



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

No. NERPC/SE(O)/OCC/2026/678-720

Date: 26-05-2026

सेवा में / To,

संलग्न सूची के अनुसार / As per list enclosed.

विषय: 238 वीं ऑपरेशन समन्वय उप-समिति (ओसीसी) की बैठक का कार्यवृत्त -तत्संबंधी।

Subject: Minutes of 238th Operation Coordination Sub-Committee (OCC) Meeting - reg.

महोदय/महोदया,

कृपया 15 मई 2026 को गुवाहाटी में आयोजित 238वीं ओ सी सी बैठक का कार्यवृत्त आपकी सूचना एवं आवश्यक कार्रवाई हेतु संलग्न देखें। यह एन ई आर पी सी की वेबसाइट www.nerpc.gov.in पर भी उपलब्ध है।

किसी भी टिप्पणी/टिप्पणियों के बारे में कृपया एन ई आर पी सी सचिवालय को जल्द से जल्द सूचित किया जा सकता है।

Sir/Madam,

Please find enclosed herewith the minutes of the 238th OCC Meeting held at Guwahati on 15th May 2026 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,


दिनांक 26/5/2026

(डी के बाउरी/ D K Bauri)

निदेशक/ Director

परिचालन/ Operation

Encl.: As above

अभिभाषकों की सूची /List of Addressees:

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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.
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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
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18. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad, Haryana-121003
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20. Vice President (Plant), OTPC, Badarghat Complex, Agartala, Tripura – 799014
21. ED, PGCIL/NERTS, Dongtieh-Lower Nongrah, Lapalang, Shillong -793 006
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25. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066
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27. ED, NERLDC, Dongtieh, Lower Nongrah, Lapalang, Shillong -793 006
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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
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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



(डी के बाउरी/ D K Bauri)
निदेशक (O) /Director (O)



सत्यमेव जयते

**MINUTES OF
238th OCC MEETING**

Time: 10:30 Hrs.

Date: 15th May, 2026 (Friday)

Venue: Hotel Nandan, Guwahati

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NORTH EASTERN REGIONAL POWER COMMITTEE

MINUTES OF 238th OCC MEETING HELD ON 15.05.2026 (FRIDAY) AT 10:30 HRS

PROCEEDINGS OF THE MEETING

Member Secretary, NERPC warmly welcomed all the representatives from the constituent utilities to the 238th Meeting of the Operation Coordination sub-Committee (OCC). In his opening remarks, he stated that the OCC continues to be an important forum for coordinated deliberation on operational matters to ensure secure, reliable and efficient operation of the NER Grid.

At the outset, he expressed concern over recent instances of persistent overdrawal by certain NER States during periods of low system frequency, emphasizing that such practices adversely affect grid discipline and system security. Referring to a recent event in which system frequency had declined to around 49.4 Hz, he noted with concern that the UFR schemes did not operate as intended to provide the necessary load relief. Keeping in view the forthcoming summer season, he informed the forum that NERPC would closely monitor the healthiness and readiness of UFR schemes on a monthly basis. He also urged all States to take timely action in accordance with the summer preparedness guidelines circulated by the CEA and NERLDC.

He appreciated the presence of Engineer-in-Chief, DoP, Nagaland along with other 2 (two) Chief Engineers of DoP, Nagaland and stated that the many unresolved issues pertaining to the State of Nagaland would be discussed comprehensively and amicably. He also congratulated DoP, Nagaland for the successful synchronization of the Kohima and Mokokchung systems through the 132 kV network at Tuensang, describing it as a significant achievement for strengthening the State's transmission network.

He expressed hope that the long-pending FTC issue of Tripura would be resolved during the present meeting. He also informed the forum that NERPC has prepared the DPR for establishment of SOC and NOC for all NER States

except Nagaland and Assam as their DPRs have already in advanced stage. In this regard, a meeting to discuss and finalize the DPR for remaining 5 (five) States of NER is proposed to be held on 19th May 2026, after which the DPRs would be submitted to the PSDF Secretariat by 29th May, 2026 for consideration and approval.

In conclusion, He thanked outgoing SE, SLDC, P&E, Govt. of Mizoram, Sh. Lalruatkima, for his various contributions to the forum and also welcomed the new SE, SLDC, Sh. Lalthanzuala. He expressed confidence that with the active cooperation of all participants, the deliberations of the 238th OCC meeting would lead to timely and constructive resolution of the important issues placed before the Committee in the larger interest of reliable and secure grid operation in the North Eastern Region.

The forum also put on sincere appreciation to Er. Kasho Chshi, CE, DoP, Nagaland on reaching his superannuation during the month and OCC members thanked him for all his contributions extended by him during his tenure to the various meetings of NERPC.

Thereafter he requested Director (Operation) to take up the agenda items for deliberation.

1. PART-A: CONFIRMATION OF MINUTES

1.1. Confirmation of Minutes of 237th Meeting of OCC Sub-Committee of NERPC

The minutes of 237th meeting of OCC Sub-committee held on 22.04.2026 at NERPC Conference Hall, Shillong were circulated vide letter No. NERPC/SE (O)/OCC/2026/304-346 dated 30th April 2026.

As no comments were received from the constituents, the sub-committee confirmed the minutes of 237th OCCM as circulated.

2. PART-B: ITEMS FOR DISCUSSION

2.1. AMC of PDMS and PSCT for 2026–27 –Recommendations of the Committee and Negotiated Price-NERPC

The PDMS and PSCT systems have been commissioned at NERPC in 2018 for providing a database for protection settings of NER grid elements and to provide a software for carrying out protection coordination studies. The 6th year AMC of the system expired on 14.03.2026. The budgetary offer was sought from M/S PRDC for 7th year AMC (2026-27). PRDC vide email dtd. 21.01.2026 provided the offer which was discussed in the 31st TCC NERPC meetings held on 11-12 February 2026. The TCC/NERPC forum felt that the price was very high and needs some revision. Therefore, the forum decided that a committee would be formed to negotiate the AMC price with the vendor.

Pursuant to the 31st TCC /NERPC decision, a committee was formed vide NERPC order dtd. 29.04.2026 to review the scope of AMC work and negotiate the price with the vendor.

Consequently, the Committee held meeting with M/s PRDC on 30.04.2026 to negotiate the price.

The committee noted the budgetary offer provided by PRDC vide mail dtd. 21.01.2026 to NERPC. The offer given was around ₹ 1.5 crore for two years, i.e. ₹ 75 lakhs per year, while the final cost of AMC for 6th year was around ₹ 58 lakhs only. The committee noted that the price is exorbitant and needs revision.

The committee proposed to include the following works in the scope of work of AMC, over and above the original scope–

- I. PRDC to visit the constituent utilities for data updation. The number of visits would be 10 to 12 in number as maximum.
- II. To coordinate with NERLDC to update the NER transmission network in MiPSCT in line with PSSE data base.

- III. No limit to be put on the number of relay settings calculation study
- IV. Protection expert to attend PCC and give expert advice on trippings and grid events.
- V. To undertake tripping analysis. DR EL to be downloaded from tripping portal of NERLDC. NERLDC to help PRDC get access to the tripping portal for downloading DR, FIR and EL.

PRDC agreed to include these additional scopes in the AMC work. Regarding the price, the committee urged PRDC to reduce it considering the amount of work and stressed financial situation of NER states. The committee urged PRDC to rationalized it keeping in mind the general annual escalation of around 10 %.

Finally, PRDC agreed to rationalize the AMC cost and on 05.05.2026, it provided the revised offer with new AMC cost for one year, which is around ₹66 lakhs only, also including the additional scope of work suggested by committee members. The revised cost was intimated to the committee members and they agreed to the price.

Deliberation of the sub-committee

Director (Operation), NERPC apprised the forum that a committee had been constituted to negotiate the AMC charges for the PDMS, as the initial proposal submitted by PRDC was very high approximately ₹75 lakh per annum. He informed the members that, following detailed deliberations and negotiations, PRDC had agreed to undertake the AMC at a reduced cost of approximately ₹66 lakh per annum. He further stated that the revised proposal also includes certain additional activities needed for regular updation of database and better utilization of PSCT software.

MS, NERPC appreciated the efforts of the committee for successfully negotiating the AMC charges and bringing down the annual cost from ₹75 lakh to ₹66 lakh along with additional scope of works. He observed that the PDMS is a valuable software asset and emphasized that its cost can be justified only when the system is fully utilized and the data maintained

therein remains accurate and up to date. In this regard, he requested NERPC & NERLDC to coordinate closely with PRDC to ensure that all relevant data in the PDMS is updated prior to issuance of FTC for any transmission element.

Director (Operation), NERPC further suggested that all upcoming ISTS and intra-state transmission or generating elements may be placed in the OCC on a monthly basis so that their associated data and other details were captured in the PDMS on timely and systematic manner.

The sub-committee noted as above.

2.2. Finalization of Annual Maintenance Contract (AMC) for Metering and AMR Components of SAMAST for North Eastern Region States

During the Special Meeting held on 14.04.2026, representatives of NERPC, NERLDC and all constituent States deliberated on the pending AMC for Metering and AMR Components of SAMAST.

Representative from Meghalaya delivered a detailed presentation, breaking down the hardware/software support requirements and explicitly demonstrating how the prices quoted by M/s Genus are exorbitant and commercially unviable when compared to market standards and the original tender conditions.

Sl No	NER State	Meters (Nos)	DCU (Nos)	Ind. Eth Switch (Nos)	Project Impl. Cost (₹ Cr, excl. Tax)	Project Impl. Cost (₹ Cr, incl. 18%)	Original Tender ATS 3yr Cap (₹ Cr, excl. Tax)	Original Tender ATS 3yr Cap (₹ Cr, incl. Tax)	Genus New Offer AMC 5yr (₹ Cr, incl. Tax)	Genus New Offer AMC 3yr (₹ Cr, incl. Tax)
1	Meghalaya	225	47	79	2.68	3.16	2.01	2.37	4.73	2.84
2	Assam	560	100	216	4.18	4.93	3.14	3.70	7.39	4.43
3	Arunachal Pradesh	55	12	5	4.25	5.02	3.19	3.76	7.53	4.52
4	Manipur	475	94	94	6.47	7.63	4.85	5.73	11.45	6.87
5	Mizoram	223	96	12	5.14	6.07	3.86	4.55	9.10	5.46
6	Nagaland	128	24	10	4.64	5.48	3.48	4.11	8.22	4.93

Sl No	NER State	Meters (Nos)	DCU (Nos)	Ind. Eth Switch (Nos)	Project Impl. Cost (₹ Cr, excl. Tax)	Project Impl. Cost (₹ Cr, incl. 18%)	Original Tender ATS 3yr Cap (₹ Cr, excl. Tax)	Original Tender ATS 3yr Cap (₹ Cr, incl. Tax)	Genus New Offer AMC 5yr (₹ Cr, incl. Tax)	Genus New Offer AMC 3yr (₹ Cr, incl. Tax)
7	Tripura	261	39	30	5.34	6.30	4.01	4.73	9.45	5.67
	TOTAL	1927	412	446	32.70	38.59	—	28.94	57.88	34.73

The forum observed that the prices quoted by M/s Genus and M/s Kalkitech were substantially higher than the acceptable levels and were commercially unviable.

After detailed deliberation, constituent States proposed the following acceptable ceilings for a 5-year AMC (inclusive of taxes) for MDAS software and DCUs including Control Centre IT Hardware and Grid Sub-station Hardware (excluding meters):

- **Meghalaya:** ₹2.38 Crore
- **Assam:** ₹6.15 Crore
- **Tripura:** ₹2.50 Crore
- **Manipur:** ₹9.55 Crore
- **Mizoram:** ₹3.20 Crore
- **Nagaland:** ₹1.70 Crore
- **Arunachal Pradesh:** ₹1.20 Crore
- **Total: 26.68 Crore**

The forum requested NERPC Secretariat to act as the nodal agency for negotiating with the OEMs/service providers and to explore all possible options for optimization of AMC cost. Accordingly, NERPC has initiated discussions with the concerned vendors.

Deliberation of the sub-committee

MS, NERPC apprised the forum that NERPC is continuously pursuing negotiations with M/s Kalkitech regarding the AMC charges for the SAMAST

system. He informed that although the initial quoted cost by M/s Genus for the 5-year AMC was around ₹57.88 crore, NER States had subsequently agreed in principle for a 5-year AMC at ₹26.68 crore (approx.) Based on the agreed rates indicated by NER States, NERPC had detailed discussions with M/s Kalkitech and the AMC cost was finally reduced to ₹26.18 crore for a 5-year period. The Scope of Works (SoW) and commercial offer was presented to the forum and the same was agreed by all NER States. The detailed SoW is attached at **Annexure-2.2**. In this regard, he requested all 7(seven) States to expedite issuance of the Letter of Award (LoA) at the earliest as the validity of the quoted price is only for 60 days with effect from 7th May 2026, and further requested the States to intimate NERPC once the respective LoAs are placed. The copy of draft LOA as finalized by NERPC would be shared to all the respective State utilities.

The price quoted by M/s Kalkitech is as given below in table:

Sl. No.	Particulars	Unit	Qty	Unit price in INR	Total Amount in INR
1	Assam	Per year	5	1,00,78,000	5,03,90,000
2	Meghalaya	Per year	5	50,00,000	2,50,00,000
3	Ar. Pradesh	Per year	5	24,00,000	1,20,00,000
4	Manipur	Per year	5	1,27,00,000	6,35,00,000
5	Mizoram	Per year	5	56,00,000	2,80,00,000
6	Nagaland	Per year	5	32,00,000	1,60,00,000
7	Tripura	Per year	5	54,00,000	2,70,00,000
	Total in INR excluding GST				22,18,90,000
	GST @18%				3,99,40,200
	Grand Total in INR including GST				26,18,30,200

Forum appreciated the efforts of NERPC in negotiating with the vendors and significantly reducing the AMC cost for the 5-year period from ₹57.88 crore to ₹26.18 crore, which would substantially reduce the financial burden on the NER States. Further, forum requested all States to issue LoA within the timeframe as the issue was not resolved for long time.

Representatives from Ar. Pradesh, Assam, Manipur, Mizoram, Nagaland and Tripura agreed in principle to the proposed AMC arrangement along with above SoW and informed the forum that the matter would be placed before their respective higher authorities for necessary financial approval and further action.

The sub-committee noted as above.

Action: All NER States to expedite necessary approval and issuance of LoA for SAMAST AMC within the validity period (i.e. 60 days w.e.f 7th May, 2026) of the quoted price and intimate NERPC after placement of LoA.

2.3. Automatic Demand Management System (ADMS) Healthiness Status in NER Grid-NERPC

Background:

The healthiness of the ADMS was discussed in the 234th OCCM & 236th OCCM. It was observed that the ADMS across all seven NER states remained 100% operational and fully functional during the entire warranty and mandatory three-year contractual support period. However, post completion of this support period, AMC has not yet been operationalized in Tripura, Manipur, and Nagaland.

In 237th OCC Meeting, MS, NERPC informed the forum that a separate meeting will be convened with Manipur, Nagaland, Tripura, and M/s Orbit to deliberate upon and resolve issues related to AMC of ADMS. Also, he stated that other States also may be called during the special meeting to assess the operational status of ADMS. He further emphasized that periodic monitoring

of ADMS operability shall also be undertaken to ensure sustained functionality and reliability of the system across the region.

Pursuant to the deliberations in the 237th OCC Meeting, an online meeting was convened on 5th May 2026 to discuss issues related to the ADMS AMC with all stakeholders. The minutes of the meeting were issued on 8th May 2026 and are enclosed as **Annexure-I**. M/s Orbit has submitted the cost implications of AMC for all states enclosed with minutes.

Deliberation of the sub-committee

MS, NERPC apprised the forum that four NER States had already executed the AMC for the ADMS, whereas Nagaland, Manipur and Tripura are yet to execute the same. He stated that, considering the present grid conditions where frequency has been frequently hovering at lower levels and certain operational instances have necessitated the operation of ADMS, it is mandatorily important to maintain the healthiness and operational readiness of ADMS in line with the provisions of the IEGC.

CE, Nagaland informed the forum that the AMC charges were on the higher side; however, considering the operational importance of ADMS, the State would examine the system and initiate further necessary action regarding the AMC of ADMS.

Manipur apprised the forum that their higher authorities had agreed in principle for the ADMS AMC and that further necessary action would be initiated shortly.

Tripura informed that after incorporation of the two substations which had been shifted, they would also initiate action towards execution of the ADMS AMC.

MS, NERPC further highlighted that adequate cybersecurity measures are equally important for safeguarding the ADMS infrastructure. He observed that Next Generation Firewall (NGFW) systems were presently not available at end point locations to mitigate vulnerabilities arising from unauthorized access

and cyber trespassing incidents, as observed in cases of ADMS integration to SCADA.

It was informed that discussions had initially been held with M/s GE Vernova, which had quoted approximately ₹40–50 lakh for NGFW implementation. Subsequently, discussions were also held with M/s Orbit Techsol regarding provision of NGFW systems with similar specifications at a comparatively lower cost of around ₹20–21 lakh. He further informed that Orbit Techsol had conveyed willingness to provide the systems at the reduced cost if procurement is undertaken collectively by the States, as individual implementation would result in higher costs.

NERLDC informed the forum that two numbers of NGFW firewalls would be required at each location and that Machine-to-Machine (M2M) SIMs would also be required at remote substations, since public IP addresses keep changing and therefore cannot be reliably whitelisted. They further stated that M2M SIMs are not significantly costly and could be arranged by the States at their end. NERLDC also apprised that, based on discussions with one of their vendors, the cost of one set of NGFW firewall with five years' license would be approximately ₹21–22 lakh. It was further emphasized that the OT firewall should remain separate from the IT firewall, since internet access through the IT firewall could adversely affect the ADMS system during cybersecurity incidents, particularly as control signals are routed through the ADMS infrastructure.

CE, Nagaland agreed in principle to implement NGFW systems at their locations considering the recent cybersecurity incidents.

Assam informed that they would examine the matter in consultation with their IT Department and subsequently intimate NERPC.

Ar. Pradesh, Manipur, Mizoram and Tripura also agreed in principle and stated that the matter would be placed before their higher authorities for necessary approval.

Meghalaya agreed in principle and further expressed willingness to expand their ADMS infrastructure in order to provide enhanced demand relief during low frequency conditions. It was informed that, since the ADMS project had initially been implemented as a pilot project, the FRTUs were primarily concentrated in the Shillong area only. However, keeping in view the recent frequency variations and operational requirements, the State expressed the need for integration of additional feeders under the ADMS framework.

Action: (1) Nagaland, Manipur and Tripura to expedite execution of ADMS AMC.

(2) All NER States to examine implementation of NGFW systems with separate OT firewall arrangement and take necessary action for strengthening cybersecurity infrastructure of ADMS.

(3) Meghalaya to explore integration of additional feeders/FRTUs under ADMS.

2.4. Monitoring of Transmission Resource Adequacy-CEA

The report on "Intra State Transmission Resource Adequacy Plan all the NER states i.e. Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland & Tripura by the year 2034-35" have been prepared in consultation with each of the NER states, CTUIL and Grid-India.

