सत्यमेव जयते

भारत सरकार Government of India
विद्युत मंत्रालय Ministry of Power
उत्तर पूर्वी क्षेत्रीय विद्युत समिति
North Eastern Regional Power Committee
एन ई आर पी सी कॉम्प्लेक्स, डोंग पारमाओ, लापालाङ, शिल्लोंग-७९३००६, मेघालय
NERPC Complex, Dong Parmaw, Lapalang, Shillong - 793006, Meghalaya

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No.: No. NERPC/SE (O)/OCC/2025/ 663-705 May 07, 2025

To
As per list attached

Sub: 225वीं ऑपरेशन समन्वय उप-समिति (ओसीसी) बैठक का कार्यवृत्त / Minutes of 225th Operation Coordination Sub-Committee (OCC) Meeting

महोदय/महोदया,

कृपया अपनी सूचना एवं आवश्यक कार्रवाई हेतु 22 अप्रैल 2025 को एनईआरपीसी कॉन्फ्रेंस हॉल, शिलांग में आयोजित 225वीं ओसीसी बैठक के कार्यवृत्त को संलग्न पाएं। कार्यवृत्त NERPC की वेबसाइट: www.nerpc.gov.in पर भी उपलब्ध है।

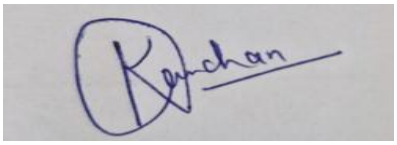
कृपया कोई भी टिप्पणी जल्द से जल्द NERPC सचिवालय को सूचित करें।

Sir/Madam,

Please find enclosed herewith the minutes of the 225th OCC Meeting held at NERPC Conference Hall, Shillong on 22nd April 2025 for your kind information and necessary action. The minutes is also available on the website of NERPC: www.nerpc.gov.in.

Any comments/observations may kindly be communicated to NERPC Secretariat at the earliest.

भवदीय / Yours faithfully,

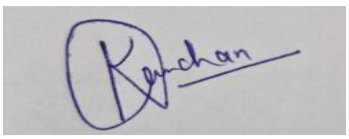


(कंचन चौहान / Kanchan Chauhan)
उप निदेशक / Dy. Director

Encl: As above

Distribution List:

1. Managing Director, AEGCL, Bijuli Bhawan, Guwahati – 781 001
2. Managing Director, APGCL, Bijuli Bhawan, Guwahati – 781 001
3. Managing Director, APDCL, Bijuli Bhawan, Guwahati – 781 001
4. Managing Director, MSPCL, Electricity Complex, Keishampat, Imphal – 795 001
5. Managing Director, MSPDCL, Secure Office Bldg. Complex, South Block, Imphal – 795 001
6. Director (Transmission), MePTCL, Lumjingshai, Short Round Road, Shillong – 793 001
7. Director (Generation), MePGCL, Lumjingshai, Short Round Road, Shillong – 793 001
8. Director (Distribution), MePDCL, Lumjingshai, Short Round Road, Shillong – 793 001
9. Director (Tech.), TSECL, Banamalipur, Agartala -799 001.
10. Director (Generation), TPGCL, Banamalipur, Agartala -799 001.
11. GM (Transmission), TPTL, Bidyut Bhaban, Banamalipur, Agartala -799 001.
12. Chief Engineer (WE Zone), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
13. Chief Engineer (TP&MZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
14. Chief Engineer (Commercial) -cum- CEI, DoP, Govt. of Arunachal Pradesh, Itanagar- 791111
15. Engineer-in-Chief, P&E Department, Govt. of Mizoram, Aizawl – 796 001
16. Engineer-in-Chief, Department of Power, Govt. of Nagaland, Kohima – 797 001
17. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
18. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad, Haryana-121003
19. Group GM, NTPC, Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
20. Vice President (Plant), OTPC, Badarghat Complex, Agartala, Tripura – 799014
21. ED, PGCIL/NERTS, Dongtieh-Lower Nongrah, Lapalang, Shillong -793 006
22. AGM (BD), NVVN, Core 5, 3rd floor, Scope Complex, 7 Institutional Area, Lodhi Rd., N. Delhi-3
23. Vice President, PTCIL, 2nd Floor, NBCC Tower, 15, Bhikaji Cama Place, New Delhi – 110066
24. Dy. COO, CTUIL, "Saudamini", 1st Floor, Plot No. 2, Sector-29, Gurugram, Haryana – 122001
25. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066
26. Chief Engineer, NPC Division, Central Electricity Authority, New Delhi – 110066
27. ED, NERLDC, Dongtieh, Lower Nongrah, Lapalang, Shillong -793 006
28. CGM, AEGCL, Bijuli Bhawan, Guwahati – 781001
29. CGM, APGCL, Bijuli Bhawan, Guwahati – 781001
30. CGM, DISCOM, Bijuli Bhawan, Guwahati – 781001
31. Head of SLDC, Dept. of Power, Govt. of Arunachal Pradesh, Itanagar – 791111
32. CGM, (LDC), SLDC Complex, AEGCL, Kahilipara, Guwahati-781 019
33. Head of SLDC, MSPCL, Imphal – 795001
34. Head of SLDC, MePTCL, Lumjingshai, Short Round Road, Shillong – 793 001
35. Head of SLDC, P&E Deptt. Govt. of Mizoram, Aizawl – 796 001
36. Head of SLDC, Dept. of Power, Govt. of Nagaland, Dimapur – 797103
37. Head of SLDC, TSECL, Agartala – 799001
38. Chief Engineer (Elect), Loktak HEP, Vidyut Vihar, Kom Keirap, Manipur- 795124
39. DGM (O&M), OTPC, Badarghat Complex, Agartala, Tripura – 799014
40. Director, NETC, 2C, 3rdFloor, D21Corporate Park, DMRC Building Sector 21, Dwarka, Delhi-77
41. AGM Regulatory & Commercial, NER II TL, 10th Floor, Berger Tower, Noida sector 16B-201301
42. Project Head, NERPSIP/PGCIL, Pub Suraj Nagar, Nutun Bazar, Kahelipara, Guwahati- 781019
43. ED, Comprehensive Scheme (Ar. Pradesh), PGCIL, Tayeng Building, Nitivihar, Itanagar-791111



(कंचन चौहान / Kanchan Chauhan)
उप निदेशक / Dy. Director

Minutes

of

225th OCC MEETING

Time of meeting: 10:30 Hrs.

Date of meeting: 22nd April, 2025 (Tuesday)

Venue: NERPC Conference Hall, Shillong

Contents

NORTH EASTERN REGIONAL POWER COMMITTEE

MINUTES OF 225TH OCC MEETING HELD ON 22.04.2025 (TUESDAY) AT 10:30 HRS

The list of Participants is attached as **annexure I**

1. PART-A: CONFIRMATION OF MINUTES

1.1. Confirmation of Minutes of 224th Meeting of OCC Sub-Committee of NERPC

The minutes of 224th meeting of OCC Sub-committee held on 25.03.2025 at NERLDC Conference Hall, Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2025/329-371 dated 9th April, 2025.

MePTCL representative stated in the meeting that with respect to the agenda item 2.28 of 224th OCCM, it was noted in the minutes –"Forum opined that FTC may be allowed with the condition that WT to be commissioned within three months." In addition to above statement, he stated that AEGCL have to install PLCC at Panchgram end in the matching timeline for enabling PLCC link on the line. Forum requested AEGCL to complete the said work within the matching timeline.

The sub-committee noted and confirmed the minutes of 224th OCC meeting accordingly.

2. PART-B: ITEMS FOR DISCUSSION

AGENDA FROM NERPC

2.1. Outage planning

I. Generation Planning (ongoing and planned outages)

a. In 217th OCCM, NEEPCO informed that they would provide daily inflow data for storage-type Hydro PS. NHPC also agreed to provide inflow data as per the NER operational data format. Based on that data provided from NEEPCO and NHPC present per day MU and projected number of days of operation.

Plants	Reservoir Level in meters (as on 28/02/2025)	MU Content	Present DC (MU)	No of days as per current Generation
Khandong	716.63	21.93	Under SD	
Kopili	607.65	86	1.60	54
Doyang	314.3	12	0.16	75
Loktak	767.02	30	1.00	30

The outage of other generating stations may be approved considering the present water levels in reservoirs. CEA has approved the generation outage plan for FY 2025-26. All the utilities may take note of it and in case of any modification from the Approved Planned Outages, the same may be finalized in consultation with GM Division

b. Outage Planning of Transmission elements

As per the Outage planning procedure of NER the planned outages approved in the OCC forum has to be reconfirmed by the availing utilities on 10:00hrs. of D-4 to 12:00 hrs. of D-3) to NERLDC in order to either avail the approved shutdown or cancel it.

If an outage is to be availed on say 10th of the month, the shutdown availing agency would reconfirm to NERLDC between 10 hrs. of 6th of the month to 1200 hrs. of 7th of the month. This practice is necessary to ensure optimal capacity utilization and the time required for associated system study/coordination by/amongst RLDC/NLDC.

Subsequently NER stakeholders have provided shutdown request for transmission elements for the month of May-2025. That is attached as **Annexure 2.1**

Deliberation of the subcommittee:

NERPC apprised that the shutdown proposal for the month of May-2025 has been discussed in the monthly outage discussion meeting held on 17.04.2025 (online mode) and the list of approved shutdowns is hereby attached as **Annexure 2.1**.

The sub committee noted as above.

AGENDA FROM NERLDC

2.2. Operational Performance and Grid discipline during March 2025:

NERLDC presented the Operational Performance and Grid Discipline Report for the month of March 2025 (**Annexure 2.2**).

2.3. Non-Functionality of online transfer of elements at Kameng HEP

It has been observed that Kameng HEP reported the inability to perform online transfer of elements at their 400 kV substation, which operates under a Double Main Bus cum Transfer bus scheme, this issue came to light during an emergency shutdown for attending a hotspot on the Bus Coupler isolator connected to Bus-B.

As per the standard protocol, NERLDC Control Room instructed Kameng HEP to carry out the online transfer of all associated elements and proceed with the shutdown of the affected isolator on Bus-B R-phase. However, Kameng HEP expressed its inability to execute the transfer online, citing safety concerns due to high sparking observed in previous attempts. In view of the above, Kameng HEP requested a complete shutdown of both 400 kV buses to

facilitate the maintenance activity. induction voltage of approximately 2.2 kV was reported, further reinforcing the safety risk to personnel and equipment.

It is important to note that the Kameng HEP switchyard is configured under a Double Main Bus cum Transfer Bus scheme, which is typically designed to allow seamless transfer of elements between buses without compromising the continuity of supply to healthy elements. The current limitation in transferring elements online is a cause for concern and needs to be addressed promptly.

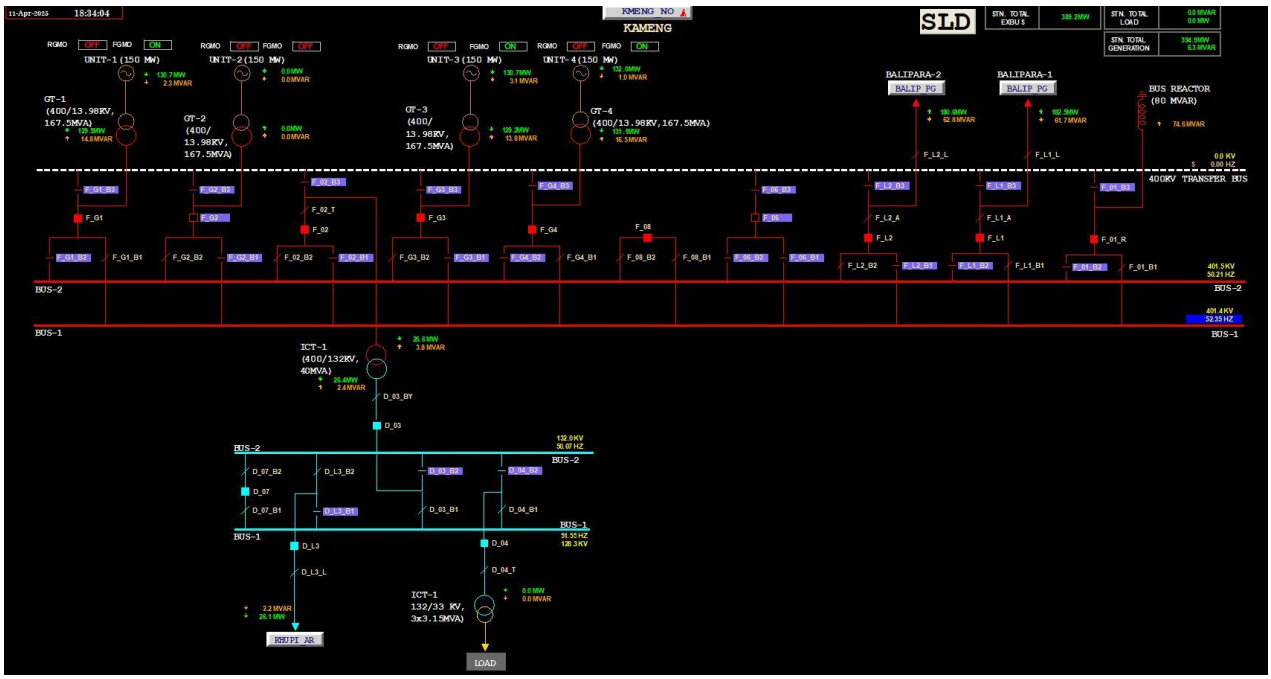


Fig: Kameng HEP Switchyard

Therefore, we request Kameng HEP to take appropriate corrective measures to ensure the reliable and secure operation of the Kameng 400/132 kV switchyard. Given that the Khupi area of the Arunachal Pradesh power system is interconnected with the Kameng system, any unplanned or forced outages at Kameng HEP could severely affect the reliability and stability of the entire North Eastern Region (NER) power grid.

Deliberation of the subcommittee:

NEEPCO apprised the forum that flashover across isolators have been observed in the previous attempts which may cause safety risks to persons and equipment. He added that the humid weather, which is persistent in the area, is the main reason for the flashover.

NEEPCO requested that online transfer may be attempted during sunny weather in coordination with NERLDC. Forum agreed to the suggestion of NEEPCO. The matter will be taken up the OEM if the issue persists after trial in sunny weather.

The subcommittee noted as above.

2.4. Submission of Machine Model Data for Subansiri HEP – Requirement for FTC Activities

It is to be noted that, as informed during the 224th OCC Meeting, the units of Subansiri HEP are scheduled to begin synchronization from May 2025.

In view of the above, and to facilitate smooth coordination and execution of First Time Charging (FTC) activities, it is requested that Subansiri HEP kindly initiate the submission of detailed machine models at the earliest, in accordance with the GRID-INDIA FTC procedure available on the NLDC website.

Early submission of the required data will provide sufficient time for model validation, analysis, and coordination, thereby ensuring preparedness well in advance of the commissioning schedule.

Deliberation of the sub committee:

NHPC assured to provide the required data shortly.

The subcommittee noted as above.

2.5. Grading of median Frequency Response Performance (FRP) of each control area for FY 2024-25:

IEGC Reg. 30(10) (q) mandates that "*NLDC, RLDCs and SLDCs shall grade the median Frequency Response Performance annually, considering at least 10*

reportable events. In case the median Frequency Response Performance is less than 0.75 as calculated as per Annexure2, NLDC, RLDCs, SLDCs, as the case may be, after analyzing the FRP shall direct the concerned entities to take corrective action. All such cases shall be reported to the concerned RPC for its review."

Annexure-2 provides that "*Each control area shall be graded based on median Frequency Response Performance annually (at least 10 events) as per following criteria:*

TABLE C: FREQUENCY RESPONSE CRITERIA

Performance	***Grading***
FRP≥ 1	*Excellent*
0.85 ≤ FRP < 1	*Good*
0.75 ≤ FRP	*Average*
0.5≤ FRP < 0.75	*Below Average*
FRP	*Poor*

**Provided that for wind/solar generating stations and state control areas with internal generation less than 100 MW or annual peak demand less than 1000 MW, the FRP grading shall be indicative only.*

NERLDC has graded the median FRP of each Regional control areas for the 20 reportable events notified by NLDC in FY 2024-25.

	BGTPP	**Palatana**	**Doyang**	**Kameng**	**Khandong Stg-2**	**Kopili**	**Loktak**	**Panyor**	**Pare**
Median FRP	3.38	0.57	0.32	0.2	0.16	4.6	0.5	1.7	-0.26
Grading	Excellent	Below Average	Poor	Poor	Poor	Excellent	Below Average	Excellent	Poor

Table 1: Median FRP of Generator Control Area

	Arunachal Pradesh	**Assam**	**Manipur**	**Meghalaya**	**Mizoram**	**Nagaland**	**Tripura**	**NER**
Median FRP	0.07	0.71	NA	0.39	0.91	0.93	0.23	1.33
Grading	Poor	Below Average	NA	Poor	Good	Good	Poor	Excellent

Table 2: Median FRP of State Control Area

The detailed grading of median FRP for all the control areas is attached in **Annexure-2.5**. Generators and States are requested to take corrective actions to improve the FRP.

Deliberation of the sub committee:

The sub committee noted the median FRP and respective grading for all the concerned utilities and states. Member Secretary, NERPC advised the ISGS Gencos to carry out necessary tests and improve their FRPs. Further MS, NERPC advised all States, especially Assam, Meghalaya and Tripura to improve the median FRP and respective grading.

The forum opined that for the intra-state Gencos, some incentives, based on Beta 'β', in line with that of for the CGS Gencos, may be considered by the State Electricity Regulatory Commissions (SERCs) in order to support grid stability. MS, NERPC suggested that the matter can be taken with NPC for further deliberation.

The subcommittee noted as above.

2.6. Status of DCS at Loktak and Doyang HEP

As per the approved Methodology for computation of Average Monthly Frequency Response Performance, Beta 'β', generators have to submit high resolution data (1 second or better resolution) for computation of Monthly

Frequency Response Performance (FRP - Beta) and Frequency Response Characteristic (FRC).

At present, NERLDC is computing the FRP of Loktak HEP (NHPC) and Doyang HEP (NEEPCO) using SCADA data available at the RLDC.

In view of the above, it is requested that NHPC and NEEPCO may update the status of DCS availability at Loktak and Doyang HEP respectively, and explore the feasibility of sharing high resolution data with NERLDC.

Deliberation of the sub committee:

NEEPCO apprised the forum that the matter regarding DCS availability at Doyang will be resolved by 16th may 2025. NHPC also apprised the forum that the DCS is included in the R&U work which will start in Nov'25 and DCS may be commissioned six months after the start of work.

The sub committee noted as above.

2.7. Collection of Bulk Load Information from States

In accordance with the provisions of IEGC 2023 and in pursuit of enhancing operational planning and ensuring secure and reliable grid operation, it is deemed essential to establish and maintain a comprehensive, standardized database of bulk consumers across all constituent states of the region.

Bulk consumers, defined as those availing power supply at 33 kV and above, exert a substantial influence on the grid due to the magnitude and concentration of their demand. Accordingly, the availability of accurate information pertaining to their connected voltage level, demand characteristics, and real-time monitoring status is critical for informed decision-making in both operational and planning.

In view of the above, all State Load Despatch Centres (SLDCs) are requested to kindly submit the requisite details of bulk consumers within their respective states as per **Annexure-2.7**.

Deliberation of the sub committee:

Assam, Meghalaya, Tripura, Arunachal Pradesh and Mizoram agreed to submit the data for bulk load information within 2 weeks' time. Nagaland and Manipur apprised the forum that the requisite information shall be shared after validating the data for bulk load consumers.

The sub committee noted as above.

2.8. Traction loads information of NER states

As part of a coordinated effort to improve load visibility and planning accuracy across the grid, it is essential to compile and regularly update information pertaining to traction loads of railways systems within each state.

Traction loads, due to their high and often fluctuating demand characteristics, have an impact on load profiles and voltage/reactive power management.

Accordingly, all State Load Despatch Centres (SLDCs) are requested to furnish the details of traction loads within their jurisdiction as follows:

- Location and feeding substation details
- Connected voltage level
- Maximum and average daily demand
- SCADA availability and status of real-time monitoring

Deliberation of the sub committee:

The forum advised all the states to share the requisite information related to traction loads within their jurisdiction within 2 weeks' time. Forum requested NERLDC to send a reminder email to all the SLDC's regarding the same.

