC	9433041823	surajit_banerjee@grid-india.in	
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10	RAKESH KUMAR PRADHAN	Ch. Mgr.	ERLDC	9831337570	rkpradhan@grid-india.in	
11	सौरभ मंडल	सु. प्रबन्धक	ERLDC	9402102354	souravmandal@grid-india.in	
12	Preetam Banerji	ACE,	WBSECL	7003871189	preetban72@gmail.com	
13	SHOUVIK BANERJEE	CE, SLD, WB	WBSETCL	9434910379	s.ce.wbsetcl@gmail.com	
14	ARNAB BASU	DE(E), SLD, WB	WBSETCL	9434910978	arnab.basu@wbsetcl.in	
15	Joydeep Sengupta	ACE, CPD	WBSETCL	9474910547	cpd.wbsetcl@gmail.com	

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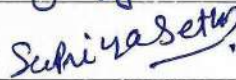
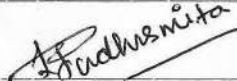

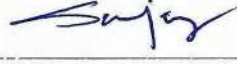






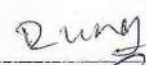


Sl.	Name	Designation	Organisation	Contact No.	E-mail Id	Signature
16	Rajat K. Koley	Sr. Mgr (OS)	WBPDCL	9474860642	rk.koley@wbpdcl.co.in	
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26	Rajendra Prasad	E.E.E.	TVNL	9030104993	rajendra.prasad@tvnl.in	
27	Gagan Kumar	E. Ex. E.	SLDC, BSPTCL	7992486100	gagankumishra@gmail.com	
28	TUNESHWAR KUMAR	SR. MANAGER	STU, JGNL	9431190306	tuneshwar.kumar@gmail.com	
29	RAJU KACHHAP	Sr. Manager	SLDC Ranchi	7783087568	rajmailme82@gmail.com	
30	Nivedita Pramanik	AGM (EI)	GRIDCO	9438907576	ele.npramanik@gridco.com	

Participants in 239th OCC Meeting

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Time: 10:30 Hrs.

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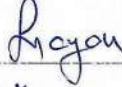






Sl.	Name	Designation	Organisation	Contact No.	E-mail Id	Signature
31	Madhusmita Mishra	GM (EI)	GRIDCO LTD.	9583769921	ele.mamishra@gridco.co.in	
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33	Supriya Setty	Manager (EL)	SLDC, WB	9438907087	ele.ssetty@optcl.co.in	
34	Priyadarshini Madhu	Manager (EL)	SLDC, ODISHA	9438907952	ele.priyadarshini@optcl.co.in	
35	Santosh Kr. Panda	Manager	DVC, SDC	6370137791	santosh.panda@dvc.gov.in	
36	S. K. Sharma	Sr. Gm ^{&} HOD.	DVC, SDC	9434539423	sanjay.sharma@dvc.gov.in	
37	Sanjai Kr. Singh	Ch. Mgr	ER-1 POWERGRID	8709107611	sanjai.singh@powergrid.in	
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39	K. Swati	AE	ERPC	7903336191	swati.cea@gov.in	
40	A. Das	DD	ERPC	9681214779		
41	I. K. Mehta	Distur	ERPC	9810688789		
42	Manjunathom	DD	ERPC	9972223842		
43	P P Jena	EE	ERPC	9776198991	ppjena.erpcc@gov.in	
44	PRATHAM KUMAR	EE	ERPC	8076873558	prathamkumar.cea@gov.in	
45	Jitendra Saha	Group Head	Tata Power (TPPL)	9223503607	Jitendra.Sahoo2@tatapower.com	

Participants in 239th OCC Meeting

Venue: ERPC Conference Hall, Kolkata

Time: 10:30 Hrs.

Date: 13.05.2025 (Wednesday)

Sl.	Name	Designation	Organisation	Contact No.	E-mail Id	Signature
46	Sambul Nayen	Group Head (Transmission)	TATA POWER PARADEEP TRANSMISSION LTD	9819420980	sambul.nayen1@tatapower.com	
47	Tushar Dhande	Chief Exe. officer	Tata Power Gopaldpur Trans. Ltd.	9223581895	tushardhande@tatapower.com	
48	Somnath Mukherjee	Associate.	Indi. Grid	7001389952	somnath.mukherjee@indigrid.com	
49	BS Ray	DD	ERPC			
50	SUBHASH R TUDU	Deputy Director	RPSO, LEA	9734907623	subhashr.tudu@gov.in	
51	INDIRAJITH KAMRAN	AD	RPSO, LEA	874311235	kamran.lee@gov.in	
52	Agniva Chatterjee	AD-I	ERPC	8100307502		
53						
54						
55						
56						
57						
58						
59						
60						

Annex A

List of Participants (ONLINE)			
Name	First Join	Last Leave	Email
ERPC Kolkata	5/13/26, 10:40:14 AM	5/13/26, 2:36:16 PM	ERPC@KolkataMST.onmicrosoft.com
Shabari Pramanick (External)	5/13/26, 10:55:18 AM	5/13/26, 2:36:16 PM	shabari.pramanick@erldc.onmicrosoft.com
Jyoti Krishna (Unverified)	5/13/26, 10:55:18 AM	5/13/26, 1:30:16 PM	
Bimal Swargiary (External)	5/13/26, 10:55:18 AM	5/13/26, 2:35:51 PM	Bimal.swargiary@erldc.onmicrosoft.com
Prasanna Kumar Sahoo (External)	5/13/26, 10:55:18 AM	5/13/26, 2:35:56 PM	PRASANNASAHOO@NTPC.CO.IN
Chandra Bhushan Ojha (External)	5/13/26, 10:55:18 AM	5/13/26, 2:36:16 PM	CHANDRABHUSHANOJHA@NTPC.CO.IN
Sourav Biswas (External)	5/13/26, 10:55:18 AM	5/13/26, 2:36:16 PM	sbiswas@erldc.onmicrosoft.com
Saswat Ranjan (Unverified)	5/13/26, 10:55:19 AM	5/13/26, 2:36:16 PM	
SLDC,ODISHA (Unverified)	5/13/26, 10:55:20 AM	5/13/26, 2:36:16 PM	
Surya Pratap rath, AGM OPTCL (Unverified)	5/13/26, 10:55:22 AM	5/13/26, 2:36:16 PM	
SUMEET NARANG (External)	5/13/26, 10:55:36 AM	5/13/26, 1:18:20 PM	SUMEETNARANG@NTPC.CO.IN
prabhakar Kishore (Unverified)	5/13/26, 10:56:27 AM	5/13/26, 11:01:05 AM	
PRABHAT KUMAR (Unverified)	5/13/26, 10:56:36 AM	5/13/26, 2:36:16 PM	
Prabhakar kishore	5/13/26, 11:00:50 AM	5/13/26, 11:40:51 AM	
Rahul Srivastava (External)	5/13/26, 11:02:47 AM	5/13/26, 2:36:16 PM	rahul.sr@greenkogroup.com
Shukla Brajesh (External)	5/13/26, 11:04:19 AM	5/13/26, 2:36:16 PM	brajesh.shukla@tatapower.com
Manoj Taunk	5/13/26, 11:08:14 AM	5/13/26, 2:30:55 PM	Manoj.Taunk@adani.com
PRABHAT KUMAR (Unverified)	5/13/26, 11:09:00 AM	5/13/26, 2:36:16 PM	
AVINASH SHUKLA (External)	5/13/26, 11:12:44 AM	5/13/26, 2:36:16 PM	AVINASHSHUKLA@NTPC.CO.IN
sldc. (Unverified)	5/13/26, 11:15:24 AM	5/13/26, 11:15:25 AM	
samim erldc (Unverified)	5/13/26, 11:19:29 AM	5/13/26, 2:06:02 PM	
KANTI SONI NHPC (Unverified)	5/13/26, 11:19:33 AM	5/13/26, 2:36:16 PM	
G Baskar (External)	5/13/26, 11:33:34 AM	5/13/26, 1:11:58 PM	GBHASKAR01@NTPC.CO.IN
GRIDCO (Unverified)	5/13/26, 11:34:32 AM	5/13/26, 2:36:16 PM	
PMC BSPHCL (Unverified)	5/13/26, 11:37:33 AM	5/13/26, 12:12:50 PM	
Sangram Keshari Bhoi {संग्राम केशरी भोई} (External)	5/13/26, 11:41:19 AM	5/13/26, 1:21:10 PM	sangramkbhoi@powergrid.in
Sumeet (Unverified)	5/13/26, 11:57:29 AM	5/13/26, 11:59:13 AM	
SANJEEV RANJAN (External)	5/13/26, 11:58:59 AM	5/13/26, 2:36:16 PM	SANJEEVRANJAN@NTPC.CO.IN
Rongnichu HEP (Unverified)	5/13/26, 12:02:03 PM	5/13/26, 2:36:16 PM	
s jana (Unverified)	5/13/26, 12:02:22 PM	5/13/26, 1:30:12 PM	
PMC,BSPHCL (Unverified)	5/13/26, 12:04:34 PM	5/13/26, 2:04:28 PM	
Gaurav Kumar (External)	5/13/26, 12:10:08 PM	5/13/26, 12:38:07 PM	gakumar@erldc.onmicrosoft.com
PMC BSPHCL (Unverified)	5/13/26, 12:13:39 PM	5/13/26, 12:52:37 PM	

List of Participants (ONLINE)

Name	First Join	Last Leave	Email
RAKESH (External)	5/13/26, 12:17:36 PM	5/13/26, 2:36:15 PM	RAKESHKUMAR07@NTPC.CO.IN
SLDC Ranchi (Unverified)	5/13/26, 12:34:25 PM	5/13/26, 2:36:16 PM	
Ashish Baviskar	5/13/26, 12:36:45 PM	5/13/26, 2:31:03 PM	Ashish.Baviskar@adani.com
Sourav Mandal (Unverified)	5/13/26, 12:42:52 PM	5/13/26, 2:32:27 PM	
PMC BSPHCL (Unverified)	5/13/26, 12:53:00 PM	5/13/26, 2:36:16 PM	
Dr.Prateek Sharma {प्रतीक शर्मा} (External)	5/13/26, 1:22:10 PM	5/13/26, 1:38:09 PM	prateeksharma@powergrid.in
P P Jena (Unverified)	5/13/26, 1:23:07 PM	5/13/26, 1:44:45 PM	
Amit Chowhdury (Unverified)	5/13/26, 1:54:38 PM	5/13/26, 2:36:16 PM	
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kUNAK (Unverified)	5/13/26, 2:24:03 PM	5/13/26, 2:35:19 PM	
ANIRUDHA ASAWA	5/13/26, 2:26:40 PM	5/13/26, 2:36:16 PM	Anirudha.Asawa@adani.com

प्रदीप कुमार सिन्हा
सचिव
भारत सरकार
PRADEEP K. SINHA
Secretary
Government of India



सत्यमेव जयते
Ministry of Power
Shram Shakti Bhawan
New Delhi - 110001

Annex B.2.1.b
Annexure B.2.2

विद्युत मंत्रालय
श्रम शक्ति भवन
नई दिल्ली-110001
Tele : 23710271/23711316
Fax : 23721487
E-mail : secy-power@nic.in

D.O. No.20/6/2014-QM

05.12.2014

Dear *Shri Negi*,

As you are aware, India has one of the largest A.C. Synchronous Transmission Grids in the world with more than 3 lakhs circuit kms of 220kV and above lines which form the backbone of the Indian Power System.