The system studies have been conducted for different state specific scenarios for the timeframe 2031-32 & 2034-35 in consultation with NER states, CTUIL and Grid-India considering the anticipated demand, generation capacity, demand pattern, operational feedback from NERLDC and SLDC. Based on the studies, the requirement of transmission system by the year 2034-35 has been identified for each of the states in NER region.

The brief of the reports is as below:

Sl. No.	State	Issued Date	New transmission lines/Reconductoring	Transformation Capacity
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			of old lines by the year 2034-35 (in ckm)	addition/Augmentation by the year 2034-35(in MVA)
1	Mizoram	30 th April 2025	659	294
2	Manipur	30 th April 2025	647	640
3	Nagaland	29 th May 2025	1247	1300
4	Meghalaya	30 th June 2025	1336	1118
5	Tripura	28 th July 2025	335	1140
6	Assam	14 th August 2025	4720	15280
7	Ar. Pradesh	12 th Sept. 2025	846.5	1103
Total			9790.5	20875

The year-wise bifurcation of the requirement of the transmission elements for the states is also available in their respective Transmission Resource Adequacy Report.

Regular monitoring of the “Intra State Transmission Resource Adequacy Plan for each NER states by 2034-35” is required to ensure timely implementation of the identified transmission systems.

Deliberation of the sub-committee

Director (Operation), NERPC apprised the forum that the Central Electricity Authority (CEA) has prepared the “Intra-State Transmission Resource Adequacy Plan” for all the NER States up to the year 2034–35. He emphasized that timely implementation of the identified transmission schemes would be essential to meet the steadily growing power demand in the region and to avoid future transmission constraints in evacuation and reliable transfer of power. He further stated that the progress of these projects would be

monitored periodically through the NERPC forum so that any implementation issues or delays can be addressed in a timely manner through coordinated discussions among the stakeholders. He further informed that the matter would also be deliberated in the upcoming TCC and NERPC meeting.

The sub-committee noted as above.

Action: Referred to TCC & NERPC meeting for deliberation

2.5. Review and updation of Transmission Resource Adequacy up to 2036-37- CEA

CEA has prepared and issued “Report on Intra State Transmission Resource Adequacy Plan up to 2034-35” for North Eastern Region (NER) states in consultation with NER states, CTUIL & NERLDC.

In exercise of the power conferred by Section 3(4) of the Electricity Act 2003, CEA prepares National Electricity Plan (NEP). Accordingly, the activities for preparation of the NEP 2036-37 have been initiated. In the NEP, the requirement of the intra state transmission system would be included.

Therefore, STUs need to prepare their respective “Transmission Resource Adequacy Report by the year 2036-37” considering the projected demand and generation.

Deliberation of the sub-committee

Director (Operation), NERPC apprised the forum that the Central Electricity Authority (CEA) has prepared the “Report on Intra-State Transmission Resource Adequacy Plan up to 2034–35” for the NER States. He further informed that the preparation of the National Electricity Plan (NEP) up to 2036–37 has already been initiated and the requirements of the intra-state transmission systems would also be incorporated in the NEP. In this regard, he requested all STUs of the NER to prepare their respective “Transmission Resource Adequacy Reports up to 2036–37” considering the projected demand growth, generation addition and future transmission requirements so that

adequate planning and timely development of the intra-state transmission network can be ensured. He further informed that the matter would also be deliberated in the upcoming TCC and NERPC meeting.

The sub-committee noted as above.

Action: Referred to TCC & NERPC meeting for deliberation

2.6. Capacity Building on the transmission planning-CEA

Transmission system planning is a specialized domain requiring continuous engagement and in-depth understanding of system studies. In this regard, STUs shall have dedicated team for the transmission planning with minimal transfers to ensure continuity and better understanding of long-term planning processes.

During the exercise of Transmission Resource Adequacy Plan, it was emerged that the capacity building on the transmission planning for the officials of the NER states is required.

Deliberation of the sub-committee

Director (Operation), NERPC apprised the forum that during the exercise carried out for preparation of the Transmission Resource Adequacy Plan, it had emerged that there is a requirement for capacity building and technical training in the area of transmission planning for officials of the NER States.

Member Secretary, NERPC stressed that strengthening the technical capabilities of the STUs by developing dedicated team for the transmission planning with minimal transfers to ensure continuity and better understanding of long-term planning processes would be essential for effective planning and timely development of the transmission network in line with future demand and generation growth. He further informed that the matter would be placed for detailed deliberation in the upcoming TCC and NERPC meeting.

The sub-committee noted as above.

Action: Referred to TCC & NERPC meeting for deliberation

2.7. Collection of Captive Power Plant (CPP) Generation data of NER- NERPC

Background:

The present electricity generation figures include only utility-based generation and exclude Captive Power Plants (CPPs), resulting in an incomplete assessment of total electricity generation and actual power consumption. The Central Electricity Authority (CEA) currently collects annual CPP generation data for plants of 0.5 MW and above from State DISCOMs under Format-21 of the Central Electricity Authority (Furnishing of Statistics, Returns and Information) Regulations, 2007. To strengthen data collection, CEA is developing an online portal for monthly reporting. In a meeting held on 15 April 2026, chaired by the Chairperson, CEA, it was directed that CPP data collection through the portal be pursued and monitored in OCC forums with participation of Regional Power Survey Offices (RPSOs).

In 237th OCC Meeting, it was decided that SLDCs/DISCOMs to ensure registration and monthly data submission of all captive plants on the CEA portal, while NERPC/RPSO-NE to share the plant list and registration status, with NERPC to follow up the progress in OCC meetings.

SLDCs/DISCOMs may update the status of registration of all eligible Captive Power Plants (CPPs) on the Central Electricity Authority (CEA) portal and the commencement of monthly data submission.

Deliberation of the sub-committee

NERPC apprised the forum that, as per the communication received from RPSO-NE regarding captive generating stations, there are presently 26 captive generating stations in the NER, out of which 11 generating stations have already registered on the CEA portal for submission of generation data, while the remaining 15 generating stations are yet to complete the onboarding.

NERPC requested all States to coordinate with the respective captive generating plants for expeditious onboarding on the CEA portal and to ensure timely submission of the required data through the portal by the 10th of every month. NERPC further apprised that, till complete onboarding of all captive generating stations is achieved, the required data may continue to be communicated to NERPC separately. The list of captive generating plants is attached as **Annexure-2.7**

Action: All NER States to coordinate with the respective captive generating stations for expeditious onboarding on the CEA portal and ensure timely submission of generation data by the 10th of every month. Till complete onboarding is achieved, the required data shall continue to be submitted to NERPC.

2.8. Operation and Protection Issues related to Nagaland

A. Expediting connectivity of 220/132kV Zhadima SS

The connectivity of the 220 kV Zhadima Substation with the 400/220 kV New Kohima Substation of KMTL through the proposed 220 kV transmission line has been delayed for more than two years. Although the 220 kV switchyard and ICTs at Zhadima Substation have already been installed, the assets are presently lying unutilized.

Commissioning of the 220 kV link is crucial as it will provide a strong power supply source from the ISTS network and substantially improve the reliability of the Nagaland grid, besides enhancing the ATC/TTC of the system. Further, the 400/220 kV ICTs at New Kohima Substation have also been lying idle for a prolonged period, while Department of Power, Nagaland continues to bear the associated charges without utilization of the assets.

In view of the above, Department of Power, Nagaland is requested to provide the present status of the commissioning of the line and take necessary steps to expedite completion and commissioning of the connectivity at the earliest.

B. Major observation during protection audit by NERPC about Kohima substation –

NERPC carried out the protection audit of Kohima Substation on 14.01.2026. During the audit, the following major observations were made:

- i. The substation is approximately 40 years old.
- ii. Severe space constraints exist across the entire substation area.
- iii. Most of the switchyard equipment pertaining to 132 kV, 33 kV and 11 kV systems, including isolators, CTs, etc., are old, rusted and facing clearance-related issues.
- iv. The bus arrangement is vertical and the connections are not as per standard norms, possibly due to space constraints.
- v. The overall condition and functioning of the substation were found to be unsatisfactory. Further, the 132/33 kV ICT-II and 33/11 kV ICT are particularly old and heavily rusted. Many switchyard elements, including the above ICTs, require urgent replacement.
- vi. The control room was also found to be congested, with open cable trenches observed at various locations.

Considering the criticality of Kohima Substation for the Nagaland grid and the present condition of the substation, upgradation to GIS configuration along with bus strengthening, at least for the 132 kV bays, may be considered on priority.

C. Frequent tripping of the 132kV Dimapur -Kohima line-

The 132 kV Dimapur–Kohima line has been experiencing frequent trippings over the last few years, with an average of 3–4 trippings per month, predominantly due to vegetation-related faults. The line is critical for maintaining reliable power supply to the capital area of Nagaland; therefore, ensuring reliability and availability of the line is of utmost importance.

Further, the frequent trippings are also causing operational stress on the GIS circuit breaker at the Dimapur (PG) end. In view of the above, necessary measures such as regular vegetation clearance, strengthening of line

maintenance practices and implementation of suitable corrective measures may be undertaken on priority to improve the reliability of the line.

D. Issue with protection system at Kohima

Multiple issues related to relay operation and circuit breaker healthiness were observed during February and March, which resulted in blackout incidents at Kohima. The incidents indicate concerns regarding the reliability and healthiness of the protection system at the substation.

In view of the above, Department of Power, Nagaland is requested to carry out comprehensive testing and health assessment of protection relays and circuit breakers to identify and rectify the issues at the earliest, so as to ensure reliable operation of the system and prevent recurrence of such incidents.

E. Issue with protection system at Sanis

Multiple blackout incidents have been recorded in the Sanis and Wokha areas over the past one year due to issues related to the directionality of the backup relay at the Sanis end of the 132 kV Doyang–Sanis line.

In the 89th PCCM, Department of Power, Nagaland was advised to carry out thorough testing of the analog signal inputs to the relay and to expedite installation of the line CVT at Sanis for the Doyang line at the earliest. However, the issue still persists and requires urgent attention to avoid recurrence of blackout incidents and to ensure reliable power supply in the affected areas.

F. Status of institutionalizing the Third-party protection audit

In order to ensure regulatory compliance and strengthen the reliability of the protection system, Department of Power, Nagaland is requested to institutionalize the practice of engaging external agencies for carrying out periodic protection audits of substations.

NERPC has already conducted protection audits for six substations during January 2026. However, for the remaining substations, Department of Power, Nagaland needs to engage a competent third-party agency for carrying out

detailed protection audits and implementation of corrective measures based on the observations and recommendations of the audit.

Deliberation of the sub-committee

A. Expediting connectivity of 220/132kV Zhadima SS

NERPC apprised the forum that the proposed connectivity of the Zhadima SS has been delayed for more than two years, despite the project being important for enhancement of the ATC and TTC of the regional system. NERPC emphasized that timely operationalization of the connectivity is essential for strengthening the transmission network and improving system reliability in the region.

CE, Nagaland apprised the forum that the connectivity agreement is presently under process for uploading on the concerned portal and, subsequent to completion of the same, the State would proceed with the FTC formalities. He further informed that the necessary OPGW and other associated infrastructure works have already been completed.

NERLDC informed the forum that DoP, Nagaland need to ensure availability of the DTPC system, as the CTU mandatorily requires the same for operationalization of the connectivity.

NERPC requested the DoP, Nagaland to expedite the pending activities so as to minimize the financial loss, as transformer charges are already being incurred without utilization of the asset.

MS, NERPC further requested NERLDC to provide a detailed list of all pending non-compliance points to the DoP, Nagaland so that necessary action can be taken for timely compliance and early commissioning of the connectivity.

The sub-committee noted as above.

Action: NERLDC & Nagaland

B. Major observation during protection audit by NERPC about Kohima substation

NERPC highlighted the observations made during the audit of the Kohima SS and informed the forum that the substation is highly critical for reliable operation of the Nagaland grid. Considering the present condition of the substation and the ageing infrastructure, NERPC suggested that upgradation of the substation to GIS configuration along with strengthening of the bus system, at least for the 132 kV bays, may be considered on priority to enhance reliability and operational security.

CE, Nagaland apprised the forum that the Kohima SS was commissioned during the 1980s and acknowledged the requirement for modernization and strengthening of the system. However, he informed that the State is presently facing financial constraints, in carrying out reconductoring works with HTLS conductors, as earlier funding support for such projects had been received through the PSDF.

MS, NERPC apprised the forum that Hon'ble Power Minister, Govt. of Nagaland had discussed with Chairman, NERPC relating to various projects which were deemed returned by PSDF Secretariat and he had sought to intervene in the matter. It was then directed by Chairman, NERPC to collect the project proposals of all NER States which are critical for their state grid so that collectively all the Hon'ble Power Ministers of 7 (seven) NER States will approach Govt. of India to provide a special package to NER since PSDF is not available as of now except for some specific projects only. He requested all the States to send the proposal at the earliest.

The sub-committee noted as above.

Action: NER States & NERPC

C. Frequent tripping of the 132kV Dimapur -Kohima line

NERPC apprised the forum that the 132 kV Dimapur–Kohima TL has been experiencing frequent trippings over the last few years and that these outages are predominantly occurring due to vegetation-related faults. NERPC emphasized that repeated tripping of this important transmission corridor is adversely affecting system reliability and operational security of the Nagaland grid.

POWERGRID apprised that repeated trippings are causing operational stress on the circuit breaker at the Dimapur (PG) SS end and informed that a few months earlier, the breaker mechanism had also got stuck due to repeated operations under such conditions.

Nagaland informed the forum that a three-day daytime shutdown has now been requested for carrying out vegetation clearance works along the line corridor. They further explained that earlier the work could not be undertaken as the Wokha–Chiephebozou line was unavailable due to tower collapse, which had restricted operational flexibility for taking shutdowns.

POWERGRID further apprised the forum that upgradation of the line have already been agreed in the CMETS forum. In this regard, POWERGRID requested the DoP Nagaland to follow up with the CEA for necessary approvals and further action regarding the proposed upgradation works.

The sub-committee noted as above.

D. Issue with protection system at Kohima

NERPC apprised the forum that multiple issues related to relay operation and circuit breaker healthiness had been observed during analysis of the recent blackout incidents affecting the Kohima system. NERPC emphasized that proper healthiness and timely maintenance of protection systems and circuit breakers are essential for reliable grid operation and for preventing recurrence of such disturbances. DoP Nagaland assured to undertake timely maintenance of protection system and CBs.

The sub-committee noted as above.

E. Issue with protection system at Sanis

NERPC apprised the forum that the DoP, Nagaland had earlier been advised to carry out thorough testing of the analog signal inputs to the relays and also to expedite installation of the CVT at Sanis for the Doyang line at the earliest. NERPC requested the DoP, Nagaland to provide an update regarding the status of the works.

Nagaland informed the forum that preliminary testing of the relay had been completed and further testing by an expert agency will be carried out shortly. Further, he apprised that the installation work of the CVT at Sanis would be completed by the following week in coordination with POWERGRID.

The sub-committee noted as above.

F. Status of institutionalizing the Third-party protection audit

NERPC apprised the forum that the DoP, Nagaland had been advised to institutionalize the practice of engaging external agencies for carrying out periodic protection audits of substations. NERPC informed that protection audits of six substations in Nagaland had already been conducted by NERPC and further requested the DoP, Nagaland to engage a third-party agency for conducting protection audits of the remaining substations so as to improve protection system reliability and operational security of the State grid.

Nagaland informed the forum that the matter is presently under process for sanction of funds required for carrying out the protection audit of the remaining substations and assured that further necessary action would be taken after approval of the same.

Action(s):

A. Zhadima SS Connectivity: DoP, Nagaland to expedite completion of pending connectivity agreement, FTC compliances and ensure availability of DTPC for early operationalization of 220/132 kV Zhadima SS. NERLDC to share the list of pending non-compliance points with DoP, Nagaland.

B. Kohima SS Audit Observations: DoP, Nagaland to examine upgradation of Kohima Substation including GIS configuration and bus strengthening works.

C. Frequent Tripping of 132 kV Dimapur–Kohima Line: DoP, Nagaland to carry out vegetation clearance on priority and follow up with CEA regarding bay upgradation for the proposed line upgradation.

D. Protection System Issues at Kohima: DoP, Nagaland to ensure timely maintenance/replacement of protection system equipment and circuit breakers to avoid recurrence of blackout incidents.

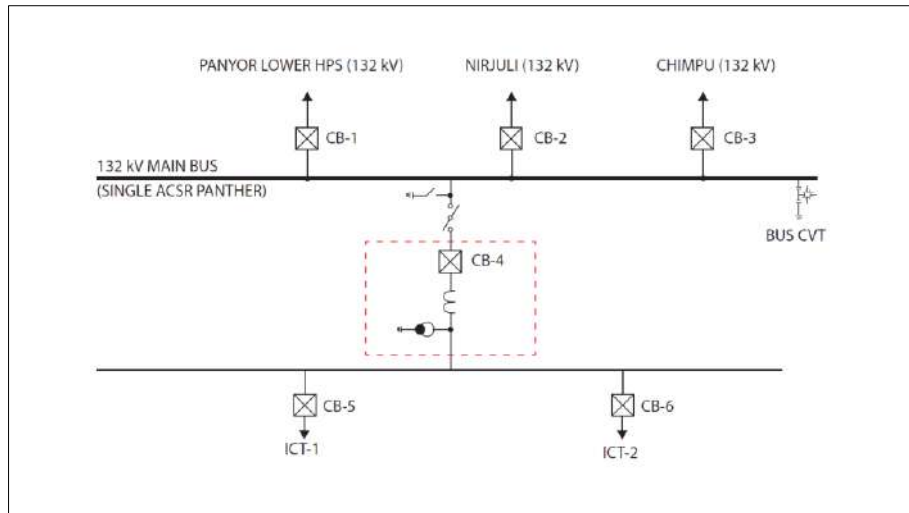
E. Protection System Issues at Sanis: DoP, Nagaland to complete installation of CVT at Sanis and ensure compliance of relay testing works in coordination with Power Grid Corporation of India Limited.

F. Third-Party Protection Audit: DoP, Nagaland to expedite sanction of funds and engage third-party agency for protection audit of remaining substations.

2.9. Implementation Schedule for Modification of Switching Arrangement and Relocation of Control & Relay Panels at 132/33 kV Lekhi Substation-Ar. Pradesh

The 132/33 kV Lekhi Substation, constructed under a Build–Operate–Transfer (BOT) scheme, presently operates in a single bus configuration. The existing control room housing the 132 kV line and ICT control and relay panels is limited in space and does not permit further expansion. Further, the breaker and associated CTs installed in the bus sectionalizer bay have deteriorated and require frequent maintenance and overhauling.

In line with the proposal concurred by the forum in Agenda No. 2.11 of the 233rd OCCM, it has been planned to remove the existing bus sectionalizer arrangement as indicated in the SLD below (CB-4 and associated instrument transformers) and permanently connect both bus sections through a jumper arrangement, along with phased relocation of the Control & Relay Panels to the new control room.



In continuation of the above, the following implementation schedule is hereby placed before the forum for kind information and operational coordination:

Sl. No.	Date/Period	Activity
1	06.06.2026	Removal of Bus Sectionalizer Circuit Breaker and associated CTs including removal of redundant SEM NP-8372, followed by permanent connection of both bus sections through jumper arrangement
2	06.06.2026 to 08.06.2026	Overhauling works of Panyor Lower Line Bay including relocation of Control & Relay Panels
3	08.06.2026 to 11.06.2026	Overhauling works of Nirjuli Line Bay including relocation of Control & Relay Panels

Deliberation of the sub-committee

Forum agreed in principle to the proposed modification of the switching arrangement and relocation of the control and relay panels at the 132/33 kV Lekhi Substation.