The sub committee noted as above.

2.9. Airport Load Information: Connectivity and Reliability Considerations

Airports, being critical infrastructure, represent strategic and high-priority loads in the power system. Given their operational sensitivity and the need

for uninterrupted power supply, it is essential to assess and document the electrical connectivity and reliability measures associated with each airport across the region.

In this context, all State Load Despatch Centres (SLDCs) are requested to provide the following details for each airport within their jurisdiction:

- Name and location of the airport
- Voltage level and point of grid connectivity
- Nature of connectivity (single source / dual source / dedicated feeder / redundant path)
- Maximum demand and average daily demand

Deliberation of the sub committee:

The forum advised all the states to share the requisite information related to airport loads within their jurisdiction within 2 weeks' time. Forum requested NERLDC to send a reminder mail to all the SLDC's regarding the same.

The sub committee noted as above.

2.10. Status Update and Revival Plan for Long-Outage NER Generators & Transmission Lines

The following NER generators & transmission lines have been under outage since long time. Considering the increasing demand trend and reliable power supply in the Region, respective utilities are requested to intimate the updated expected date of revival & take necessary action to restore the mentioned units & lines at earliest:

Generating Units:

S. No.	Element Name	Outage time	Reason	Expected date (as updated in 224th OCCM)

1	Khandong Unit I	10:45 Hrs of 26-03-2022	Flash flood of reservoir causing submergence of the Khandong station	31-May-25
2	Khandong Unit II	10:45 Hrs of 26-03-2022		
3	LTPS Unit 7	17:08 hrs of 08-04-2024	Due to high vibration	May'25
4	Baramura Unit 5	20:17 Hrs of 26-03-2024	Gas fuel hydrolic trip low.	Unit Ok.
5	Baramura Unit 4	23:20 Hrs of 05-06-2024	Manually opened as there is issue in display, erroreous data was coming.	Non- availability of gas
6	Rokhia Unit 8	22:13 Hrs of 02-05-2024	Hand Tripped due to low Gas Pressure	-
7	Rokhia Unit - 7	14:06 Hrs of 06-11-2024	Leakage in Heat Chamber	-
8	Kameng Unit 2	07:31 Hrs of 17-06-2024	Damage in the stator core & bar, and also on rotor poles due to dislodging of 1no. V-block	May'25

Transmission Lines:

S. No.	**Element Name**	**Outage time**	**Reason**	**Expected date (as updated in 224th OCCM)**
1	400 kV Imphal - Thoubal I	18-10-2021	Tripped on DP, ROW issue.	RoW issue

2	132 kV Kohima - Meluri	27-09-2023	S/D taken by Kohima trans. Div. for dismantling of Tower no. AP 130	Expected revival By April/May'25
3	132 kV Jiribam-Rengpang	17-11-2023	Tripped on Earth fault	Tower shifting required due to NHIDCL work
4	132kV Ningthoukhong-Churachandpur ckt 1	04-08-2024	Z-1, 18.5 km, O/C	-
5	132 kV Imphal-Ningthoukhong line 1	13-02-2025	Stringing and termination of diverted SC 132kV Leimatak-Mao line (MSPCL) from existing tower no. 83 to tower no. 101 (to avoid infringement with proposed Imphal Railway Station under Jiribam-Imphal New Railway line on turnkey basis). The Railway diversion reference is for the old line namely 132kV Leimatak-Ningthoukhong-Yurembam-Mao which is now 132kV Leimatak-Ningthoukhong-Imphal PG-Yurembam-Karong line. The diversion portion presently considered is from tower loc no. 83 to 101 of 132kV Imphal PG - Ningthoukhong line ckt 1.	-

6	132kV Srikona – Panchgram	14-01-2019	-	-

Deliberation of the sub committee:

Generating units

S. No.	Element Name	Outage time	Reason	Update in 225th OCC meeting
1	Khandong Unit I	10:45 Hrs of 26-03-2022	Flash flood of reservoir causing submergence of the Khandong station	Khandong Unit I- May 2025
2	Khandong Unit II	10:45 Hrs of 26-03-2022		Khandong Unit II- July 2025
3	LTPS Unit 7	17:08 hrs of 08-04-2024	Due to high vibration	May'25
4	Baramura Unit 5	20:17 Hrs of 26-03-2024	Gas fuel hydrolic trip low.	Baramura Unit 5- 1st week of May 2025
5	Baramura Unit 4	23:20 Hrs of 05-06-2024	Manually opened as there is issue in display, erroreous data was coming.	Baramura Unit 4. Tripura apprised that there is technical problem in rotor.Non functional due to non availability of gas. Forum advised to resolve rotor issue in the unit.
6	Rokhia Unit 8	22:13 Hrs of 02-05-2024	Hand Tripped due to low Gas Pressure	Tripping issue due to technical problem in bearing.

				Coordination with OEM underway. Forum advised to resolve at the earliest.
7	Rokhia Unit - 7	14:06 Hrs of 06-11-2024	Leakage in Heat Chamber	Leakage in Heat Chamber issue solved. Unit is ready.
8	Kameng Unit 2	07:31 Hrs of 17-06-2024	Damage in the stator core & bar, and also on rotor poles due to dislodging of 1no. V-block	June-2025

Transmission lines

S. No.	**Element Name**	**Outage time**	**Reason**	**Update as per 225th OCC meeting**
1	400 kV Imphal - Thoubal I	18-10-2021	Tripped on DP, ROW issue.	RoW issue. Law and order situation is fragile.
2	132 kV Kohima - Meluri	27-09-2023	S/D taken by Kohima trans. Div. for dismantling of Tower no. AP 130	Expected revival By April-2025
3	132 kV Jiribam-Rengpang	17-11-2023	Tripped on Earth fault	Tower shifting required due to NHIDCL work

4	132kV Ningthoukhong-Churachandpur ckt 1	04-08-2024	Z-1, 18.5 km, O/C	-
5	132 kV Imphal-Ningthoukhong line 1	13-02-2025	Stringing and termination of diverted SC 132kV Leimatak-Mao line (MSPCL) from existing tower no. 83 to tower no. 101 (to avoid infringement with proposed Imphal Railway Station under Jiribam-Imphal New Railway line on turnkey basis). The Railway diversion reference is for the old line namely 132kV Leimatak-Ningthoukhong-Yurembam-Mao which is now 132kV Leimatak-Ningthoukhong-Imphal PG-Yurembam-Karong line. The diversion portion presently considered is from tower loc no. 83 to 101 of 132kV Imphal PG - Ningthoukhong line ckt 1.	PTCC clearance obtained from Telecom and railway departments. However. PTCC clearance pending from Defence department.
6	132kV Srikona – Panchgram	14-01-2019	-	Survey for rerouting in process.

Agenda items referred from NETeST meetings

2.11. Request to integrate DoP, Arunachal Pradesh Stations over OPGW.

As informed by the POWERGRID-COMPREHENSIVE Arunachal Pradesh team, installation of OPGW, FOTE and commissioning of FOTE in the OPGW communication path from Pasighat to Ziro i.e Niglok-> Napit-> Pasighat-> Along-> Basar->Daporizo-> Ziro has been completed and commissioned.

NERLDC requested DoP, Arunachal Pradesh via email dated 11th March 2025, to integrate the following stations over OPGW also apart from the available VSAT:

Along

Pasighat

Daporizo

This will help in increasing reliability of real time telemetry of Arunachal Pradesh.

DOP, Arunachal Pradesh may update the status.

In 31st NETEsT Meeting, ERPC requested NERLDC to communicate with the working level executive to rectify the issue. NERLDC informed that the same has been already communicated to the concerned person on multiple occasions, however no improvement has been observed.

Further discussion could not be elaborated due to absence of DOP-Arunachal Pradesh representative. The forum noted that update will be taken from DOP-Arunachal Pradesh over mail before 224th OCC meeting to be held in April 2025.

Deliberation of the sub committee:

The forum advised DoP-AP to complete cabling of LAN from RTU to FOTE in all 3 nos. of substations (Along, Pasighat and Daporizo). Member Secretary, NERPC advised DoP-AP to take up the matter with the co-ordinator of M/s GE and resolve the issue by the next OCC meeting.

The sub committee noted as above.

2.12. Request to integrate data of Panyor and Pare in Chimpu S/s RTU.

NERLDC observed that the data (MW, MVAR, CB, and isolators) for Panyor and Pare bays at Chimpu S/s is not being reported. Upon further analysis, it has come to NERLDC's attention that MFTs and CMRs for the mentioned bays are yet to be installed. Since the above-mentioned lines are connected to ISGSs, monitoring of the same is imperative from Chimpu end also.

NERLDC requested DoP, Arunachal Pradesh to carry out the following actions to enable data reporting for the mentioned bays via email dated 17th February 2025 and reminder mail on 11th March 2025:

Installation of MFTs:

MFTs need to be installed for both bays.

Appropriate CT and PT connections must be completed.

MFTs should then be integrated with the Chimpu RTU.

Installation of CMRs:

CMRs need to be installed for both bays.

CB and isolator status should be integrated with the Chimpu RTU.

Deliberation of the sub committee:

DoP-AP apprised the forum that MFTs and CMRs have been received at site. DoP-AP further apprised the forum that cabling work is pending and will be resolved within 2 week's time.

The sub committee noted as above.

3. PART-C: METERING ITEMS

3.1. Comparative study of Deviation Accounts (SEM vs SCADA data) for NER States:

As per 15th NPC and further deliberation in 223rd OCCM, a comparative study for Deviation accounts taking SCADA data was done by NERLDC. The differences found in DSM Accounts among all States for the period 27.01.2025 to 23.02.2025 with day wise differences Plots. As can be observed from the plots, there exist large deviations in SEM and SCADA DSM Accounts.

In 224th OCCM, NERLDC presented the comparative DSM accounts (SCADA data vs SEM data) and day wise difference plots. Forum noted that there is large deviation in the DSM accounts calculated from SCADA data and from SEM data.

Forum requested PGCIL to explore the option of data transfer from additional port of SEM (RS 232 port) to SLDC at the ISTS points till new AMR system is procured by CTU.

Deliberation of the sub committee:

PGCIL apprised the forum that corporate office of PGCIL has raised concerns regarding cyber security in the matter of data transfer from additional port of SEM (RS 232 port) to SLDC at the ISTS points till new AMR system is procured by CTU. NERPC advised that it is one way i.e read only port and no violation of Cyber Security, so explore possibility of RS 232 Port.

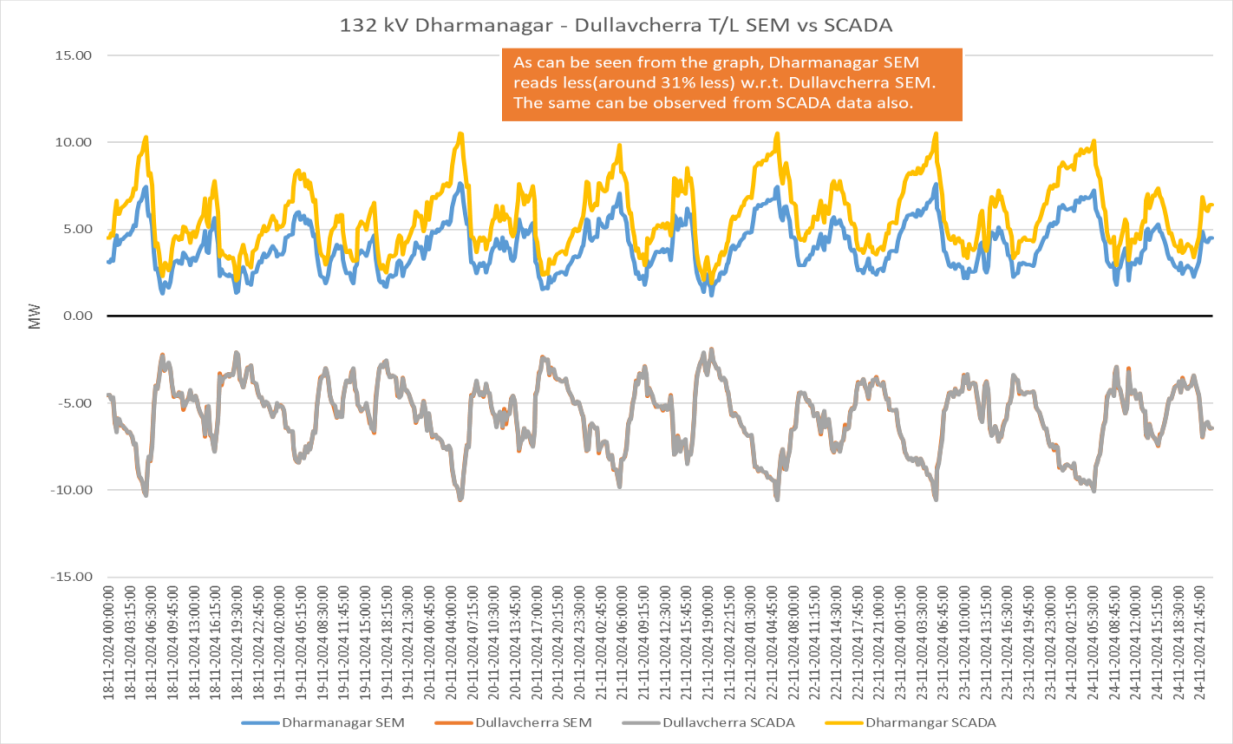
The sub committee noted as above.

3.2. Issue in SEM data of 132 kV Dharmanagar end of Dullavcherra Feeder:

It has been observed that the data received from Dharmanagar end is erroneous and the same neither matches with SCADA data nor with data from Dullavcherra end. Several follow ups have been initiated regarding the matter with utility, however, matter is yet to be resolved.

It is also to be noted that since 222nd OCCM, data from Dharmanagar S/S has not been received by NERLDC from said substation. Issue with Vinplus Software had been mentioned by Tripura in the previous OCCM.

In the 224th OCCM, TSECL updated that the matter will be looked into and will provide update shortly. Forum urged Tripura to sort the matter on urgent and priority basis. Tripura is hereby requested to provide updates on the issue and also provide contact details of personnel stationed at Dharmanagar S/S for future communication.



Deliberation of the sub committee:

Tripura apprised the forum that DCD data have been received at Ambassa and Dharmanagar substations. However, due to technical issue with Vinplus software, SLDC Tripura is unable to transfer the data to laptop. The forum advised Tripura to carry the laptop along with DCD data to Kumarghat substation where PGCIL will help Tripura to resolve the issue.

The sub committee noted as above.

3.3. Issue in receipt of data from 132 kV Tipaimukh S/S

Weekly SEM data from 132 kV Tipaimukh (Manipur) S/S is essential for accounting of Manipur Drawal. However, SEM data for said substation is not being received. On query, downloading data from DCD to laptop has been failing.

In 222nd OCCM, Manipur apprised the forum that the problem in downloading data from DCD
to laptop still persists. PGCIL agreed to help Manipur in resolving the issue.

In 223rd OCCM, Forum requested Powergrid to assist Manipur to rectify the issue. Manipur to send Laptop along with DCD available at Tipaimukh to Aizawl PG S/S for the same.
In the 224th OCCM, Manipur informed that the equipment is ready to be dispatched but due to Law-and-Order condition in the state, movement is restricted. They are unable to send laptop along with DCD to Aizawl S/S. Manipur agreed to do the same as soon as possible.

Deliberation of the sub committee:

Manipur apprised the forum that the DCD data and the laptop are in Manipur and are inaccessible due to the current law and order situation in Manipur. Manipur further apprised the forum that the laptop has developed technical problems and is not functional currently. Member Secretary, NERPC advised Manipur to repair the laptop and resolve the issue at the earliest.

The sub committee noted as above.

3.4. Issue in Receipt of Data data from Udaipur S/S:

Weekly SEM data from 132 kV Udaipur(Tripura) Substation is not being received since replacement of old LnT Meter with Secure Make Meter on 23-12-2024(for 132 kV Udaipur end of Palatana T/L). In 222nd OCCM, the forum advised Tripura to resolve the issue by next OCC meeting. Data from the replaced meter is yet to be received by NERLDC. Tripura may intimate present status of the same.

Deliberation of the sub committee:

Tripura apprised the forum that DCD data has been received at Udaipur substation. However, due to technical issue with Vinplus software, SLDC Tripura is unable to transfer the data to laptop. The forum advised Tripura to carry the laptop along with DCD data to Kumarghat substation where PGCIL will help Tripura to resolve the issue.

The sub committee noted as above.

3.5. Receipt of SEM data from 132 kV Budhjungnagar, 132 kV Ambassa, 132 kV Dharmanagar, 132 kV PK Bari & 132 kV SM Nagar (TSECL) Substations:

As per 175th OCCM dated 18th Feb 2021 agenda D.12, Indigrid and Powergrid NERTS were given responsibility to collect and send SEM data on weekly basis for Tripura owned substations viz 132kV Ambassa S/s,132kV Budhjungnagar S/s, 132 kV PK Bari S/s and 132 kV SM Nagar S/s for the interim period, due to shortage of DCDs. The relevant extracts are furnished below

Quote:

"The forum noted that due to the existing shortage of DCDs, the same cannot be provided to Tripura for some time for new locations. This creates difficulty in getting SEM data from Budhjangnagar, Ambasa, PK Bari and SM Nagar. The Matter was discussed and it was decided that during the interim period Powergrid NERTS will provide readings from PK Bari and SM Nagar of Tripura and Sterlite will provide readings from Budhjangnagar and Ambassa of Tripura."

Unquote

As per IEGC 2023 Clause 49(12)(e) entity shall be responsible to send weekly meter data to RLDC. The relevant extracts are furnished below

Quote:

"Entities in whose premises the IEMs are installed shall be responsible for (i) monitoring the healthiness of the CT and PT inputs to the meters, (ii) taking weekly meter readings for the seven day period ending on the preceding Sunday 2400 hrs and transmitting them to the RLDC by Tuesday noon, in case such readings have not been transmitted through automatic remote meter reading (AMR) facility (iii) monitoring and ensuring that the time drift of IEM is within the limits as specified in CEA Metering Regulations 2006 and (iv) promptly intimating the changes in CT and PT ratio to RLDC."

Unquote

In 221st OCCM, Tripura confirmed the receipt of 3 nos. of DCDs and that the same have been dispatched to Dharmanagar, Ambassa and SM Nagar(State) S/Ss. Tripura further intimated that the remaining works shall be completed by 21/12/2024 and the meters shall be reporting successfully from 23/12/24.

In 222nd OCCM, forum requested Tripura to resolve the issue by next OCC meeting.

However, data is yet to be received from concerned utilities on weekly basis.

Deliberation of the sub committee:

Tripura stated that the matter will be resolved by next OCC meeting.