2. However, this huge network needs to be operated in a sustained and secure manner, particularly, during the time of natural disasters. Failure to do so leads to severe constraints not only in meeting the power demand but also poses serious problems in maintaining safety and security of the Grid. Difficult situations came to light in the wake of recent natural disasters, such as, floods in J&K and Phailin as well as Hud-Hud cyclone in Odisha and Andhra Pradesh. These disasters caused extensive damage to transmission networks resulting in wide spread disruption of many important transmission links and substations affecting power supply for long periods due to the time taken in restoration.

3. You would appreciate that under such adverse situations, the availability of an effective mechanism for emergent restoration of transmission lines in the shortest possible time is of utmost importance. Immediate and temporary restoration of transmission networks is possible by deploying the "Emergency Restoration Systems (ERS)." Grid Standards notified by the Central Electricity Authority(CEA) stipulate that every Transmission Licensee shall have an arrangement for restoration of transmission lines of at least 220kV and above through the use of ERS. However, presently the States do not possess such ERS infrastructure. Consequently, POWERGRID becomes the last resort whose ERS infrastructure is also limited.

4. Therefore, deployment of adequate ERS infrastructure with the States is necessary. In this connection, CEA had recently convened a meeting of the representatives from State Utilities, CTUs and RPCs to deliberate and review their preparedness to effectively restore transmission networks in times of emergency. Based on the inputs received, an indicative requirement of ERS for States has been assessed which is at Annex-I. Further, CEA has also formulated guidelines for planning, deployment and procurement of such ERS infrastructure (Annex-II).

5. I would, therefore, request you to please issue necessary directives to Transmission Utilities/ Transmission licensees operating in your State to take stock, procure appropriate number of ERS infrastructure and place them at strategic locations. Action taken by the Utilities in this regard may be informed to the CEA and the Ministry of Power, at the earliest.

With regards,

Yours sincerely,

Pradeep K. Sinha
(Pradeep K. Sinha)

Encl : as above

Shri Ramesh Negi
Chief Secretary
Govt of Arunachal Pradesh
Itanagar



RIGHT TO
INFORMATION

Sist:- As per list attached.



एक कदम स्वच्छता की ओर

Availability and Proposed Plan for deployment of ERS

Sl. No.	Region	State Utilities / PGCIL	Availability of ERS sets	Additional ERS set to be procured	Remark
I	Northern Region				
	PGCIL	NR1	3	1	
		NR2	1		
	1	Haryana	-	1	
	2	HP	-	1	Hilly terrain
	3	J&K	-	1	-do-
	4	Punjab	-	2	
	5	Rajsthan	-	3	
	6	Uttar Pradesh	-	3	
	7	Uttarakhand	-	1	
	8	Chandigarh	-	-	
	9	Delhi	-	1	DTL is procuring 2 ERS sets
	10	POWERLINKS	2		1 set each is located in NR and ER; each setting having 14 towers of 400 kV
	Total		6	14	
II	Western Region				
	PGCIL	WR1	2	1	
		WR2	2		
	10	Gujarat	-	3	

	11	MP	1	2	
	12	Chhattisgarh	-		
	13	Maharashtra	2	2	
	14	Goa	-	1	
	15	D&NH	-	-	
	16	Daman & Diu	-	-	
	Total		7	9	
III	Southern Region				
	PGCIL	SR1	1	2	
		SR2	1		
	17	AP	-	3	(To be located at Vishakhapatnam, Vijawada, Nellore)
	18	Telengana	-	1	
	19	Karnataka	-	2	
	20	Kerala	-	1	
	21	Tamil Nadu	-	2	
	22	Lakshadweep	-	-	
	23	Puducherry	-	-	
	Total		2	11	
IV	Eastern Region				
	PGCIL	ER1	1	-	
		ER2	2		
	24	Bihar	2	2	
	25	Jharkhand	-	1	
	26	Orissa	3	2 (comprising of 12 nos. of 400kV towers which is in the process of procurement)	Existing ERS located at Bhubaneswar, Chatrapur and Budhipada (each with 14 ERS towers)
	27	West Bengal	-	2	
	28	DVC	-	1	

	29	A&N Island	-	-	
	30	Sikkim	-	-	
	Total		8	8	
V	North Eastern Region		-		
	PGCIL	NER	1		
	31	Assam	4	2	
	32	Manipur	-		
	33	Meghalaya	-		
	34	Nagaland	-		
	35	Tripura	-		
	36	Ar. Pradesh	-		
	37	Mizoram	-		
	Total		5	2	
	Total All India		28	44	

Note: POWERGRID has informed that they are procuring 6 additional sets of ERS for different regions.

Strategy adopted

- The primary criterion for deciding number of ERS to be arranged by a transmission utility has to be the length of transmission line (ckt-kms) at different voltage levels (e.g 220 kV, 400 kV, 765 kV and +/- 500kV HVDC). Other factors to be taken into account while deciding the number of ERS are
 - Importance of the line considering security of Grid
 - Areas prone to tower failure and failure pattern in different areas
 - Command area of the transmission utility and transportability across the command area
- For any transmission utility, one set of ERS has been planned to cater to failure of towers for transmission line lengths of up to 5000 Ckt. Kms.. Accordingly, two (2) sets of ERS have been planned for transmission line lengths of about 5000 to 10,000 Ckt. Kms. and three (3) sets for more than 10,000 Ckt. Kms and so on.
- The transmission Utility with line length less than 500 ckt kms (of 400kV lines) may be given option either to procure ERS or have agreement with other transmission utilities for providing ERS on mutually agreed terms, when need arises.

**GUIDELINES FOR PLANNING, PROCUREMENT AND DEPLOYMENT OF
EMERGENCY RESTORATION SYSTEM (ERS)**

1. One set of ERS should include all accessories [structures (Aluminum Alloy), polymer insulators & hardware, anchor assembly, guy wires, foundation plates, guy plate, other equipment & fittings, special Tools & Plants required for erection & stringing of ERS and trailer mounted detachable containers (without engine) for storage & transportation of ERS hardware / material etc.] and associated software.
2. One set of ERS shall be capable of restoring few numbers of suspension towers and tension towers of the transmission line corresponding to the highest transmission voltage in operation in the utility with required type of conductors. The same ERS can be used for lower voltage lines as well. The number of suspension, tension towers, insulators and associated hardware etc., to be included under one set of ERS, may be decided by the utilities at the time of procurement depending on their requirement.
3. Proper management of ERS and training of personnel for erection of towers on ERS and use of associated software is essential. A dedicated and specialized erection & commissioning gang, which is properly trained to execute such work, would be required.
4. ERS should be utilized only for emergency purposes and the line should be restored on normal towers as early as possible. It should not be a practice to run transmission line on ERS for a long time instead of shifting to normal towers. Moreover, ERS should not be used in new lines under construction. Otherwise, the very purpose of ERS will be defeated.
5. The deployment of ERS by any transmission utility / licensee should be reported to concerned RLDC and RPC.
6. The transmission utilities may approach Appropriate Commission for approval and initiate procurement process on urgent basis to comply with Grid Standards. Utilities may also approach State Disaster Management Authorities for funding.
7. The funding for procurement of ERS could be considered from PSDF for North Eastern States and a proposal be submitted by Member Secretary, NERPC.

List of Chief Secretaries of State and UTs

S. No.	State	Name and Address	Telephone/ Fax/Email
1.	Andhra Pradesh	Shri I.Y.R. Krishna Rao Chief Secretary Government of Andhra Pradesh, Secretariat, Hyderabad-500022	Tel: 040-23453620 040-23455340 Fax: 040-040-23453700, 23451133, 23451144
2.	Arunachal Pradesh	Shri Ramesh Negi Chief Secretary & Principal Secretary (Relief & Rehabilitation & Disaster Management) Arunachal Pradesh Civil Secretariat, Government of Arunachal Pradesh, Itanagar- 791 111	Tel: 0360-2212595 Fax: 0360-2212446, 2215719 M: 9436040035
3.	Assam	Shri Jitesh Khosla Chief Secretary Government of Assam, Assam Sachivalaya, Block C, 3 rd Floor, Dispur, Guwahati-781006	Tel: 0361-2261120, 2261403 Fax:-0361-2260900
4.	Bihar	Shri Anjani Kumar Singh Chief Secretary Government of Bihar Old Secretariat, Patna-800015	Tel: 0612-2215804 Fax: 0612-2217085
5.	Chattisgarh	Sh. Vivek Kumar Dhand Chief Secretary Government of Chattisgarh, DKS Bhawan, Mantralaya, Raipur-492001	Tel: 0771-2221207/8 Fax: 0771-2221206
6.	Goa	Shri R.K. Srivastava Chief Secretary Govt. of Goa Secretariat Porvorim	Tel: 0832-2419402 Fax: 0832-2415201
7.	Gujarat	Shri D.J. Pandian Chief Secretary Government of Gujarat New Sachivalaya Gandhingar-382010	Tel: 079-23220372, 079-23250301-3 Fax: 079-23250305
8.	Haryana	Shri. P.K. Gupta Chief Secretary Government of Haryana, Room No.-4, 4 th floor, Harayana, Civil Secretariat, Sector-1, Chandigarh-160009	Tel: 0172-2740118 Fax: 0172-2740317
9.	Himachal Pradesh	Shri P. Mitra Chief Secretary Government of Himachal Pradesh Secretariat, Shimla- 171002	Tel: 0177-2621022 Fax: 0177-2621813