NERLDC apprised the forum that, during the shutdown of Lekhi Substation, both the ICTs at Panyor Substation and the Panyor–Ziro line should remain available to maintain system reliability. NERLDC further informed that generation from the Panyor Hydro Electric Project should be restricted to a peak of 380 MW during the shutdown period.

Further, NERLDC also highlighted that the Panyor–Pare and Panyor–Itanagar lines may experience overloading conditions if all three units of the Panyor HEP are scheduled simultaneously. In view of the anticipated system conditions, it was advised that the bus arrangement at Panyor should be operated in split mode during the shutdown period. Further, NERLDC informed that the load in the capital area of Ar. Pradesh and Gohpur may need to be restricted to around 210 MW, considering that the predicted peak load for the month of June is expected to be around 270 MW.

NEEPCO apprised the forum that ICT-2 is tentatively expected to be available by 17th May 2026.

Action: Ar. Pradesh to carry out the proposed modification of switching arrangement and relocation of control and relay panels at Lekhi Substation under coordination with NEEPCO, NERLDC and NERPC.

2.10. Approval for Reconfiguration of 132 kV Line Bays at Khupi Substation- Ar. Pradesh

132/33 kV Khupi Substation is presently connected to 132 kV transmission lines from Tenga, Kimi and Seppa Substations. In addition, the 132 kV Bomdila–Khupi Transmission Line is presently under implementation under the Comprehensive Scheme for Strengthening of Transmission and Distribution System in Arunachal Pradesh being executed by POWERGRID.

Further, under the State Plan, the Department of Power, GoAP is implementing Kimi–Khupi Ckt-II with HTLS 900A conductor, while the existing Kimi–Khupi Ckt-I is also being reconducted with HTLS 900A conductor for enhancement of transmission capacity.

With multiple transmission lines terminating at Khupi Substation and owing to the limited availability of line corridor in the hilly terrain surrounding the substation, congestion has developed at the line entry portion of the switchyard and crossing of transmission lines near the terminating end has become largely unavoidable under the existing bay arrangement. Such crossings are expected to pose operational and maintenance constraints in the long term.

Accordingly, after detailed assessment and coordination with POWERGRID, it has been considered necessary to undertake reconfiguration of the 132 kV line bays at Khupi Substation to rationalize the line entry arrangement and minimize crossing of transmission lines in the vicinity of the substation.

The proposed reconfiguration shall be implemented jointly by POWERGRID and the Department of Power, GoAP. The proposed arrangement has been illustrated in the enclosed SLD (**Annexure-IV**).

The proposed reconfiguration of bays is as follows:

Bay No.	Existing Assignment	Proposed Assignment
101	Tenga	Bomdila
102	ICT	ICT (No Change)
103	TBC	TBC (No Change)
104	Kimi (Ckt-I)	Tenga
105 (Completed – Yet to be Energised)	Bomdila	Kimi (Ckt-II)
106	Seppa	Kimi (Ckt-I)
107 (Under Implementation)	Kimi (Ckt-II)	Seppa

Necessary DATA revalidation of bays and installation of suitably rated equipment for Kimi (Ckt-I) and Kimi (Ckt-II) shall be ensured prior to commissioning under the revised configuration. The work shall be carried out in a phased manner with prior intimation to all concerned agencies and system operators.

For implementation of the proposed arrangement, minor modifications at the terminating end towers shall be adequate for most of the lines. However, in respect of Khuppi–Kimi Ckt-I and Khuppi–Kimi Ckt-II, interchange of the two circuits shall additionally be carried out at the existing crossing location so as to align the lines with the proposed bay configuration.

Approval of the forum is therefore solicited for the following:

1. Reconfiguration of 132 kV line bays at Khupi Substation as proposed above.
2. Interchange of Khuppi–Kimi Ckt-I and Khuppi–Kimi Ckt-II at the existing crossing location for implementation of the proposed bay arrangement.

Deliberation of the sub-committee

Forum approved the proposed reconfiguration of the 132 kV line bays at Khupi Substation in line with the proposed bay reconfiguration placed for approval. The forum also agreed to the interchange of Khuppi–Kimi Circuit-I and Khuppi–Kimi Circuit-II at the existing crossing location for implementation of the proposed bay reconfiguration scheme.

Forum further directed DoP, Ar. Pradesh to intimate the detailed schedule of the proposed works in advance and to obtain all necessary approvals from the competent authorities prior to implementation of the reconfiguration activities so as to ensure smooth execution of the works without adversely affecting system operation and reliability.

Action: Ar. Pradesh to carry out the approved reconfiguration of 132 kV line bays at Khupi Substation and interchange of Khuppi–Kimi Circuit-I and II after intimating the work schedule in advance and obtaining necessary approvals from the competent authorities.

2.11. Energisation of 400 kV Lower Subansiri–BNC I & II Circuits from Lower Subansiri side-NERLDC

At present, the 400 kV Lower Subansiri–BNC III & IV circuits are under operation. The 400 kV Lower Subansiri–BNC I & II circuits were charged for

the first time from the BNC end on 30-03-2023 by PGCIL; however, these circuits (I & II) are still not in operation due to non-energisation from the Subansiri side.

As four units (4x250 MW) of the Lower Subansiri project have already been commissioned, and one line can carry a maximum of 1100 MVA, the addition of any further unit would result in non-compliance with the N-1 criterion.

In this regard, NHPC is requested to operationalise the 400 kV Lower Subansiri–BNC I & II circuits before commissioning the remaining units of the Lower Subansiri project to ensure reliable and secure grid operation.

Deliberation of the sub-committee

NHPC apprised the forum that the GIS works associated with the Lower Subansiri HEP are tentatively expected to be completed by July 2026 and one transmission line is also expected to be available by that time. NHPC further informed that the CoD of the 5th Unit of the Lower Subansiri project is anticipated in June 2026 and that the Unit is expected for CoD at 205 MW.

NERLDC apprised the forum that the present generation level of each Unit of the Lower Subansiri HEP is around 230–240 MW and highlighted that, unless the other 2 transmission circuits are charged at Lower Subansiri end, only two circuits of the 400 kV Lower Subansiri–BNC transmission line would be available for evacuation of power. NERLDC observed that, in the event of tripping of one circuit, the situation could become detrimental to system security and therefore emphasized the necessity of availability of a third circuit prior to declaration of CoD of the 5th Unit.

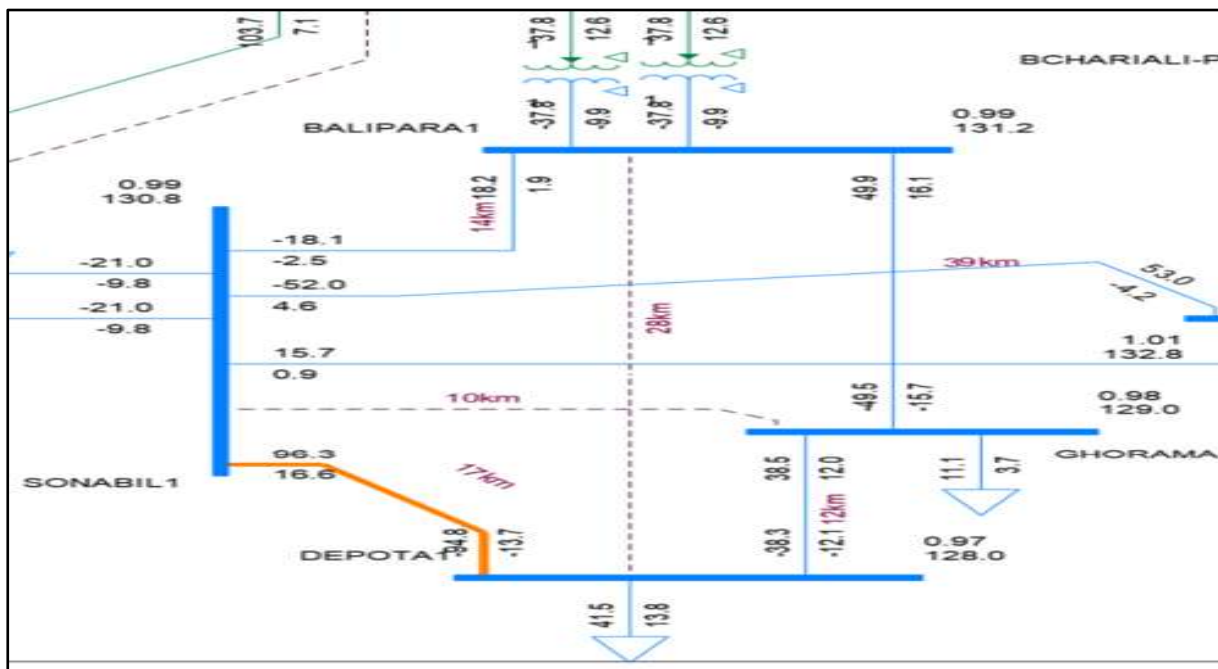
ED, NERLDC further shared that based on past operational experience at the Naphtha-Jhakri Hydroelectric Project, overloading of transmission lines had resulted in severe oscillations at the generator end. In view of this, he emphasized that at least three transmission circuits should be made available to ensure secure evacuation of power from the Lower Subansiri HEP without causing operational issues.

NHPC agreed with the observations of NERLDC and informed the forum that necessary efforts would be made to ensure availability of the required transmission infrastructure before declaration of CoD of the 5th Unit.

Action: NHPC to ensure availability of at least three transmission circuits, including completion of associated GIS works, before declaration of CoD of the 5th Unit of the Lower Subansiri Hydroelectric Project to ensure secure evacuation of power and system reliability.

2.12. Utilisation of 220/132 kV, 2x160 MVA ICTs at Balipara by AEGCL-NERLDC

Before June 2018, the following 3 number of interconnections were available for utilization of the 220/132 kV Balipara ICTs viz. 132 kV Balipara – Ghoramari line, 132 kV Balipara – Sonabil line and 132 kV Balipara- Khupi line. Presently, as only one 132 kV connectivity is utilized for Khupi area of Arunachal Pradesh system (around 25 MW flow in peak hour) the 220/132 kV ICTs at Balipara remains underutilised (the ICTS being loaded upto only 10% of their capacity).



The matter was discussed extensively in the 195th OCC meeting and subsequently taken up in the 15th, 16th, 17th, 18th, 19th, 20th, and 21st

CMETS meetings. After detailed deliberations, it was finally decided in the 21st CMETS meeting held on 27th July 2023 that AEGCL would construct the following scheme under intra-state with completion timeframe of 3 years from date of award for utilisation of 132kV vacant bays at Balipara S/s (vacated by AEGCL due to bypassing of its Balipara – Sonabil and Balipara – Ghoramari 132kV lines):

Establishment of 2x50MVA, 132/33kV Misamari substation

Balipara – Misamari 132kV D/c (ACSR Zebra) line (utilising the 132kV line bays vacated upon bypassing of Balipara – Sonabil and Balipara – Ghoramari 132kV lines at Balipara substation) alongwith associated line bays at Misamari substation.

LILO of Depota – Rowta 132kV S/c line at Misamari substation along with associated line bays

Due to the non-utilization of the 220/132 kV ICTs at Balipara by AEGCL, power supply to the Tezpur (Sonabil) and Rowta areas is presently being routed through the 220 kV Balipara–Sonabil D/C line. Consequently, the 220 kV Balipara–Sonabil D/C line reaches high loading level (more than SIL) well before peak demand hours, affecting reliable grid operation.

In view of the above, the forum is requested to deliberate on the matter and request AEGCL to provide the current status of the approved scheme so that timely execution can be ensured for maintaining reliable and secure grid operation.

Deliberation of the sub-committee

Assam apprised the forum that the process of identification and exploration of suitable land for establishment of the 132/33 kV Misamari Substation is presently underway. They further informed that efforts are also being made for exploration of funding avenues for the project and that the matter is being closely pursued with the concerned Ministry for necessary support and approval.

Action: Assam to expedite land identification and funding arrangements for establishment of the 132/33 kV Misamari Substation.

2.13. Early strengthening of 220 kV Balipara-Sonabil DC and 220 kV Agia- BTPS DC-NERLDC

Due to non-utilization of the 220/132 kV ICTs at Balipara by AEGCL and commissioning of Lower Subansiri generating units, high loading is being observed in the 220 kV Balipara–Sonabil D/C line. It has been observed that with every increase of 100 MW generation from Lower Subansiri Plant, the loading in 220 kV Balipara–Sonabil D/C line increases by approximately 5–6 MW.

The loading in the 220 kV Balipara–Sonabil D/C line can be reduced by increasing power export through HVDC. However, with every additional 100 MW export through HVDC, the loading in the 220 kV BTPS–Agia D/C line also increases by around 5–6 MW.

Apart from the above, the current Total Transfer Capability (TTC) of the North Eastern Region is being restricted due to high loading on the following transmission lines under the N-1 contingency condition of the 400 kV Bongaigaon–Azara line:

- 220 kV Balipara–Sonabil DC
- 220 kV BTPS–Agia DC

Therefore, upon commissioning of all units of Lower Subansiri Plant, high loading is expected in both the 220 kV Balipara–Sonabil D/C line and the 220 kV Agia–BTPS D/C line during the coming summer season.

As per the Minutes of the 52nd CMETS-NER meeting held on 26th February 2026, reconductoring of 220 kV Balipara–Sonabil D/C line is to be implemented under NERES-XXX scheme with a completion schedule of 24 months.

For 220 kV Agia–BTPS D/C line, the matter was discussed in the 30th NERPC meeting held on 13–14th November 2025, wherein the forum advised AEGCL to expedite the process for strengthening of the 220 kV BTPS–Agia double circuit line. The agenda item was also placed before NERPC for information.

Considering the requirement for reliable and secure operation of the NER power system, early strengthening of 220 kV Balipara–Sonabil D/C line and 220 kV Agia–BTPS D/C line is urgently required. Accordingly, PGCIL and AEGCL are requested to expedite implementation of the approved projects at the earliest for maintaining reliable and secure grid operation.

Deliberation of the sub-committee

Assam apprised the forum that the strengthening work of 4 km portion of the 220 kV Balipara–Sonabil D/C transmission line falling under the jurisdiction of AEGCL is being taken up and the LoA for the same has already been issued. They further informed that the strengthening work of the 220 kV BTPS–Agia D/C line would also be taken up on immediate basis.

POWERGRID apprised the forum that strengthening of the remaining 9 km portion of the 220 kV Balipara–Sonabil line is to be taken up under NERSS-XXX. Further, under NERSS-XXX the scope of works (as per OM Ref: C/CTU/AI/00/26th CCTP dated 03rd Sep'25 circulated by CTU) includes reconductoring of three lines which are mentioned below along with associated bays.

- a. 220 kV Balipara-Sonabil D/C Line ISTS Portion-POWERGRID
- b. 132 kV Silchar-Srikona D/C Line- POWERGRID
- c. 132 kV Ranganadi-Ziro S/C line.

However, reconductoring of 132 kV Ranganadi-Ziro S/C line also includes associated upgradation at both ends of the bays (Ref: 51st NER CMETS). M/s NEEPCO is reluctant to execute the work of bay upgradation at NEEPCO end and since then several rounds of discussion have taken place without any

conclusion. Therefore, the finalization of OM from CTU is pending due to which POWERGRID is unable to take up the tendering activities which eventually is delaying the works for reconductoring of 220 kV Balipara-Sonabil D/C line. POWERGRID also emphasized that similar work (reconductoring of 220 kV Balipara-Sonabil D/C line and associated bays) at AEGCL end is also being undertaken by the owner M/s AEGCL without any reluctance. Hence, in the same line M/s NEEPCO should take up the work at their end by themselves.

MS, NERPC requested both AEGCL and PGCIL to take up the matter on priority for early completion of the strengthening works. He further requested POWERGRID to closely follow up with CTU for expeditious issuance of the pending OM.

Action: AEGCL and POWERGRID to expedite strengthening works of the 220 kV Balipara–Sonabil D/C line and 220 kV BTPS–Agia D/C line. POWERGRID to closely follow up with the CTU for early issuance of the pending OM.

2.14. Maintaining Healthy Spare for Reliable Grid Operation-NERLDC

The 360 MVA, 400/132 kV ICT-2 at 400 kV Panyor Substation has been under forced outage since 23:05 hrs of 01.04.2026 due to abnormalities observed in the R&B phase bushing, and restoration is expected by 20.05.2026. Due to the outage of this ICT, NERLDC was constrained to schedule a maximum of only 240–250 MW generation initially, which was later increased to 360 MW by introducing an SPS at Panyor Substation.

Unfortunately, the 360 MVA, 400/132 kV ICT-1 also underwent emergency shutdown on 07.05.2026 due to abnormalities observed in the R&B phase bushing and was restored at 15:45 hrs on 10.05.2026. During the period when both 360 MVA ICTs at Panyor were out of service, NERLDC was forced to restrict generation scheduling to a maximum of only 200 MW.

This critical event highlights the importance of maintaining and monitoring of the healthiness and readiness of both hot spares and cold spares at all substations.

Failure of spare arrangements can directly impact system reliability, generation evacuation, and overall secure operation of the regional grid. All utilities are therefore requested to ensure that both hot spare and cold spare ICTs are maintained in healthy condition at all times so that reliable and secure grid operation can be sustained without operational constraints during contingencies.

Deliberation of the sub-committee

NEEPCO apprised the forum that spare components of similar ratings from their other projects are presently being utilized to address the ongoing requirements. They further informed that restoration work of the Panyor ICT, which is proposed to be maintained as a spare unit, has already been initiated and the repair activities are being carried out at site itself. Further, NEEPCO also apprised the forum that an additional spare ICT along with spare bushings is available at the Kameng HEP for contingency requirements.

Forum advised NEEPCO to maintain sufficient number of cold and Hot spares of switchyard equipment at all the generating units in order to minimize the downtime in cases of contingencies.

The sub-committee noted as above.

Action: NEEPCO

2.15. Updation of List of Important Grid Elements for 2026-27-NERLDC

As per IEGC Clause 29(2)(b), each RLDC, in consultation with concerned RPCs, Users, and SLDCs, is required to prepare and circulate a list of important elements in the regional grid, including those in State grids that are critical for regional grid operation.

In line with this requirement, the Draft List of Important Grid Elements 2026-27 was circulated vide email dated 06.05.2026, requesting comments/additions/omissions from all stakeholders by 20.05.2026.

It is requested to kindly take up the matter and ensure submission of updated data latest by 20th May 2026 so that above list can be published by 31st May 2026.

Deliberation of the sub-committee

NERPC requested all the NER States to review the draft list of Important Grid Elements for the year 2026–27 and submit their comments latest by 20th May 2026 so that the consolidated list could be finalized and published by 31st May 2026. NERPC further apprised the forum that once any intra-state transmission element is included in the list of Important Grid Elements, approval for shutdown of such elements shall thereafter be obtained through NERPC and NERLDC instead of the respective SLDCs, considering the operational significance of these elements for maintaining grid security and reliability in the region.

The sub-committee noted as above.