4. PART-D: ITEMS FOR UPDATE/FOLLOW-UP

4.1 Implementation/Review of Islanding schemes of NER:

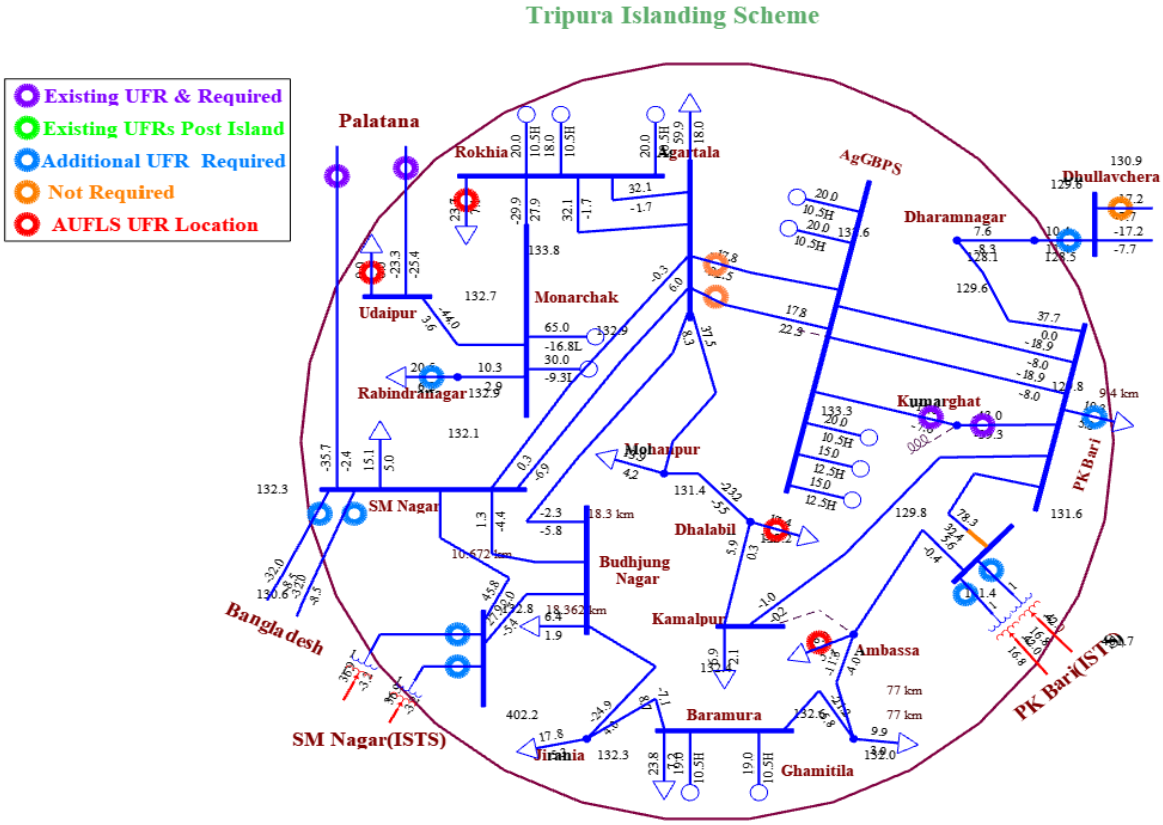
As per Clause 10 of the Central Electricity Authority (Grid Standards), Regulations, 2010: "Islanding Schemes- (1) The Regional Power Committees shall prepare Islanding schemes for separation of systems with a view to save healthy system from total collapse in case of grid disturbance. (2) The Entities shall ensure proper implementation of the Islanding Schemes". In this regard the Islanding schemes which are being planned/have been implemented in NER are mentioned below, along with the updates from 224th OCCM.

A. Guwahati Islanding Scheme

Assam updated that modified DPR has been sent to PSDF.

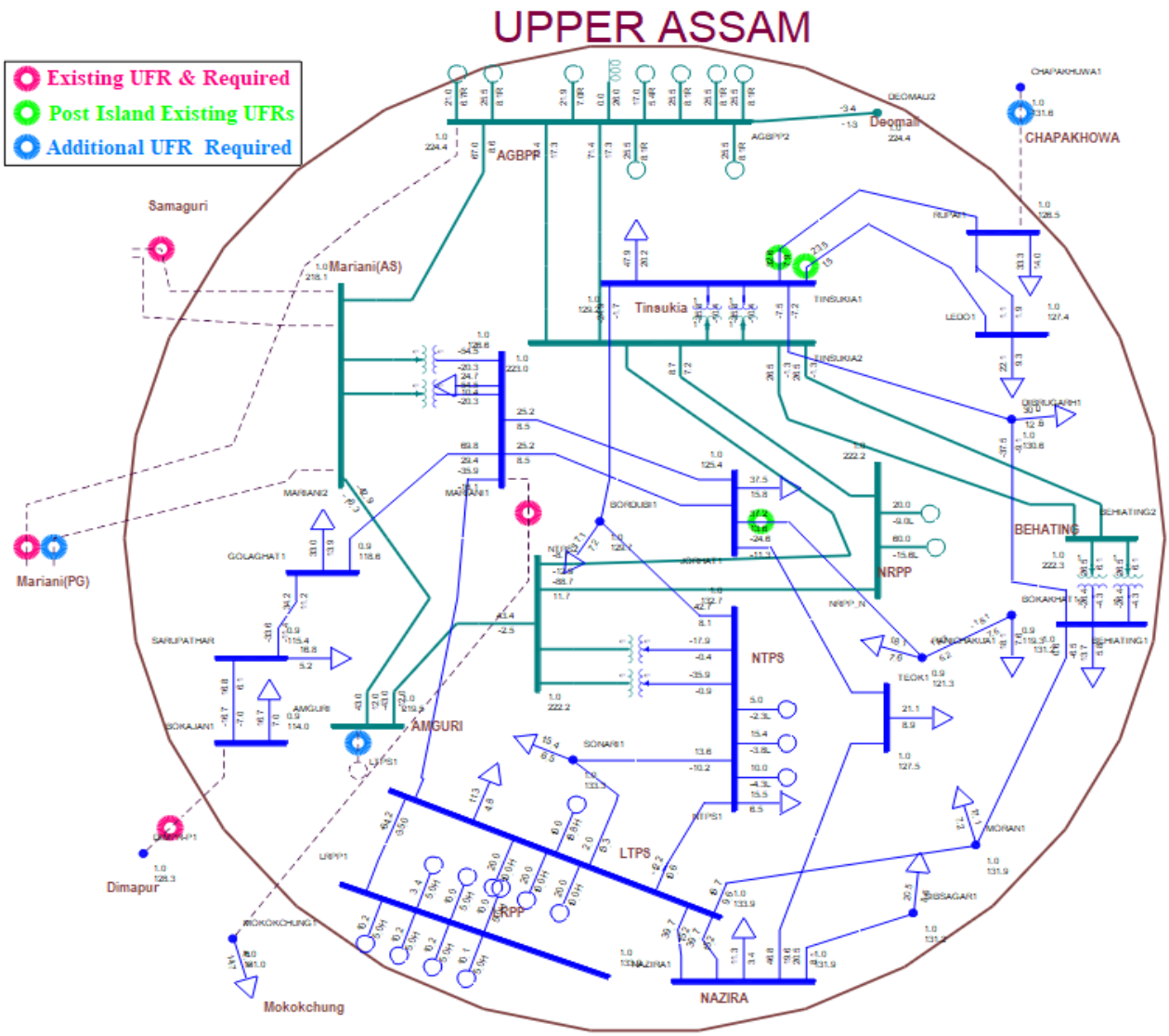
B. Tripura/Agartala Islanding Scheme

NERLDC informed forum that required format was shared with Tripura. NERLDC have also apprised forum that generation data form Tripura along with load data yet to be received from Tripura. Forum requested Tripura to provide all the required data at earliest.



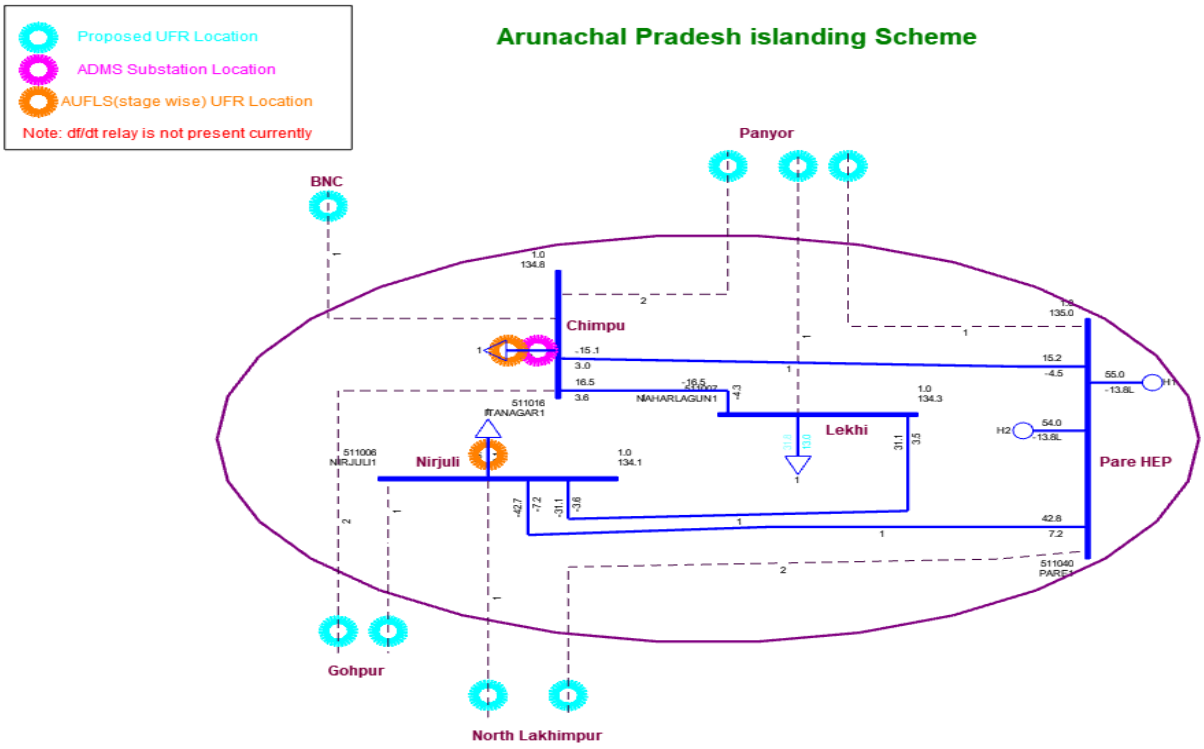
C. <u>Upper Assam Islanding Scheme</u>

Assam informed forum that NTPS was a very old power station and they did not have the data as required for updation for islanding scheme. For LTPS, regarding change in frequency settings, communication has been done with BHEL and we are awaiting response from their end. For LRPP, Stage I frequency setting is alarm and Stage II frequency setting is Trip. Forum asked NEEPCO and AEGCL to make the necessary changes and update their settings in consultation with their respective OEMs.



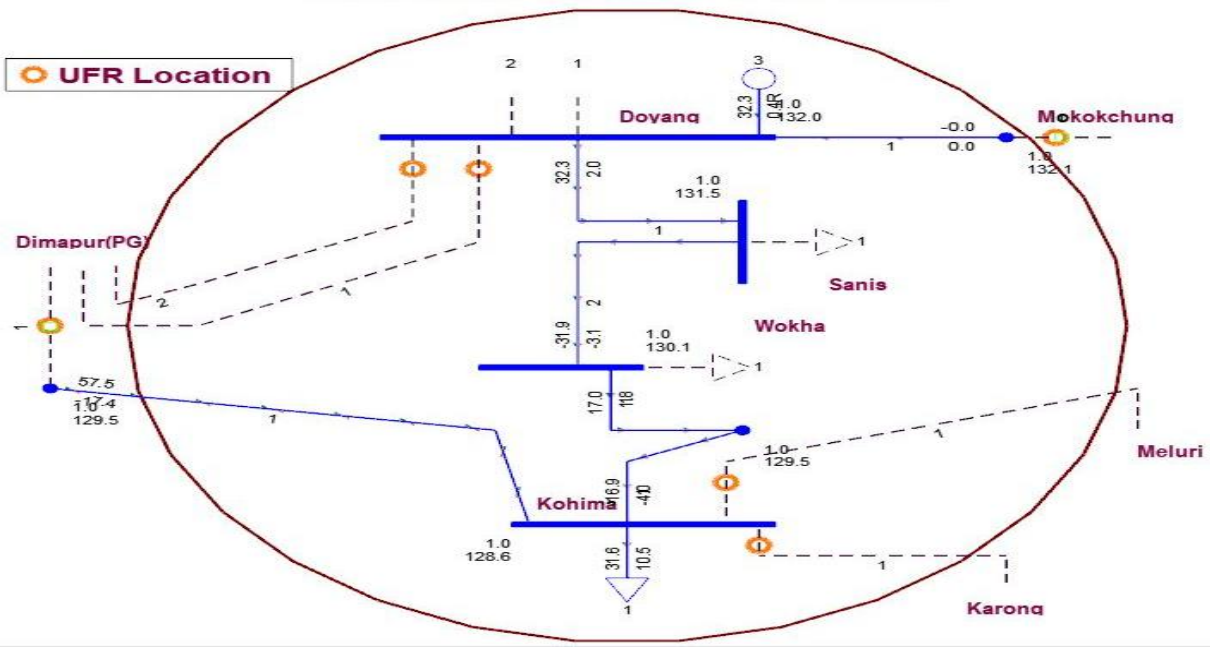
D. <u>Itanagar Islanding Scheme</u>

Arunachal Pradesh informed that the required load data had been submitted to NERLDC.



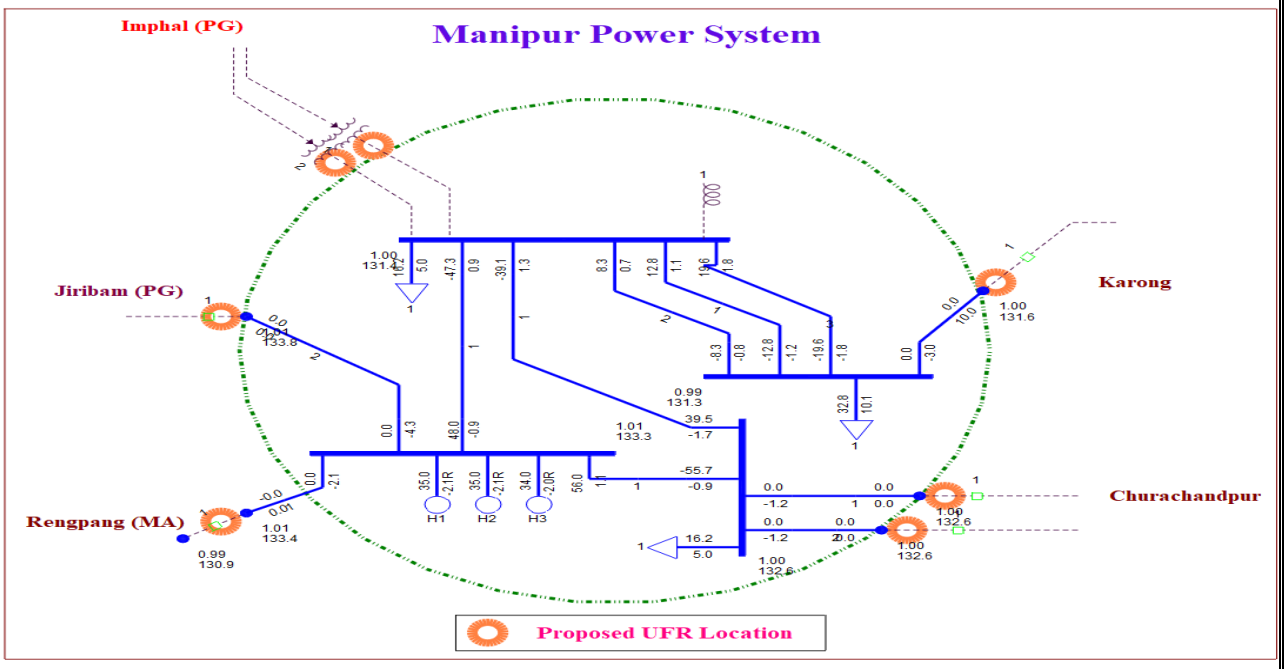
E. <u>Kohima Islanding scheme</u>

DoP Nagaland updated that the DPR preparation was underway, as they have not received budgetary offer from vendor. MS, NERPC urged DoP Nagaland to take the budgetary offer from a vendor at the earliest so that the same may be got approved in the upcoming RPC meeting.



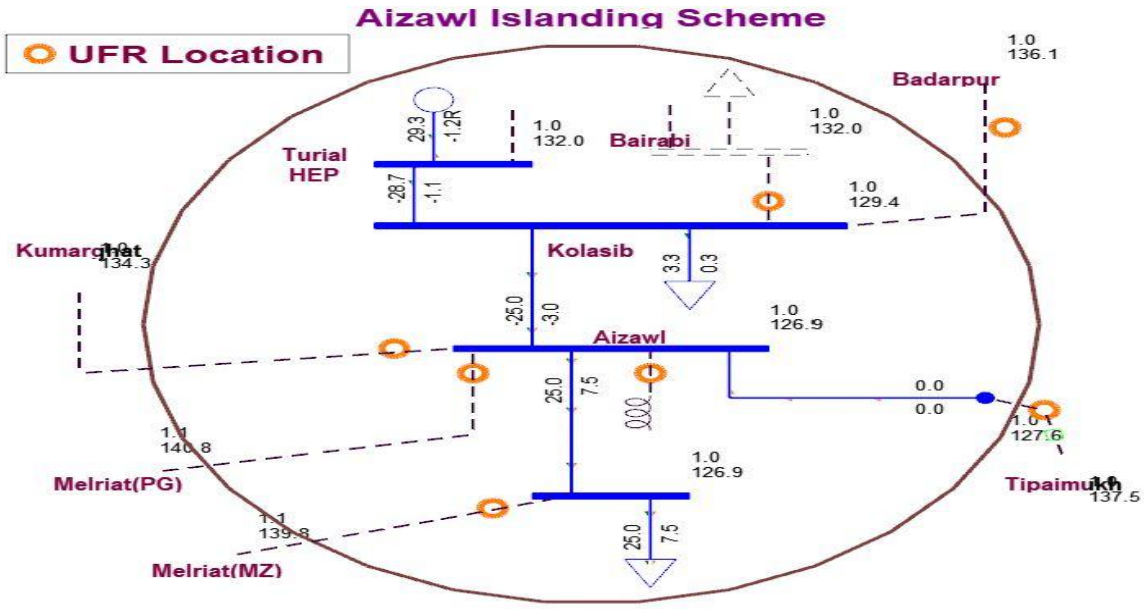
F. Imphal Islanding scheme

Manipur informed forum that due to law-and-order situation AUFLS mapping was pending from sub-station's end and assured to provide the required data shortly. NERLDC stated that data from NHPC was yet to be received. NHPC stated that they would provide required data shortly.



G. Aizawl Islanding scheme

Mizoram informed that the required load data had been provided to NERLDC. The forum stated that a special meeting would be held shortly to finalize the scheme.



H. Meghalaya/Shillong Islanding Scheme

NERLDC requested Meghalaya utilities to provide the load and generation data at the earliest as format for data had already been shared with Meghalaya.

MS, NERPC has urged all the stakeholder to expedite the process so that this Islanding Scheme can be approved in next RPC meeting. Schematic diagram is under process.

The following deliberations followed in 220th OCCM:

Tripura/Agartala Islanding Scheme:

NERLDC apprised the forum that all the data has been received from Tripura. Dynamic study has been completed and Load-Generation study is under way.

Upper Assam Islanding Scheme:

NERLDC apprised the forum that dynamic study as well as Load-Generation study has been completed. However, NEEPCO is required to submit the UFR settings for 2 nos. of units of AGBPP. NEEPCO agreed to submit the information at the earliest. Assam may prepare the DPR post submission of data by NEEPCO.

Itanagar Islanding Scheme:

NERLDC apprised the forum that all necessary study has been completed. Arunachal Pradesh may prepare the DPR for Itanagar Islanding Scheme.

Kohima Islanding Scheme:

NERLDC apprised the forum that dynamic data has not been received from Doyang completely. As such dynamic study is pending. NEEPCO agreed to share the data at the earliest to NERLDC.

Imphal Islanding Scheme:

NERLDC apprised the forum that data from NHPC Loktak has been received. Manipur has identified the 33 kV feeders but are yet to share load-generation data for the identified feeders. Dynamic study is going on.

Aizawl Islanding Scheme:

NERLDC apprised the forum that dynamic data has not been received from Turial. NEEPCO agreed to share the data at the earliest. Mizoram also intimated the forum that exploration for a change in feeders is under way as per priority. Load-generation data for such feeders shall have to be shared with NERLDC.

Shillong Islanding Scheme:

Meghalaya apprised the forum that the old machine at Umium stage III is being replaced with a new machine. As such, NERLDC requested Meghalaya to share dynamic data for Umium Stage I, Stage II and Stage IV and also for New Umtru.

In 224th OCCM, NERLDC updated that Upper Assam Islanding to be enabled shortly and Itanagar islanding scheme is pending due to non-completion of work by DoP Ar. Pradesh.

Regarding other islands NERLDC updated that studies are underway.

Deliberation of the sub committee:

Tripura/Agartala Islanding Scheme:

The scheme shall be finalised by next week i.e in May 2025.

Upper Assam Islanding Scheme:

SLDC Assam apprised the forum that relay settings have been updated at Tinsukia. However, update of relay settings is pending in Jorhat.

Relay setting at NEEPCO end have been updated.

Itanagar Islanding Scheme:

Arunachal Pradesh apprised the forum that the feeder change at Lekhi and implementation of UFR have been completed. NERLDC suggested to change under frequency relay settings at Pare machine to 47.5 Hz with a time delay of 2 seconds. NEEPCO agreed to take up the matter with OEM.