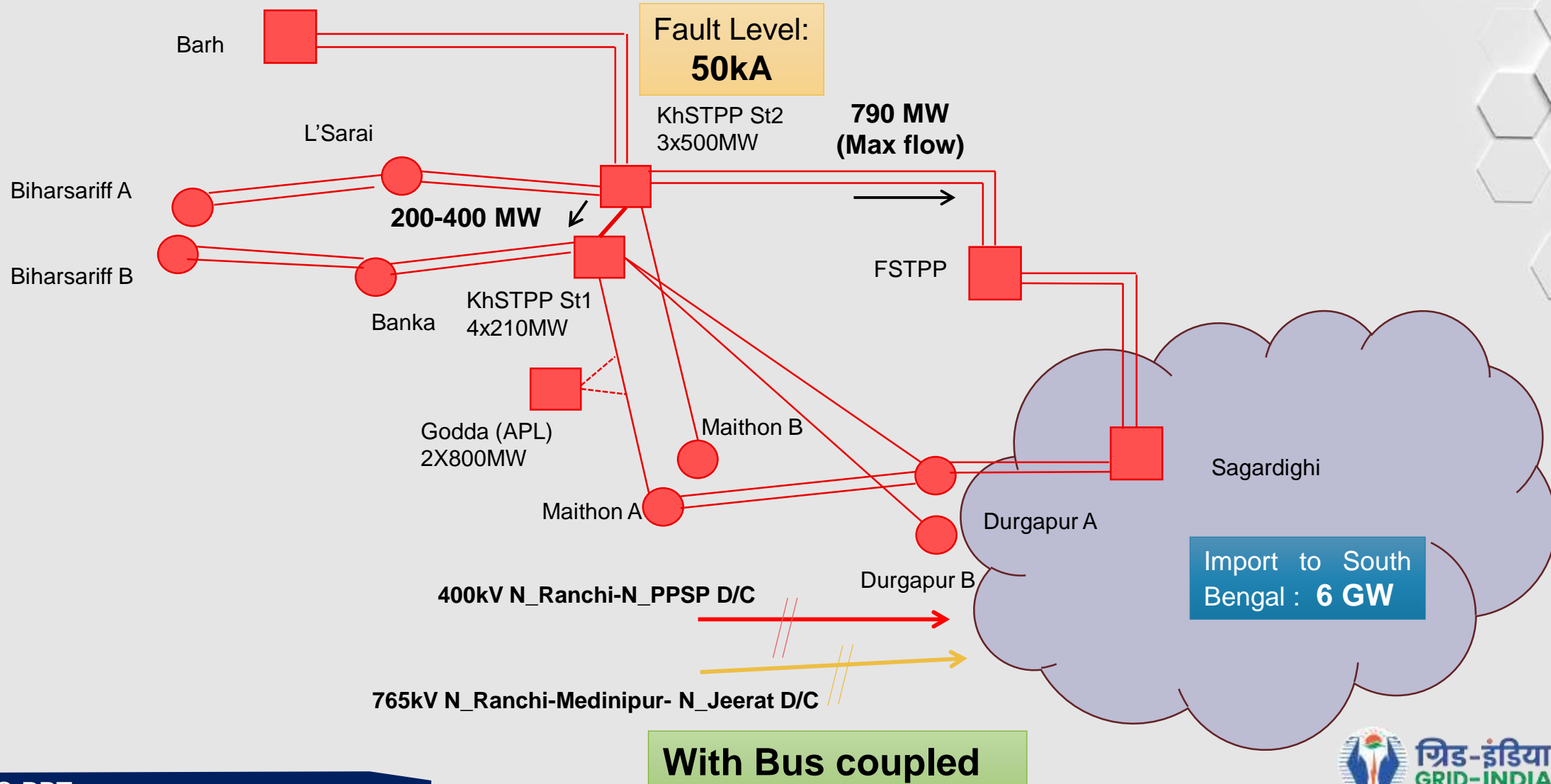
10.	Jammu & Kashmir	Sh. Mohammad Iqbal Khandey Chief Secretary Government of J & K Jammu Secretariat, Jammu	Tel: 0191-2546773, 2544338 (Jammu) Fax: 0191-2546188
11.	Jharkhand	Shri Sajal Chakrabarty Chief Secretary Government of Jharkhand Secretariat, Ranchi-834004	Tel: 0651-2400240, 2400250 Fax: 0651-2400255
12.	Karnataka	Shri Kaushik Mukherjee Chief Secretary Government of Karnataka 3 rd Floor, R. No. 320, Vidhan Sauda, Secretariat, Bangalore-560001	Tel: 080-22252442, 22092476 Fax: 080-22258913
13.	Kerala	Ms E K Bharat Bhushan Chief Secretary Government of Kerala Secretariat, Thiruvananthapuram-695001	Tel: 0471-2333147, 2327376 Fax: 0471-2327176
14.	Madhya Pradesh	Shri Anthony J C Desa Chief Secretary Government of Madhya Pradesh Mantralaya, Vallabh Bhawan, Bhopal-462004	Tel: 0755-2441370, 2441848 Fax: 0755-2441521
15.	Maharashtra dscsoffice @gmail.com	Shri Swadheen S Kshatriya Chief Secretary Government of Maharashtra Mantralaya, Mumbai-400032	Tel: 022-22852626 22025042,22028762 22793762 Fax: 022-22028594
16.	Manipur	Shri P.C. Lawmkunga Chief Secretary Government of Manipur Manipur Secretariat, Imphal-790001	Tel: 0385-2451144, 2450064 Fax: 0385-2452629
17.	Meghalaya	Shri P B O Warjri Chief Secretary Government of Meghalaya, Meghalaya Civil Secretariat, Shillong-793001 Email: barkos.warjri@nic.in	Tel: (O)0364-2224801, 222250, Mob:-9774033922 (R)-0364-2534629 Fax: 0364-2225978
18.	Mizoram	Shri Lalmalsawma Chief Secretary Government of Mizoram, Block C, Civil Secretariat, Aizwal- 796001	Tel: 0389-2322411 Fax: 0389-2322745
19.	Nagaland	Shri M.T. Aier Chief Secretary Government of Nagaland Nagaland Civil Secretariat, Kohima-790001	Tel: 0370-2270082, 2270076 Fax: 0370-2270057
20.	Orissa	Shri Gokul Chandra Pati Chief Secretary Government of Orissa Secretariat, Bhubaneswar- 751001	Tel: 0674-2534300, 2536700 Fax: 0674-2536660
21.	Punjab	Shri Sarvesh Kaushal Chief Secretary Government of Punjab Punjab Secretariat, Chandigarh-160017	Tel: 0172-2740156, 2740860 Fax: 0172-2742488, 2740936

22.	Rajasthan	Shri C.S. Rajan Chief Secretary Government of Rajasthan Secretariat, Jaipur-302001	Tel: 0141-2227254 Fax: 0141-2227114
23.	Sikkim	Smt. Rinchen Ongmu Chief Secretary Government of Sikkim Secretariat, Gangtok- 737101	Tel: 03592-202315, 204323 (fax) Fax: 03592-222851 03592-204323
24.	Tamil Nadu	Shri. K. Gnanadesikan Chief Secretary Government of Tamil Nadu Secretariat, Chennai-600009	Tel: 044-25671555 Fax: 044-25672304
25.	Tripura	Shri G. Kameswara Rao Chief Secretary Government of Tripura Civil Secretariat, Agaratala-799001	Tel: 0381-2323200, 2324392 Fax: 0381-2324013
26.	Uttar Pradesh	Shri Alok Ranjan Chief Secretary Government of Uttar Pradesh Secretariat, Lucknow-226001	Tel: 0522-2621599 0522-2238212 0522-2238212 Fax: 0522-2239283
27.	Uttarakhand	Shri N. Ravi Shanker Chief Secretary Government of Uttarakhand 4, Subhash Road, Secretariat, Dehradun-248001	Tel: 0135-2712094 0135-2712100, 2712200 Fax: 0135-2712113 0135-2712500
28.	West Bengal	Shri Sanjay Mitra Government of West Bengal Secretariat, Writers Building Kolkata-700001	Tel: 033-22145858 Fax: 033-22144328
29.	Andaman & Nicobar	Sh. Anand Prakash Chief Secretary Secretariat & Administration, Government of Andaman & Nicobar Islands, Port Blair	Tel: 03192-233110, 234087 Fax: 03192-231100, 03192-232656
30.	Chandigarh	Shri K.K. Sharma Advisor to Administrator Union Territory of Chandigarh, Punjab Raj Bhawan, Sector – 6 Chandigarh-160017	Tel: 0172-2740154 Fax: 0172-2740317 0172-2740165
31.	Dadra & Nagar Haveli	Shri Ashish Kundra Administrator Government of Dadra & Nagar Haveli, Secretariat, Silvassa-396230	Tel: 0260-2230700 2642777 Fax: 0260- 2230775 0260-2642702
32.	Daman & Diu	Shri Ashish Kundra Administrator Secretariat Daman, Government of Daman & Diu, Daman & Diu	Tel: 0260-2230770, 2230700 Fax: 0260-2230775

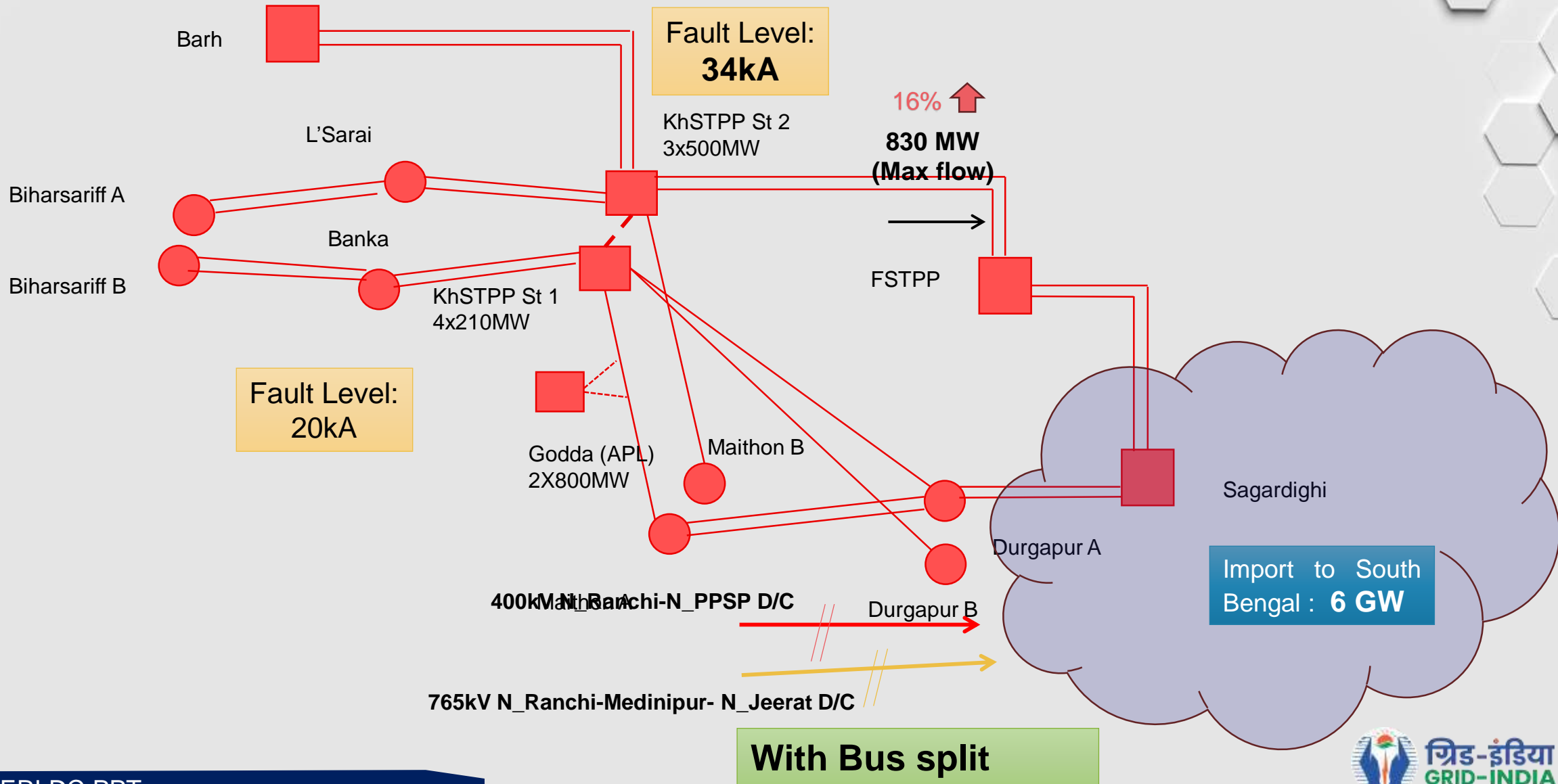
33.	Delhi	Shri D.M. Spolia Chief Secretary Govt of NCT Delhi, Delhi Secretariat, I.P. Estate, New Delhi- 110002	Tel: 011-23392100 Fax: 011-23392102
34.	Lakshadweep	Shri H. Rajesh Prasad Administrator Union Territory of Lakshadweep, Kavaratti, Lakshadweep-682555	Tel: 04896-262255, 262279 Fax: 04896-262184
35.	Puducherry	Shri Chetan B Sanghi Chief Secretary Puducherry Administration, Chief Secretariat, 1 Beach Road, U.T. of Puducherry, Puducherry- 605001	Tel: 0413-2334145 0413-2335512 Fax: 0413-2337575

36. *Telangana* Dr. Rajiv Sharma,
Chief Secretary,
Govt of Telangana,
Hyderabad.