Action: All concerned utilities, NERLDC & NERPC

2.16. Mock Black Start of Units in compliance with IEGC-NERLDC

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, as per the deliberations held during the 236th OCCM with respect to Agenda Item 3.1 on “Mock Black Start of Units in compliance with IEGC,” the roster for conducting mock black start exercises for generating stations was prepared and communicated by NERPC via email dated 27-04-2026.

In line with the above, Kameng HEP was scheduled, as per the roster, to conduct the mock black start test in the month of June 2026. However, due to prior engagement with the OEM, Kameng HEP successfully conducted mock black starts of all its units (4 x 150 MW) from 5th to 7th May 2026, and the same has been updated in the annual roster for mock black start exercises.

In this regard, all concerned utilities are requested to review and update their respective black start plans and intimate the same well in advance so that the demonstration of mock black start exercises can be scheduled and carried out successfully.

Deliberation of the sub-committee

NERLDC requested all utilities to review and update their respective black start plans. NERLDC further requested all concerned utilities to intimate well in advance if any changes in timeline from the black start roster already shared.

The sub-committee noted as above.

Action: All concerned utilities

2.17. Regarding non-submission of Demand forecast and Resource Adequacy (RA) data as per IEGC 2023-NERLDC

IEGC 2023 mandated that each SLDC and such other entities (like bulk consumers) which are directly connected to ISTS will carry out the demand estimation for both active and reactive power (as per clause 31.2(a), 31.2(b), 31.2(f)) along with the generation capacity availability (as per clause 31.4(b)) for meeting the projected demand and submit the same to respective RLDC for regional level forecast by method of aggregation, each RLDC would further furnish the regional level as well as state level forecast data to NLDC for computation for all India level demand and generation estimation (as per clause 31.2(g)).

The timeline for submitting these data to RLDC/NLDC would be as given in Table-I (as per IEGC clause 31.2(h)).

Table-I: Timeline for Demand Estimation

Daily demand estimation	10:00 hours of previous day
Weekly demand estimation (Monday to Sunday)	First working day of previous week
Monthly demand estimation	Fifth day of previous month
Yearly demand estimation	30th September of the previous year

The status of submission of Demand estimation and RA data for the month of April 2026 is shown in the table below:

	Day-Ahead Demand Forecast	Week Ahead Demand Forecast (April 2026)					Month Ahead Demand Forecast		Year Ahead Demand Forecast for 2026-27
		Week 1	Week 2	Week 3	Week 4	Week 5	Apr -26	May-26	
Arunachal Pradesh									
Assam									
Manipur									
Meghalaya									
Mizoram									
Nagaland									
Tripura									

Not in prescribed format	Data not submitted	Data Submitted	Irregular
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To facilitate effective operational planning, forecast and Resource adequacy data is essential. Hence, all SLDCs are requested to submit the required forecast data as per formats mentioned in NER operating Procedure 2025 and IEGC timeline mentioned above regularly.

Further as per the Report of honourable Member (Technical), CERC in order on Suo-motu petition No. 09/SM/2024, the issues of non-submission of resource adequacy data including demand estimation and generation data by the states to be deliberated.

Deliberation of the sub-committee

NERLDC apprised the forum that Tripura has missed the timelines on several occasions for submission of weekly and monthly demand forecast and Resource Adequacy (RA) data. NERLDC emphasized the importance of timely submission of these data for accurate system planning and operational assessment.

Tripura apprised the forum that the required data had been submitted, however, the same was not sent to the designated email ID of NERLDC meant for such data collection, which resulted in the perceived delay. Tripura further informed that necessary communication has already been made to the concerned offices to ensure that all future submissions are sent to the designated email ID of NERLDC within the stipulated timeline.

The sub-committee noted as above.

Action: TSECL

2.18. Operational Planning and Resource Adequacy for June 2026- NERLDC

The Operational Planning and Resource Adequacy assessment for June 2026 is attached for review and comments.

- All utilities are requested to review the assessment and provide any necessary inputs or observations.

- Kindly share your feedback at the earliest to ensure comprehensive planning.

Deliberation of the sub-committee

NERLDC presented the Resource Adequacy (RA) assessment carried out for the NER States for the month of June'26:

As per the study, a surplus power scenario is envisaged for Arunachal Pradesh throughout the month. Representatives from Arunachal Pradesh informed the forum that a reverse banking arrangement of 40 MW has already been made with Punjab. The forum advised Arunachal Pradesh to explore sale of surplus energy through the Day Ahead Market (DAM) or Real Time Market (RTM) for optimal utilization of available power.

For Assam, NERLDC informed that an overall surplus scenario is expected; however, if the peak demand materializes during night peak hours between 22:00 hrs and 24:00 hrs, there may be a shortage of around 80 MW.

In respect of Manipur, NERLDC apprised that a shortage scenario is anticipated mainly due to the reverse banking arrangement with Odisha for 35 MW to 50 MW during peak hours, and informed that the State has already been intimated in this regard.

Regarding Meghalaya, NERLDC informed that an overall surplus situation is envisaged. However, representatives from Meghalaya apprised the forum that, as per their internal assessment, shortages may be experienced during daytime hours owing to anticipated deficiency in rainfall. Meghalaya further informed that necessary power procurement from the market would be undertaken during such deficit time blocks.

NERLDC further apprised the forum that a surplus scenario is expected for Mizoram, while no shortage condition is envisaged for Nagaland.

For Tripura, NERLDC informed that shortages may occur during daytime and evening peak periods. Representatives from Tripura apprised the forum that a bilateral arrangement of 50 MW with NVVN has already been tied up for peak hour support from June onwards and further informed that additional procurement from the market may also be undertaken during daytime deficit periods.

The forum issued a general guideline to the states which may face shortages, as per the study, to enter into short term contracts for power supply to mitigate the projected deficits rather than relying on the Market, during non-Solar hours.

The detailed RA study is attached as **Annexure-2.18**.

The sub-committee noted as above.

Action: All concerned utilities

2.19. Automatic Generation Control (AGC) in Indian Grid (Agenda 3.18 of 33rd NETeST Meeting)-NERLDC

As discussed in 33rd NETeST Meeting in Guwahati on 24th April 2026, Forum advised to discuss the above-mentioned agenda in monthly OCCM for regular updates.

The status is tabulated below:

Station Name	Status as per 32nd NETeST Meeting	Status as per 33rd NETeST Meeting
AGBPP (Kathalguri)	NEEPCO once again mentioned that AGC cannot be implemented in STG as it is only slave to GTG. NEEPCO raised the concerned regarding the ramping UP/down for the gas/steam. Forum requested	NEEPCO informed that they will decide internally for the necessary action on the Gas based plant to carry out the AGC in plant. Likely to go to CERC for exemption.

Station Name	Status as per 32 nd NETeST Meeting	Status as per 33 rd NETeST Meeting
	NEEPCO to approach the CERC for necessary exemption.	
Doyang	The SCADA and DCS of remaining two units will be carried out during lean hydro period i.e., Nov'25 – Dec'25. After which AGC commissioning will be carried.	Work is under progress and commissioning is expected to be completed by May'26. Open Loop testing done. Close Loop testing by 2nd week of May'2026.
Khandong Stage -2	Implementation is under progress along with Stage-1 units.	Units are under 25 MW hence AGC will not be implemented.
Khandong	Implementation is under progress along with Stage-1 units.	Units are under 25 MW hence AGC will not be implemented.
Kameng	M/s BHEL has not provided the quotation till date. NEEPCO is trying to acquire the quotation at the earliest.	NEEPCO informed that machines are still not stable as high vibrations are present due to mechanical issues, once the machines stabilize the necessary AGC implementation will be taken up.
Ranganadi (Panyor)	Quotation is received and further discussions are going with Vendor for the implementation.	SCADA is very old, and for which DCS upgradation is required. Tender has been floated, and Technical Evaluation going on. The AGC implementation will be carried out in the lean period i.e., after Nov'26.

Station Name	Status as per 32nd NETeST Meeting	Status as per 33rd NETeST Meeting
Pare	Implementation work will start during lean hydro period.	The AGC implementation will be carried out in the lean period i.e., after Nov'26.
RC Nagar	NEEPCO mentioned that due to gas shortage 1 module is always in off condition. Forum requested NEEPCO to approach the CERC for necessary exemption.	NEEPCO informed that they will decide internally for the necessary action on the Gas based plant to carry out the AGC in plant. Likely to go to CERC for exemption.
Palatana	OTPC was not present. However, forum requested OTPC to approach the CERC for necessary exemption.	OTPC was not present. However, forum requested OTPC to approach the CERC for necessary exemption.

Deliberation of the sub-committee

NEEPCO apprised the forum that, with respect to the Doyang HEP, the closed loop testing activities for implementation of AGC are expected to be completed by the last week of May 2026 or by the first week of June 2026. NEEPCO further apprised the forum that implementation of AGC at the Kameng Hydroelectric Project is presently pending due to high vibration issues in the machines and informed that discussions are ongoing with the OEM for resolution of the issue.

OTPC apprised the forum that implementation of AGC at the Palatana is not considered feasible owing to the isolated nature of the Palatana grid system. OTPC informed that frequent increase and decrease in generation as per AGC signals may not be operationally feasible under the prevailing grid conditions and further apprised that a request seeking exemption from AGC implementation has already been submitted before the Hon'ble CERC.

The sub-committee noted as above.

Action: NEEPCO & OTPC

2.20. Repeated tripping of 220 kV Misa-Kopili 2 & 3 Lines-NERLDC

220 kV Misa-Kopili 2 & 3 lines tripped multiple times on 8th May'26 & 10th May'26 which is a matter of serious concern.

The details of these tripping are shown below:

Sl. No.	Element Name	Tripping Date & Time	Relay End A	Relay End B	DR/EL Analysis
1	220 kV Kopili - Misa 2 Line	08-05-2026 13:16	CB tripped	DT received	No fault in the system, CB tripped
2	220 kV Kopili - Misa 2 Line	08-05-2026 15:09	CB tripped	DT received	No fault in the system, at 15:09:00.420 hrs, DT received at Misa end
3	220 kV Kopili - Misa 2 Line	08-05-2026 16:35	CB tripped	DT received	No fault in the system, at 16:34:35.439 hrs, DT received at Misa end
4	220 kV Kopili - Misa 3 Line	10-05-2026 20:37	Not furnished	DT received	DR/EL not submitted
5	220 kV Kopili - Misa 3 Line	10-05-2026 23:00	Not furnished	DT received	DR/EL not submitted

Observations based on FIR/DR/EL analysis:

- There was no fault observed in the system and tripping occurred due to DT receipt at Misa end, as such tripping seems to be unwanted.
- No "DT send" signal was recorded as high in the DR channel at Kopili end.
- As per FIR submitted by Kopili, the problem seems to be with BCU & Trip Circuit Supervision Relay 1 & 2 Operated in Control Panel annunciation.

Similar tripping 220 kV Misa-Kopili 3 line occurred at 16:59 Hrs of 2nd April'26.

Deliberation of the sub-committee

NEEPCO apprised the forum that there may be issues related to the BCU associated with the Kopili–Misa-2 and Kopili–Misa-3 lines. NEEPCO informed that the matter has already been taken up with M/s GE Vernova and representatives from the OEM are expected to visit by the last week of the month for detailed examination of the issue. NEEPCO further informed that, based on the observations during the visit, the status and further course of action would be intimated to NERPC and NERLDC.

MS, NERPC directed that the matter may also be deliberated in detail during the upcoming PCC meeting of NERPC for further review and necessary action.

Action: NEEPCO to coordinate with M/s GE Vernova for detailed examination of the BCU issues associated with Kopili–Misa-2 and Kopili–Misa-3 lines and update NERPC and NERLDC. The matter shall also be deliberated in the upcoming PCC meeting of NERPC.

2.21. Implementation of “Full Surrender” as Default Option in Requisition Submission w.e.f. 06.05.2026 in WBES for Day ahead scheduling for date 07.05.26 onwards-NERLDC

It is to inform the forum that implementation of “Full Surrender” as default option in Requisition Submission of Thermal and Gas based Stations has been made effective from 06.05.2026 for the scheduling day of 07.05.2026 onwards. This aims to prevent unintended over-scheduling and ensure that the final schedules reflect the actual requirements of the regional beneficiaries. Under this new implementation, if a beneficiary/State does not submit their requisition by 08:30 Hrs on D-1, requisition shall be treated as zero for that station. It is also to be noted that the un-requisitioned power may be sold by generators in the Day-Ahead Market (DAM), rendering it unavailable for subsequent scheduling by the beneficiaries.

In this regard, NERLDC has also communicated these changes to all regional entities via letter ref: NERLDC/MO/SCH/2026-27/9231 dated 06-05-2026(**Annexure VI** attached). To facilitate a smooth transition, a technical demonstration was previously conducted for NER scheduling coordinators.

Moreover, an advisory system-generated email alerts will be issued to non-submitting entities prior to the window closure on D-1.

Deliberation of the sub-committee

NERLDC apprised the forum that earlier the default option in the requisition portal was full requisition by beneficiaries, which at times resulted in over-scheduling of power. However, under the revised arrangement, if any beneficiary does not submit its requisition, the requisition quantum would now be considered as zero. NERLDC further informed that utilization of unrequisitioned surplus power would be possible in accordance with the amended procedure. It was also apprised that reminder emails are being sent to beneficiaries if requisition is not submitted by 08:30 hrs of D-1 and that demonstration regarding the revised mechanism has already been conducted.

Nagaland informed the forum that, at times, due to network outages, access to the portal becomes unavailable and because of the limitation associated with static IP configuration, the portal cannot be accessed through alternate networks. Nagaland further apprised that such issues have been encountered on multiple occasions.

Ar. Pradesh also raised concerns that during internet ban situations, difficulties were faced in uploading requisitions through the portal.

NERLDC clarified that requisitions can only be uploaded by the authorized user and therefore utilities should maintain multiple ISP connections so that, during downtime of one network, alternate connectivity remains available. NERLDC further advised the utilities to avail services from government-mandated ISPs such as Bharat Sanchar Nigam Limited (BSNL) and Power Grid Telecom (PowerTel), so that communication services may continue even during internet restriction or ban situations considering their critical nature as essential services.

MS, NERPC also advised all States to maintain services from at least two ISPs to ensure reliability and uninterrupted accessibility of the requisition portal.

The sub-committee noted as above.

Action: all NER States to maintain services from at least two ISPs to ensure reliability and uninterrupted accessibility of the requisition portal

2.22. Procedure for assessing the utilization of Connectivity or the GNA quantum by the Grantees- Stakeholders Comments Reg-NERLDC

A Procedure for assessing the utilization of Connectivity or the GNA quantum by the Grantees prepared by GRID-INDIA under Regulation 11.3(B) of the CERC Connectivity and GNA Regulations (Third amendment), 2025 on 08-05-2026. As GRID-India has been authorized to prepare a detailed report regarding actions to be taken in cases of non-optimal utilization of Connectivity or GNA quantum. The procedure provides the framework for quarterly block-wise assessment of utilization based on scheduled power i.e effective Connectivity/GNA, including suitable exclusions and utilization metrics for regulatory evaluation.

Stakeholders are requested to forward their comments/suggestions on the attached (**Annexure-VII**) draft procedure. The same has been communicated via e-mail.

Deliberation of the sub-committee

NERLDC apprised the forum that the States may submit their comments and observations on the draft procedure to the Regulatory Affairs Division of GRID-INDIA email ID: **regulatory@grid-india.in** in the prescribed format by 7th June 2026.

Director (Operation), NERPC requested all stakeholders to go through the draft procedure in detail and provide their suggestions/feedback, if any, within the stipulated timeline for further consideration.

The sub-committee noted as above.

Action: All NER constituents to provide their feedback/comments within stipulated time

2.23. Submission of Pending Documents and Compliance as per various Rules, Regulations and Procedures pertaining to FTC-NERLDC

In various OCC/TCC/NERPC meetings, the similar agenda regarding submission/compliance of FTC procedure by TSECL/SLDC Tripura has been discussed from time to time. Accordingly, the Forum had advised TSECL/SLDC Tripura to kindly ensure compliance with the FTC procedures and submit the pending documents/data related to charged ISTS as well as intra-state elements within the stipulated timeline.

It was also deliberated that timely submission of pending documents and other compliance-related information would facilitate smooth processing of FTC by NERLDC and contribute towards ensuring reliable and secure grid operation.

Further, the Forum advised TSECL/SLDC Tripura to ensure adherence to the applicable Rules, Regulations, Guidelines and Procedures pertaining to FTC issued from time to time.

Accordingly, TSECL/SLDC Tripura is once again kindly requested to comply with the requirements/directions issued by OCC/TCC/NERPC and submit the pending documents/data at the earliest for smooth processing of FTC.

Previous forums record as below:

OCC Meeting no.	Meeting Date	Previous OCC Meeting Deliberation/Remarks
230 th OCCM	19-09-2025	In Agenda, Deemed ISTS element i.e., LILO of 132 kV PK Bari – Ambassa at Manu and 132 kV Manu which was charged in Sep'24 was highlighted. <i>SLDC Tripura was absent</i>

231 st OCCM	10-10-2025	MS NERPC stated that NERPC will write letter to MD TSECL highlighting the issue which shall also be discussed in <i>30th NERPC & TCC Meeting</i> .
232 nd OCCM	07-11-2025	MS NERPC instructed Tripura to submit the required data to NERPC and NERLDC within one month
30 th NERPC & TCC Meeting	13-11-2025	TSECL assured the Forum that the required documents related to FTC for the charged elements will be submitted by 30-11-2025.
235 th OCCM	20-02-2026	Forum strongly urged TSECL to strictly adhere to the FTC procedure for all upcoming elements and for the already charged elements TPTL/SLDC Tripura to provide the FTC data to NERLDC and the protection-related data to NERPC on immediate basis.
236 th OCCM	20-03-2026	MSNERPC stated that since the reconductoring works have already been completed, the FTC process should not be delayed on account of procedural or compliance-related issues. He advised Tripura to coordinate and resolve the same at the earliest in coordination with NERLDC.
31 st NERPC & TCC Meeting	11-03-2026	During 31st TCC/NERPC Meeting held on 11th and 12th March 2026 - TCC forum directed TSECL to adhere to the FTC procedure and to submit all pending documents for ISTS and intra-state elements to facilitate NERLDC approval/consent.

The list of pending documents for ISTS connected elements have been provided as **Annexure VIII**.

Deliberation of the sub-committee

NERLDC apprised the forum that the pending compliances related to FTC have remained unresolved for a prolonged period and that the matter has been under continuous deliberation since the 230th OCC meeting.

Tripura apprised the forum that PTCC clearance and OTDR testing are pending for the 132 kV PK Bari (ISTS)–Manu line, which is the LILO of the 132 kV PK Bari (ISTS)–Ambassa line at the 132 kV Manu Substation. Tripura

further informed that the connectivity agreement is expected to be completed by the following week as assured by the CTU. It was also apprised that the meter associated with the 132 kV SM Nagar (ISTS)–SM Nagar line is presently not sensing properly due to conductivity-related issues after reconductoring of the line with HTLS conductor.

MS, NERPC directed Tripura to resolve all pending FTC-related issues before the next OCC meeting.

The sub-committee noted as above.