Kohima Islanding Scheme:

NEEPCO apprised the forum that dynamic data for Doyang generator has been submitted to NERLDC. NERLDC further apprised that some information is missing in the submitted data and agreed to take up with NEEPCO for the same.

Imphal Islanding Scheme:

NERLDC apprised the forum that data from NHPC Loktak has been received. Dynamic study is going on and is expected to be completed by next OCC meeting.

Aizawl Islanding Scheme:

The scheme shall be finalized by the next OCC meeting.

Shillong Islanding Scheme:

Meghalaya has shared the dynamic data for Umium Stage I, Stage II and Stage IV and also for New Umtru. Dynamic study is going on and is expected to be completed by next OCC meeting.

The sub committee noted as above.

4.2 Automatic Under Frequency Load shedding (AUFLS) scheme of NER:

Status as updated in 224th OCCM

Name of the State/utility	**Installation of UFRs**	**Status of mapping**
Ar. Pradesh	Completed	DoP Arunachal Pradesh stated that mapping of feeder at Lekhi SS (Industry feeder, stage 1) will be carried out by end of Oct'24. For rest of the feeders and substations, coordination with GE is underway and will be taken up gradually.

Assam	Completed	Completed
Manipur	UFR installed but not enabled as system integration work is underway, to be completed by Aug'24.	Mapping is pending from substations end, which is being hampered due to Law & Order situation in the State. It is in the last stage of integration (90%) and will be completed by Aug'24.
Meghalaya	Completed	Completed
Mizoram	Completed	Coordination with GE is underway for mapping, completion by Sep'24.
Nagaland	Completed	Completed
Tripura	Completed	All mapping done except for Ambassa SS due to communication link issue. To be done by next NeTEST meeting.

Forum noted the status updated as provided in the above table. NERPC informed that AUFLS quantum has been revised for NER for the FY 2024-25 and presented the revised quantum for load shedding to the forum, which is provided below: –

UFR load shedding for NER States for the FY 2024-25

State	**stg I (MW)**	**Stg II**	**Stg III**	**Stg IV**
Ar. Pradesh	8.659594937	10.39151392	12.12343291	12.12343291
Assam	112.3419494	134.8103392	157.2787291	157.2787291
Manipur	11.54612658	13.8553519	16.16457722	16.16457722
Meghalaya	18.85556962	22.62668354	26.39779747	26.39779747
Mizoram	7.542227848	9.050673418	10.55911899	10.55911899
Nagaland	8.100911392	9.721093671	11.34127595	11.34127595
Tripura	16.85362025	20.2243443	23.59506835	23.59506835
Total	183.9	220.68	257.46	257.46

For FY 2023-24 (already under operation)

State	stg I (MW)	Stg II	Stg III	Stg IV
Ar. Pradesh	10	14	12	10
Assam	90	125	113	115
Manipur	10	10	10	10
Meghalaya	25	25	25	25
Mizoram	5	5	5	5
Nagaland	10	10	10	10
Tripura	15	12.2	21.2	30
Total	165	201	196	205

The forum requested the States to implement the revised load shedding quantum within two months.

As per IEGC provisions, Tripura is requested to provide the MW and CB status data for further mapping activities.

The forum requested RLDC to prepare a feeder-wise report (MW and CB status) for those States that have completed the mapping and present it at the next OCC meeting

The following deliberations followed in 220th OCCM:

DoP, AP apprised the forum that new loads have been identified but new UFR scheme has not been implemented yet. DoP,AP further apprised the forum that the new UFR scheme shall be implemented by March-2025.
Assam apprised the forum that revised load quantum shall be implemented in 10-12 days.
Manipur apprised the forum that the new UFR scheme shall be implemented in three months' time.
Meghalaya updated that the additional load identification (for stg III and IV) is underway.

Mizoram apprised the forum that new loads have been identified and UFR will be implemented on these feeders shortly

Tripura apprised the forum that new loads have been identified for implementation of UFR. He further informed that Mapping at Ambassa is still pending due to communication link issue.

In 221st OCC meeting, Arunachal Pradesh, Assam and Meghalaya apprised the forum that the new UFR load shedding scheme shall be implemented by January-2025.

Deliberation of the sub committee:

DoP, AP apprised the forum that mapping of feeders at Lekhi substation has been completed.

Manipur apprised the forum that system integration work is pending due to payment issue with M/s GE.

Mizoram apprised the forum that mapping has been completed at Shimui substation. Mizoram further apprised that there is problem with SCADA display at Luangmual substation.

Tripura apprised the forum that that mapping at Ambassa is still pending due to communication link issue with card. The matter is in progress and will be resolved shortly.

The sub committee noted as above.

4.3 Monthly Review of LGBR

PARTICULARS (Peak Demand in MW as per LGBR vs Actual)	Jan-25 (LGBR)	Jan-25 (Actual)	Feb-25 (LGBR)	Feb-25 (Actual)	Mar-25 (LGBR)	Mar-25 (Actual)
Arunachal Pradesh	187.37	195.53	183.18	218	180.30	180
Assam	1761.00	1581.01	1779.00	1647	1979.00	1917
Manipur	275.31	267	268.86	248	246.39	213
Meghalaya	465.00	392.542	460.00	352	445.00	343
Mizoram	184.00	167.87	181.00	160	149.00	151
Nagaland	190.00	171.7	179.00	173	180.00	164
Tripura (exc. Bangladesh)	282.00	233.59	292.81	252	304.90	317

NER DEMAND (exc. Bangladesh)	3247.18	3000	3173.53	2890	3302.70	3273

PARTICULARS (Energy Requirement in MU as per LGBR vs Actual)	Jan-25 (LGBR)	Jan-25 (Actual)	Feb-25 (LGBR)	Feb-25 (Actual)	Mar-25 (LGBR)	Mar-25 (Actual)
Arunachal Pradesh	111.21	94.70	98.64	94.26	109.61	94.48
Assam	951.00	852.52	853.00	795.11	1012.00	945.66
Manipur	129.00	114.28	117.00	93.27	98.00	90.43
Meghalaya	259.00	204.28	221.00	155.31	223.00	172.39
Mizoram	86.02	69.97	81.87	60.43	78.76	100.81
Nagaland	82.00	74.54	76.00	69.76	82.00	73.06
Tripura (excl. Bangladesh)	110.60	128.31	101.44	123.84	132.23	108.88
NER DEMAND (exc. Bangladesh)	1728.83	1539.21	1548.95	1392.60	1735.60	1586.32

LGBR projection for April'25, May'25 and June'25

PARTICULARS (Peak Demand in MW as per LGBR)	Apr-25 (MW)	Apr-25 (MU)	May-25 (MW)	May-25 (MU)	Jun-25 (MW)	Jun-25 (MU)
Arunachal Pradesh	200	82	217	96	185	93
Assam	2203	1108	2629	1255	2586	1312
Manipur	234	94	247	95	247	105
Meghalaya	455	195	439	184	370	183
Mizoram	143	62	141	63	136	58
Nagaland	185	76	192	88	200	95
Tripura (exc. Bangladesh)	384	180	423	183	380	179
NER DEMAND (exc. Bangladesh)	3689	1797	4066	1964	3899	2025

Deliberation of the sub committee:

Forum noted the LGBR projection vis-à-vis the actual demand. The forum also noted the correction in actual demand of Mizoram for March 2025 as 62.68 MW.

The sub committee noted as above.

4.4 Weak Infeed to Rangia Area of Assam Power System

Currently, the Rangia area of the Assam power system is primarily supplied through the 220 kV Rangia-BTPS D/C and the 132 kV Rangia-Montanga line. However, the loading on the 220 kV Rangia-BTPS D/C often does not comply with N-1 contingency requirements, particularly during peak demand periods. The tripping of any one circuit of the 220 kV Rangia-BTPS D/C could result in grid disturbances in the region.

Additionally, both the Rangia and Bongaigaon areas of the Assam power system are experiencing severe low voltage issues.

Furthermore, a high loading of 84 MW was observed on the 132 kV Rangia-Montanga line, as discussed in the 219th OCC Meeting held in September 2025. Given these concerns, an update on the status of the capacitor bank is requested for discussion in the forum.

The situation is reaching an alarming stage, particularly during the summer peak, as voltage levels in these areas frequently fall below the IEGC-prescribed band. In light of this, the AEGCL team is kindly requested to take immediate action to address these issues and ensure system reliability.

As per the 224th OCC forum's recommendation, a special meeting was convened by NERLDC with AEGCL, APDCL and SLDC Assam on 04-04-2025. The minutes of the meeting are attached as **Annexure–4.4**.

Deliberation of the sub committee

The forum advised Assam and NERLDC to hold an internal meeting for implementation of SPS as suggested in the meeting.

Regarding the capacitor banks at Rangia, AEGCL informed that the same will be ensured by April'25. AEGCL added that the capacitor banks will be ensured at Nalbari and Bornagar by May'25.

The sub committee noted as above.

4.5 Mock Black Start of Units in compliance with IEGC:

As per IEGC Clause 34 (3), The user shall carry out a mock trial run of the procedure for different sub-systems including black-start of generating units along with grid forming capability of inverter based generating station and VSC based HVDC black-start support **at least once a year** under intimation to the concerned SLDC and RLDC.

Accordingly, Mock Black Start of the following generating plants where conducted for the FY 2024-25:

Sl. No.	**Name of Power station**	**Date of Mock exercise**
1	AGBPS GTG 4	14-05-2024
2	Kopili Unit 1, 3 & 4	Completed (U I & III 09th March 25 & U II & IV 10th March 25)
3	AgGBPS GTG 2	11-09-2024

All utilities are requested to submit the latest status of planning related to mock black-start trials of ***all units*** that are pending or yet to be conducted and to complete these activities within FY 2024-25 to ensure compliance with IEGC.

Mock Black Start of the following generating plant are pending:

Sl. No.	**Name of Power station**	**Last date of Mock exercise**	**Expected date of Mock exercise**
1	Doyang HEP	12-05-2023	Unit II Completed on 04/042025.

2	Khangdong Stg-2 HEP	-	Feb/March'25
3	Kameng HEP	-	Feb/March'25
4	Loktak HEP	31-07-2023	Feb/March'25
5	Pare HEP	10-01-2024	Feb/March'25
6	Panyor HEP	30-05-2023	Feb/March'25
7	Turial HEP	-	Completed on 08/042025.

In 223rd OCC meeting, the forum exhorted the generating plants (mentioned in the table above) to carry out the Mock Black Start exercise by March'2025.

Deliberation of the sub committee

Sl. No.	**Name of Power station**	**Last date of Mock exercise**	**Expected date of Mock exercise as per 225th OCC**
1	Doyang HEP	12-05-2023	Unit II Completed on 04/042025.
2	Khangdong Stg-2 HEP	-	November-2025
3	Kameng HEP	-	November-2025
4	Loktak HEP	31-07-2023	May-2025
5	Pare HEP	10-01-2024	November-2025
6	Panyor HEP	30-05-2023	May-2025
7	Turial HEP	-	Completed on 08/042025.

The sub committee noted as above.

4.6 Urgent Review of Online Element Transfer at PLHPS

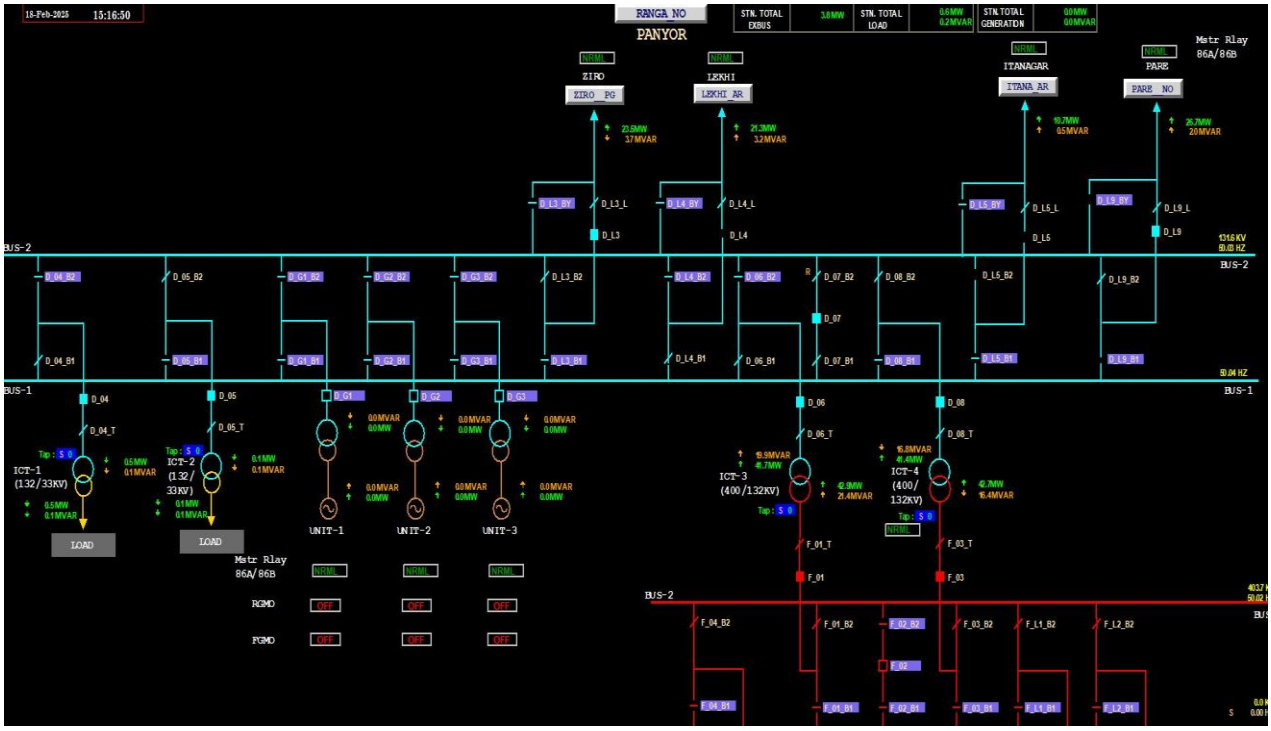
The Bus Scheme of PLHPS at the 132 kV level is a Double Main scheme, as confirmed via email. In this type of bus arrangement, the online transfer of elements from one bus to another can be performed seamlessly without any interruption in power flow.

As per the decision of the previous OCC forum, NERLDC requested PLHPS to transfer of an element to another bus on January 28, 2025, to facilitate the testing and verification of the healthiness of the non-energized element. However, in response to this request, Panyor NEEPCO stated that the existing scheme of PLHPS does not permit the online switching of isolators and that such an operation has never been carried out since the commissioning of the station.

This issue has already been raised with the NEEPCO team, highlighting that online bus transfers of elements are being successfully performed at multiple stations within the NER Grid, including AgGBPS, which is also owned by NEEPCO. However, PLHEP executives have consistently denied such operations, citing that they have never been practiced at their station.

It is important to note that with the commissioning of the 132 kV Roing-Chapakhowa D/C line and the increasing industrial load in the Pasighat area, the 132 kV Panyor-Ziro-Daporijo-Basar-Along-Pasighat-Roing-Chapakhowa link has become vital for Arunachal Pradesh and Assam power systems.

Given the importance of ensuring system reliability, a review of the non-transfer of elements at PLHPS is strongly recommended. If online element transfers are indeed not feasible under the current setup, experienced personnel should be consulted to explore possible solutions and address the issue effectively.



In 223rd OCC meeting, NEEPCO informed that online transfer could not be done due to alignment issue with the isolator as isolators are old (commissioned in 2002). He further stated that rectification works are underway and issue will be resolved shortly.

Deliberation of the sub committee

NEECO informed that there is alignment issue with isolator which is hampering online transfer of the elements. He added that they are expediting the resolution of the matter at the earliest.

4.7 Submission of Dynamic Model for ±800 kV MTDC Agra-BNC-Alipurduar

As you are aware, GRID-INDIA is responsible for ensuring the secure and reliable operation of the Indian power system. A critical aspect of this responsibility involves conducting system studies and power system stability simulations to proactively implement measures for grid security.

In this regard, the submission of the dynamic model for the ±800 kV Agra-BNC-Alipurduar HVDC MTDC has already been communicated by NLDC, GRID -INDIA.

However, we have not yet received the required dynamic model. ***This data is crucial for islanding formation studies, especially considering that the ±800 kV MTDC Agra-BNC-Alipurduar operates in frequency control mode.***

As per 224th OCC meeting, NERTS updated that the matter has been forwarded to corporate office and awaiting their reply.

NERTS may update

Deliberation of the sub committee

NERTS informed that response is still awaited from the corporate office on the matter. NERTS added that the matter was earlier taken up by NLDC with the Powergrid and hence requested NERLDC may take up with NLDC for getting the required data.

4.8 Compliance with Annual Measurement of Harmonics, DC Injection, and Flicker as per CEA Regulations

As per the CEA (Technical Standards for Connectivity to the Grid) Regulations, Clause B1(4), Measurement of harmonic content, DC injection and flicker shall be done at least once in a year in presence of the parties concerned and the indicative date for the same shall be mentioned in the connection agreement;

Provided that in addition to annual measurement, if distribution licensee or transmission licensee or the generating company, as the case may be, desires to measure harmonic content or DC injection or flicker, it shall inform the other party in writing and the measurement shall be carried out within 5 working days";

In accordance with this regulation, all Wind generating stations and generating stations using inverters connected to the grid are required to perform this test annually and submit the test report to the relevant utility

authorities. All utilities are requested to provide an update on the current status of test reports and outline their future testing plans as per CEA guidelines.

In 224th OCC meeting, NERLDC apprised that no wind generators or inverter-based generators have provided any test reports so far. Forum requested the SLDCS of the states where such plants are located, to take up the matter with developers of such plants to and provide a testing plan and reports to NERPC and NERLDC at the earliest.

Further, MS NERPC informed that regarding the uniform guidelines on Harmonics measurement by transmission and generating utilities, matter has been put for discussion in the upcoming NPC meeting.

Deliberation of the sub committee

The forum noted that agenda for uniform procedure has been put up in NPC for further deliberations. Moreover, the forum advised SLDCs to update the status of the harmonic content contribution from solar and wind generators.

The sub committee noted as above.

4.9 Performance of online network estimation tools at RLDC:

IEGC mandates RLDCs and SLDCs to utilize the network estimation tool integrated in their EMS and SCADA systems for the real time operational planning study. Also, performance of the online estimator tools shall be reviewed in monthly operational meetings as per IEGC Regulation 33(2). Quote:

"*SLDCs, RLDCs and NLDC shall utilize network estimation tool integrated in their EMS and SCADA systems for the real time operational planning study. All users shall make available at all times real time error free operational data for the successful execution of network analysis using EMS/SCADA. Failure to make available such data shall be immediately reported to the concerned SLDC, the concerned RLDC and NLDC along with a firm timeline for restoration. The performance of online network estimation tools at SLDC and RLDC shall be reviewed in the monthly operational meeting of RPC. Any telemetry related*

issues impacting the online network estimation tool shall be monitored by RPC for their early resolution."

Unquote:

The performance of online network estimation tools at NERLDC is shown below:

Difference & % Error of RTCA and RTNET

Constituents	SCADA	RTCA		RTNET	
		Difference	Error %	Difference	Error %
NER Generation	2470	386	13.00	29	1.00
NER Load	2404	338	12.00	29	12.00
Tripura	227	85	35.00	85	35.00
Assam	1413	553	31.00	553	31.00
Meghalaya	259	29	12.00	29	12.00
Manipur	145	27	23.00	27	23.00
Arunachal	126	41	30.00	41	30.00
Nagaland	104	37	30.00	37	30.00
Mizoram	131	14	12.00	14	12.00

Similarly, SLDC's are requested to present their online network estimation tool performance in the monthly operational meeting of RPC to comply with IEGC regulation 33(2).

In 224th OCCM, NERLDC informed the forum that they will conduct workshop in the last week of April 2025.

Deliberation of the sub committee

NERLDC apprised the forum that the date for conducting the workshop shall be finalised in May-2025.

The sub committee noted as above.