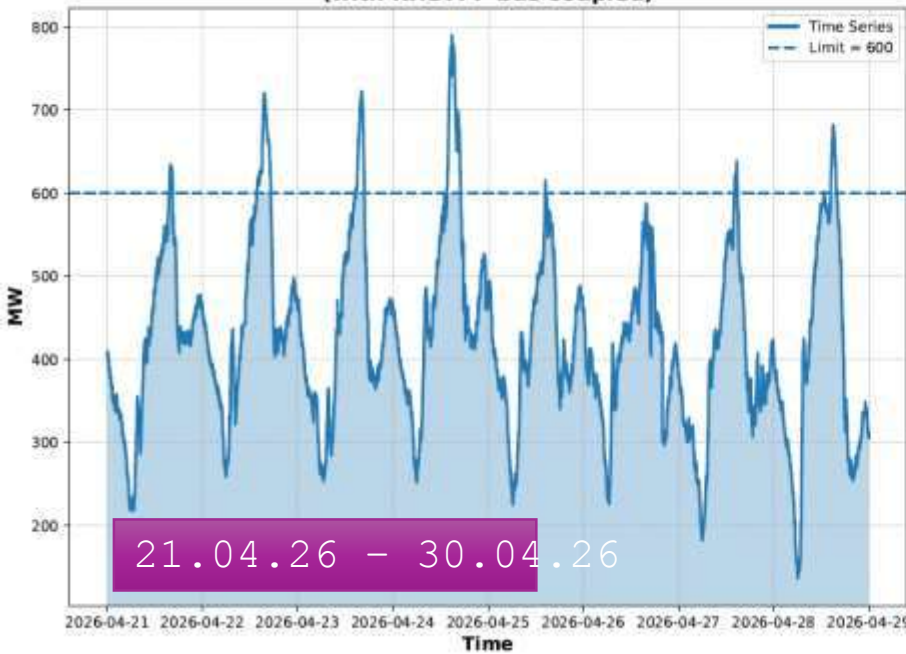
Kahalgaon Bus Coupler



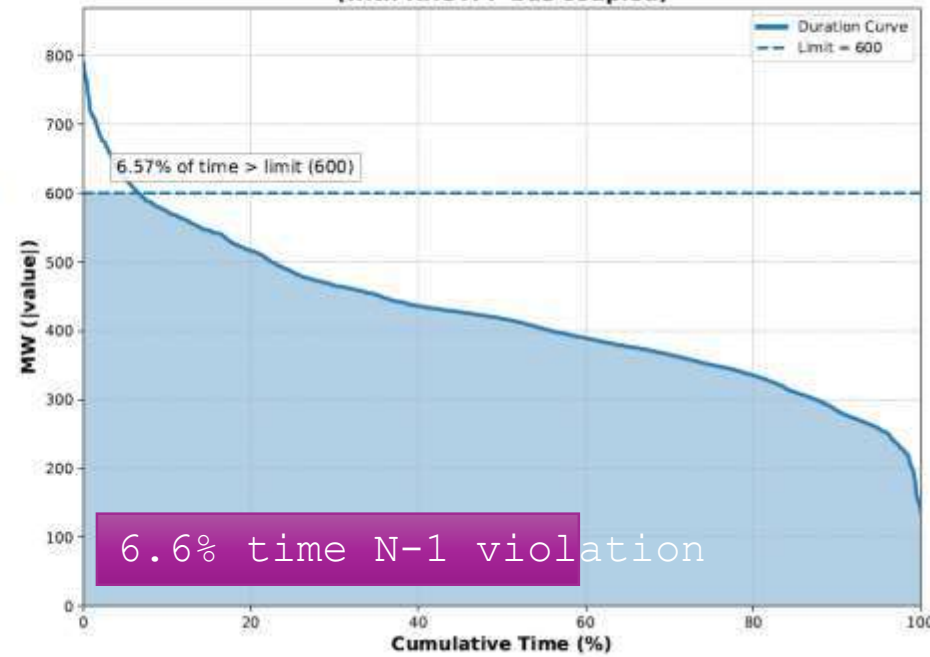
Kahalgaon Bus Coupler



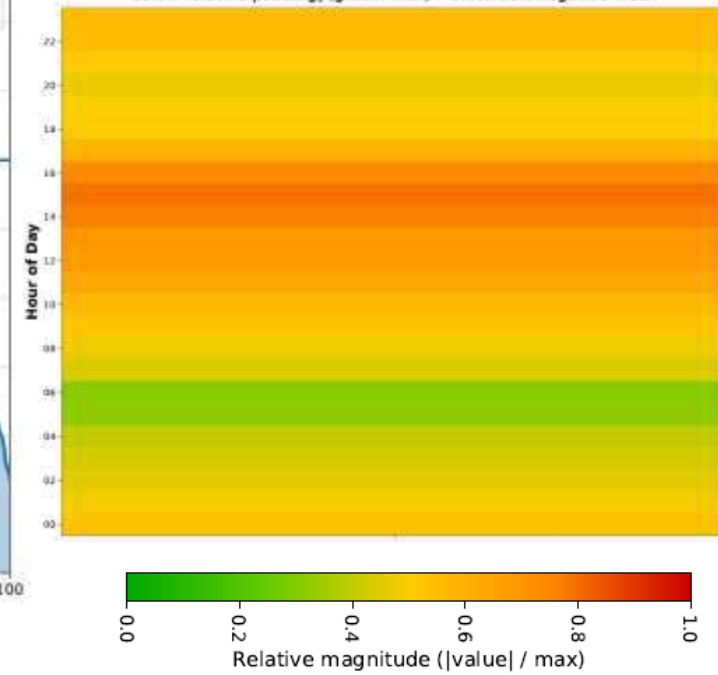
Time Series - 400kV KHSTPP-FSTPP (with KHSTPP bus coupled)



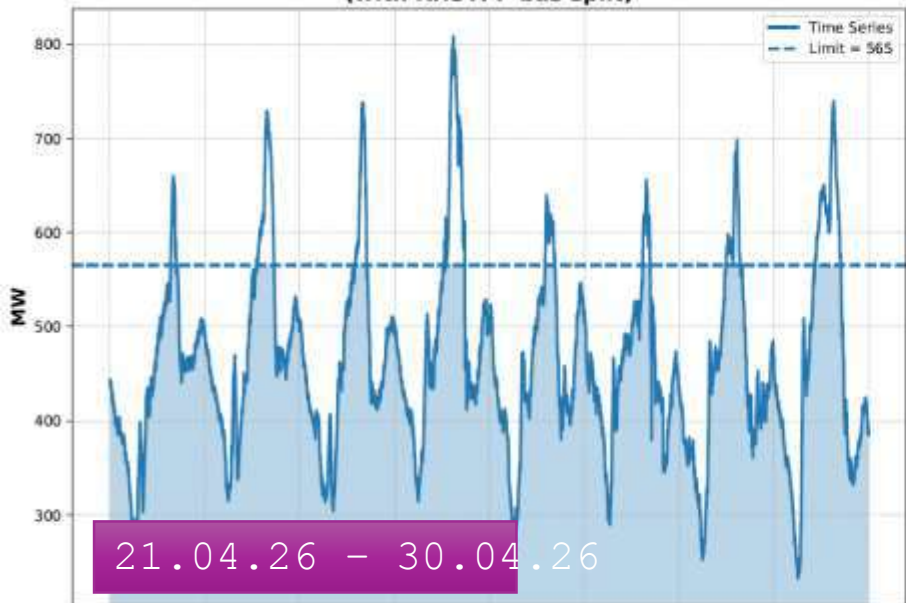
Duration Curve - 400kV KHSTPP-FSTPP (with KHSTPP bus coupled)



Hour x Month Heatmap - 400kV KHSTPP-FSTPP (with KHSTPP bus coupled)



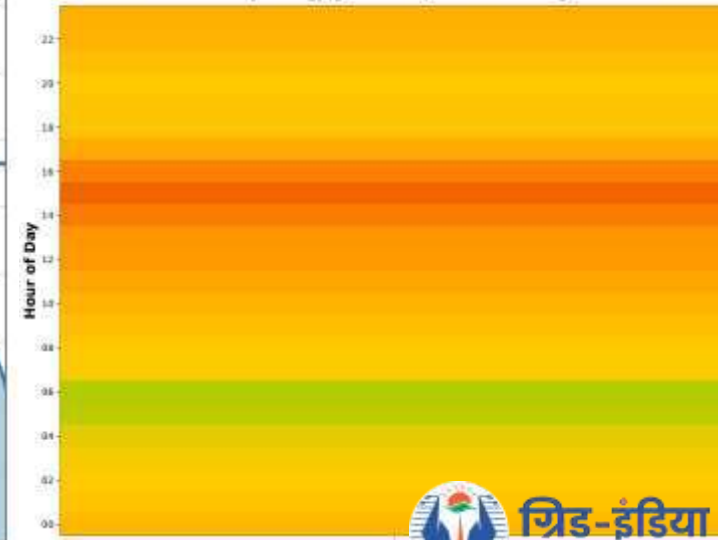
Time Series - 400kV KHSTPP-FSTPP (with KHSTPP bus split)



Duration Curve - 400kV KHSTPP-FSTPP (with KHSTPP bus split)



Hour x Month Heatmap - 400kV KHSTPP-FSTPP (with KHSTPP bus split)



Final SoP/ Guidelines for diversion of RPC approved Spare Transformers and Reactors to the constituents / state transmission utilities

A. Background:

1. In line with the recommendations of committee formed under the direction of CERC in Petition No. 38/TT/2017, requirement of regional spare transformers and reactors is being assessed by POWERGRID and agreed in RPCs based on the population of existing transformers and reactors in POWERGRID substations.
2. POWERGRID procures & maintains the RPC approved spare transformers and reactors as Regional Spares to meet any contingency in its existing Substations to ensure the reliability of the grid and to minimise downtime.
3. These spares are approved primarily for use of POWERGRID in its ISTS Substations. However, in some of the cases, requests are being received by POWERGRID from constituents/ state utility to divert Regional spare transformer(s)/ reactor(s) on temporary basis for their use considering certain exigencies, to maintain continuity of power supply and also considering the grid stability & reliability. Further, in past, in few of the cases regional spare transformers/ reactors have been diverted to constituents/ state utilities after necessary approval of concerned RPC.