Action: Tripura to resolve all pending FTC-related issues before the next OCC meeting

2.24. Painting work to restrict the corrosion for the safety & enhancement of life of the towers in 400 kV D/c Silchar-Byrnihat-Azara line traversing through highly polluted area near Byrnihat – NETC

In 236th OCCM, NETC apprised that a portion of the 400 kV D/C Silchar-Byrnihat-Azara line was passing through a highly polluted area near Byrnihat. The increased pollution level in the Byrnihat area, caused by industrialization, had resulted in severe rusting of towers 571, 572, 573, 577, 584, 585 & 587, which was causing structural degradation of these towers.

Further, NETC informed that if such corrosion continued, there was a chance that the entire towers might collapse in near future due to damage of the tower stub & members. Therefore, to avoid further corrosion, NETC proposed to take up high tech painting in the whole tower body of these towers by using zinc rich anticorrosive galvanized paint along with the additional coating of rust converter and acid resistant in line with the earlier executed painting work.

Further, it was informed that the cost estimate for the subject painting work including supply & execution works came around Rs.170 lakhs. NETC had requested forum to consider and approve the expenditure on account of painting of towers under Additional Capitalization (ADD-CAP).

The 236th OCC forum deliberated the matter and decided that a committee should be constituted comprising representatives from NERPC, NERLDC, PGCIL, Assam, and Meghalaya to carry out a physical site visit and assess the site conditions and requirement at the identified tower locations of the 400 kV D/C Silchar Byrnihat–Azara line.

Consequently, the committee was formed by NERPC vide order dtd. 01.04.2026 to inspect the affected towers and suggest remedial measures. The committee visited the towers on 06.04.2025 and carried out thorough assessment of the towers and made following recommendations in its report

1. The towers have suffered severe corrosion at cross arms, top portion and base portion. The situation needs to be urgently addressed to curb further deterioraion of structural integrity of the Towers. The line is a critical 400kV intra-regional link of NER, providing necessary reliability in power supply to Meghalaya and Assam. Therefore, it is necessary to take preventive measures to protect the towers of the line.
2. Pollution has been a major concern in the area, posing threat to not only towers of the tranission lines, but also communcation towers and other steel infrastructures present in the area.
3. The rapid rise of polluting industries could *not be foreseen* by the transmisssion utility at the time of plannig of the line. The situtation appears to be beyond the control of utility. The original painting of the towers were done as per the relavent contemporary standards.
4. To protect the towers 571, 572, 573, 577, 584, 585 & 587 of the 400 kV D/C Silchar–Byrnihat–Azara TL, painting them with anit-corrosive paint is the most effective solution. Further, considering that the area falls under corrosion category C-5 as per ISO 12944 (Industrial area with high pollution, humidity and aggressive atomsphere), the towers should be painted with Anti-corrosive zinc rich galvanised paint with high durabilitiy (upto 25 years). The painting specifications should conform to the ISO 12944 standards.

The detailed report is attached as **Annexure-IX**. The recommendations and report are presented to the forum for deliberation and further action.

Deliberation of the sub-committee

NERPC presented the report of the committee constituted for investigating the requirement of painting works for restricting corrosion and enhancing the safety and service life of the towers of the 400 kV D/C Silchar–Byrnihat–Azara transmission line traversing through the highly polluted area near Byrnihat. NERPC apprised the forum that, based on detailed assessment, the committee had recommended application of anti-corrosive paint conforming to ISO 12944 standards on the identified tower locations to mitigate corrosion-related deterioration.

Forum agreed, in principle, with the recommendations of the committee for undertaking the anti-corrosive painting works at the identified tower locations.

MS, NERPC further informed the forum that the matter would also be deliberated in the Commercial sub-Committee meeting of NERPC for examination of the associated financial aspects and further necessary action.

The sub-committee noted as above.

Action: NERPC

2.25. (A) SoP)/Guidelines for Diversion of RPC-Approved Spare Transformers and Reactors

(B) Rotation Mechanism for RPC-Approved Regional Spare Transformers and Reactors-NERPC

Final Standard Operating Procedure (SoP)/Guidelines for Diversion of RPC-Approved Spare Transformers and Reactors to the Constituents/State Transmission Utilities (attached as **Annexure-X**) was deliberated in the 236th OCC Meeting, wherein Director, NERPC informed that the SoP had been approved in principle in the 17th National Power Committee (NPC) meeting and comments had been invited from stakeholders across all regional power committees. Pursuant to the above, the matter was further deliberated in the 31st TCC meeting of Northern Eastern Regional Power Committee (NERPC), wherein it was decided to circulate the draft SoP to all utilities in the North Eastern Region for obtaining their comments and suggestions.

Accordingly, NERPC informed that the draft SoP was circulated to all NER utilities on 16.03.2026 for furnishing their observations. During the discussion, POWERGRID stated that, at present, six NERPC-approved regional spare transformers/reactors are available in the region.

Further, it was noted that, pursuant to the deliberations of the 17th NPC meeting, it had been decided to evolve a suitable mechanism for periodic rotation and/or utilization of spare transformers and reactors, either within the owning utility or among the constituents and State Transmission Utilities (STUs), so as to ensure their operational readiness and to prevent prolonged idle storage.

In view of the above, POWERGRID may furnish its detailed inputs and suggestions regarding the development of an appropriate mechanism for periodic rotation and effective utilization of the regional spare transformers and reactors.

Further, as per the final SoP Clause (C)(ii), which stipulates that diversion of regional spares to utilities other than State Transmission Utilities is generally not envisaged under normal circumstances. However, with the approval of the RPC forum, such diversion may be permitted under exceptional circumstances. In this regard, private Transmission Service Providers (TSPs) may indicate their willingness and views on the proposed provision.

Deliberation of the sub-committee

Forum has in principle agreed to the SoP for diversion of spares.

NERPC apprised the forum that, during the course of implementation of the SoP, if any issues or operational difficulties are encountered by the constituents, the same may be communicated to NERPC for taking up the matter with the NPC for further consideration.

Regarding Rotation mechanism for spares, forum requested Powergrid to prepare a draft SoP and present to the forum in next OCCM.

Further, regarding diversion of regional spares to utilities other than State Transmission Utilities like private Transmission Service Providers (TSPs)

under exceptional circumstances the forum envisaged to reserve all the rights with NERPC forum.

The sub-committee noted as above.

Action: Powergrid to prepare the draft SoP on rotation of spares.

2.26. Finalization of Criteria for Selection of 132 kV Transmission Lines for Implementation of Travelling Wave Fault Locator (TWFL) in NER-NERPC

Implementation of Travelling Wave Fault Locator (TWFL) on critical transmission lines in the North Eastern Region (NER) was deliberated earlier, wherein it was decided that the deployment of TWFL may be undertaken in a phased manner. For implementation in the first phase, the following criteria were identified for selection of critical transmission lines:

- i) 220 kV, 400 kV and 765 kV transmission lines having a length greater than 200 km.
- ii) 220 kV, 400 kV and 765 kV transmission lines used for evacuation of nuclear and renewable energy power, having a length greater than 150 km.
- iii) 220 kV and above transmission lines located in hilly terrain.
- iv) Inter-regional 220 kV and above transmission lines having a length greater than 150 km.

Chairman, TCC, NERPC observed that although the existing criteria primarily cover higher voltage transmission lines, deployment of TWFL on lower voltage transmission lines, particularly 132 kV lines in the North Eastern Region, may also provide significant operational benefits considering the difficult terrain, accessibility constraints, and the importance of prompt fault location and restoration. The members agreed with the suggestion. Subsequently, the matter was placed in the 31st TCC meeting of NERPC, where it was referred to a sub-committee for further examination.

The issue was again deliberated in the 236th OCC Meeting, wherein it was decided that suitable criteria for selection of 132 kV transmission lines for TWFL installation may be finalized, and accordingly, such lines shall be

identified by NERPC in consultation with the SLDCs of the North Eastern Region and NERLDC.

Pursuant to the deliberations, the following criteria are proposed for identification of 132 kV transmission lines for installation of TWFL:

- i) Load criticality, including transmission lines catering to major load centers like cities and lines interconnecting state grids.
- ii) Length of the transmission line
- iii) Lines passing through hilly terrain or dense forest where fault patrolling and restoration are time-consuming
- iv) Availability of OPGW communication links required for reliable operation of the TWFL system

In addition, the States may identify and propose 132 kV transmission lines serving major load centers where rapid fault location would substantially reduce restoration time.

Deliberation of the sub-committee

After detailed deliberation the Forum found the criteria sufficient for selection of 132kV lines of NER for installation of TWFL.

The following are the criteria for selection of 132kV lines for TWFL installation:

- i) Load criticality, including transmission lines catering to major load centers like cities and lines interconnecting state grids.*
- ii) Length of the transmission line*
- iii) Lines passing through hilly terrain or dense forest where fault patrolling and restoration are time-consuming*
- iv) Availability of OPGW communication links required for reliable operation of the TWFL system*

Further, Director (Operation), NERPC apprised the forum that CEA (PSETD Division) has formed a committee for preparing the criteria for identification of transmission lines for implementation of TWFL.

The sub-committee noted as above.

2.27. Reconductoring of 132kV Ranaganadi-ziro line

1. In 51st CMETS-NER meeting, scope of NERES-XXX scheme was modified and reconductoring of 132kV PLHPS (Ranganadi)-Ziro line (owned by Powergrid), with HTLS conductor of rating 900Amps and necessary extension works at both ends, was included.

2. Extension works at Ranganadi end - Replacement of interconnecting Single Moose conductor & associated hardware and other requisite equipment at Panyor Lower (Ranganadi) HEP switch yard so as to match ampacity of Ranganadi (NEEPCO) – Ziro (POWERGRID) 132kV S/c HTLS line - was put under NEEPCO's scope

3. However, in 52nd CMETS, NEEPCO has expressed disagreement on putting the extension works at Ranganadi under its scope, as it will increase the generation cost and may face other implementation challenges, and requested that it may be carried out by the agency carrying out the reconductoring of the line

4. in order to break through the stalemate, it was decided that a special meeting may be arranged between CEA, CTU, NERPC, Powergrid, Grid-India and NEEPCO to discuss the matter.

Subsequently a special meeting held by NERPC on 26.03.2026 in which NEEPCO was requested to provide the single Line Diagram and Electrical Layout & Section drawings of 132kV Ranaganadi switchyard to powergrid so that Powergrid may estimate the total cost involved.

Powergrid vide email dtd. 24.04.2026 mentioned that the existing equipment of the Ziro bay and the existing bus coupler bay, along with their interconnections, are suitable to handle a current rating of 900 A. Only the equipment interconnections/jack bus associated with the 132 kV Ziro bay would require replacement.

Based on the above assumptions, the tentative cost for erection hardware associated with the 132 kV Ziro bay, to commensurate with the HTLS conductor of 900 A, is approximately ₹50 lakhs.

In this regard, it is requested to NEEPCO to agree to take up the reconductoring works at their end.

Deliberation of the Sub-committee

NEEPCO stated that the matter will be put up to the higher authority for discussion and final decision will be conveyed through mail to NERPC within a week.

PowerGrid informed that reconductoring of 220kV Baliprara- Sonabil line (partly owned by AEGCL and Partly by Powergrid) is being undertaken by both AEGCL and Powergrid for their respective bays and portions of lines. Taking lesson from this, the forum opined that NEEPCO should also agree to carry out the upgradation at their end.

Forum urged NEEPCO to carry out the work at their end in order to avoid operational and maintenance issues in future.

The sub-committee noted as above.

Action: NEEPCO

2.28. Declaration of High Inflow Period for ISGS Hydro Generating Stations in NER for FY 2026–27-NERPC

As per Clause 45, Sub-clause 8(a) of the Indian Electricity Grid Code (IEGC):

Quote

(8) Declaration of Declared Capacity by Regional entity generating stations

(a) The regional entity generating station other than the WS seller shall declare ex-bus Declared Capacity limited to 100% MCR less auxiliary power consumption, on day ahead basis as per the provisions of Regulation 49 of these regulations:

Provided that the hydro generating stations may declare ex-bus Declared Capacity more than 100% MCR less auxiliary power consumption limited to

overload capability in terms of sub-clause (a) of clause (10) of this Regulation during high inflow periods:

Provide further that a high inflow period for this purpose shall be notified by the respective RPC.

Unquote

Accordingly, the high inflow season for hydro generating stations in the North Eastern Region is required to be declared.

In the 234th OCC Meeting, wherein the forum agreed to define the high inflow season for Lower Subansiri Hydroelectric Project (HEP) as the period from 15th June to 15th October for FY 2026–27.

Deliberation of the sub-committee

Forum agreed to declare the high hydro inflow period plant-wise based on intimation received for respective hydro plants of NEEPCO and NHPC and upon examination, following are the details of high hydro inflow period for FY2026-27 of respective plants:

Station Name	Owner	High Inflow Period
Panyor HEP	NEEPCO	1 st Jun-26 to 30 th Sept-26
Kameng HEP	NEEPCO	1 st Jun-26 to 30 th Sept-26
Pare HEP	NEEPCO	1 st Jun-26 to 30 th Sept-26
L Subansiri HEP (Already declared in 234 th OCCM)	NHPC	15 th June-26 to 15 th Oct-26
Kopili HEP	NEEPCO	1 st July-26 to 31 st Oct-26

Doyang HEP	NEEPCO	1 st July-26 to 31 st Oct-26
Tuirial HEP	NEEPCO	1 st July-26 to 31 st Oct-26
Loktak HEP	NHPC	10 th June-26 to 10 th Oct-26

The sub-committee noted as above.

PART-C: ITEMS FOR UPDATE/FOLLOW-UP

All utilities are requested to update the status of works and indicate the tentative timeline for completion of pending activities pertaining to them, as outlined in the Action Taken Report (ATR), which will be circulated post the issuance of these minutes.

Annexure-I**List of Participants in the 238th OCC Meeting held on 15.05.2026**

SN	Name & Designation	Organization
1	Sh. N.Modi, SE	Ar. Pradesh
2	Sh. Moli Kamki, EE	Ar. Pradesh
3	Sh. Chandan Deka, CGM (SLDC)	Assam
4	Sh. Arup Kr. Kalita, CGM (O&M),AEGCL	Assam
5	Sh. Dwipen Moral,CGM(Comm&EE), APDCL	Assam
6	Sh. Nilluipal Boruah, AGM (SLDC), APGCL	Assam
7	Smt. Sushmita Das, JM, SLDC	Assam
8	Sh. Biaklian Tonsing, JE,MSPCL	Manipur
9	Sh. H. Vishwaranjit Sharma, JE, MSPCL	Manipur
10	Sh. D J Lyngdoh,SE(SLDC), MePTCL	Meghalaya
11	Sh. N K Singh, EE, MePTCL	Meghalaya
12	Sh. M.R.Marak, EE (T&T), MePTCL	Meghalaya
13	Sh. A Koch, MePTCL	Meghalaya
14	Sh. Er. Lalthanluala, SE, SLDC	Mizoram
15	Sh. Lalramchhunga, AE, SLDC	Mizoram
16	Sh. Er. Wabangmeren, Engg. In Chief	Nagaland
17	Sh. Kasho Chishi,CE(T&G)	Nagaland
18	Sh. Nitovi Wotsa, CE(D&R)	Nagaland
19	Sh. T Lithrichuki Sangtam, Addl CE(T&G)	Nagaland
20	Sh. Mronlumo Kikon, SE(Gen)	Nagaland
21	Sh. S I Asangba Tikhir, EE(SLDC)	Nagaland
22	Sh. Swapan Deb Barma, GM (Tech.), TSECL	Tripura
23	Sh. Anil Debbarma, AGM,SLDC, TPTL	Tripura
24	Sh. Ashok Kr. Dey, SM, TSECL	Tripura
25	Sh. Bhaskar Mazumder, DGM (T)	NEEPCO
26	Sh. Somara Lakra, CGM (I/c)	NERLDC
27	Sh. Biswajit Sahu, CGM	NERLDC
28	Sh. Anjan Kumar Pandey, Dy.Mgr	NERLDC
29	Sh. Nishant K.Mishra, Dy.Mgr	NERLDC
30	Sh. Sunil Singha, Ch.Manager	NERLDC
31	Sh. Sakaldeep, DM	NERLDC
32	Sh. Keshab Borah, DM	NERLDC
33	Smt. Subhra Ghosh, AM	NERLDC
34	Sh. Ashim Paul, DGM (AM)	PGCIL
35	Sh. Sanjay Garhwal, COO	OTPC
36	Sh. Soubhik Choudhury, Head-Operation	OTPC
37	Sh. Niranjana Rabha, Dy.Mgr	NETC

38	Sh. Pranav Rathore, AM	Indigrid
39	Sh. Anirban Bhattacharjee, Sr.Mgr(E)	NHPC
40	Sh. C L Khayuingam, GSM(E)	NHPC
41	Sh. B.Lyngkhai, Member Secretary	NERPC
42	Sh. D.K.Bauri, Director	NERPC
43	Sh. Dinesh Kr. Singh, Asst. Director	NERPC
44	Sh. Vikash Shankar, Asst. Director	NERPC
45	Sh. Rajnish Kumar, Asst.Director	NERPC

Annexure

TECHNICAL PROPOSAL

For

**Annual Maintenance Contract (AMC) of the existing
Automatic Meter Reading (AMR) System (excluding
meter) for a period of Five (5) years**

SLDCs of NERPC States

**(Assam, Meghalaya, Arunachal Pradesh, Manipur,
Mizoram, Nagaland & Tripura)**

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1 INTRODUCTION

1.1 Introduction & Background

The Grid Metering and Automated Meter Reading (AMR) System across the Northeastern Region has been implemented under the SAMAST Project, covering all NERPC constituent states including Assam, Meghalaya, Arunachal Pradesh, Manipur, Mizoram, Nagaland, and Tripura.

As part of this initiative, a centralized AMR infrastructure comprising Special Energy Meters (SEMs), Data Concentrator Units (DCUs), communication networks, and Central Data Collection Systems (CDCS) has been deployed across multiple Grid Substations (GSSs). The system enables reliable acquisition and transfer of meter data through GPRS-based M2M communication and/or optical fibre networks to the respective SLDCs.

The AMR system supports critical SLDC functions such as energy accounting, scheduling, and settlement by ensuring accurate and timely data availability. The solution is powered by Kalkitech KALKI.IO Metering Headend (MDAS) which provides efficient meter data acquisition, monitoring, and reporting capabilities.

In order to ensure sustained performance, reliability, and continuity of the existing AMR infrastructure, SLDCs propose to enter into an Annual Maintenance Contract (AMC) for the AMR infrastructure, covering DCUs, MDAS, control centre IT systems, and substation communication infrastructure, **excluding energy meters** and invites a detailed techno-commercial proposal for comprehensive maintenance and support services

States	No of Substation
Assam	81
Meghalaya	33
Arunachal Pradesh	10
Manipur	84
Mizoram	54
Nagaland	20
Tripura	29

1.2 OBJECTIVE

The objective of the proposed Annual Maintenance Contract (AMC) is to ensure reliable operation and maintenance of the existing Automated Meter Reading (AMR) system and infrastructure deployed across all NERPC states, including control centre IT hardware excluding Meters

The key objectives of the AMC are:

- To ensure smooth operation and maintenance of the MDAS software platform and DCU supplied by Kalkitech and associated communication devices including control centre IT hardware.
- To provide preventive and corrective maintenance support for AMR system components excluding Meters under the AMC scope.
- Maintaining data integrity and continuity of acquisition
- Supporting SLDC operations for energy accounting and reporting

Note: AMC services shall be limited to maintenance and support of the existing infrastructure and shall not imply responsibility for original design or supply defects.