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Annexure-I

List of Participants in the 225th OCC Meeting held on 22.04.2025

SN	Name & Designation	Organization	Contact No.
1	Sh. Purik Buchi, AE (E), SLDC	Ar. Pradesh	09366118384
2	Sh. Tarali Deka, AGM (T), AEGCL	Assam	09864981330
3	Sh. Trimayan Kaushik Borah, AM,SLDC	Assam	06000620921
4	Smt. Priyanka Bhuyan, AM,SLDC	Assam	08638761291
5	Smt. Sushmita Das, SLDC	Assam	09864956879
6	Sh.Hijam Chittan,Mgr, MSPCL	Manipur	08257098230
7	Sh. Ch DRM Warish Khan, Mgr,MSPCL	Manipur	09615350963
8	Sh. B.Narry, SE, MePTCL	Meghalaya	07005298338
9	Sh. B.Samiam, EE, SLDC	Meghalaya	09862021883
10	Sh. Hamjngai Law, EE, MePGCL	Meghalaya	07005208427
11	Sh. C.W.Chen, AEE, MePTCL	Meghalaya	09863093311
12	Sh. K.Myrthong, AEE, MePTCL	Meghalaya	08794435131
13	Sh. Shawn M. Wa , AEE, SLDC	Meghalaya	08787885019
14	Sh. C.Chawnggzikpuia, SDO	Mizoram	08974770712
15	Sh. Vipin Kumar Azad, AE, SLDC	Mizoram	07085205665
16	Sh. E.Limhachan Kikon, JE	Nagaland	09383234164
17	Sh. Alex E.Ngullie, JE, SLDC	Nagaland	08837080321
18	Sh. Debabrata Pal, Sr.Mgr, TSECL	Tripura	09436500244
19	Sh. Anil Debbarma, DGM, SLDC	Tripura	09612559250
20	Smt. Mamami Talukdar, GM (T)	NEEPCO	09435339690
21	Sh. Manas Pratim Sharma, Sr.Mgr	NEEPCO	08729901871
22	Sh. Neeraj Kumar, GM	NERLDC	09910907949
23	Sh. Anjan Kumar Pandey, Dy.Mgr	NERLDC	07003728479
24	Sh. Kishore Kalita, AM	NERLDC	09101178340
25	Sh. Yogendra Singh, Engineer	NERLDC	07005587509
26	Sh. Ashim Paul, DGM	PGCIL	09436602688
27	Sh. R.Haribabu, DGM	PGCIL	09445021006
28	Sh. Soham De,Shift-In-Charge	OTPC	09556557648
29	Sh. Ashim De, Dy.Mgr (E)	NHPC	09800284587
30	Sh. Manoj Kumar Gupta, DGM(Trans.)	KMTL	09996789264
31	Sh. Jyotirmoy Barman, AE	NETC	07002036191
32	Sh. K.B.Jagtap, Member Secretary	NERPC	-
33	Sh. Alikpanth De, Dy.Director	NERPC	-
34	Sh. Vikash Shankar, Asst. Director	NERPC	09455331756
35	Sh. Ashim Goswami, AD-II	NERPC	08638966481

Annexure 2.1

Shutdown Proposed for the month of May- 2025

SN	Name of Element	May-25	Proposed Time	Reason	Study Comments
	SHUTDOWNS PROPOSED BY PGCIL				
1	132kV KUMARGHAT-AIZWAL		0800 Hrs to 1600 Hrs	Integration of P591 relay with Line Differential relay for signal amplification.	SD may be availed subject to availability of 132 kV PK Bari - Kumarghat -AGTCPP link, 132 kV Badarpur-Kolasib-Aizwal link and 132 kV Jiribam -Tipaimukh- Aizwal link
2	132kV SILCHAR-MELRIAT-1 (Charged in 400kV DC)		0800 Hrs to 1600 Hrs	Installation of TLSA at Loc. No. 07&06	SD may be availed subjected to availability of 132 kV Melriat-Silchar-2 and 132 kV Aizwal-Melriat lines . **FTC procedure to be followed.**
3	132kV SILCHAR-MELRIAT-2 (Charged in 400kV DC)		0800 Hrs to 1600 Hrs	Installation of TLSA at Loc. No. 07&06	SD may be availed subjected to availability of 132 kV Melriat-Silchar-1 and 132 kV Aizwal-Melriat lines. **FTC procedure to be followed.**
4	132kV MELRIAT-SIHMUI(MIZORAM)-2		0800 Hrs to 1600 Hrs	For AMP works	SD may be availed subjected to availability of 132 kV Melriat-Sihhmui-1 **Consent from Mizoram**
5	132kV BADARPUR-KARIMGANJ(ASSAM)		0800 Hrs to 1600 Hrs	For AMP works	SD may be availed subjected to availability of 132 kV Kumarghat - Karimganj **Consent from Assam**
6	132kV BADARPUR-JIRIBAM-1		0800 Hrs to 1600 Hrs	For AMP works	The SD may be availed subject to availability of 132 kV Silchar -Badarpur-Khleriat link and 132 kV Loktak- Jiribam-Haflong-Umrangshu-Khandong link or 132 kV Loktak- Jiribam-Tipaimukh - Aizwal link .
7	132kV KHANDONG(NEEPCO)-KHLIEHRIAT-2		***CSD*** 0800 Hrs to 1600 Hrs	Due to settlement of soil around tower base , tower member has bent at loc - 76 , For shifting of vulnerable tower to a new location with the same orientation of line .	The SD may be availed subject to availability of 132kV KHANDONG(NEEPCO)-KHLIEHRIAT-1, 132 kV Badarpur-Khleihriat, 132 kV Badarpur-Panchgram-Lumnshnong-Khleihriat (ME) link, 132 kV Jiribam-Haflong-Umrangshu-Khandong-Kopili-Khleihriat link. **FTC procedure to be followed.** **Intimation to Assam & NEEPCO**
8	132kV BADARPUR-Panchgram (ASSAM)-1		0800 Hrs to 1600 Hrs	For AMP works	The SD may be availed subject to availability of 132 kV Badarpur-Khleihriat, and all other lines connected to 132 kV Panchgram SS. **Consent from Assam.**
9	132kV LOKTAK(NHPC)-IMPHAL		0800 Hrs to 1600 Hrs	Installation of Vibration damper for HTLS Conductor under NERSS-XIX project work.	SD May be availed subjected to avilability of 132 kV Loktak-Ningthokong - Imphal link, and Loktak- Jiribam link. **SPS at Loktak for unit desynchronisation on tripping of 132 kV Loktak-Ningthokong and 132kV Loktak- Jiribam to be enabled. Max generation of 95 MW may scheduled.** **Consent from NHPC**
10	A/R of 132kV JIRIBAM-TIPAIMUKH (MANIPUR)		0700 Hrs to 1700 Hrs	NON - AUTO MODE required for OPGW installation works under Reliable Communication Scheme.	A/R may be kept in Non-Auto mode.
11	A/R of 132kV AIZWAL-TIPAIMUKH (MANIPUR)		0700 Hrs to 1700 Hrs	shall be availed on D-3 basis for NON - AUTO MODE required for OPGW installation works under Reliable Communication Scheme.	A/R may be kept in Non-Auto mode.
12	A/R of 132kV Agartala Gas (RC Nagar) - Kumarghat (PG)		0700 Hrs to 1700 Hrs	NON - AUTO MODE required for OPGW installation works under Reliable Communication Scheme.	A/R may be kept in Non-Auto mode.
13	AR of 132KV Dimapur Imphal line		0700 Hrs to 1700 Hrs	NON - AUTO MODE required for OPGW installation works under Reliable Communication Scheme.	A/R may be kept in Non-Auto mode.
14	AR of 220kV OLD MARIANI-KATHALGURI(ASSAM)-1		D 0800 Hrs to 1600 Hrs	For replacement of conventional porcelain insulators by composite long rod polymer insulators in **400KV KATHALGURI-MARIANI-2**	A/R may be kept in Non-Auto mode.
15	AR OF 400kV MISA-BALIPARA-2		0900 Hrs to 1700 Hrs	For replacement of conventional porcelain insulators by composite long rod polymer insulators at Power/Deep valley/River/SH/NH crossing locations	A/R may be kept in Non-Auto mode.

SN	Name of Element	May-25	Proposed Time	Reason	
	220kV Transmission lines				
16	220kV MARIANI-MOKOKCHUNG-2		0900 Hrs to 1600 Hrs	Yph CVT replacment in 220 KV Mariani - Mokokchung#2 due to high secondary drift in voltage .	The SD may be availed subject to availability of 220kV MARIANI-MOKOKCHUNG-I and 132 kV Doyang Mokokchung- Mokokchung link
17	220 KV NEW MARIANI - KATHALGURI-2		***Daily*** 0800 Hrs to 1600 Hrs	For replacement of conventional porcelain insulators by composite long rod polymer insulators at Power/Deep valley/River/SH/NH crossing locations from lov 3 - loc 353 . For suspension tower loc 4 - loc 393 .	S/D may be availed. During SD period, the Upper Assam power system is connected with 220 kV Samaguri-Mariani(AS) line, 220 kV Mariani(AS) - Mariani (PG) line, and 132 kV Mariani - Golaghat - Sarupathar - Bokajan - Dimapur link. SD may be availed subjected to availability of all these links as well as availability of 220 kV AGBPP-Mariani(AS) line . Under N-1 condition, Gate flow should be monitored and shall be maintained below 260 MW(during solar period) and 245 MW (durng non-solar period) for safe and reliable grid operation. RELIABILITY OF THE SYSTEM IS REDUCED. **Consent from Assam**

	Name of Element	May-25	Proposed Time	Reason	
	400kV Transmission lines				
20	400kV BALIPARA-BONGAIGAON-1		0800 Hrs to 1600 Hrs	TESTING OF LBB RELAY AFTER REPLACEMENT IN 413 MAIN BAY WITH NUMERICAL AFTER REPLACEMNENT WITH ELECTROMEHANICAL RELAY	SD may be availed subject to avavilability of other ckts.
21	400kV MISA-BALIPARA-1		0800 Hrs to 1600 Hrs	For replacement of conventional porcelain insulators by composite long rod polymer insulators at Power/Deep valley/River/SH/NH crossing locations	SD may be availed subject to avavilability of 400 kV Misa - Balipara 2.

	Name of Element	May-25	Proposed Time	Reason	
	220kV Salakati SS				
22	220kV SALAKATI-BTPS(AS)-1		0800 Hrs to 1600 Hrs	PLCC wiring for implementation of DT scheme and end to end testing.	The SD may be availed subject to availability of 220 kV Salakati-BTPS line 2 and both 400/220 kV ICTs at BGTPP. **Consent from Assam**
23	220kV SALAKATI-BTPS(AS)-2		0800 Hrs to 1600 Hrs	PLCC wiring for implementation of DT scheme and end to end testing.	The SD may be availed subject to availability of 220 kV Salakati-BTPS line 1 and both 400/220 kV ICTs at BGTPP. **Consent from Assam**
	400 KV BONGAIGAON SS				
24	413 Bay (Main Bay of 400KV Bongaigaon - Balipara - 1 line) at Bongaigaon SS		***CSD*** 0800 Hrs to 1600 Hrs	REPLACEMENT OF ELECTROMECHANICAL LBB RELAY WITH NUMERICAL RELAY IN 413 MAIN BAY	SD May be availed (Alipurdar 1 & Balipara 1 Tie Bay at Bongaigaon)
	400/132 KV Imphal SS				
25	20MVAR,BUS REACTOR-1 AT IMPHAL SS		0800 Hrs to 1600 Hrs	AMP of Reactor	SD may be availed
26	315MVA,400/132kV ICT-1 AT IMPHAL SS		0800 Hrs to 1600 Hrs	AMP of ICT .	SD may be availed subjected to availability of 400/132kV ICT 2 and 132kV Dimapur-Imphal and 132kV Jiribam(PG)-Loktak-Imphal
27	412 BAY(Main Bay of BR-1) AT IMPHAL SS		0800 Hrs to 1600 Hrs	AMP of Bay equipments .	SD may be availed subject to no outage of elements (Imphal - Silchar 1 & Imphal - Bus Reactor 1 Tie Bay at Imphal)
28	418 BAY (Main Bay of Thoubal-1 Line) AT IMPHAL SS		0800 Hrs to 1600 Hrs	AMP of Bay equipments .	SD may be availed subject to no outage of elements
29	416 BAY (Future Bay) AT IMPHAL SS		0800 Hrs to 1600 Hrs	AMP of Bay equipments .	SD may be availed subject to no outage of elements
30	417 BAY (Tie Bay of Imphal - Thoubal Line-1 and Future Bay) AT IMPHAL SS		0800 Hrs to 1600 Hrs	AMP of Bay equipments .	SD may be availed subject to no outage of elements
	220/132KV Mokokchung SS				
31	30MVA,220/132kV ICT-3 AT MOKOKCHUNG SS		1100 Hrs to 1500 Hrs	Yph CVT replacment in 220 KV Mariani - Mokokchung#2 due to high secondary drift in voltage .ICT#3 bay is in induction zone .	SD may be availed subject to availability of 30MVA,220/132kV ICT-1 & 2 AT MOKOKCHUNG SS . **FTC procedure to be followed.**
	400 KV Balipara SS				

32	220KV SIDE OF 315MVA ICT-2 (BAY-205) at Balipara SS									■																							0800 Hrs to 1600 Hrs	AMP works. (ICT-2 shall remain in service through TBC Bay)	SD may be availed subject to no outage of elements
33	400KV BONGAIGAON-3 AND KAMENG-2 TIE BAY (BAY-420) at Balipara SS												■																				0800 Hrs to 1600 Hrs	AMP works	SD may be availed subject to no outage of elements
34	400KV BONGAIGAON-1 AND BNC-3 TIE BAY (BAY-414) at Balipara SS						■	■																									***CSD*** 0800 Hrs to 1600 Hrs	AMP works & CSD instalaltion works	SD may be availed subject to no outage of elements
	132 KV Nirjuli SS																																		
35	50MVA,132/33kV ICT-2 AT NIRJULI GIS							■																									0800 Hrs to 1600 Hrs	AMP works of ICT	SD may be availed . **Consent from AP**
	400 KV Silchar SS																																		
36	414 Bay (TIE bay of ICT#3 and Future Bay) at Silchar SS									■																							0800 Hrs to 1600 Hrs	AMP works	SD may be availed subject to no outage of elements
	132 KV Melriat SS																																		
37	15MVAR,BUS REACTOR-1 AT MELRIAT SS																														■		0800 Hrs to 1600 Hrs	AMP works	SD may be availed
	400 KV Misa SS																																		
38	400 KV Misa - Mariani#1 LR at Misa SS						■																										0800 Hrs to 1600 Hrs	AMP works of Line Reactor . (400 KV Misa - Mariani#1 line shall hand tripped during closing and opening of reactor isolator and remain period line will be in service)	SD may be availed, subject to the condition that the line remains in service during all other instances, except when required for the opening or closing of the reactor isolator.
		Apr-25																																	
SN	**Name of Element**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**Proposed Time**	**Reason**	
	Interregional/International																																		
		May-25																																	
SN	**Name of Element**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**Proposed Time**	**Reason**	
	SHUTDOWNS PROPOSED BY ASSAM																																		
1	220/132kV 100MVA ICT-I AT MARIANI																			■													10:00-16:00	FOR PERIODIC TESTING PURPOSE	SD may be availed subject to availability of 220/132kV 100MVA ICT-2 AT MARIANI
2	220/132kV 100MVA ICT-II AT MARIANI																				■												10:00-16:00	FOR PERIODIC TESTING PURPOSE	SD may be availed subject to availability of 220/132kV 100MVA ICT-1 AT MARIANI
3	220 kV MARIANI-AMGURI															■																	08:00-16:00	CORRIDOR CLEANING	SD may be availed subject to availability of 220 kV Amguri-NTPS line. Considering N-1 contingency of 220 kV AGBPP - Mariani (PG) line, Upper Assam Power Flow is to be maintained within 260 MW (during solar period) and 245 MW (during non-solar period)
4	220 kV AMGURI-NTPS											■			■																		08:00-16:00	CORRIDOR CLEANING	SD may be availed subject to availability of 220kV AMGURI-MARIANI line. Considering N-1 contingency of 220 kV AGBPP - Mariani (PG) line, Upper Assam Power Flow is to be maintained within 270 MW (during solar period) and 245 MW (during non-solar period)
5	220kV SAMAGURI-MARIANI-II									■	■																						08:00-16:00	CORRIDOR CLEANING	S/D may be availed. At present, the Upper Assam power system is connected with 220 kV Samaguri-Mariani(AS) line, 220 kV Mariani(AS) - Mariani (PG) line, 220 kV AGBPP-Mariani(PG) line and 132 kV Mariani - Golaghat - Sarupathar - Bokajan - Dimapur link. Under N-1 condition of 220 kV AGBPP-New Mariani (PG) , Gate flow should be monitored and shall be maintained below **270 MW**(during solar period) and 245 MW (durng non-solar period) for safe and reliable grid operation. RELIABILITY OF THE SYSTEM IS REDUCED.
6	132kV GOLAGHAT-MARIANI					■																											09:00-16:00	CORRIDOR CLEANING	S/D may be availed. 132 kV Dimapur - Bokajan - Sarupathar - Golaghat link to be kept in service.
7	132kV GOLAGHAT-SARUPATHAR			■																													09:00-16:00	CORRIDOR CLEANING	S/D may availed. 132 kV Mariani - Golaghat line and 132 kV Dimapur - Bokajan - Sarupathar link to be kept in service.
8	132kV BOKAJAN-DIMAPUR																■																09:00-16:00	CORRIDOR CLEANING & PREVENTIVE MAINTENANCE	S/D may be availed. 132 kV Mariani - Golaghat - Sarupathar - Bokajan link to be kept in service.
9	132kV BOKAJAN-SARUPATHAR																	■															09:00-16:00	CORRIDOR CLEANING & PREVENTIVE MAINTENANCE	S/D may be availed. 132 kV Dimapur -Bokajan line and 132 kV Mariani - Golaghat - Sarupathar link to be kept in service
10	132kV GOHPUR-NALKATA-I					■																	■										07:00-14:00	COORIDOR CLEANING & LINE MAINTENANCE	S/D may be availed subject to availability of 132 kV Gohpur - Nalkata ckt 2
11	132kV GOHPUR-NALKATA-II						■																	■									07:00-14:00	COORIDOR CLEANING & LINE MAINTENANCE	S/D may be availed subject to availability of 132 kV Gohpur - Nalkata ckt 2
12	220kV TINSUKIA-KATHALGURI-I												■																				10:00-16:00	CORRIDOR CLEARANCE	S/D may be availed subject to the availability of 220 kV Tinsukia-Kathalguri II, 220 kV Tinsukia - NTPS and 220 kV Tinsukia - NRPP - NTPS,
13	220kV TINSUKIA-KATHALGURI-II													■																			10:00-16:00	CORRIDOR CLEARANCE	S/D may be availed subject to the availability of 220 kV Tinsukia-Kathalguri I, 220 kV Tinsukia - NTPS and 220 kV Tinsukia - NRPP - NTPS,
14	220kV TINSUKIA-NTPS																■																10:00-16:00	CORRIDOR CLEARANCE	S/D may be availed. 220 kV Tinsukia - Kathalguri D/C and 220 kV Tinsukia - NRPP- NTPS-Amguri-Mariani link to be kept in service.
15	220kV TINSUKIA-NRPP																															■	10:00-16:00	CORRIDOR CLEARANCE	S/D may be availed. 220 kV Tinsukia - Kathalguri D/C, 220 kV Tinsukia - NTPS-Amguri-Mariani link and 220 kV NTPS - NRPP are to be kept in service.
16	220/132kV 100MVA TR-1 AT TINSUKIA								■																								08:00-16:00	ROUTINE TESTING	The SD may be availed subject to 220/132kV 100MVA TR-2 AT TINSUKIA. 132kV NTPS-Bordubi-Tinsukia link and 132kVTinsukia-Dibrugarh-Behiating link.
17	132kV SALAKATI-RANGIA-I													■						■													08:00-15:00	PREVENTIVE MAINTENANACE	S/D may be availed subject availability of 220 kV BTPS-RANGIA CKT II. SPS at Rangia should be kept in ON condition.
18	132kV SALAKATI-RANGIA-II														■							■											08:00-15:00	PREVENTIVE MAINTENANACE	S/D may be availed subject availability of 220 kV BTPS-RANGIA CKT I. SPS at Rangia should be kept in ON condition.
19	220kV SAMAGURI-JAWAHARNAGAR								■																								08:00-16:00	CORRIDOR CLEANING	SD may be availed subject to availability of 220kV Samaguri-Sonapur-Sarusajai link, 220kV Jawaharnagar-Sarusajai line & 220kV Azara-Sarusajai D/C.
20	220kV SAMAGURI-SONAPUR						■								■								■										08:00-16:00	CORRIDOR CLEANING	S/D may be availed subject to availability of 220 kV Sarusajai-Jawaharnagar-Samaguri link, 220 kV Sarusajai - Sonapur line and 220 kV Sarusajai-Azara DC.
21	220kV SARUSAJAI-SONAPUR			■																													08:30-16:30	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	SD may be availed subject to availability of 220kV Samaguri-Sonapur line, 220kV Samaguri-Jawaharnagar-Sarusajai link & 220kV Azara-Sarusajai D/C.
22	220/132kV 100MVA TR-II AT SARUSAJAI								■																								10:00-13:00	PREVENTIVE MAINTENANACE	SD maybe availed subject to availability of 220/132kV ICT-I, ICT 3 and ICT-4 AT SARUSAJAI
23	132kV SARUSAJAI-UMTRU-II									■																							10:00-14:00	FOR ISOLATOR ADJUSTMENT	SD may be availed. **Consent from Meghalaya**
24	220kV SAMAGURI-JAWAHARNAGAR																	■															08:30-16:30	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	SD may be availed subject to availability of 220kV Samaguri-Sonapur-Sarusajai link, 220kV Jawaharnagar-Sarusajai line.
25	132 KV SRIKONA-PAILAPOOL			■														■															09:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	SD may be availed subject to availability of 132kV Jiribam (PG) - Pailapool
26	132kV PAILAPOOL-JIRIBUM												■	■																			08:00-16:00	CORRIDOR CLEANING & JUNGLE CUTTING	SD may be availed subject to availability of 132 kV Srikona-Pailapool line.
27	132 KV PANCHGRAM-LUMSHNONG													■	■																		09:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	S/D may be availed.132 kV Badarpur-Khleihriat line, 132 kV Kopili-Khandong- Khliehriat link, 132 kV Jiribam - Halfong - Khandong - Khliehriat links shall be kept in service. **Consent from Meghalaya**
28	132 KV DULLAVCHERRA-DHARMANAGAR			■			■																										09:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	SD may be availed subject to availabilty of 132kV PK Bari - Dharmanagar and 132kV Dullavcherra – Hailakandi. **Consent from Tripura**
29	132 KV PANCHGRAM-HAILAKANDI																■																09:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	SD may be availed. subject to availability of 132 kV Badarpur-Panchgram line & 132kV Panchgram-Lumshnong.
30	132 KV HAILAKANDI-DULLAVCHERRA															■																	09:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	SD may be availed subject to availabilty of 132kV PK Bari - Dharmanagar-Dullavcherra link