B. General Condition:

4. As Regional spares are approved primarily for use of POWERGRID in its ISTS Substations, its diversion to regional state transmission utility may be considered under exceptional circumstances considering the gravity of requirement to the constituent and its beneficiaries on expeditious replenishment basis. Further, Inter Regional diversion of equipment to the constituent shall not be considered.

C. Utilities eligible for diversion: Following utilities (hereinafter referred as Borrower) shall be eligible for diversion of Regional spares as per the conditions specified;

- i) **State Transmission Utility:** Diversions can be considered in case of failure of existing equipment in use of respective RPC constituents and diversion required in the interest of Grid security and reliability. It is clarified that under normal circumstances, a regional spare shall not be diverted for commissioning of new assets.
- ii) **Other Utilities:** For utilities other than State Transmission Utilities, under normal circumstances, such diversions are not envisaged. However, if agreed by RPC forum, such diversions may be allowed only under the exceptional circumstances.

D. Modalities for diversion of Regional spare transformer(s)/ reactor(s) to State Transmission Utility:

5. In case of requirement of Regional spare transformer/ reactor by the Borrower i.e. State Transmission Utility, the requirement shall be put up for consent of the respective RPC forum.
6. In this regard, the concerned Borrower shall submit the following to the RPC for consideration:
 - i) Contingency situations describing the requirement of spare equipment from POWERGRID.
 - ii) Action plan along with timeline for return/ replenishment of the spare equipment to POWERGRID.
7. Decision of diversion along with associated terms and conditions for diversion will be based on the agreement reached in RPC Forum after considering the merit of the request. It is clarified that regional spare transformer/ reactor can be diverted only in case of restoration of failed equipment and generally not for commissioning of new equipment.
8. Upon approval in the RPC, the Spare transformer/ reactor shall be diverted to the Borrower only on usage/replenishment basis and the same shall not be sold to the Borrower under any circumstances.

E. Signing of agreement:

Upon approval in the RPC Forum & before diversion of Regional spare transformer/ reactor, an agreement shall be signed between POWERGRID and the Borrower. The agreement shall cover the terms and conditions for the diversion of equipment in line with this SOP and as discussed below broadly.

a) Time period:

The Borrower shall return the Spare transformer/ reactor within the timeframe agreed by the RPC which in all cases shall not exceed a maximum of 24 months from the date of diversion. The spare transformer/ reactor is to be lifted within 3 months of signing of agreement. Failing which the consent for diversion as agreed in the RPC shall be deemed to be withdrawn.

POWERGRID shall monitor the list of such diverted equipment and coordinate to ensure that the replenishment by the borrower is done as per agreed timeframe and keep the RPC forum-informed.

b) Cost Implications:

The equipment shall be diverted on zero cost basis/ cost neutral basis to POWERGRID. On account of the diversion, POWERGRID shall remain revenue

neutral i.e. there shall be no change in CERC approved tariff or its sharing due to diversion of the concerned regional spare transformer/ reactor. The sharing of cost of the asset shall be as per Sharing Regulations. Tariff of the asset shall be borne by the requestor for the period of usage and charges of the asset shall be recovered bilaterally and adjusted back to pool.” Tariff of the asset would be put up to borrower and RPC by POWERGRID in advance.

c) Responsibility of Borrower:

- i) The Borrower shall be responsible for dismantling, to & fro transportation, transit insurance, statutory expenses, erection, testing & commissioning charges (including at POWERGRID station after return) etc., any other incidental expenditure associated with the diversion of equipment or any loss to POWERGRID on account of diversion and all such charges shall be borne by the Borrower.
- ii) Borrower shall verify the condition of equipment at POWERGRID substation before taking the equipment on loan basis. After verification, the equipment shall be handed over to the Borrower.
- iii) The Borrower shall be responsible for transportation/ erection/ commissioning/ operation & maintenance.
- iv) The Borrower shall be responsible to maintain the equipment in healthy condition as per the standard maintenance practices.
- v) The Borrower shall be responsible to ensure that the equipment is returned to POWERGRID in healthy condition as per the commitment/ action plan agreed prior to diversion.
- vi) Any damage/failure of the equipment shall be the responsibility of the Borrower till the equipment is taken over by POWERGRID in healthy condition.
- vii) In case of failure/ breakdown of equipment during transportation/ erection/ commissioning/ operation & maintenance or during any other activity, the Borrower shall return the equipment after repair/ refurbishment of the same rating as per the POWERGRID specification. Alternatively, new equipment matching with the POWERGRID specifications and from POWERGRID approved vendors shall be replenished. All cost for repair/ refurbishment/ replacement as applicable shall be borne by the Borrower.
- viii) After returning of equipment, all pre-commissioning tests shall be jointly performed at POWERGRID station to ascertain healthiness. In case of any deviation, POWERGRID shall take up the repair of equipment and cost of the repair shall be borne by the Borrower.

d) Return of equipment:

In case of any exigency or if required in the interest of the Grid, POWERGRID reserves the right to demand the diverted Spare from the Borrower prior to the time period as agreed in the RPC after intimation to RPC. Once consented in RPC Forum, Borrower shall return the diverted spare to POWERGRID on immediate basis.

e) Penalty clause:

In the event of a delay in the return or replenishment of spare equipment beyond the agreed timeframe (which is a maximum of 24 months from the date of diversion), a penalty of 15% of the approved tariff for the diverted equipment will be imposed on the Borrower for the duration of the deployment. However, this penalty will not be applied if an extended return or replenishment period is approved by the Regional Power Committee (RPC), subject to maximum extension period of 12 months.

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Annex B.2.11

GUIDELINES
on
DIVERSION of REGIONAL COLD SPARES
(TRANSFORMERS and REACTORS)



November 2025

NORTHERN REGIONAL POWER COMMITTEE

1. Background & Objective

POWERGRID procures and maintains regional spares- transformers and reactors- to ensure the continuity of power supply and grid stability in the event of a contingency, such as the sudden failure of an in-service transformer or reactor. The primary purpose of these spares is to meet contingencies/emergencies within ISTS substations of the region. Regional spares are primarily sanctioned for use in Inter-State Transmission System (ISTS) substations. However, diversion of such spares to a State Transmission Utility (STU) may be permitted only under exceptional circumstances, based on the criticality of the requirement and subject to expeditious replenishment by the Borrower.

These Guidelines sets out the framework, eligibility, processes, roles, responsibilities, and conditions under which regional spares- transformers and reactors-maintained by POWERGRID may be diverted to eligible utilities. These Guidelines seeks to balance the need to extend emergency support to constituents with the responsibility of ensuring adequate spare availability for the ISTS network.

2. Scope & Applicability

These Guidelines applies exclusively to transformers and reactors approved by the respective Regional Power Committee (RPC) as *Cold Regional Spares* for use in Inter-State Transmission System (ISTS) substations within the region. These spares are procured, owned, and maintained by POWERGRID to ensure operational continuity of the ISTS network during contingencies. Diversion of Regional Spares may be considered for the following eligible beneficiaries within the same Region:

- **ISTS Substations.**
- **State Transmission Utility (STU) Substations**

Diversion may be considered only in case of failure of existing in-use equipment and where diversion is essential for grid security and reliability. Diversion for commissioning of new assets or Inter-regional diversion of equipment to any constituent may not be permitted. All diversions may be executed strictly on a replenishment basis and may not amount to sale or transfer of ownership of the equipment.

3. Roles and Responsibilities

3.1. Lender (POWERGRID): POWERGRID may ensure that the cold regional spares- Transformers and Reactors- are maintained in operationally ready condition and available for deployment during contingencies. POWERGRID may:

- Maintain a central inventory of all Regional Spares with technical particulars and locations.
- Implement the diversion only after RPC or its sub-forum's approval, as the case may be, and in accordance with these guidelines.
- Record every approved diversion in the central register, including date of diversion, borrower, and approved return timeline.

- Monitor adherence to approved diversion timelines and report deviations to the respective RPC Secretariat.

3.2. Borrower: The Borrower may be responsible for safe custody and operation of the diverted Regional Spare during its possession. The Borrower may:

- Submit a formal diversion request to the respective RPC Secretariat with required technical and contingency details.
- Jointly verify the equipment condition at POWERGRID substation prior to MoU signing.
- Bear all expenses associated with transportation (both ways), transit insurance, erection, testing, commissioning, and related statutory charges, as applicable, and any incidental expenditure or loss to POWERGRID.
- Ensure site readiness and compatibility of the spare equipment before diversion.
- Furnish a valid Bank Guarantee equal to the prevailing cost of the equipment, effective till 45 days after return or replenishment is completed.
- Maintain and operate the equipment in accordance with applicable technical standards and POWERGRID's guidelines.
- Return or replenish the equipment in healthy condition within the approved timeframe and bear any repair or replacement cost arising from damage or failure.
- After returning of equipment, all pre-commissioning tests may be jointly performed at POWERGRID station to ascertain healthiness. In case of any deviation, POWERGRID may take up the repair of equipment and cost of the repair may be borne by the Borrower.

3.3. RPC Secretariat: The concerned RPC Secretariat may facilitate deliberation of the diversion proposal in the RPC or its sub-forum and place the Borrower's request before the members for decision. It may record all decisions, including timelines for return or replenishment. RPC Secretariat may communicate the decision of the forum to borrower and Powergrid within one week of decision in RPC or its sub-forum meeting.

4. Procedure for Diversion

4.1. Submission of Request: The Borrower may submit a written request to the concerned RPC Secretariat, specifying:

- The nature of contingency or failure necessitating diversion, including details of affected substation and equipment.
- Technical parameters of the failed equipment and the matching requirement from the Regional Spare pool.
- A detailed action plan and proposed timeline for return or replenishment of the diverted equipment.

4.2. Evaluation and Approval: The RPC or its sub-forum may evaluate the request on merit, considering:

- The severity and genuineness of the contingency.
- Availability of the Regional Spare and its necessity for ISTS grid reliability.
- Impact on overall system stability and adequacy of remaining spares.

The decision of the RPC or its sub-forum will be final and binding on all concerned entities. Upon approval, the forum may record the diversion details and the agreed period of utilization in its proceedings.