2 AMC SCOPE OF WORK

The scope of this proposal is limited to maintenance and support of the existing features and functionalities of the AMR application and infrastructure as currently deployed. Development of new features, enhancements, or functional modifications is not included in this AMC and, if required, shall be handled separately as change requests subject to mutual agreement.

The AMC shall cover maintenance and technical support of the Automated Meter Reading (AMR) system infrastructure deployed across all NERPC states. The scope includes software, servers, networking components, and field communication equipment forming part of the AMR system (Excluding Meters).

Services under this AMC shall be limited to maintenance and operational support of the existing installed infrastructure and shall be provided on a **best-effort basis**, considering the condition and compatibility of equipment originally supplied under the project.

All State shall be supported by Adequate AMC Engineers for operation and maintenance of the AMR system and related site activities, with deployment carried out on demand based on operational requirements and issue criticality.

The AMR infrastructure has been implemented under a multi-vendor project environment. While Kalkitech has supplied key components such as DCUs and MDAS, other infrastructure components have been supplied by different vendors.

Under this AMC, Kalkitech shall provide integrated support as a single-point service provider. However, support for non-Kalkitech supplied equipment shall be provided on a best-effort basis and shall be subject to equipment condition, serviceability, and OEM support availability. Kalkitech shall not be held responsible for inherent design issues, legacy defects, or failures arising from third-party supplied equipment.

Kalkitech shall be responsible for the procurement and renewal of the domain name and SSL certificate for the duration of the ATS period, ensuring continuity of service for the SLDC domain and secure access to MDAS applications. Kalkitech shall also provide step-by-step installation and renewal procedures for the domain name and SSL certificate, enabling SLDC to independently manage the process after the expiry of the ATS period. (Note: This responsibility may be transferred to the designated hardware management service provider, if so, decided by SLDC).

Regulatory-driven changes mandated by CEA/CERC/SERC, including but not limited to the transition from 15-minute to 5-minute scheduling, shall be treated as part of AMC obligations for the DCU and MDAS systems. Major modifications notified subsequently during the AMC period, which involve substantial code-level enhancements or addition of new functionalities, shall be executed under separate Change Requests, subject to mutual agreement.

Kalkitech shall deploy minimum five engineers across all seven North Eastern States on a rotational basis to support AMC activities at both Control Centre and station levels. Restoration of non-operational DCUs at stations shall be undertaken during the initial phase of the AMC, with States providing necessary support to facilitate access and logistics.

2.1 CDCS Maintenance

- Maintenance and support of CDCS server, Database server, MDAS software and associated network equipment.
- Preventive and corrective maintenance of application software and server systems
- Firmware and software upgrades, subject to compatibility with existing infrastructure
- Technical support for system operation and troubleshooting
- Performance monitoring and basic optimization of application and server environment

2.2 Field-End Equipment Maintenance

Operation, maintenance, and troubleshooting support for field equipment installed across GSSs, including:

- Data Concentrator Units (DCUs)
- Network switches
- Adapters / power supply units
- AMR communication cables (CAT-6)
- Optical fibre cables and patch cords (used for AMR communication at SS)
- Line Interface Units (LIUs)

Maintenance support for Meters is not included. Support for GPRS associated hardware shall be limited to diagnostics, configuration assistance, and coordination with SLDC Engineers or respective OEMs.

2.3 AMC SLA FRAMEWORK

2.3.1 SERVICE LEVELS

As part of AMR system operation, the following are the service levels in terms of breakdown maintenance.

- Critical faults – When both servers are not working or no data is available from all the substations.
Resolution Time – Within 2 working days.
- Major faults – When one Server is not working or data for one complete station is not available.
Resolution Time – Within 4 working days.
- Minor faults – Any other issue which is not essential for availability of data. Resolution Time – Within 10 working days.

2.3.2 AVAILABILITY PERFORMANCE

As part of AMR system operation, the following performance parameters shall be considered:

- MDAS Data Availability –
98% Provided,
 - Exceptions to data unavailability due to network coverage, MPLS breakdown, station source Power supply,
 - Defective/ Malfunctioning Meters and period during feeder outages.
 - Substations which are not connected to Control Center MDAS

Under the proposed AMC, Kalkitech agrees to make reasonable best efforts to support a target equipment availability of 98% for AMR system components covered within the AMC scope, including CDCS servers, MDAS, DCUs, communication equipment (**Excluding Meters**).

Availability performance shall be reviewed on a quarterly basis. availability shall be defined as the percentage of time the equipment remains operational and capable of performing its intended function. The unavailable time is the duration of the time when the equipment is found to be non-functional till the issue is fixed and the equipment found functional.

$$\text{Availability} = \text{*Scheduled Available Time} - \text{Unscheduled Downtime}$$

$$\% \text{ Availability} = (\text{Availability} / \text{*Scheduled available time}) \times 100\%$$

* Note: Scheduled Availability Time = Total Availability Time – Approved Down Time

* Unscheduled Downtime refers to the duration from when a fault is officially reported until the issue is resolved and the equipment is functional.

The Availability will be calculated based on the mutually agreed downtime. Total Schedule Time is calculated as the cumulative sum of individual operating hours across all equipment.

Availability calculations shall exclude:

- Scheduled preventive maintenance approved by NERPC SLDCs
- Power supply interruptions
- Communication network failures
- Failures of third-party infrastructure or equipment outside vendor control
- Force majeure events
- Defective/ Malfunctioning Meters and period during feeder outages.
- Substations which are not connected to Control Center MDAS

Availability targets are subject to exclusions including communication failure, power issues, meter-side issues, and third-party dependencies.

A minimum threshold of 98% system availability shall be maintained under AMC. In case of shortfall, penalties shall be applied as follows: For every 1% reduction below the guaranteed uptime, a deduction of 1% of the quarterly AMC payment shall be levied. The maximum penalty applicable shall be capped at 10% of the quarterly AMC charges. Considering the remote and difficult terrain of certain sites, with limited connectivity and seasonal weather disruptions, Kalkitech shall make all reasonable efforts to meet the availability requirement. However, penalties shall not exceed the above cap.

2.4 CYBER SECURITY & COMPLIANCE

Kalkitech will endeavor to address cybersecurity guidelines issued by CERT-In, CEA, and the Ministry of Power (MOP) on a "best-effort" basis. Any requirement that is technically or operationally incompatible with the existing legacy hardware or software version shall be formally excluded from the scope of this AMC.

3 EXCLUSION IN AMC

Following items are not covered under AMC.

1. Supply, installation, replacement of new energy meters
2. Troubleshooting, Repair and replacement of existing meters
3. Replacement of firewall, server, and switches for equipment that has reached End-of-Life (EOL) or End-of-Support (EOS) from the OEM and is not diagnosable or repairable is excluded from the AMC scope. Procurement of such equipment shall be arranged by NERPC SLDCs.
4. Major hardware upgrades, technology refresh, or capacity enhancement of existing servers, storage systems, networking devices, or PCs.
5. Printers and peripheral office equipment
6. SIM card charges, telecom connectivity charges, MPLS charges, and related service provider fees.
7. The recurring charges, infrastructure maintenance, and operational uptime of all communication networks including GPRS, Cellular (SIM procurement/rentals), and OPGW fiber are the sole responsibility of the respective SLDCs; consequently, any data unavailability resulting from network outages, third-party service failures, or non-payment of telecom fees is excluded from availability calculations.
8. Vulnerability Assessment and Penetration Testing (VAPT) is excluded from the Kalkitech AMC scope. SLDCs may conduct VAPT through authorized agencies, and Kalkitech shall provide necessary patching support on a best-effort basis.
9. Provision of UPS systems, batteries, earthing, and ensuring stable power supply at Control Centre (CC) and Substation (SS) locations.
10. Integration, commissioning, and configuration of new DCUs or addition of new meters to the existing AMR system shall be carried out on a mutually agreed chargeable basis.
11. Any modification, enhancement, customization, or development of new features in MDAS software beyond the currently deployed functionalities.

4 ASSUMPTIONS

- The existing AMR system architecture shall remain unchanged.
- Present scope of AMC Limited to presently connected Meters, DCU and IT Infrastructure
- No major regulatory changes require redesign of MDAS platform.
- Availability commitments are subject to exclusions defined under Section 2.3.

Annexure - I

Bill of Material

Sl No	Particulars	Unit	Qty
1	2	3	4
	Assam- AMR Project		
1	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Years	5
	Meghalaya - AMR Project		
2	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Years	5
	Arunachal Pradesh - AMR Project		
3	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Years	5
	Manipur - AMR Project		
4	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Years	5
	Mizoram - AMR Project		
5	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Years	5
	Nagaland - AMR Project		
6	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Years	5
	Tripura - AMR Project		
7	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Years	5

Annexure – II

The following list represents the typical AMR system components covered under the AMC. The actual scope shall include all deployed and operational equipment across respective SLDCs and substations.

A. Hardware & Software at Data Centre

Sr. No.	Equipment Description
1.	CDCS Server (Communication Server)
2.	Database Server
3.	KALKI.IO Metering Headend (MDAS)
4.	GPS Clock
5.	Firewall
6.	24-Port Network Switch

B. Hardware at Grid Substation Level

Sr. No.	Equipment Description
1	Kalkitech Data Concentrator Unit (DCU)
2	Network Switch (5-port / 8-port)
3	Power Supply Unit
4	CAT-6 Cables, Patch Cords, LIUs and Associated Communication Accessories

**** End of Document ****

Annexure-III

Price Schedule – Annual Maintenance Contract (AMC) Charges for NERPC AMR Project (7 States)					
Kalkitech Offer Dated:07.05.2026					
SI No	Particulars	Unit	Qty	Unit Price in INR	Total Amount in INR
1	2	3	4	5	6
	Assam- AMR Project				
1	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Per Year	5	1,00,78,000	5,03,90,000
	Meghalaya - AMR Project				
2	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Per Year	5	50,00,000	2,50,00,000
	Arunachal Pradesh - AMR Project				
3	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Per Year	5	24,00,000	1,20,00,000
	Manipur - AMR Project				
4	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Per Year	5	1,27,00,000	6,35,00,000
	Mizoram - AMR Project				
5	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Per Year	5	56,00,000	2,80,00,000
	Nagaland - AMR Project				
6	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Per Year	5	32,00,000	1,60,00,000
	Tripura - AMR Project				
7	Annual Maintenance Contract (AMC) for MDAS Software and DCUs, including Control Centre IT Hardware and Grid Substation Hardware (excluding meters), for a period of five (5) years	Per Year	5	54,00,000	2,70,00,000
	Total in INR excluding GST				22,18,90,000
	GST @ 18 %				3,99,40,200
	Grand Total in INR including GST				26,18,30,200

Annexure-IV

Commercial Terms & Conditions

SI No	Item	Description
1	Validity of offer	60 days
2	Payment terms: Service Payment Terms: One Hundred percent (100%) of the Operational and Maintenance (AMC) amount along with (100%) of taxes and duties to be paid against submission of invoices on a quarterly basis	E-payment Bank Name: ICICI Bank Ltd. No. 76/1, 27 th Main, HSR Layout sector 1, Bengaluru – 560102. SWIFT Code: ICICINBBCTS AD Code: 6390578-8400009 Bank A/C No: 035751000005 RTGS/ NEFT Code: ICIC0000357 MICR: 560229024
3	Completion schedule	5 Years Months from Date of Award
4	Warranty	NA
5	Taxes, duties	The quoted prices are Exclusive of 18% Taxes & Duties
6	Price Basis	Firm
7	Statutory Variations	Any price repercussion due to variation in duty structure, or new taxes, during the contract execution period, shall be to the Purchaser's account.
8	Arbitration	Any dispute or difference arising under or in connection with this contract or any breach thereof, which cannot be settled by friendly negotiation and agreement among parties, shall be finally settled by arbitration, three arbitrators to be appointed, one arbitrator to be appointed by Kalki, one arbitrator to be appointed by the customer and the umpire to be appointed by the two arbitrators, the arbitration being conducted in accordance with the provisions of the Arbitration & Conciliation Act, 1996. The venue of arbitration proceedings shall be Shillong
9	Suspension / cancellation of contract	Any temporary variation, suspension and resumption of execution of the contract shall be mutually agreed upon between purchaser and Kalkitech
10	Force Majeure	The delivery of the package shall be subject to normal Force Majeure conditions like act of Government (Domestic or foreign), act of God, war, lock outs etc and in such cases, the performance of the contract shall be extended on a mutually agreeable basis.
11	Other Terms	Any other terms not covered in the proposal are to be decided based on discussion and mutual consensus

Annexure-V

Change Request Man-Month / Man-Day Rates

a. Man-Day Rates for Change Requests

Item Description	Phase	Unit Rate in INR (₹)
Man-day Rates for change requests for the development of new features, enhancement or functional modification etc. in MDAS.	1 st Year of AMC	₹35,000
	2 nd Year of AMC	₹35,000
	3 rd Year of AMC	₹35,000
	4 th Year of AMC	₹35,000
	5 th Year of AMC	₹35,000

b. Specific Integration Activities:

Sl. No.	Description	Unit	Unit Rate (₹)
1	Integration of a new DCU into the AMR system with up to five (5) SEM meter connections at the Control Centre	Per DCU	₹25,000
2	Per meter for integration into MDAS system at Control Centre	Per SEM	₹4500

c. MDAS Licensee:

The AMC shall include a rate contract for license/service support in the event of future requirements to increase the number of meters integrated with the MDAS software. For instance, if the existing MDAS license supports integration of up to 500 meters, the Vendor shall quote the license/integration charges for further enhancement of MDAS capacity in incremental units of 100 meters or part thereof.

The license cost for enhancement of MDAS capacity shall be ₹8,10,000 (Rupees Eight Lakh Ten Thousand only) for each additional batch of 100 meters or part thereof.