31	132kV TINSUKIA-MARGHERITA	08:30-15:30	CORRIDOR CLEANING	The SD may be availed subject to 132 kV Roing-Pasighat-Along-Basar-Daporijo-Ziro-Ranganadi link, 132kV Tinsukia-Rupai -margarita and 132 kV Rupai Chapakowa link. **Firstly BR at Roing, Tezu to be opened, 132kV Roing-Chapakhowa D/C to be kept open.** Consent from AP
32	132kV RUPAI-MARGHERITA	08:30-15:30	CORRIDOR CLEANING	The SD may be availed subject to 132 kV Roing-Pasighat-Along-Basar-Daporijo-Ziro-Ranganadi link, 132kV Tinsukia-Rupai Chapakhowa and 132 kV Tinsukia - Margerita link. **Firstly BR at Roing, Tezu to be opened, 132kV Roing-Chapakhowa D/C to be kept open.** Consent from AP
33	132kV MAIN BUS AT MARGHERITA	07:00-10:00	PREVENTIVE MAINTENANCE	The SD may be availed subject to 132 kV Roing-Pasighat-Along-Basar-Daporijo-Ziro-Ranganadi link, 132kV Tinsukia-Rupai Chapakhowa link. **Firstly BR at Roing, Tezu to be opened, 132kV Roing-Chapakhowa D/C to be kept open.** Consent from AP
34	220kV AGIA-BTPS-I	09:00-16:00	CORRIDOR CLEANING	The S/D may be availed subject to availability of 220kV Agia-BTPS 2 line (which line loading to be maintained below 500A). 400kV Bongaigaon - Azara, 400/220kV ICTs at Azara S/s should be kept in service.
35	220kV AGIA-BTPS-II	09:00-16:00	CORRIDOR CLEANING	The S/D may be availed subject to availability of 220kV Agia-BTPS 1 line (which line loading to be maintained below 500A). 400kV Bongaigaon - Azara, 400/220kV ICTs at Azara S/s should be kept in service.
36	220kV MIRZA-BOKO	08:30-16:30	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	S/D may be availed. 220 kV Agia - Boko and 220 kV Agia-Mirza to be in service.
37	220kV MIRZA-AGIA	08:30-16:30	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	S/D may be availed. 220 kV Agia - Boko - Mirza link to be kept in service. Also, 400kV Bongaigaon - Azara, 400/220kV ICTs at Azara S/s, 220kV Balipara - Sonabil D/C
38	220kV AGIA-BOKO	09:00-16:00	CORRIDOR CLEANING	S/D may be availed. 220 kV Mirza - Boko line and 220 kV Agia - Mirza line to be kept in service.
39	220kV MIRZA-AGIA	09:00-16:00	CORRIDOR CLEANING	S/D may be availed. 220 kV Agia - Boko - Mirza link to be kept in service. Also, 400kV Bongaigaon - Azara, 400/220kV ICTs at Azara S/s, 220kV Balipara - Sonabil D/C
40	220kV SAMAGURI-SONABIL-I	08:00-16:00	CORRIDOR CLEANING	SD may be availed subject to availability of 220kV Samaguri-Sonabil Ckt 2, 220kV Misa-Samaguri D/C and 220kV Samaguri - Mariani (AS)
41	220kV SAMAGURI-SONABIL-II	08:00-16:00	CORRIDOR CLEANING	SD may be availed subject to availability of 220kV Samaguri-Sonabil Ckt 1, 220kV Misa-Samaguri D/C and 220kV Samaguri - Mariani (AS)
42	412 BUS REACTOR BAY AT MIRZA	08:00-16:00	LOAD TESTING OF CSD FOR BUS REACTOR	SD may be availed subject to no outage of elements
43	411 TIE BAY AT MIRZA	08:00-16:00	LOAD TESTING OF CSD FOR BUS REACTOR	SD may be availed subject to no outage of elements
44	411 TIE BAY & 412 BUS REACTOR BAY AT MIRZA	08:00-16:00	LOAD TESTING OF CSD FOR BUS REACTOR	SD may be availed subject to no outage of elements
45	220kV SONABIL-BALIPARA-II	08:00-16:00	CHECK HEALTHINESS OF IFC CARD	The SD may be availed. Considering N-1 Line-I, the 220kV Azara-Sausajai D/C, 400kV Bongaigaon -Azara, 220kV BTPS - Agia, 220 kV Samaguri-Sonabil D/C,220 kV Misa-Samaguri D/C, 220 kV Mariani - Samaguri are to be in service. SPS 2 at Sonabil to be kept on when the combined loading of 220 kV Balipara-Sonabil 2 and 220 kV Samaguri- Misa D/C is more than 370 MW

SN	Name of Element	May-25																											Time	Reason
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
	SHUTDOWNS PROPOSED BY Meghalaya																																	
1	132KV main Bus Shutdown at Ampati Substation																																08:00hrs to 12:00hrs	Stringing of Bus Conductor at the new 132 KV Bay extension	SD may be availed, Subject to availability of 132 kV Ganol-Rhonkon-Nangalbibra link and 132kV Agia - Hastingmari
2	132KV Main Bus of Mendipathar Substation																																08:00hrs to 11:00hrs	Preventive Maintenance Work of 132KV Terminal equipment	SD may be availed, Subject to availability of 132 kV Nangalbibra-Agia, 132kV Nangalbibra-Nongstoin-Mawngap link, 132kV Nangalbibra-Rongkhon-Ampati-Hastingmari-Agia link.
3	132KV Nangalbibra-Agia Line II																																08:00hrs to 15:00hrs	Replacement of broken disc and jumper repairing at Loc 8.; Jungle Clearance T/loc 20-25, 170-173	SD may be availed subject to availability of 132kV Agia - Mendipathar -Nangalbibra link and 132kV Nangalbibra - Nongstoin - Mawngap link. Consent from Assam
4	132KV Bus of 132KV Nangalbibra Substation																																08:00hrs to 12:00hrs	132KV Line Bay Maintenance	SD may be availed subject to availability of 132kV Agia - Mendipathar, 132kV Nongstoin - Mawngap and 132kV Agia-Hastingmari-Ampati-Rongkhon link. Consent from Assam
5	220KV Killing-Misa D/C Lines																																08:00hrs to 16:00hrs	For line maintenance works	SD may be availed subject to availability of 400/220/132kV ICTs at Killing S/s, 132 kV Agia-Nangalbibra links and 132 kV Khleihrait-Khleihriat(DC).
6	220KV Killing-Mawphlang D/C Lines																																08:00hrs to 16:00hrs	For line maintenance work and jungle clearance	SD may be availed subject to availability of 400/220/132kV ICTs at Killing S/s, 132 kV Killing- EPIP-Umtru- Umiam 3-Umiam 1-Mawngap-Mawlai-Umiam 1 link . Availability of 132kV Badarpur-Khiehriat,132kV Badarpur-Panchgram-Lumshnong, 132kV Khlihriat-Khandong-Kopili and 132kV Khleihriat-Khandong-Umrangshu-Halflong-Jiribam link. The combined loading of 132 kV Khleriat-Khleriat D/C to be kept below 90 MW. For loading greater than 90 MW, Meghalaya has to bring their internal generation. The sensitivity of Leshka generation on 132 kV Khleriat-Khleriat D/C is 50% and the sensitivity of rest internal generation of Meghalaya on 132 kV Khleriat-Khleriat D/C is 20%.
7	132KV Umtru-Kahilipara D/C Lines																																08:00hrs to 16:00hrs	For line maintenance work and jungle clearance	SD may be availed. Consent from Assam
8	132kV Lumshnong-Panchgram Line																																08:00hrs to 16:00hrs	Jungle clearance at tower location 70,71	S/D may be availed.132 kV Badarpur-Khleihrait line, 132 kV Kopili-Khandong- Khliehriat link, 132 kV Jiribam - Halfong - Khandong - Khliehriat links shall be kept in service. Consent from Assam

SN	Name of Element	May-25																											Time	Reason
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
	SHUTDOWNS PROPOSED BY NAGALAND																																	
1	132kV DIMAPUR(PG)-KOHIMA																																09:00 Hrs to 15:00 Hrs	Vegetation Clearance	Subject to availibity of 132 kV Imphal-Karong-Kohima link and 132 kV Dimapur-Doyang-Sanis-Wokha-Chiephbozou-Zhadima-kohima link.

SN	Name of Element	May-25																											Time	Reason
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
	SHUTDOWNS PROPOSED BY TRIPURA																																	
1	132kv Udaipur - Manarchak line																																09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed subject to availability of 132kV Palatana - Udaipur and 132kV Monarchak - Rokhia and 132kV Rokhia - Agartala D/C. Monarchak Generation may be kept to 70 MW.SPS at Monarchak to be kept off before availing shutdown
2	132kv Agartala - Rokhia- line 1																																09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed. Considering N-1 of ckt II, Monarchak and Rokhia generation is to be kept such that 132kV Monarchak - Udaipur line loading to be maintain within 70 MW. SPS at Monarchak to be kept off before availing SD.
3	132kV PK BARI- ISTS PKBARI LINE																																09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed. The loading of 132 kV SM Nagar - SMNagar line to be restricted within 70 MW after availing the S/D. The loading will be maintained by SLDC Tripura. Initmation to Sterlite
4	132kv main bus Banduar (Udaipur)with associated 132kv lines																																09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed subject to availability of 132kV Palatana - Udaipur and 132kV Monarchak - Rokhia and 132kV Rokhia - Agartala D/C. Monarchak Generation may be kept to 70 MW
5	132KV Main bus Dhalabil																																09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed subject to availability of 132kV PK Bari - Kamalpur and 132kV Agartala - Mohanpur
6	132 KV Agartala- Rokhia line -2																																09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed. Considering N-1 of ckt I, Monarchak and Rokhia generation is to be kept such that 132kV Monarchak - Udaipur line loading to be maintain within 70 MW. SPS at Monarchak to be kept off before availing SD.

7	132kV ROKHIA- Monarchak line																																	09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed subject to availability of 132kV Palatana - Udaipur and 132kV Monarchak - Udaipur and 132kV Rokhia - Agartala D/C. Monarchak Generation may be kept to 70 MW. SPS at Monarchak to be kept off before availing shutdown
8	132kV PK BARI- KUMARGHAT (PGCIL) LINE																																	09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed subject to availability of all adjacent lines from 132kV Kumarghat SS. Initmation to Powergrid
9	132kV Agartala - Rokhia- line 1																																	09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed. Considering N-1 of ckt IL Monarchak and Rokhia generation is to be kept such that 132kV Monarchak - Udaipur line loading to be maintain within 70 MW. SPS at Monarchak to be kept off before availing SD.
11	132KV Udaipur -Palatana line																																	09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed subject to availability of 132kV Monarchak - Udaipur and 132kV Monarchak - Rokhia and 132kV Rokhia - Agartala D/C. Monarchak Generation may be scheduled in such a way that combined loading of 132kV Monarchak - Rokhia and 132kV Monarchak - Udaipur is less than 70 MW. **Intimation to OTPC**
12	132kv PK Bari ISTS - Ambassa Line																																	09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed subject to availability of 132kV Ambasa - Gamaitilla - Baramura - Jirania link.The loading of 132 kV SM Nagar - SMNagar line to be restricted within 70 MW after availing the S/D. **Initmation to Sterlite**
13	132KV SM Nagar- SM Nagar ISTS																																	09:00 hrs -15:00 hrs)	M Pre- moonsoon mtc.	S/D may be availed. The loading of 132 kV SM Nagar (ISTS) - Bodhjungnagar line is to be restriced within 60 MW after availing the S/D. The loading will be maintained by SLDC Tripura. **Initmation to Sterlite**
SN	**Name of Element**	**May-25**																																**Time**	**Reason**	
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**			
	SHUTDOWNS PROPOSED BY NEEPCO																																			
1	Assam Gas Based Power Stations (AGBPS),STG#2																																	00-00 Hrs to 23:59 Hrs CSD from 05/05/25 to 04/06/25	Upgradation of Module-2 DCS and Governorof STG#2 through OEM /M/S ABB India Ltd.as a part of R&M works. Major Overhauling of 50 MVA, Generator Transformer of STG#2 through OEM,M/S BHEL from 05/05/2025 to 29/05/2025(for 25 days)	SD may be availed
2	Agartala Gas Based Power Stations (AgGBPS),STG#1																																	CSD 00-00 Hrs to 23:00 Hrs	Hydrotest of HRSG#2, generation loss 12.5MW	SD may be availed
3	Agartala Gas Based Power Stations (AgGBPS),STG#1																																	CSD 00-00 Hrs to 23:00 Hrs	Hydrotest of HRSG#1,generation loss 12.5MW	SD may be availed
4	Khandong BUS-A and BUS -B																																	08:00 Hrs to 17:00 HrsDay time shutdown(Daily Bais):	Commissioning of Busbar Protection,LBB protection,Connecting of all dropping conductors of Khandong Unit 1&2.Outage during the above period will be: 1. All the feeders of Khandong Bus 2. Khandong Stage2 Unit	SD may be availed subjected to availability of 132kV Badarpur - Panchgram- Lumshnong-Khleihrat -Khilerait link and 132 kV Badarpur-Khilerait Lmk. Considering N-1 of 132kV Panchgram - Lumshnong, the 132kV Umiam - Umiam St I line loading need to be maintain below 50 MW. The sensitivity of 132kV Umiam - Umiam St I w.r.t tripping of 132kV Panchgram – Lumshnong is 30%. One unit of Leshka is recommended during SD period. **Consent from Meghalaya**
SN	**Name of Element**	**May-25**																																**Proposed Time**	**Reason**	
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**			
	SHUTDOWNS PROPOSED BY IndiGrid																																			
1	132KV-AGTCCPP-P K BARI-1																																	0600 Hrs to 1600 Hrs	Mass insulator replacement work along with installation of arcing horn at tower end. Approx 2000 to 2544 Nos insulators are going to be replaced.	SD may be availed Subjected to availability of 132 kV AGTCCPP-Kumarghat-PK Bari link. **Consent from Tripura**
2	400KV-SURAJMANINAGAR (STERLITE)-PK BARI (STERLITE)-1																																	0600 Hrs to 1600 Hrs	EFD defective insulator replacement work. approx. 143 no's insulators.	SD may be availed Subjected to availability of 400KV-SURAJMANINAGAR (STERLITE)-PK BARI (STERLITE)-2 and 400KV-SURAJMANINAGAR (STERLITE)-Palatana.
3	132KV-AGTCCPP-P K BARI-2																																	0600 Hrs to 1600 Hrs	Mass insulator replacement work along with installation of arcing horn and hardware fitting towards tower end.	SD may be availed Subjected to availability of 132 kV AGTCCPP-Kumarghat-PK Bari link. **Consent from Tripura**
4	400KV-SURAJMANINAGAR (STERLITE)-PK BARI (STERLITE)-2																																	0600 Hrs to 1600 Hrs	Mass EFD defective insulator replacement work. approx. 38nos insulator.	SD may be availed Subjected to availability of 400KV-SURAJMANINAGAR (STERLITE)-PK BARI (STERLITE)-1 and 400KV-SURAJMANINAGAR (STERLITE)-Palatana.

Annexure-II

Format for Submission of Bulk Consumer Information

All SLDCs are requested to submit the details of bulk consumers connected within their respective states in the following prescribed format.

S.No	Name of Consumer	Location (District/City/Substation)	Connected Voltage Level (kV)	Max Demand (MW)	Captive generation (MW)	Average Daily Demand (MW)	Industry Type	SCADA Available (Y/N)

Annexure 4.4

Minutes of

Meeting on Weak Infeed Issues in Rangia Area of Assam Power System

Date: 04.04.2025

A meeting was held on 4th April 2025 to address the persistent low voltage and weak infeed issues in the Rangia area of the Assam power system. The meeting was attended by representatives from AEGCL, APDCL, NERLDC, and SLDC Assam. The Chief General Manager (CGM) of NERLDC welcomed all participants and provided an overview of the current challenges affecting the Rangia power system.

Key Points of Discussion

1. Presentation by NERLDC

NERLDC opened the meeting with a comprehensive presentation highlighting the critical issues related to low voltage and weak infeed in the Rangia area, especially during the summer peak demand period.

- Primary Supply Lines to Rangia Area:
    - 220 kV Rangia–BTPS Double Circuit (D/C)
    - 132 kV Rangia–Motonga line

2. Identified Issues

- Non-compliance with N-1 Criteria:
    - 220 kV Rangia–BTPS D/C: The line loading of this lines does not fulfill N-1 contingency criteria, especially during peak demand. Tripping of any one circuit can cause widespread grid disturbances in the Rangia region.
    - BTPS ICTs (2x160 MVA, 220/132 kV): These ICTs also do not comply with N-1 criteria most of the time. A maximum loading of 320 MW was observed in August 2024. Tripping of any ICT could lead to major disturbances in the BTPS area.
- 132 kV Rangia–Motonga Line Overload:

  Earlier loading of 84 MW was recorded, which is a serious concern. Bhutan had previously raised this issue, stating that all possible measures were taken from their side to improve voltage, yet the voltage remained below the acceptable operating range. Bhutan had suggested opening the line, but this was not agreed

upon by Indian utilities due to the risk of large-scale load disconnection in the Rangia area.