4.3. Execution of Memorandum of Understanding (MoU)

- Following the approval of diversion by the respective RPC or its sub-forum, the Borrower and POWERGRID may execute a Memorandum of Understanding (MoU) within forty-five (45) days from the date of RPC or its sub-forum. *For the purpose of these Guidelines, date of communication by RPC secretariat of the decisions of the forum to borrower and Powergrid as defined in para 3.3 shall be treated as the date of RPC or its sub-forum approval, as the case may be.*
- The MoU may specify all terms and conditions of diversion, including equipment details, responsibilities of both parties, financial implications, Bank Guarantee (BG) requirements, maintenance and reporting obligations, timelines for return/replenishment, and applicable penalties for default.

4.4. Condition Assessment and Testing

- Before diversion, a joint inspection of the equipment may be carried out by POWERGRID and the Borrower at the designated POWERGRID substation. The physical condition and test results may be documented and signed jointly.
- Upon return, the equipment may undergo joint pre-commissioning testing at the POWERGRID station to ascertain its healthiness. Any deviation, defect, or damage observed during inspection may be rectified at the Borrower's cost. Where repair or refurbishment is necessary, the Borrower may carry it out through the OEM or other approved agency as per POWERGRID specifications.

5. General Conditions of Diversion

5.1. Timeframe for Diversion and Return

- The Borrower should take the physical handover of the equipment from the designated POWERGRID substation within forty-five (45) days from the date of execution of the MoU.
- Failure to take the physical handover of the equipment within the ninety-days (90) days from RPC or its sub-forum approval, as applicable, may be treated as revocation the diversion approval.

- The maximum diversion period may not exceed twenty-four (24) months from the Zero Date of Diversion.
- The Borrower may ensure return or replenishment of the diverted equipment within this period as per the action plan approved by the RPC or its sub-forum, as applicable, and the provisions of the MoU.
- Any request for extension of the diversion period beyond twenty-four (24) months or delay in taking the physical handover of the equipment may require prior approval of the respective RPC or its sub-forum, as applicable, supported by written justification.
- On completion of the diversion period, the Borrower should return the equipment in healthy condition to POWERGRID to POWERGRID's technical specifications.
- *The "Zero Date of Diversion" shall be the date recorded in the joint handover certificate signed by representatives of POWERGRID and the Borrower at the time of physical transfer from the designated POWERGRID substation or storage location.*
- *The "Date of Return" shall be the date recorded in the joint handover certificate signed by representatives of POWERGRID and the Borrower, after successful healthiness checking, at the time of physical transfer at the designated POWERGRID substation or storage location.*

5.2. Early Recall

- RPC Forum may recall any diverted equipment at any time before the expiry of the approved period if required in the interest of grid security or system reliability.
- The Borrower should return the equipment immediately upon receipt of such recall notice, and the RPC Secretariat may be intimated accordingly.

5.3. Financial Provisions: Diversion of Cold Regional Spares may be carried out on a cost-neutral basis, ensuring that POWERGRID neither incurs financial loss nor earns additional revenue on account of such diversion. The diversion should not result in any change in the Yearly Transmission Charges recoverable by POWERGRID as per the approved tariff against the diverted asset and financial adjustments, if any, may be settled within the regional pool mechanism as approved by the RPC forum. The Borrower may bear all direct and incidental costs, including transportation, loading/unloading, insurance, erection, testing, and commissioning charges. The Borrower may be fully liable for any loss, damage, theft, or deterioration of the equipment during the diversion period. Insurance coverage may be obtained in the joint name of POWERGRID and the Borrower, with POWERGRID designated as the primary beneficiary.

In line with these principles, the financial treatment for diversion may be as follows:

- **ISTS Substations:** Diversion to any ISTS substation, should be without financial liability to Powergrid/DIC. Such diversion should not affect the Regional tariff or cost-sharing framework.
- **STU Substations:** For diversions to STU substations, the equivalent Yearly Transmission Charge (YTC) of the diverted asset on pro-rate basis, along with any applicable penalty, may be credited to the Regional ISTS Pool for the diverted period.

For this purpose, POWERGRID may raise bilateral bills to the borrower to recover the equivalent YTC of the diverted asset on pro-rate basis, along with any applicable penalty. The YTC may be computed in accordance with the prevailing Tariff Regulations, Sharing Regulations, or any other rules or regulations notified by CERC or the Ministry of Power, and all provisions relating to due dates, late payment surcharge, interest, or other billing conditions may likewise be governed by the applicable rules or regulations. The amount so recovered may be adjusted in the Regional ISTS Pool through the Second Bill mechanism under sharing regulations, and the corresponding credit shall be passed on to the DICs of the Region in the same Second Bill.

5.4. Bank Guarantee (BG) requirements:

- Borrower may furnish a valid Bank Guarantee equal to the prevailing cost of the equipment, effective till 45 days after return or replenishment is completed.
- The BG may be invoked by POWERGRID to recover any financial loss or liability arising from events such as failure to return or replenish the equipment within the agreed timeframe, or failure to repair, refurbish, or replace the equipment in the event of damage, failure, or loss during transit, erection, or operation.

5.5. Penalty and Default:

- If the Borrower fails to return or replenish the diverted equipment within the agreed timeframe, which may not exceed 24 months, a penalty of 15% of the approved Yearly Transmission Charge (YTC) of the diverted asset may be levied on a pro-rata basis for the delayed duration.
- The penalty amount may be credited to the Regional Component of ISTS charges for the corresponding period. In case of continued default or non-replenishment, POWERGRID may report the matter to the RPC forum for further decision, which may include encashment of the Bank Guarantee and/or regulatory intervention.

5.6. Record-Keeping and Monitoring: POWERGRID may maintain a centralized and up-to-date register of all diversions, containing the following information:

- Borrower entity name and category.
- Equipment details (type, rating, make, serial number).
- Date of diversion and expected return date.
- Physical and test condition at dispatch and upon return.
- Financial treatment and applicable YTC adjustments.
- Status of replenishment or replacement.

6. Review and Amendment: These Guidelines may be reviewed from time to time to incorporate operational experience, regulatory updates, or changes in system requirements.

7. Power to Relax: RPC forum may relax any of the provisions of these guidelines on its own or on an application made before it by the affected party.

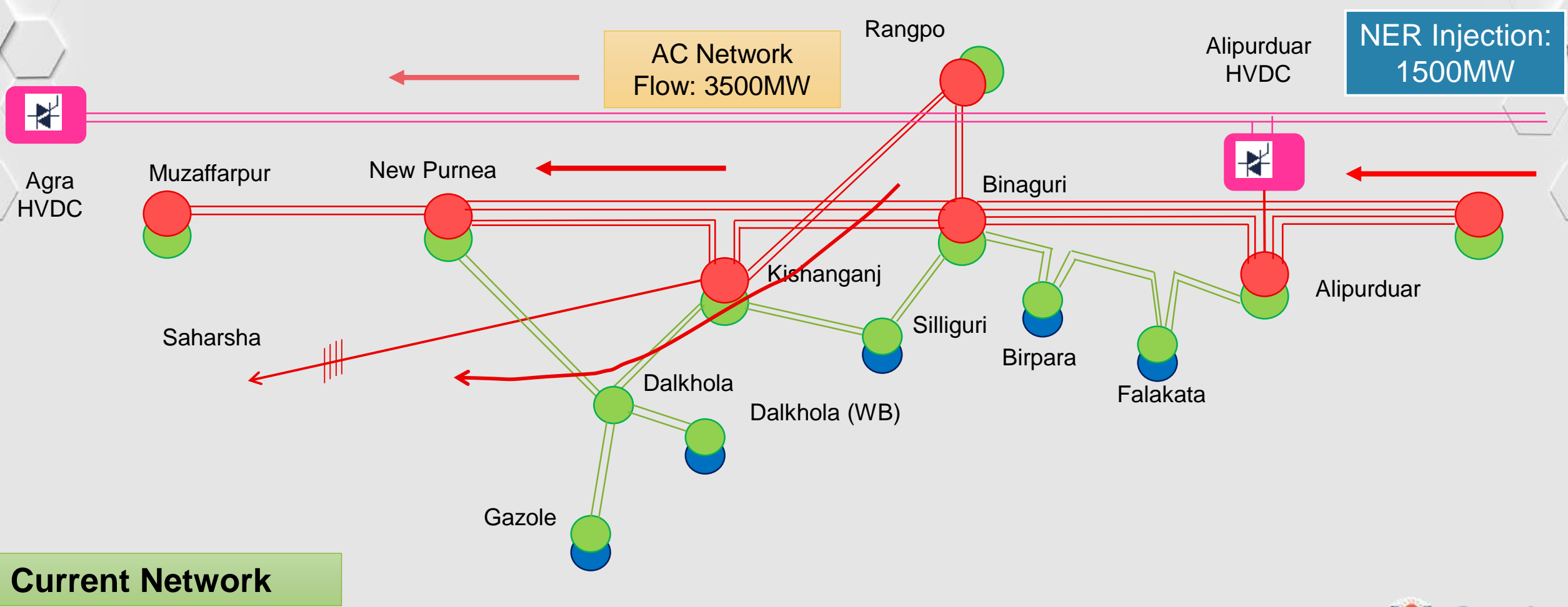
Shutdown of 400kV Binaguri-New Purnea D/C