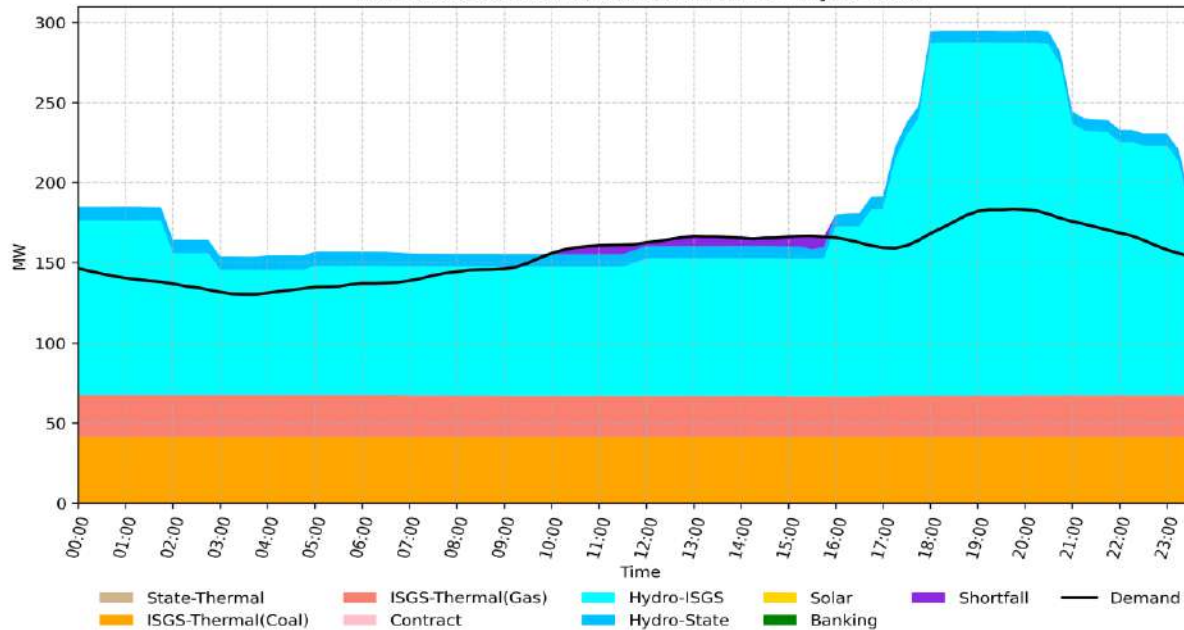
Sl. No.	Name Of Entity	Postal Address	Pincode	District	State	Type Of Industries	Type Of CPP	Base	Installed Capacity: 2024-2025	Registration on CPP Portal
1	Maijan Tea Estate	Maijan T.E. P.O.& Dist Dibrugarh Assam	786101	Dibrugarh	Assam	Food Products	Diesel	Standby	1096	Not Registered
2	GREENWOOD TEA ESTATE	P.O. & P.S. Mohanbari,	786012	Dibrugarh	Assam	Food Products	Diesel	Standby	304	Not Registered
3	GREENWOOD TEA ESTATE	P.O. & P.S. Mohanbari,	786012	Dibrugarh	Assam	Food Products	Diesel	Standby	144	Not Registered
4	GREENWOOD TEA ESTATE	P.O. & P.S. Mohanbari,	786012	Dibrugarh	Assam	Food Products	Diesel	Standby	100	Not Registered
5	GREENWOOD TEA ESTATE	P.O. & P.S. Mohanbari,	786012	Dibrugarh	Assam	Food Products	Diesel	Standby	304	Not Registered
6	Assam Company India Ltd.	P.O. Rangagora, Dist. Tinsukia, Assam, Pin - 786147	786147	Tinsukia	Assam	Food Products	Diesel	Standby	914	Not Registered
7	IOCL, Guwahati Refinery	Noonmati, Pin-781020	781020	Noonmati	Assam	Mineral Oil and Petroleum	Steam	Base Load	28000	Yes
8	IOCL, Guwahati Refinery	Noonmati, Pin-781020	781020	Noonmati	Assam	Mineral Oil and Petroleum	Solar	Base Load	1560	Yes
9	INDIAN OIL CORPORATION LTD., BONGAIGAOON REFINERY	Bongaigaon Refinery, Dhaligaon P.O. Dist. Chirang Assam - 783385	783385	Chirang	Assam	Mineral Oil and Petroleum	Steam	Base Load	48000	Not Registered
10	INDIAN OIL CORPORATION LTD., BONGAIGAOON REFINERY	Bongaigaon Refinery, Dhaligaon P.O. Dist. Chirang Assam - 783385	783385	Chirang	Assam	Mineral Oil and Petroleum	Gas	Base Load	21195	Not Registered
11	INDIAN OIL CORPORATION LTD., BONGAIGAOON REFINERY	Bongaigaon Refinery, Dhaligaon P.O. Dist. Chirang Assam - 783385	783385	Chirang	Assam	Mineral Oil and Petroleum	Solar	Base Load	2378	Not Registered
12	Purbanchal Timber Industries	Purbanchal Timber Industries, Palashbari	781128	Kamrup	Assam	Miscellaneous	Diesel	Standby	1288	Not Registered
13	Purbanchal Timber Industries	Purbanchal Timber Industries, Palashbari	781128	Kamrup	Assam	Miscellaneous	Solar	Base Load	1000	Not Registered
14	Centply(a division of Century Plywoods	M/s Cent Ply-Mirza-Palashbari Road, PO-Palashbari, Kamrup -- Assam	781128	Kamrup	Assam	Miscellaneous	Diesel	Standby	960	Not Registered
15	Centply(a division of Century Plywoods	M/s Cent Ply-Mirza-Palashbari Road, PO-Palashbari, Kamrup -- Assam	781128	Kamrup	Assam	Miscellaneous	Solar	Base Load	1000	Not Registered
16	Khoontai T.E	Khoontai T.E., P.O. Moranhat, Dist:Charaideo (Assam)	785670	Charaideo	Assam	Food Products	Diesel	Standby	500	Not Registered
17	Khoontai T.E	Khoontai T.E., P.O. Moranhat, Dist:Charaideo (Assam)	785670	Charaideo	Assam	Food Products	Diesel	Standby	380	Not Registered
18	Khoontai T.E	Khoontai T.E., P.O. Moranhat, Dist:Charaideo (Assam)	785670	Charaideo	Assam	Food Products	Diesel	Standby	180	Not Registered
19	Brahmaputra Valley Fertilizer Corporation Limited, Namrup	Dist: Dibrugarh, PO: Parbatpur, State: Assam, PIN: 786623	786623	Dibrugarh	Assam	Fertilizer	Gas	Base Load	30000	Yes
20	Assam University Silchar	Dargakona, District-Cachar	782490	Cachar	Assam	Non Industry	Solar	Base Load	1000	Not Registered
21	Eveready Industries India Ltd.	Industrial Growth Center, Matia, P.O. & Vill : Mornai, Goalpara, Assam,Pin : 783101.	783101	Goalpara	Assam	Electrical Engineering	Diesel	Standby	425	Not Registered
22	Eveready Industries India Ltd.	Industrial Growth Center, Matia, P.O. & Vill : Mornai, Goalpara, Assam,Pin : 783101.	783101	Goalpara	Assam	Electrical Engineering	Diesel	Standby	425	Not Registered
23	Eveready Industries India Ltd.	Industrial Growth Center, Matia, P.O. & Vill : Mornai, Goalpara, Assam,Pin : 783101.	783101	Goalpara	Assam	Electrical Engineering	Diesel	Standby	425	Not Registered
24	Eveready Industries India Ltd.	Industrial Growth Center, Matia, P.O. & Vill : Mornai, Goalpara, Assam,Pin : 783101.	783101	Goalpara	Assam	Electrical Engineering	Diesel	Standby	425	Not Registered
25	Eveready Industries India Ltd.	Industrial Growth Center, Matia, P.O. & Vill : Mornai, Goalpara, Assam,Pin : 783101.	783101	Goalpara	Assam	Electrical Engineering	Solar	Standby	1000	Not Registered
26	Dulajian Power Station- OIL	Dulajian Power Station, Electrical Engineering Department, Main Industrial Area, OIL INDIA LIMITED, Dulajian, Dist- Dibrugarh (Assam).	786602	Dibrugarh	Assam	Mineral Oil and Petroleum	Gas	Base Load	49620	Yes
27	BRAHMAPUTRA CRACKERS AND POLYMERS LIMITED	p.o. Lakwa charaideo, Assam	785698	Sivasagar	Assam	Mineral Oil and Petroleum	Gas	Base Load	5780	Not Registered
28	BRAHMAPUTRA CRACKERS AND POLYMERS LIMITED	p.o. Lakwa charaideo, Assam	785698	Sivasagar	Assam	Mineral Oil and Petroleum	Diesel	Standby	400	Not Registered
29	CPP ONGC Assam Asset	1c CPP-ST, ROB-II, ONGC Assam Asset Nazira	785685	Sivasagar	Assam	Mineral Oil and Petroleum	Gas	Base Load	40000	Yes
30	CPP ONGC Assam Asset	1c CPP-ST, ROB-II, ONGC Assam Asset Nazira	785685	Sivasagar	Assam	Mineral Oil and Petroleum	Gas	Base Load	6000	Yes
31	CPP ONGC Assam Asset	1c CPP-ST, ROB-II, ONGC Assam Asset Nazira	785685	Sivasagar	Assam	Mineral Oil and Petroleum	Gas	Base Load	3000	Yes
32	Numaligarh Refinery	:NRL, Numaligarh, Golaghat district, Assam-785615	785615	Golaghat district	Assam	Mineral Oil and Petroleum	Gas	Base Load	34000	Yes
33	Numaligarh Refinery	:NRL, Numaligarh, Golaghat district, Assam-785615	785615	Golaghat district	Assam	Mineral Oil and Petroleum	Gas	Base Load	34000	Yes
34	Numaligarh Refinery	:NRL, Numaligarh, Golaghat district, Assam-785615	785615	Golaghat district	Assam	Mineral Oil and Petroleum	Steam	Base Load	12000	Yes
35	Numaligarh Refinery	:NRL, Numaligarh, Golaghat district, Assam-785615	785615	Golaghat district	Assam	Mineral Oil and Petroleum	Solar	Base Load	1015	Yes
36	Brahmaputra Cracker and Polymer Limited	Captive Power Plant,BCPL,Lepetkata	786006	Dibrugarh	Assam	Mineral Oil and Petroleum	Gas	Base Load	22,470	Yes
37	Brahmaputra Cracker and Polymer Limited	Captive Power Plant,BCPL,Lepetkata	786006	Dibrugarh	Assam	Mineral Oil and Petroleum	Gas	Base Load	22,470	Yes
38	Brahmaputra Cracker and Polymer Limited	Captive Power Plant,BCPL,Lepetkata	786006	Dibrugarh	Assam	Mineral Oil and Petroleum	Steam	Base Load	15,310	Yes
39	Brahmaputra Cracker and Polymer Limited	Captive Power Plant,BCPL,Lepetkata	786006	Dibrugarh	Assam	Mineral Oil and Petroleum	Diesel	Standby	1400	Yes
40	Brahmaputra Cracker and Polymer Limited	Captive Power Plant,BCPL,Lepetkata	786006	Dibrugarh	Assam	Mineral Oil and Petroleum	Diesel	Standby	2520	Yes
41	Brahmaputra Cracker and Polymer Limited	Captive Power Plant,BCPL,Lepetkata	786006	Dibrugarh	Assam	Mineral Oil and Petroleum	Diesel	Standby	808	Yes
42	KOTALGOORIE TEA ESTATE	MARIANI, DIST. - JORHAT (ASSAM)	785634	JORHAT	Assam	Food Products	Diesel	Standby	256	Yes
43	KOTALGOORIE TEA ESTATE	MARIANI, DIST. - JORHAT (ASSAM)	785634	JORHAT	Assam	Food Products	Diesel	Standby	144	Yes
44	Dalmia Cement (Formerly Calcem Cement India Limited)	2 No. Pipal Pukhuri, Kaki Mouza, Lanka Assam	782446	Nagaon	Assam	Cement	Solar	Base Load	16720	Yes
45	Dalmia Cement (Formerly Calcem Cement India Limited)	2 No. Pipal Pukhuri, Kaki Mouza, Lanka Assam	782446	Nagaon	Assam	Cement	Solar	Base Load	4130	Yes
46	Kondoli Tea Estate	P.O. Kathiatoli , Dist. Nagaon (Assam), Pin : 782427	782427	Nagaon	Assam	Food Products	Diesel	Standby	304	Not Registered
47	Kondoli Tea Estate	P.O. Kathiatoli , Dist. Nagaon (Assam), Pin : 782427	782427	Nagaon	Assam	Food Products	Diesel	Standby	256	Not Registered
48	Kondoli Tea Estate	P.O. Kathiatoli , Dist. Nagaon (Assam), Pin : 782427	782427	Nagaon	Assam	Food Products	Diesel	Standby	100	Not Registered
49	M/s BCPL Dulajian	1. DT &GDU, DULAJIAN, PO-HOOGRIJAN- ASSAM	786601	Dulajian	Assam	Mineral Oil and Petroleum	Gas	Base Load	2,400	Not Registered
50	Star Cement Unit(Cement Grinding Unit)	Star Cement Limited, Gopinath Bordoloi Road , Vill: Chamata Pathar , Sonapur ,Dist : kamrup(Metro) , Assam-782402	782402	Kamrup Metropolitan	Assam	Cement	Diesel	Standby	1200	Not Registered
51	THANAI TEA ESTATE FACTORY	Thanai T.E., Dist. Dibrugarh (Assam), P.O. Dikom-786101	786101	Dibrugarh	Assam	Food Products	Diesel	Standby	323	Not Registered
52	THANAI TEA ESTATE FACTORY	Thanai T.E., Dist. Dibrugarh (Assam), P.O. Dikom-786101	786101	Dibrugarh	Assam	Food Products	Diesel	Standby	323	Not Registered
53	THANAI TEA ESTATE FACTORY	Thanai T.E., Dist. Dibrugarh (Assam), P.O. Dikom-786101	786101	Dibrugarh	Assam	Food Products	Diesel	Standby	119	Not Registered
54	BORBOROAH TEA ESTATE	Borborooah Tea Estate, P.O. Barbaruah Dist. - Dibrugarh, Assam Pin-786007	786007	Dibrugarh	Assam	Food Products	Diesel	Standby	160	Not Registered
55	BORBOROAH TEA ESTATE	Borborooah Tea Estate, P.O. Barbaruah Dist. - Dibrugarh, Assam Pin-786007	786007	Dibrugarh	Assam	Food Products	Diesel	Standby	220	Not Registered
56	BORBOROAH TEA ESTATE	Borborooah Tea Estate, P.O. Barbaruah Dist. - Dibrugarh, Assam Pin-786007	786007	Dibrugarh	Assam	Food Products	Diesel	Standby	50	Not Registered
57	Meghalaya Cements Limited	thangskai, PO-Lumshong,East Jaintia Hills,Meghalaya-793210	793210	East Jaintia Hills	Meghalaya	Cement	Steam	Base Load	10000	Yes
58	Meghalaya Cements Limited	thangskai, PO-Lumshong,East Jaintia Hills,Meghalaya-793211	793211	East Jaintia Hills	Meghalaya	Cement	Steam	Base Load	6500	Yes
59	Meghalaya Cements Limited	thangskai, PO-Lumshong,East Jaintia Hills,Meghalaya-793211	793211	East Jaintia Hills	Meghalaya	Cement	Diesel	Standby	9600	Yes
60	Goldstone Cements Limited	Musian Lamare Old, Khliehriat, East Jantia Hills	793200	East Jaintia Hills	Meghalaya	Cement				Yes
61	Star Cement Meghalaya Limited	Vill & P.O: Lumshong	793210	East Jaintia Hills	Meghalaya	Cement				Yes

Monthly State Level Resource Adequacy Assessment- June 2026

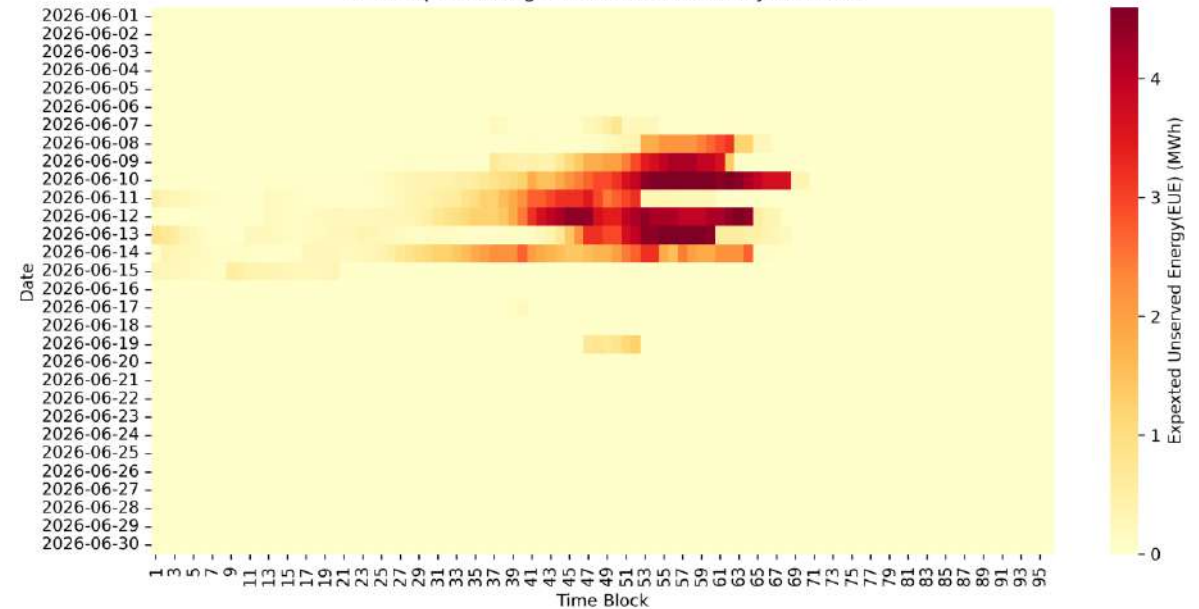
ARUNACHAL PRADESH

Month	Jun-26							
	Time Period	00:00-02:00	02:00-05:00	05:00-08:00	08:00-14:00	14:00-17:00	17:00-22:00	22:00-24:00
Demand (MW)	Peak	152	138	150	168	175	188	176
	Average	130	123	130	140	149	171	150
Availability from various sources(MW)	ISGS-Coal+Gas	67	67	67	67	67	67	67
	ISGS-Hydro	144	133	136	134	158	218	182
	State Gas Generation	0	0	0	0	0	0	0
	State Hydro Generation	13	12	12	11	11	12	12
	State Solar Generation	0	0	0	0	0	0	0
	LT Contracts	0	0	0	0	0	0	0
	ST Contracts	0	0	0	0	0	0	0
Total Availability (C)(MW)	224	213	215	213	237	298	262	
Peak Surplus(+)/ Deficit(-) (IN MW)	72	75	65	44	62	109	86	
Average Surplus(+)/ Deficit(-) (IN MW)	94	90	85	73	87	127	112	

Worst case scenerio for Arunachal Pradesh in June 2026

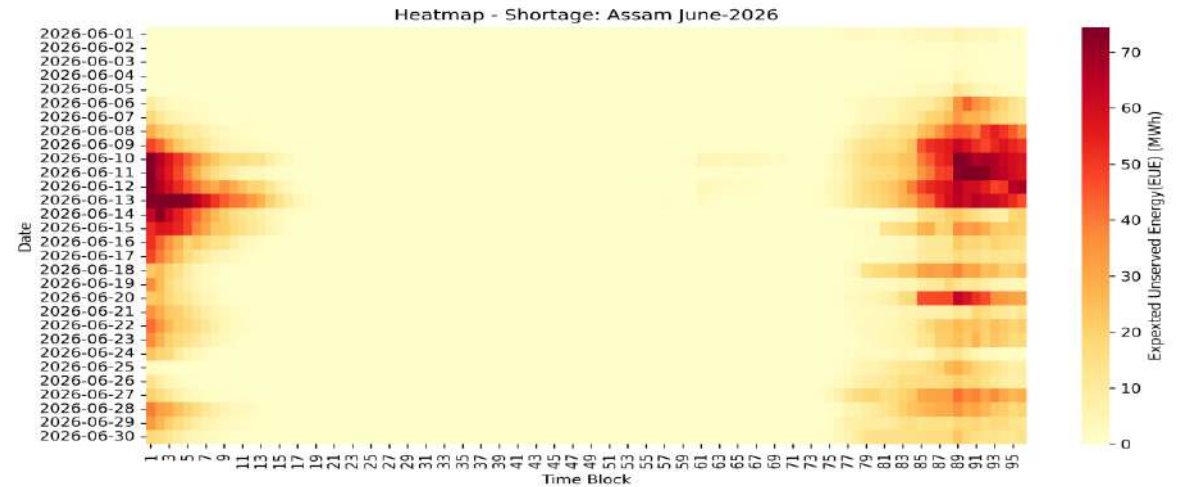
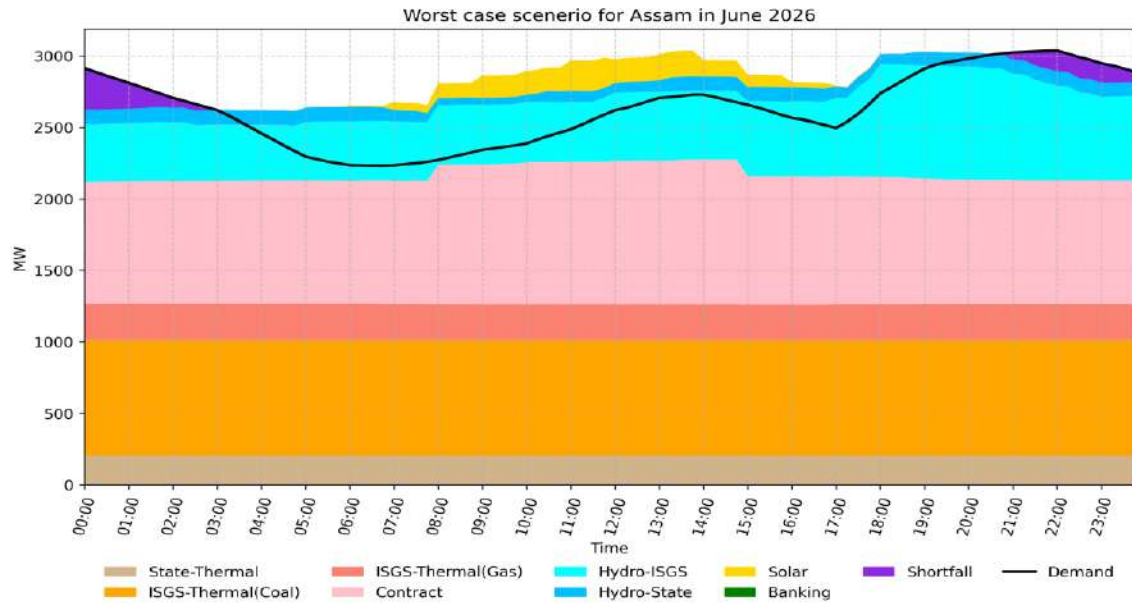