- Severe Low Voltage at Rangia:
    - Recorded voltage levels dropped to as low as 115 kV at the 132 kV level and 199 kV at the 220 kV level, particularly during the summer season.
    - The situation is aggravated by increasing demand and limited infeed capacity.
- NERLDC stated that the situation in Rangia and BTPS area is aggravated due to delay in integration of already planned elements like establishment of 400/220 kV Rangia and 220/132 kV Agomoni substations. The commissioning of 400/220 kV Rangia substations with its downstream would increase at least 200 MW TTC and 220/132 kV Agomoni with downstream would increase 100 MW TTC.
- In reply to above AEGCL ensured that the
    - 400/220 kV Rangia will come by July 2026 and 220/132 kV Agomoni substation by December 2025.
    - Restoration of 10 MVAR capacitor bank at Rangia and 5 MVAR at Nalbari and Bornagar by May 2025
- **NERLDC Recommendation:** Given no major infrastructure additions before this summer, meeting the expected load with existing assets is not feasible. Immediate load shifting and implementation of Special Protection Schemes (SPS) are necessary.
    - Partial load of 132/33 kV Nalbari to be shifted to 132 kV Barpeta side. For this AEGCL will augment bus sectionalizer at 132 kV Nalbari. In addition to that strengthening of 132 kV Dhaligaon-Barpeta- line to be explored by AEGCL
    - 132 kV Tangla or 132 kV Siphajhar load to be shifted to 220/132 kV Sonabil side in real time by SLDC Assam based on real time grid scenarios.
    - NERLDC also suggested that due to high demand in these area creates serious low voltage issues, thus an SPS may be introduced for load disconnection based on low voltage at 115 kV with minimal time delay

Bus Segregation at Rangia substations: APDCL proposed radial operation of 132 kV Rangia -Montanga line for feeding local load at Rangia.

NERLDC Response: This is not possible due to:

- Bhutan's synchronous connection with the Indian grid
- Need for coordination and consent with NLDC, RPC,CEA, and the Ministry of Power as 132 kV Rangia –Montanga is a international link
- Risk of further worsening the low voltage situation in Rangia, leading to significant load disconnection.

Subsequently taking into account of the above facts and after deliberation on the above issue APDCL also agreed not to operate 132 kV Rangia -Montanga line for feeding local load at Rangia in redial mode.

3. After detail discussion following has been decided

Short-Term Measures:

1. Load Shifting from Nalbari:
    - Partial load from 132/33 kV Nalbari to be shifted to 132 kV Barpeta.
    - AEGCL will augment the bus sectionalizer at Nalbari.
    - Explore strengthening of 132 kV Dhaligaon–Barpeta line.
2. Real-Time Load Shifting by SLDC Assam:
    - Shift load from 132 kV Tangla or 132 kV Siphajhar to 220/132 kV Sonabil, depending on real-time grid conditions.
3. Implementation of SPS:
    - Introduction of an SPS for load disconnection triggered by voltage dropping below 115 kV, with minimal delay.
4. Capacitor Bank Restoration:
    - Ensure all capacitor banks at Rangia, Nalbari, and Barnagar are operational by the first week of May 2025.
5. Explore Further Strengthening:
    - 132 kV Dhaligaon–Bornagar–Nathkuchi line.
    - 132 kV Dhaligaon–Gossaigaon line to support Agomoni substation integration.

Long-Term Measures:

1. Commissioning of 400/220 kV Rangia Substation:

- To be expedited with associated downstream strengthening.
- Target date: July 2026

2. Commissioning of 220/132 kV Agomoni/Gossaigaon Substations:
    - Including strengthening of downstream network.
    - Target date: December 2025

Discussion on weak infeed of rangia area of Assam Power System

S. No.	Name	Designation	Organisation	Contact No.	Signature
1)	Biswajit Sahu	CGM	NERLDC	9425409539	
2)	B. Bardoloi	DGM	AEGCL	9435558545	
3)	Pallab Roy	DM	AEGCL	8724914028	
4)	Nilkulpal Barman	AGM (SO)	AEGCL, SLDC	7002885719	
5)	Sushmita Das	JM (SO)	SLDC, AEGCL	9864956879	
6)	Barsha Kashyap	DM(SO)	SLDC, AEGCL	9706692773	
7)	Ananya Giri	Engineer	NERLDC	8730806573	
8)	Laxmi Prabha Das	Asst Manager	NERLDC	8794092007	
9.	[illegible]	[illegible]	〃	9436335377	
10.	Sachin Singh	Manger	〃	8826999191	
11	Sunil Singha	Manager	NERLDC	8414865865	
12	Debasish Choudhury	DGM(O),	AEGCL, SLDC.	94357 32546	
13	Sumit Kr. Singha	CEO, GEC-II	APDCL	98640-29246	
14	Diganta Deka	CEO, Rangia EC	APDCL	7002297834	
15	Rupul Nath	CEO, Barpeta EC.	APDCL	9365045585	4/4/25
16	Rajiv Kr. Gogoi	GM (PP&EM)	APDCL	98540-05595	04/04/25

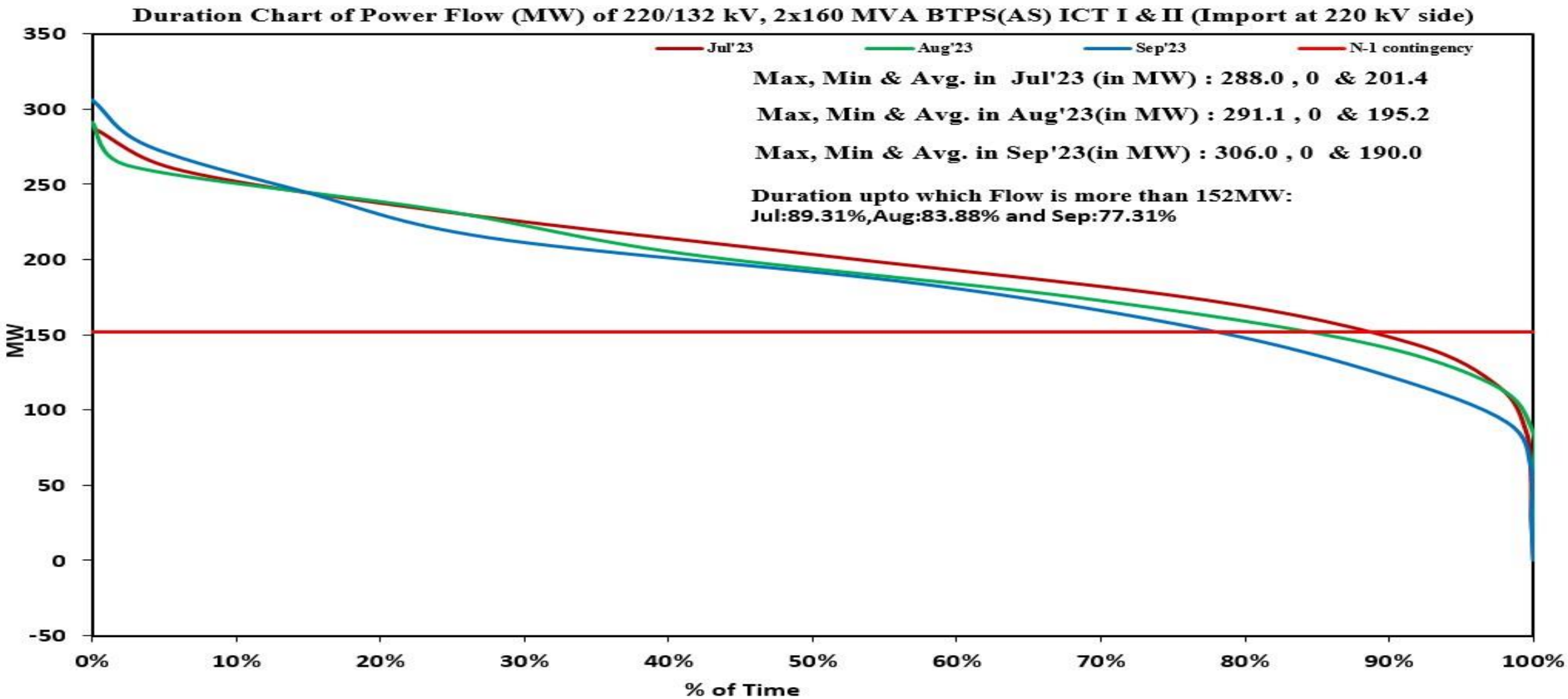
S.No	Name	Designation	Organisation	Contact No	Signature
17	INDRAJIT TAHBILDA	DGM (com)	APDCL	8761049486	
18.	Basabendu Dev Roy	AGM, Rangia ED	APDCL	9127054862	04.04.2025
18	Ubaidur Rahaman Mazumder	CGM(QS) + AR	APDCL	9435567761	
19	Tarali Deka	AGM (Tariff)	AEGCL	98649-81330	
20	Dipmoni Nath	AM (Tariff)	AEGCL	8011117343	
21	Angshuman Deb Roy.	AGM, Rangia Division	AEGCL.	95085-40444	
22	Devajyoti Patowary	DGM, AEGCL	AEGCL	7002216708	
23	M. Rahman	GM, AEGCL	AEGCL	70027 63718	

Weak Infeed to Rangia Area of Assam Power System

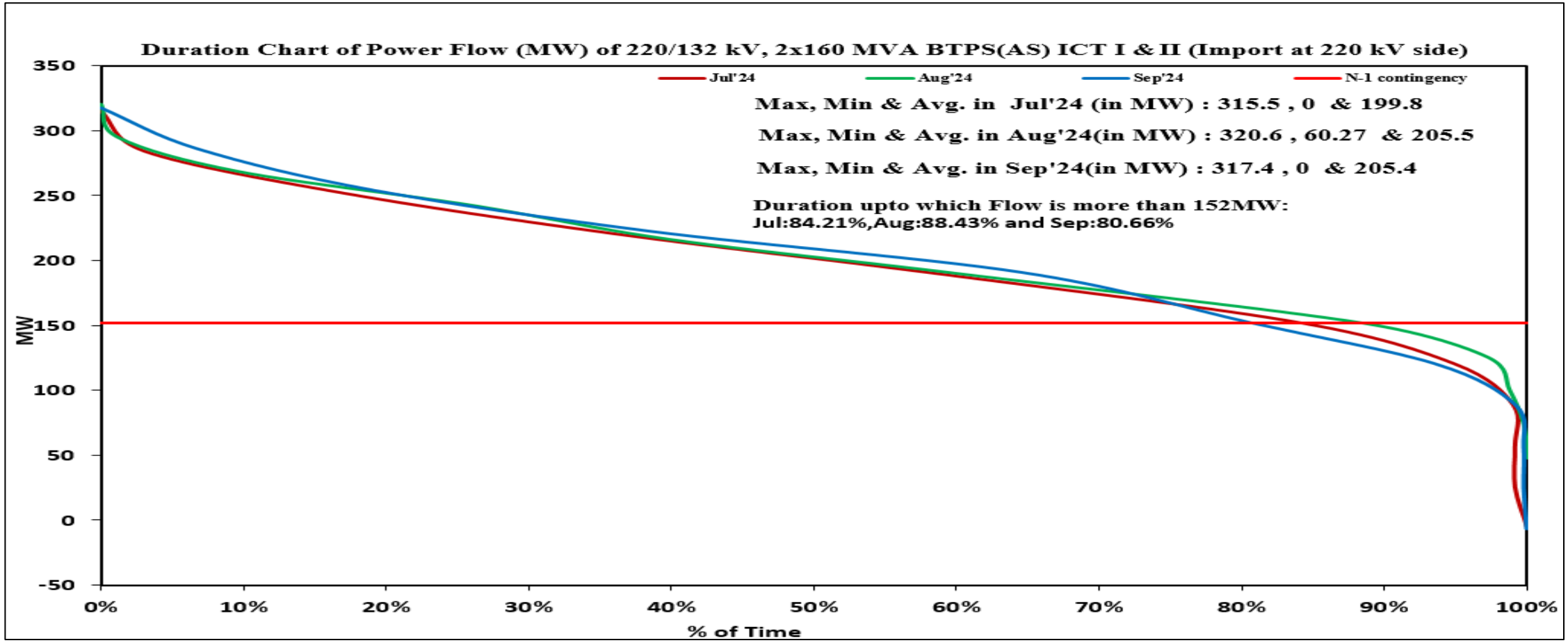
Issues in Rangia area of Assam power system

- Currently, the Rangia area of the Assam power system is primarily supplied through the 220 kV Rangia-BTPS D/C and the 132 kV Rangia-Montanga line. However, the loading on the 220 kV Rangia-BTPS D/C often does not comply with N-1 contingency requirements, particularly during peak demand periods. The tripping of any one circuit of the 220 kV Rangia-BTPS D/C could result in grid disturbances in the region
- Furthermore, a high loading of 84 MW was observed on the 132 kV Rangia-Montanga line, which is serious concern issues