NER Hydro: 2000MW
(Subarnsiri 4units – 1000MW (new))
BNC HVDC: 500MW*

Sikkim Hydro: 800MW

Bhutan Hydro: 2500MW

NER Injection: 1500MW



Current Network

* Last year trend



Shutdown of 400kV Binaguri-New Purnea D/C

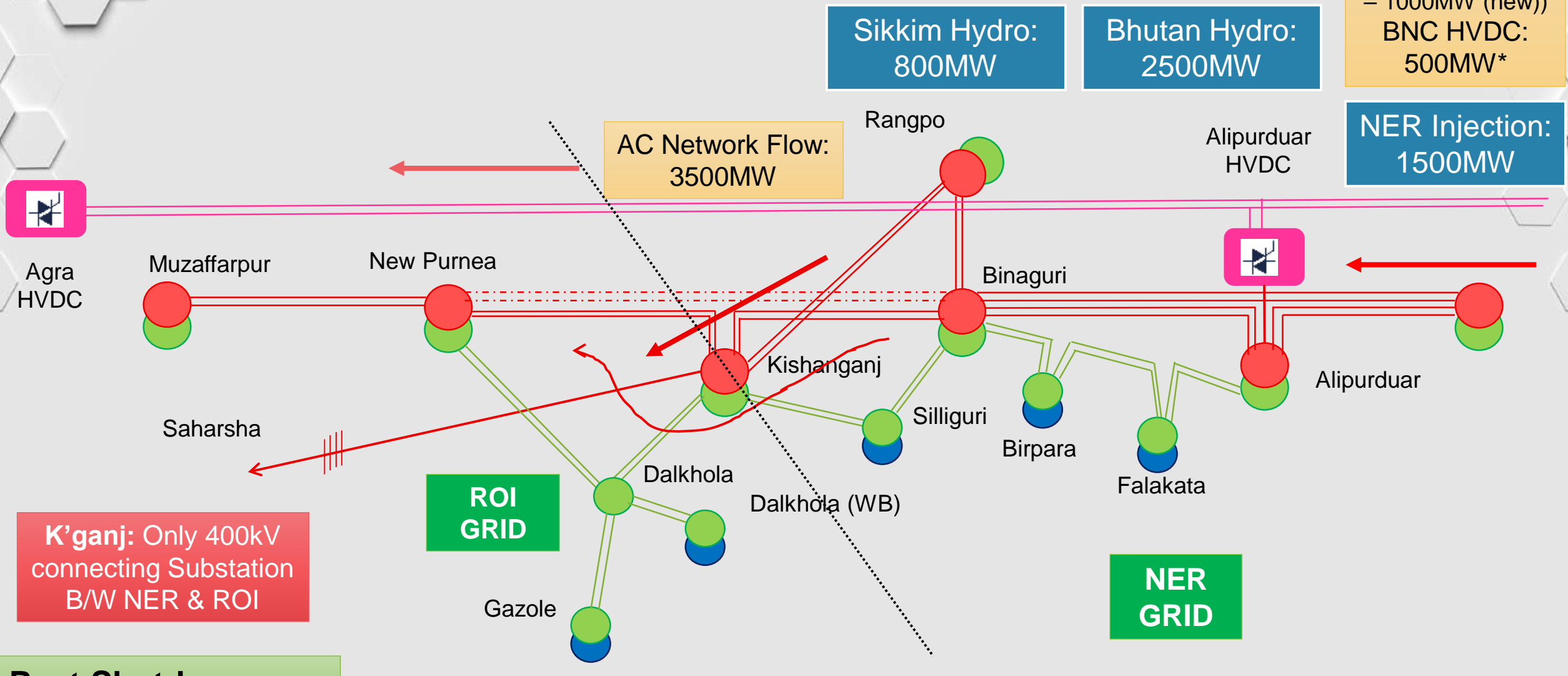
NER Hydro: 2000MW
 (Subarnsiri 4units – 1000MW (new))
 BNC HVDC: 500MW*

Sikkim Hydro: 800MW

Bhutan Hydro: 2500MW

NER Injection: 1500MW

AC Network Flow: 3500MW



K'ganj: Only 400kV connecting Substation B/W NER & ROI

ROI GRID

NER GRID

Post Shutdown

* Last year trend



Shutdown of 400kV Binaguri-New Purnea D/C

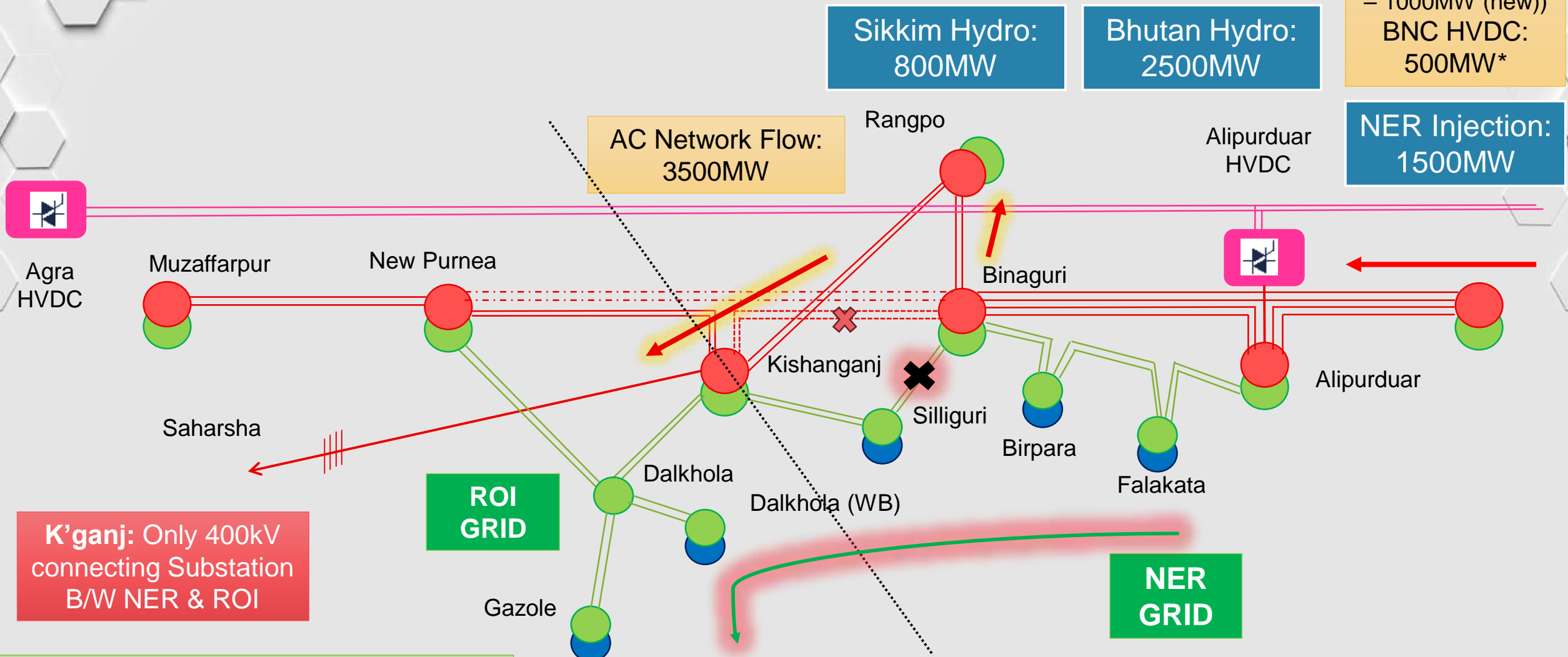
NER Hydro: 2000MW
 (Subarnsiri 4units – 1000MW (new))
 BNC HVDC: 500MW*