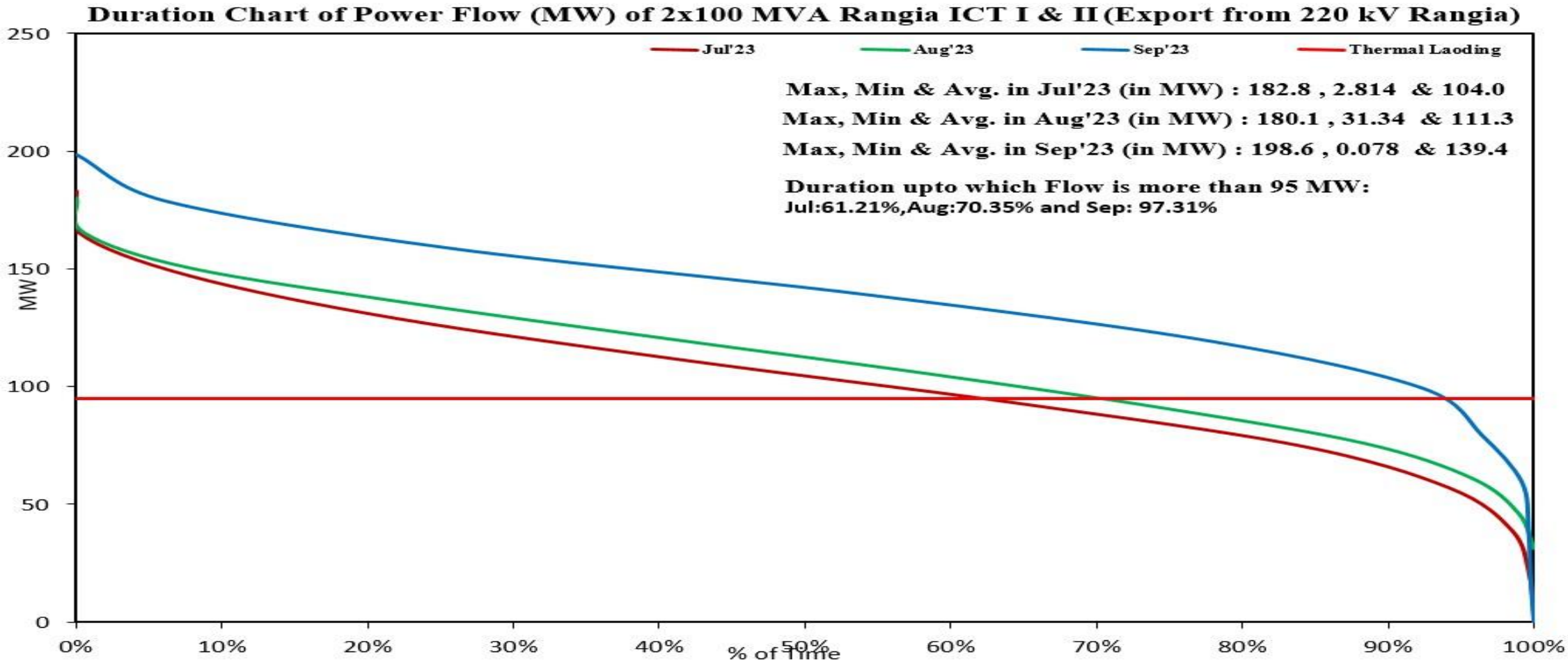
Loading of BTPS ICTs



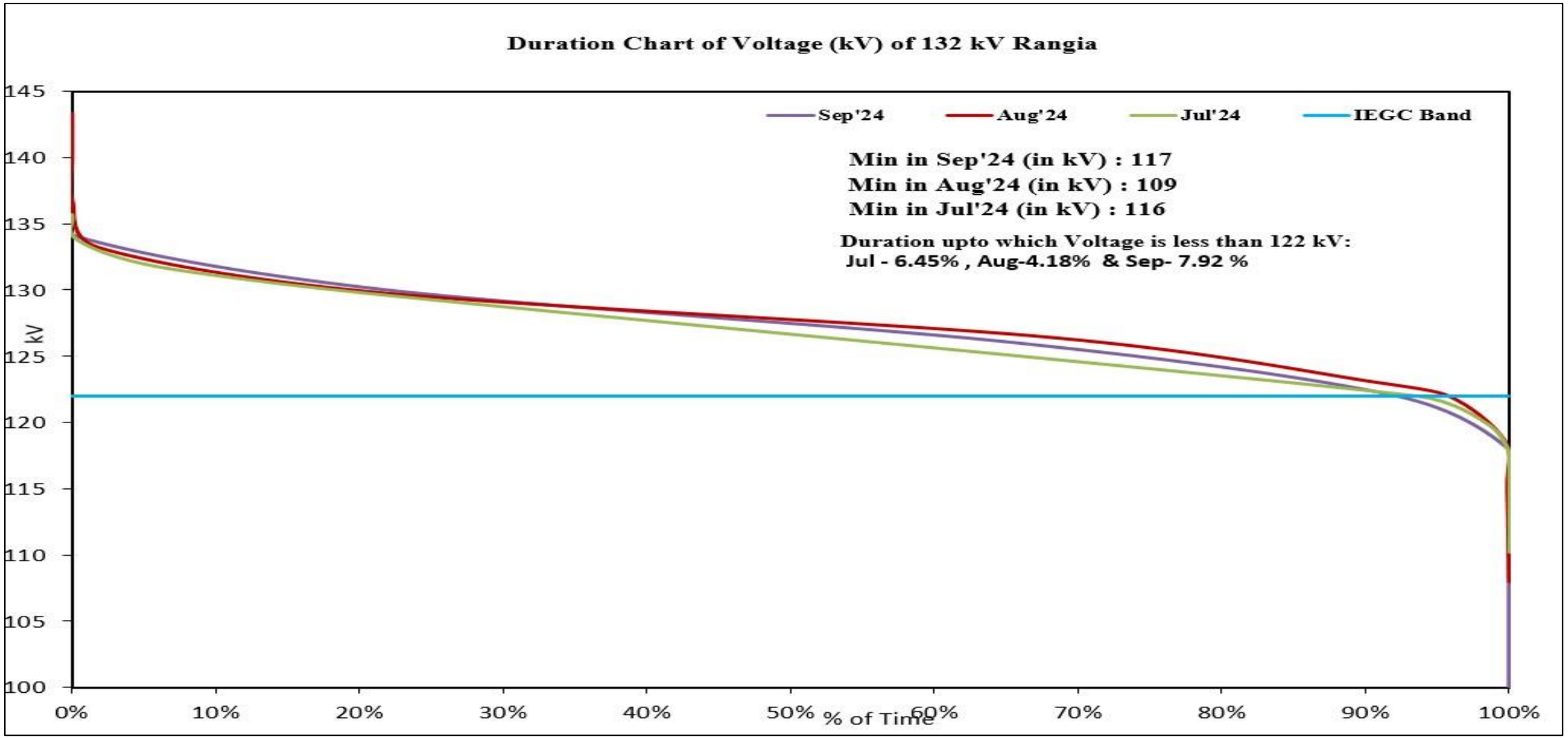
Loading of BTPS ICTs



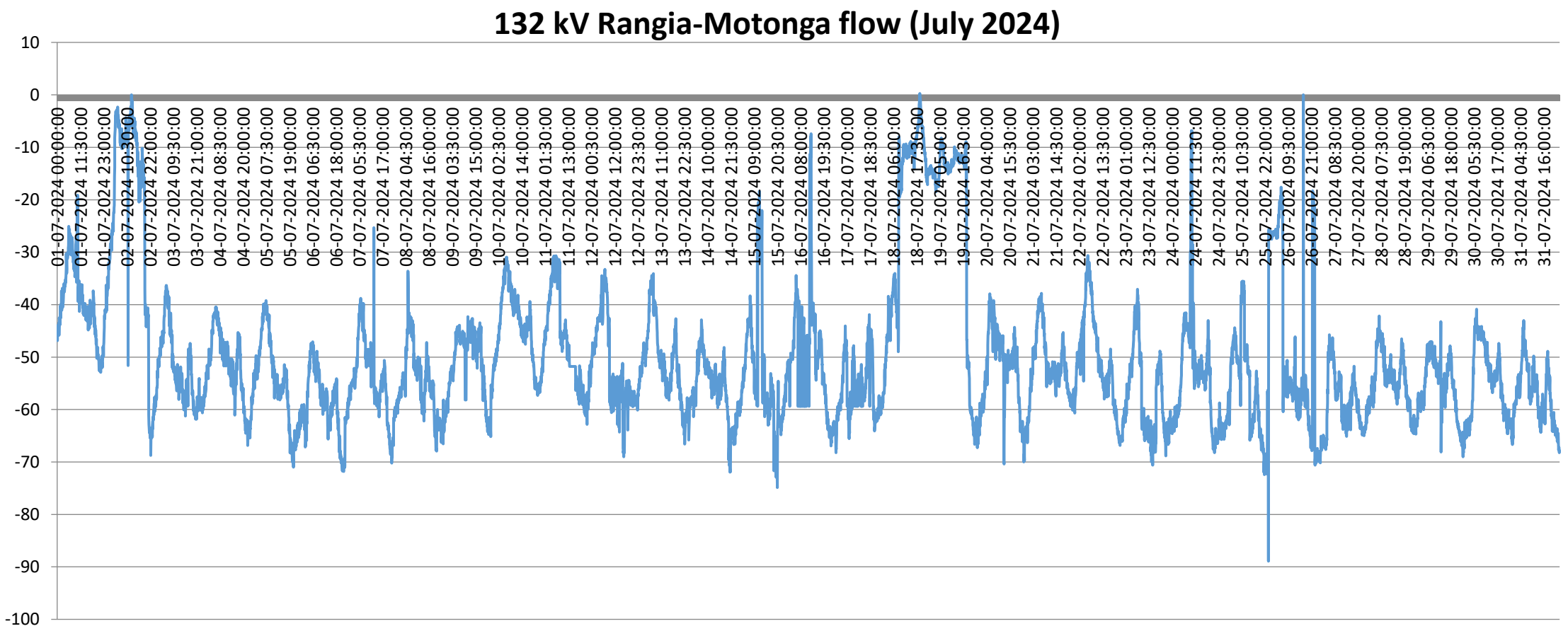
Loading of Rangia ICTs



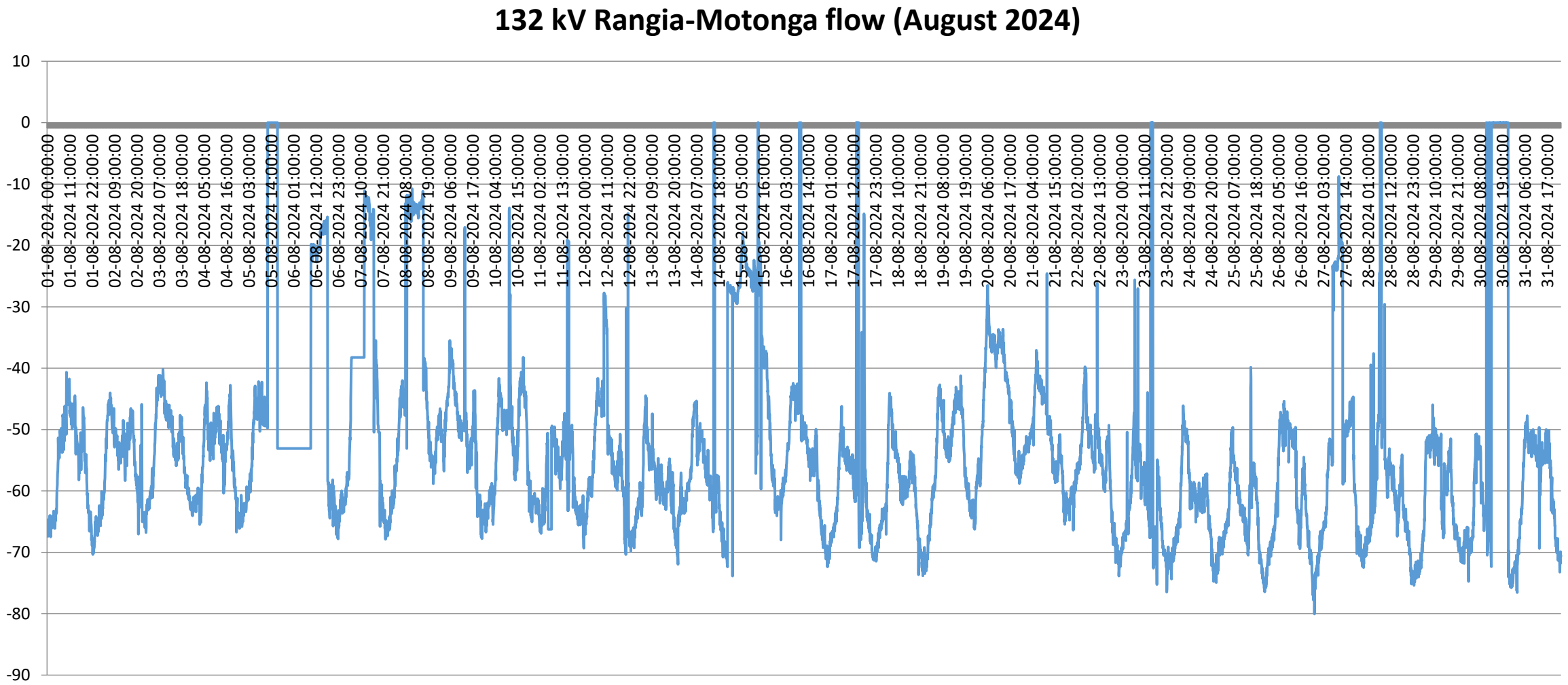
Voltage Profile of Rangia Bus



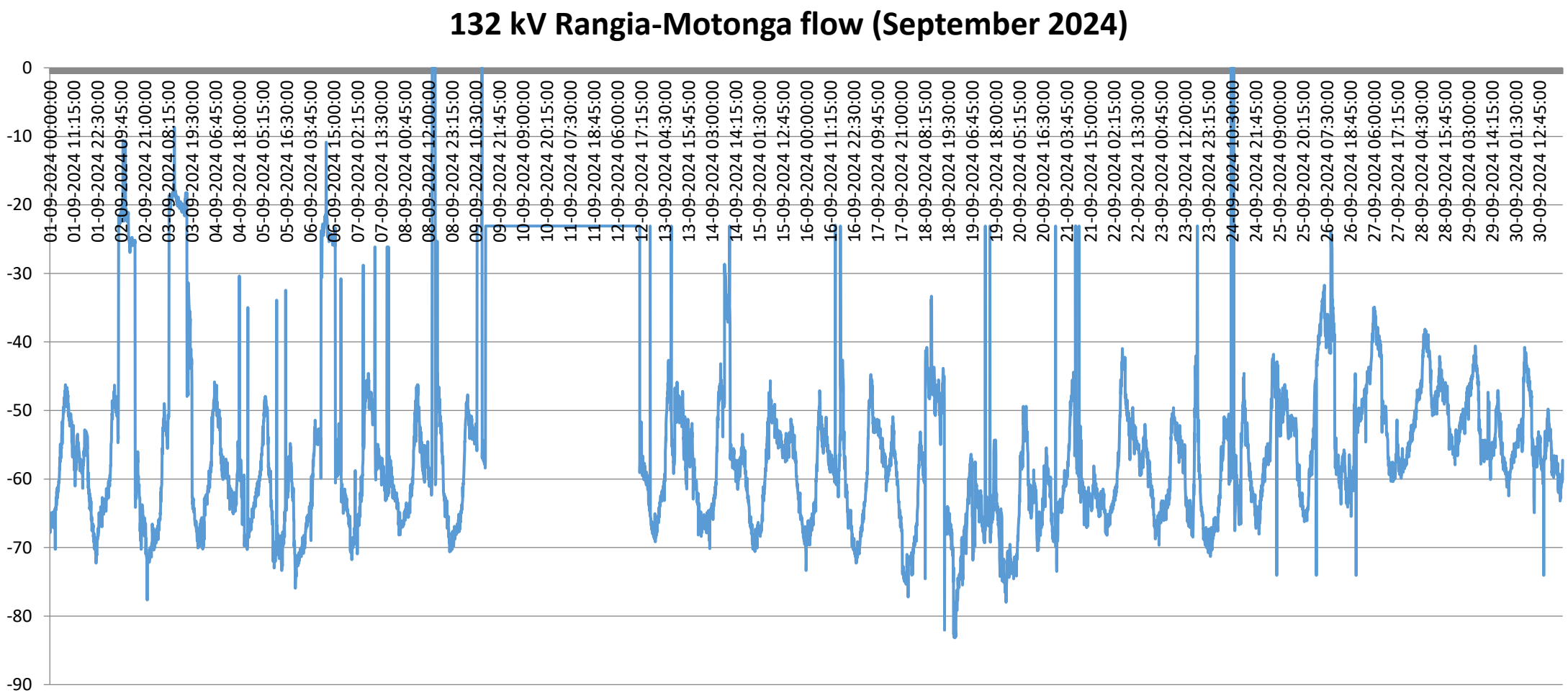
Loading Profile of 132 kV Rangia-Monttanga line-Juy24



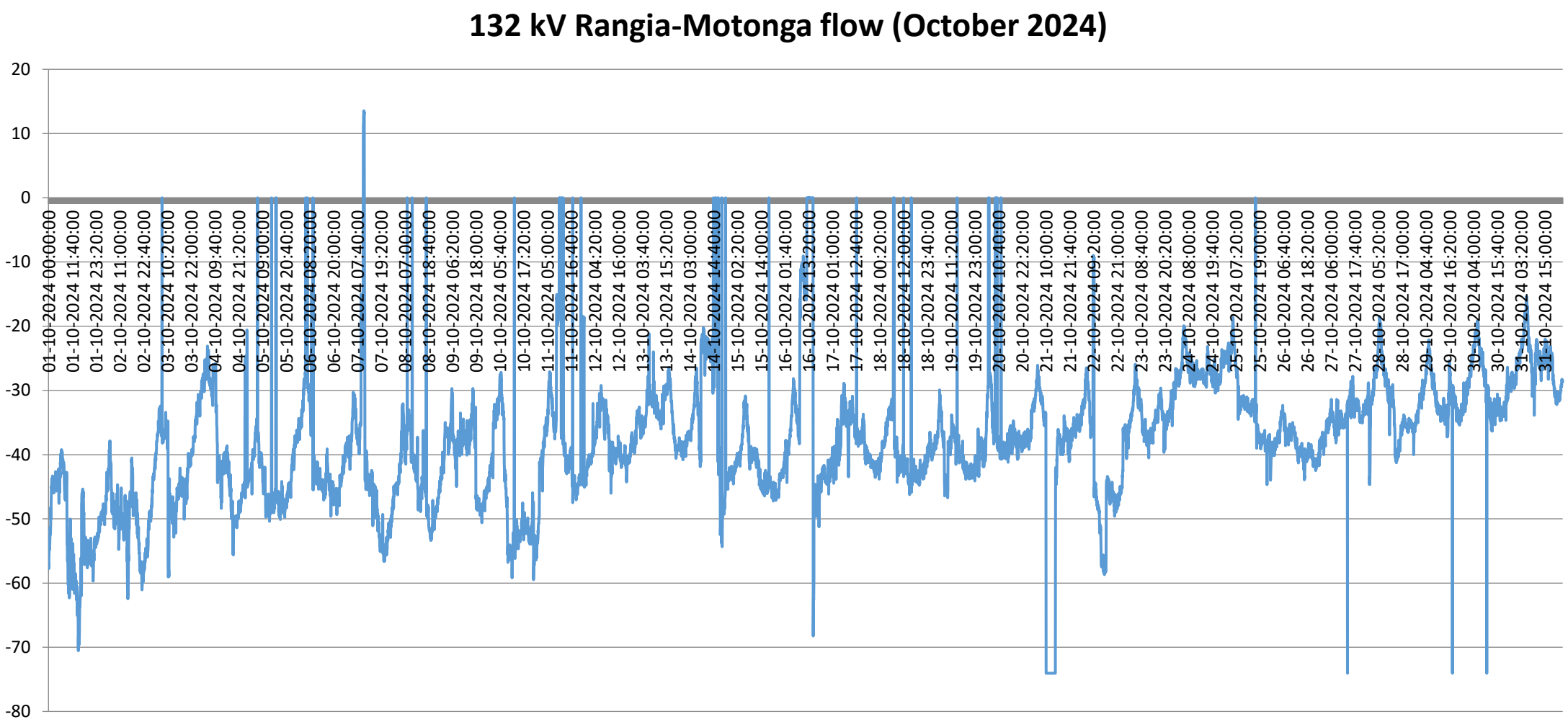
Loading Profile of 132 kV Rangia-Monttanga line-Aug24



Loading Profile of 132 kV Rangia-Monttanga line-Sep24



Loading Profile of 132 kV Rangia-Monttanga line-Oct24



Grading of Median FRP of Regional Control Areas for FY 2024-25

Annexure 2.5

S.No	Date	Time	Region/Area	Generation/Load loss	BGTPP	Palatana	Doyang	Kameng	Khandong Stg-2	Kopili	Loktak	Panyor	Pare
1	3-Apr-24	5:30	WR_Chhatisgarh	-1235	0.77	-0.16	No Gen	1.19	No Gen	No Gen	0.53	No Gen	No Gen
2	6-Apr-24	11:24	NR_Rajasthan Renewable complex, Punjab and Uttar pradesh	4242	2.05	2.11	No Gen	0.08	-1.52	No Gen	0.58	No Gen	No Gen
3	19-Apr-24	10:28	NR_Rajasthan Renewable complex	1040	1.33	1.57	No Gen	11.32	No Gen	No Gen	-0.36	No Gen	No Gen
4	23-Apr-24	20:15	WR_APML Tiroda	1800	2.05	0.66	0.91	9.79	No Gen	4.67	1.92	3.97	-0.57
5	2-May-24	14:41	NR_Rajasthan Renewable complex	1840	9.31	2.12	No Gen	-5.71	5.49	5.42	-0.18	No Gen	No Gen
6	10-May-24	19:35	Khedar(RGTPS)	1071	5.30	6.77	0.68	3.97	-10.92	-5.46	-1.03	1.70	2.39
7	28-May-24	17:59	Gorai_Maharashtra_ WR	-1587	24.29	0.40	0.42	-0.67	0.07	7.97	34.62	-1.71	-0.93
8	4-Jun-24	10:26	NR_Rajasthan Renewable complex	1090	4.47	0.16	0.39	4.16	2.99	-1.26	0.63	0.06	0.32
9	4-Jun-24	10:34	NR_Rajasthan Renewable complex	1295	6.08	0.62	0.25	13.37	14.58	-3.06	1.85	7.15	-1.59
10	11-Jun-24	14:10	Delhi_NR	-1322	3.34	0.66	No Gen	0.23	-0.48	3.12	-0.61	1.63	No Gen
11	17-Jun-24	13:53	NR_WR_NER	-9725	1.08	0.00	No Gen	0.13	0.53	13.86	1.98	No Gen	No Gen
12	19-Jun-24	12:42	NR region	4480	3.42	3.41	No Gen	0.09	-1.62	4.62	0.30	No Gen	No Gen
13	16-Jul-24	22:10	Delhi and Haryana_NR	-1580	0.76	-0.25	0.42	0.48	0.27	23.22	-0.40	5.99	0.00
14	23-Aug-24	12:34	Tamil Nadu and RE Complex of Kayathar_SR	1200	7.34	-4.59	-0.74	0.24	-1.64	-0.31	-0.08	0.70	-0.53
15	13-Sep-24	13:15	Azmer,Azure 34_NR	850	-0.62	2.63	-0.27	0.18	10.13	4.39	32.51	No Gen	No Gen
16	21-Oct-24	16:49	DB Power_WR	1114	1.70	0.52	0.10	0.00	16.50	12.48	1.01	No Gen	No Gen
17	4-Jan-25	19:17	Barh_ER	1790	6.65	-6.22	-3.23	-5.12	-15.34	17.14	4.10	-9.90	6.99
18	20-Feb-25	16:20	GMR & JITPL, WR	1777	19.43	0.44	No Gen	-1.29	No Gen	48.68	-0.95	No Gen	No Gen
19	12-Mar-25	14:51	Maharashtra, Gujarat, KAPS generating station, WR	-2290	5.87	0.84	No Gen	No Gen	No Gen	No Gen	No Gen	7.23	No Gen
20	12-Mar-25	15:37	Maharashtra, Gujarat, WR	-1318	2.19	0.44	No Gen	No Gen	No Gen	No Gen	1.07	6.24	No Gen
	Median				**3.38**	**0.57**	**0.32**	**0.21**	**0.17**	**4.67**	**0.58**	**1.70**	**-0.26**
	Grading				**Excellent**	**Below Average**	**Poor**	**Poor**	**Poor**	**Excellent**	**Below Average**	**Excellent**	**Poor**

Grading of Median FRP of Regional Control Areas for FY 2024-25

S.No	Date	Time	Region/Area	Generation/Load loss	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura	NER
1	3-Apr-24	5:30	WR_Chhatisgarh	-1235	5.79	0.18	NA	-9.57	5.49	2.09	0.38	1.05
2	6-Apr-24	11:24	NR_Rajasthan Renewable complex, Punjab and Uttar pradesh	4242	1.84	0.54	NA	-2.95	-0.38	1.61	-0.46	1.11
3	19-Apr-24	10:28	NR_Rajasthan Renewable complex	1040	-0.37	-0.01	NA	-1.18	4.10	0.34	2.97	2.38
4	23-Apr-24	20:15	WR_APML Tiroda	1800	4.92	1.78	NA	0.46	-5.39	-1.82	1.03	2.29
5	2-May-24	14:41	NR_Rajasthan Renewable complex	1840	0.30	3.67	NA	4.72	-7.27	-7.36	-0.59	2.56
6	10-May-24	19:35	Khedar(RGTPS)	1071	-10.37	-8.60	NA	1.75	1.04	6.09	0.47	-3.51
7	28-May-24	17:59	Gorai_Maharashtra_ WR	-1587	2.11	-0.11	NA	-3.58	3.14	3.68	1.54	3.61
8	4-Jun-24	10:26	NR_Rajasthan Renewable complex	1090	-4.46	1.07	NA	0.60	1.95	-0.97	-1.88	0.99
9	4-Jun-24	10:34	NR_Rajasthan Renewable complex	1295	-1.12	0.17	NA	-1.88	-9.57	-1.42	0.09	1.72
10	11-Jun-24	14:10	Delhi_NR	-1322	-1.78	1.12	NA	-1.30	1.03	1.67	0.63	0.76
11	17-Jun-24	13:53	NR_WR_NER	-9725	0.99	1.85	NA	0.32	0.79	1.47	2.18	1.30
12	19-Jun-24	12:42	NR region	4480	-0.16	-0.14	NA	-2.05	-0.18	0.39	-0.20	1.36
13	16-Jul-24	22:10	Delhi and Haryana_NR	-1580	14.79	1.42	NA	-3.09	-4.31	-5.28	0.47	1.20
14	23-Aug-24	12:34	Tamil Nadu and RE Complex of Kayathar_SR	1200	-4.01	-0.14	NA	1.53	6.84	3.68	-1.34	2.02
15	13-Sep-24	13:15	Azmer,Azure 34_NR	850	-1.04	0.20	NA	0.68	-0.85	0.24	-0.60	0.50
16	21-Oct-24	16:49	DB Power_WR	1114	0.92	-0.24	NA	1.89	-1.12	-15.97	-0.18	-0.49
17	4-Jan-25	19:17	Barh_ER	1790	2.83	1.41	NA	-4.09	5.06	4.58	-3.91	2.77
18	20-Feb-25	16:20	GMR & JITPL, WR	1777	14.07	1.32	NA	4.69	-0.55	-2.03	0.61	4.26
19	12-Mar-25	14:51	Maharashtra, Gujarat, KAPS generating station, WR	-2290	-3.00	0.89	NA	2.37	8.17	2.73	-0.19	1.09
20	12-Mar-25	15:37	Maharashtra, Gujarat, WR	-1318	-12.45	1.21	NA	7.29	4.00	1.76	0.76	1.41
	Median				**0.07**	**0.71**	**NA**	**0.39**	**0.91**	**0.93**	**0.23**	**1.33**
	Grading				**Poor**	**Below Average**	**NA**	**Poor**	**Good**	**Good**	**Poor**	**Excellent**