Sikkim Hydro: 800MW

Bhutan Hydro: 2500MW

NER Injection: 1500MW

AC Network Flow: 3500MW



K'ganj: Only 400kV connecting Substation B/W NER & ROI

ROI GRID

NER GRID

Outage of K'ganj-Binaguri D/C

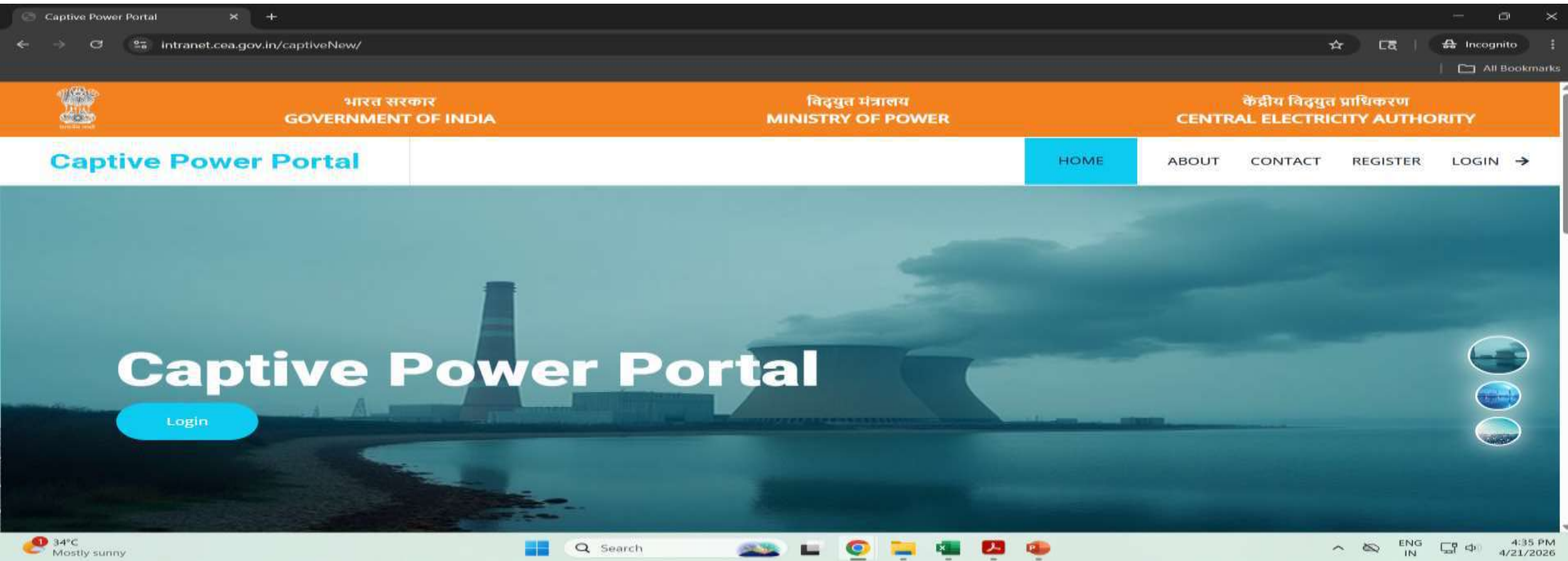
* Last year trend



CEA-Captive Power Portal

Annex B.2.18

<https://intranet.cea.gov.in/captiveNew/>



Captive Power Portal

भारत सरकार
GOVERNMENT OF INDIA

विद्युत मंत्रालय
MINISTRY OF POWER

केन्द्रीय विद्युत प्राधिकरण
CENTRAL ELECTRICITY AUTHORITY

Captive Power Portal

HOME ABOUT CONTACT REGISTER LOGIN →

Login

34°C
Mostly sunny

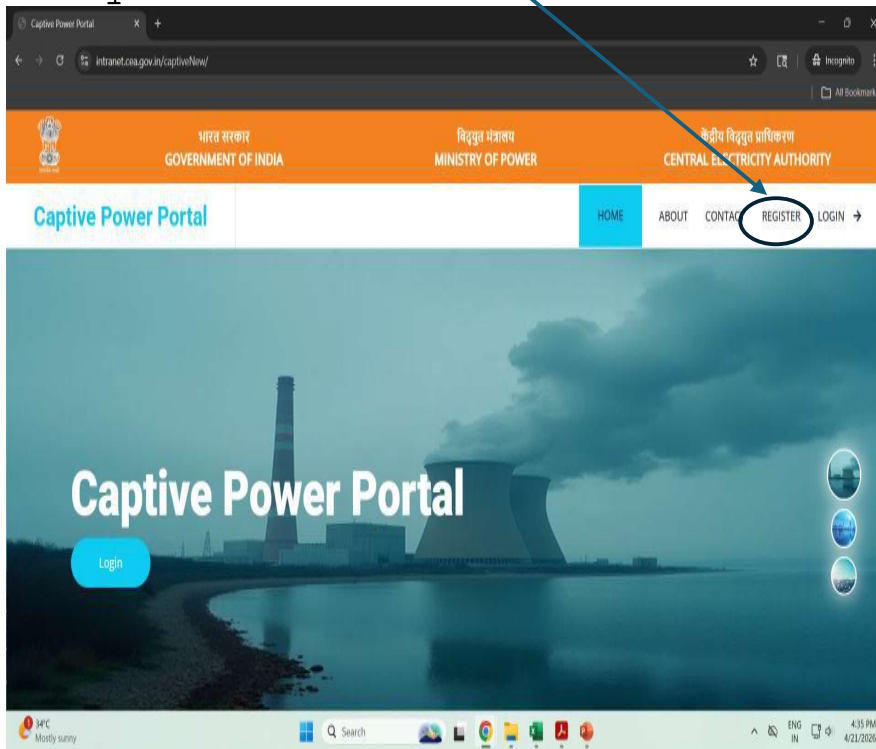
Search

ENG IN

4:35 PM
4/21/2026

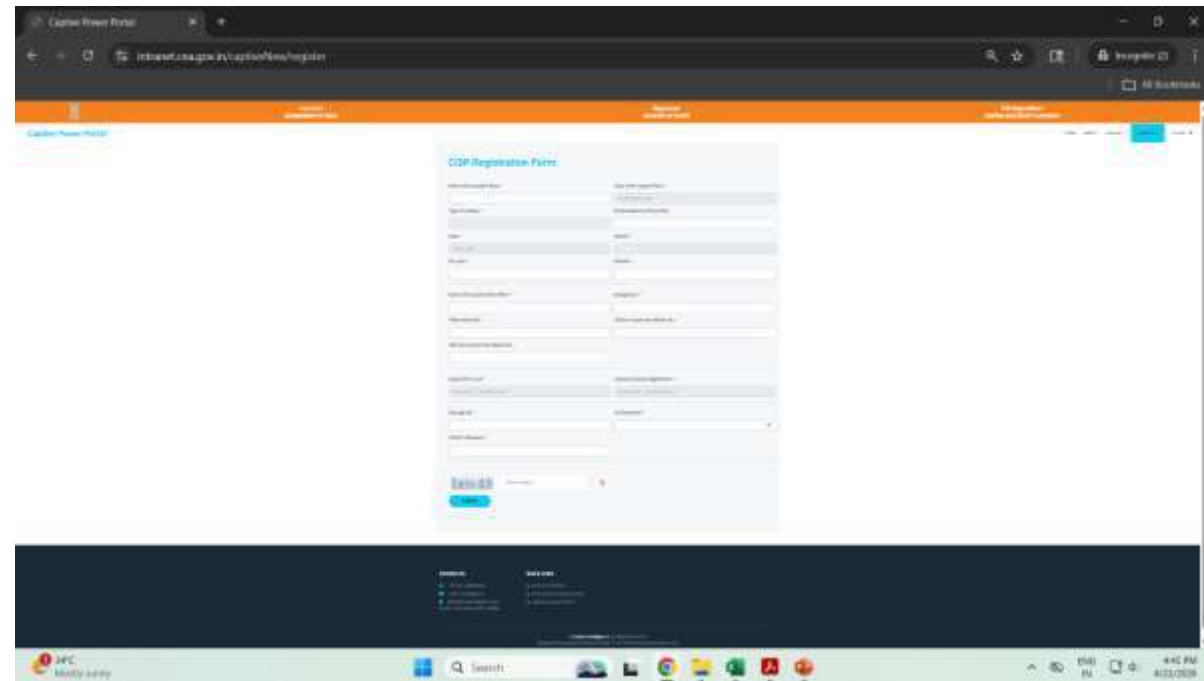
How to register

1. Go to the URL <https://intranet.cea.gov.in/captiveNew/> or CEA-Captive Power Portal on the CEA website (www.cea.nic.in)
2. Select the 'Register' option
required details in the CPP registration form
3. Enter the



Address, Details of the

t



Documents required for registration

1. PAN Card of the company
2. Company registration document

Upload these documents in the

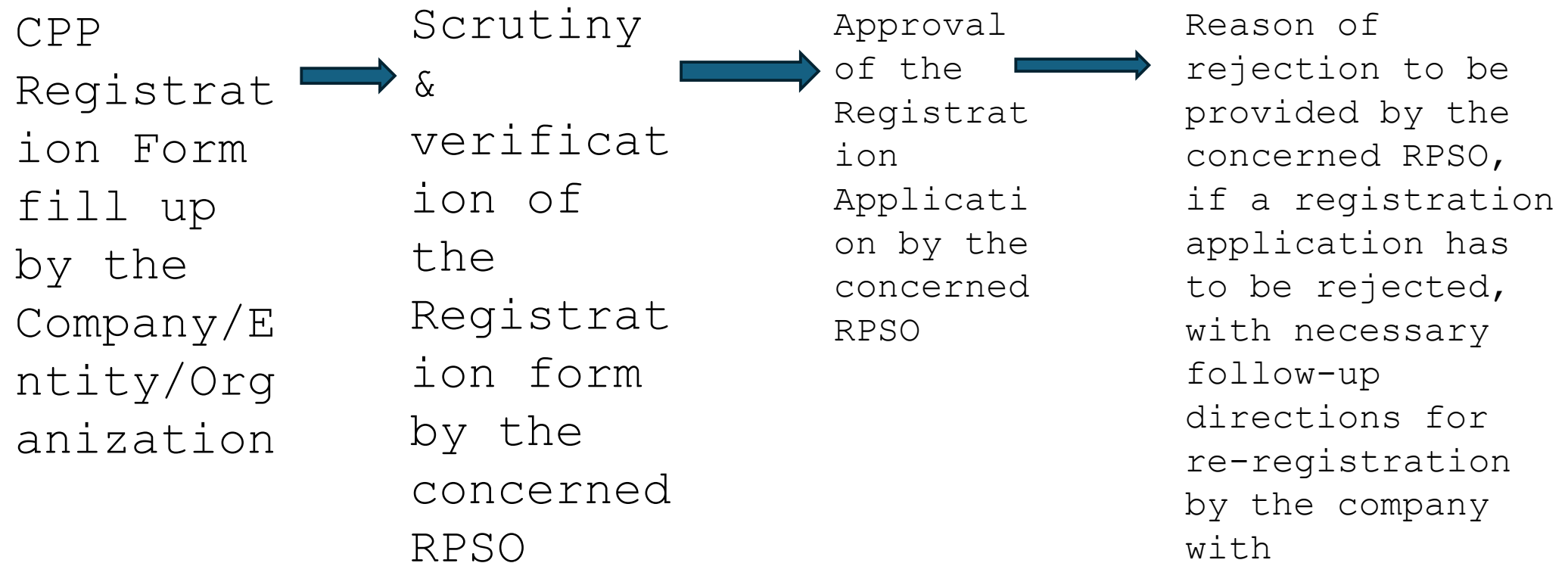
The screenshot shows the registration page of the Captive Power Portal. The page title is "Captive Power Portal" and the URL is "Intranet.cpa.gov.in/captiveNew/register". The navigation menu includes "HOME", "ABOUT", "CONTACT", "REGISTER", and "LOGIN". The registration form consists of the following fields:

- Upload Pan Card ***: A file upload field with a "Choose file" button and "No file chosen" text. An arrow points from the text "1. PAN Card of the company" to this field.
- Upload Company Registration ***: A file upload field with a "Choose file" button and "No file chosen" text. An arrow points from the text "2. Company registration document" to this field.
- Set Login ID ***: A text input field.
- Set Password ***: A password input field with a visibility toggle.
- Confirm Password ***: A text input field.
- Captcha**: A captcha image showing "fxc233" and an "Enter Captcha" input field.
- Register**: A blue button to submit the form.

The system tray at the bottom shows a temperature of 34°C, weather "Mostly sunny", and the date and time "4:58 PM 4/21/2026".

Stages of Registration Process

- Region-wise scrutiny, verification & approval is done by the Regional Power Survey Office (RPSO)



Dashboard for users

Captive Power Portal

Dashboard

Monthly Data of CGP list

Sr.No	Financial year	Month	Date of submission	View
No data available in table				

Showing 0 to 0 of 0 entries

Details entered during registration will appear in the User **Dashboard** after approval of the registration.

Captive Power Portal

Registration Details

Name of the Captive Plant: ABC Industries
Type of Industry: Paper
Name of the Authorized Officer: ABCD
Official Contact Number: 11111111
State: West Bengal
Pin Code: 750033
Company Registration: [Download](#)
Date of User Registration: 30-12-2025

Type of the Captive Plant: Industry
PAN No: AAAAA1235G
Official Email ID: ABC@XYZ.CO
Postal Address: XYZ
District: Kolkata
Pan Card: [Download](#)
Date of User Registration Request: 30-12-2025

Installed Capacity List

Sr.No	Type Of CPP	Installed Capacity (in kW)	Data submission date
-------	-------------	----------------------------	----------------------

Registration details provided by the company can be viewed from the **Registration Details** tab on left.

Installed Capacity Data

- The installed capacity data of the CPP can be entered by the user by mentioning the **Captive Generating Type**, **IC value in KW** and the **month**

The screenshot displays the 'Captive Power Portal' interface. The main content area is titled 'Installed Capacity Data (Add/List)'. It features a sidebar on the left with navigation options: Dashboard, Registration Details, Installed Capacity of CGP (highlighted), Update Monthly Data of CGP, and Update Previous Month's Data of CGP. The main form has two tabs: 'Add' (selected) and 'List'. The form contains the following fields:

- Plant Location: Kolkata , West Bengal
- Industry For Captive generation: Paper
- Captive Generating Type * (dropdown menu, currently showing '--Select--')
- Total Installed Capacity (in kW) * (text input field)
- Select Month * (dropdown menu, currently showing 'Month')

A red circle highlights the 'Captive Generating Type', 'Total Installed Capacity (in kW)', and 'Select Month' fields. At the bottom of the form is a green 'Add +' button. The browser's address bar shows 'intranet.cea.gov.in/captiveNew/installed_capacity'. The system tray at the bottom indicates a temperature of 34°C, 'Mostly sunny', and the date/time as 5:29 PM on 4/21/2026.

Monthly data upload

- CPPs have to upload monthly data for the CPP by the 5th of the following month in the **Update**

The screenshot displays the 'Captive Power Portal' web interface. The browser's address bar shows the URL 'intranet.coa.gov.in/captiveNew/details_cpp'. The page features a navigation menu on the left and a main content area with several data entry sections:

- Monthly data of this:** Includes a dropdown for 'Month: March 2025' and a 'Submit' button.
- Energy produced from generation assets:** A table with columns for 'Date', 'Name of the Asset', 'Energy Produced (MWh)', and 'Total Energy Produced (MWh)'. It contains three rows of data.
- Energy consumed by the facility:** A table with columns for 'Date', 'Name of the Asset', 'Energy Consumed (MWh)', and 'Total Energy Consumed (MWh)'. It contains three rows of data.

The Windows taskbar at the bottom shows the system tray with a temperature of 33°C, a search bar, and the date/time '5:30 PM 4/21/2025'.

Registration status for Eastern Region

- As per Format-21 data for FY 2024-25, 226 entities had submitted CPP data in Format-21 from the Eastern Region.
- As on date, 125 entities of the Eastern Region have registered successfully on the CEA-Captive Power Portal.