Heatmap - Shortage: Arunachal Pradesh June-2026



ASSAM

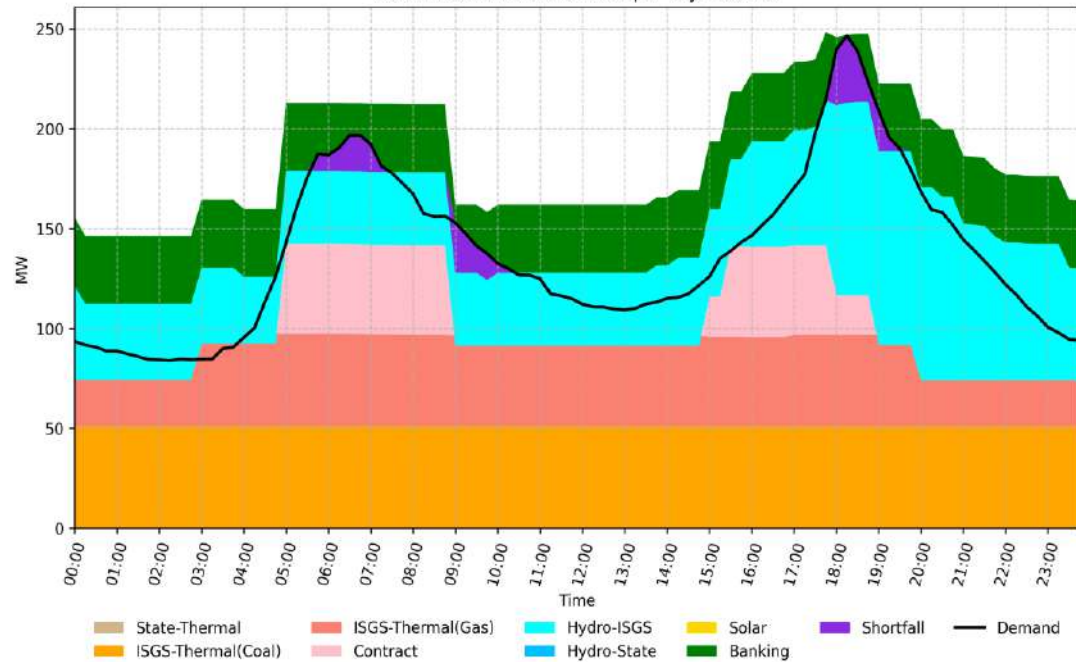
Month	Jun-26							
	Time Period	00:00-02:00	02:00-05:00	05:00-08:00	08:00-14:00	14:00-17:00	17:00-22:00	22:00-24:00
Demand (MW)	Peak	2803	2565	2233	2625	2666	2912	2932
	Average	2671	2367	2129	2404	2476	2820	2838
Availability from various sources(MW)	ISGS-Coal+Gas	1066	1066	1065	1062	1061	1064	1065
	ISGS-Hydro	507	483	512	527	610	775	660
	State Gas Generation	202	202	202	202	202	202	202
	State Hydro Generation	90	87	86	83	81	89	96
	State Solar Generation	0	0	28	165	62	0	0
	LT Contracts	408	412	423	547	480	430	418
	ST Contracts	445	445	445	445	445	445	445
Total Availability (C)(MW)		2718	2696	2762	3031	2940	3005	2885
Peak Surplus(+)/ Deficit(-) (IN MW)		-85	131	529	406	274	93	-47
Average Surplus(+)/ Deficit(-) (IN MW)		47	329	633	627	464	185	47



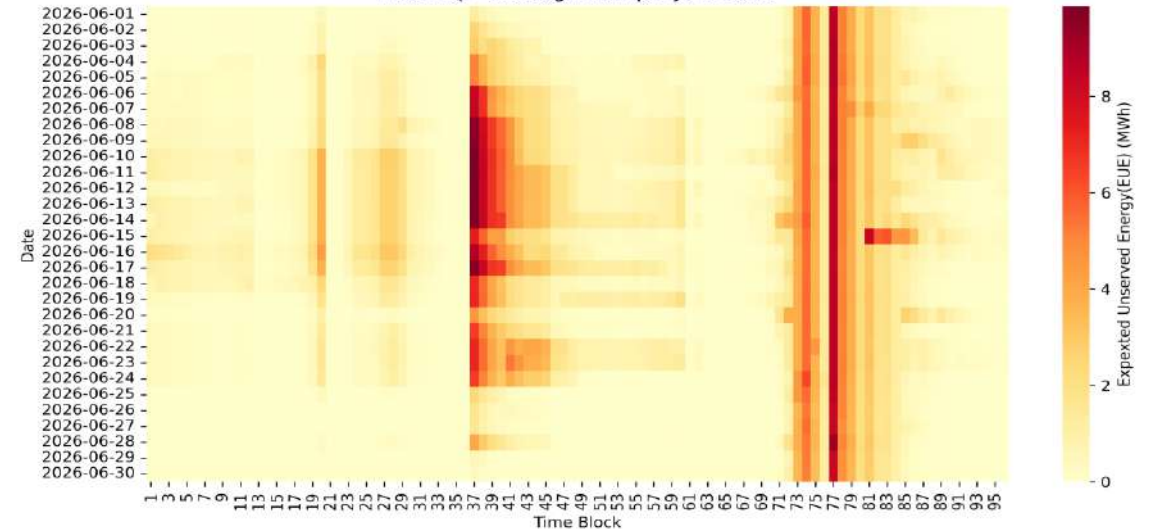
MANIPUR

Month	Jun-26							
	Time Period	00:00-02:00	02:00-05:00	05:00-08:00	08:00-14:00	14:00-17:00	17:00-22:00	22:00-24:00
Demand (MW)	Peak	94	126	197	167	215	247	144
	Average	89	93	180	129	149	197	116
Availability from various sources(MW)	ISGS-Coal+Gas	97	97	97	96	96	97	97
	ISGS-Hydro	86	83	86	88	102	130	111
	State Gas Generation	0	0	0	0	0	0	0
	State Hydro Generation	0	0	0	0	0	0	0
	State Solar Generation	0	0	0	0	0	0	0
	LT Contracts	0	0	0	0	0	0	0
	ST Contracts	-57	-45	11	-31	-5	-37	-57
Total Availability (C)(MW)		127	136	195	154	194	191	151
Peak Surplus(+)/ Deficit(-) (IN MW)		33	10	-2	-13	-21	-56	7
Average Surplus(+)/ Deficit(-) (IN MW)		38	42	15	25	44	-6	36

Worst case scenerio for Manipur in June 2026

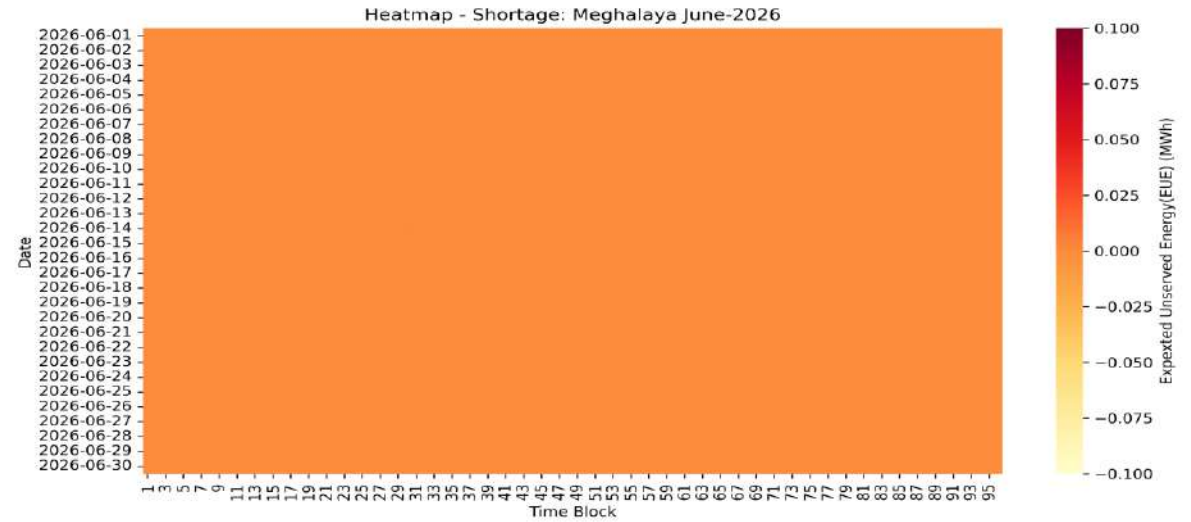
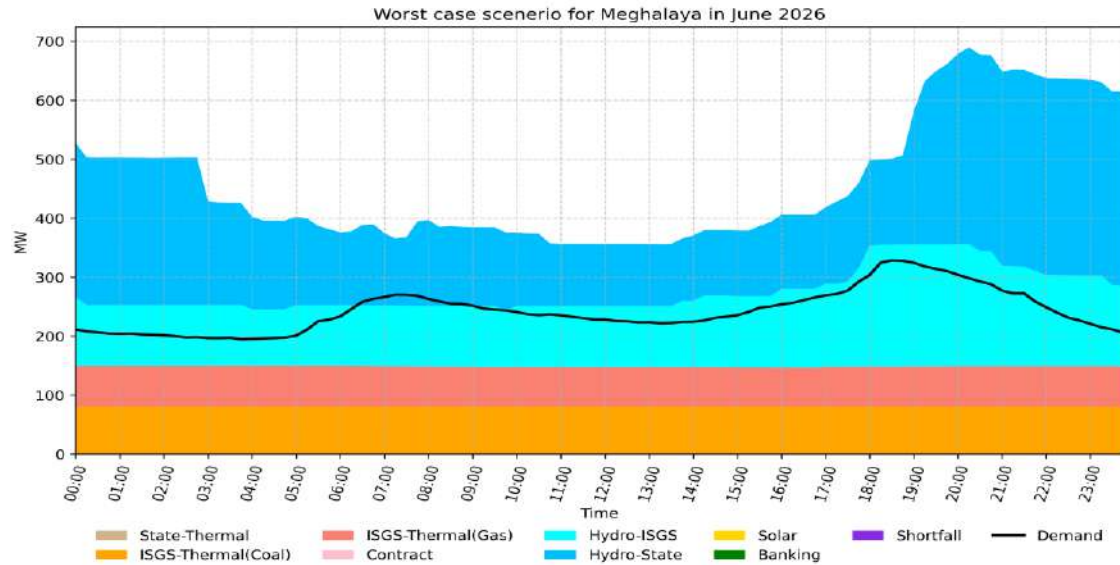


Heatmap - Shortage: Manipur June-2026



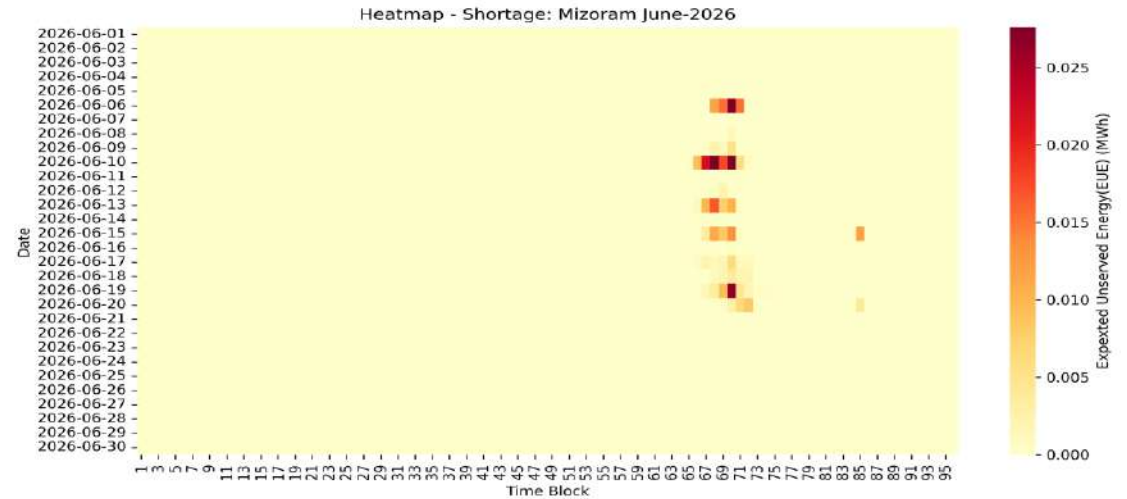
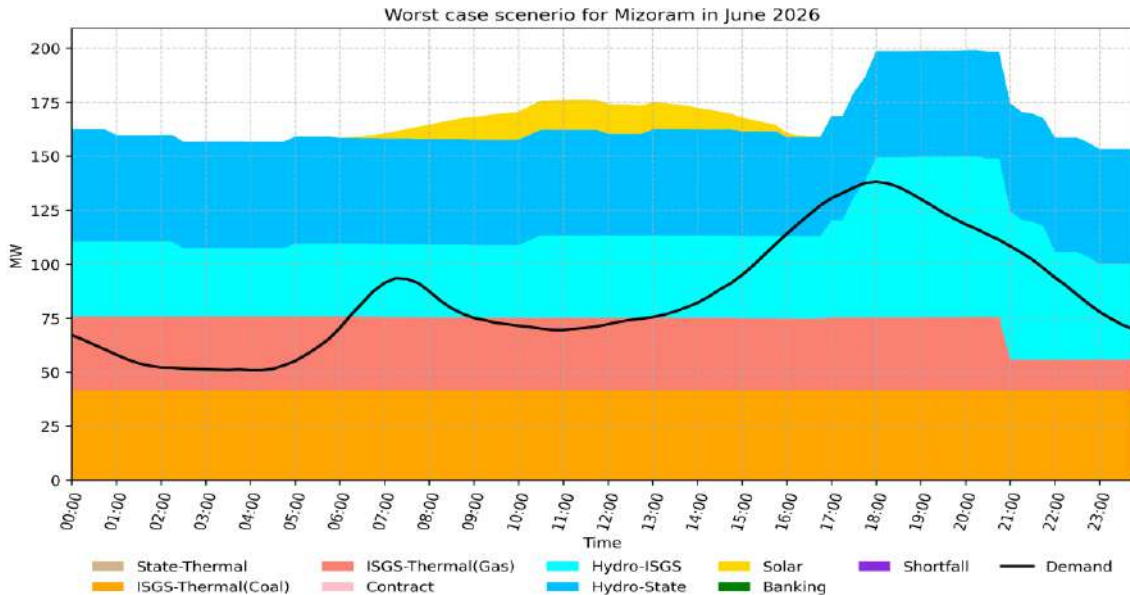
MEGHALAYA

Month	Jun-26							
	Time Period	00:00-02:00	02:00-05:00	05:00-08:00	08:00-14:00	14:00-17:00	17:00-22:00	22:00-24:00
Demand (MW)	Peak	212	202	271	264	298	329	278
	Average	204	196	244	236	251	310	239
Availability from various sources(MW)	ISGS-Coal+Gas	150	150	149	148	148	149	149
	ISGS-Hydro	127	121	129	134	159	206	173
	State Gas Generation	0	0	0	0	0	0	0
	State Hydro Generation	313	268	251	201	207	294	324
	State Solar Generation	0	0	0	0	0	0	0
	LT Contracts	0	0	0	0	0	0	0
	ST Contracts	0	0	0	0	0	0	0
Total Availability (C)(MW)	589	538	530	483	514	649	646	
Peak Surplus(+)/ Deficit(-) (IN MW)	377	336	258	219	216	319	368	
Average Surplus(+)/ Deficit(-) (IN MW)	384	342	286	247	263	339	407	



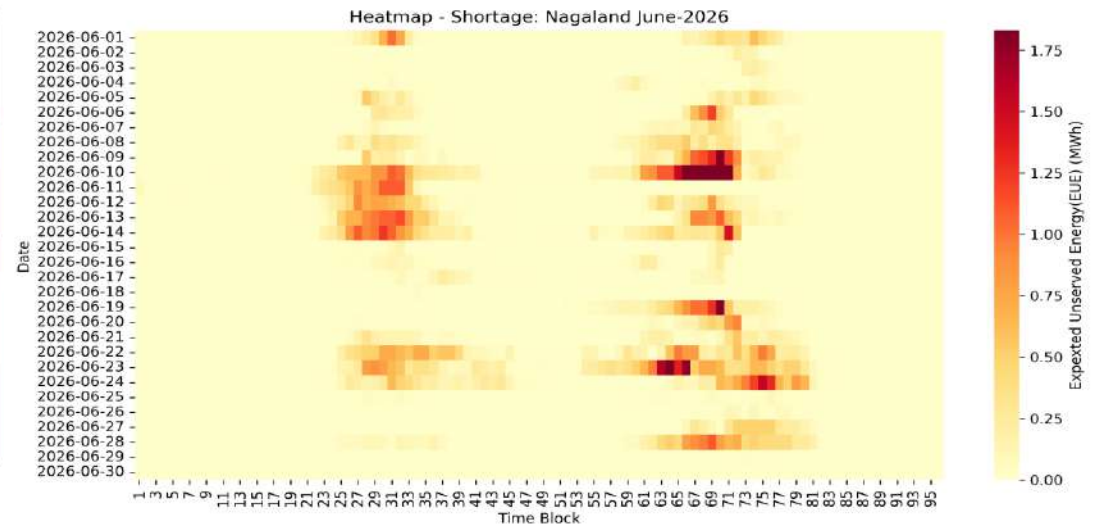
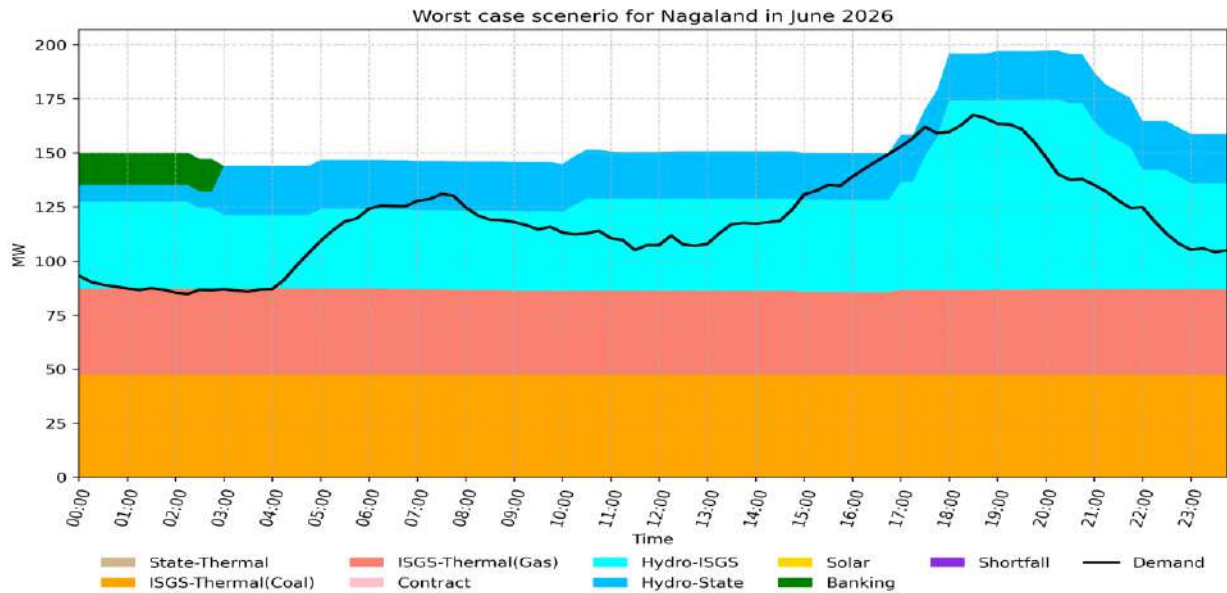
MIZORAM

Month	Jun-26							
	Time Period	00:00-02:00	02:00-05:00	05:00-08:00	08:00-14:00	14:00-17:00	17:00-22:00	22:00-24:00
Demand (MW)	Peak	76	62	100	100	143	144	121
	Average	60	51	76	77	107	123	88
Availability from various sources(MW)	ISGS-Coal+Gas	76	76	76	75	75	76	76
	ISGS-Hydro	44	42	44	46	55	74	61
	State Gas Generation	0	0	0	0	0	0	0
	State Hydro Generation	51	49	49	49	48	49	52
	State Solar Generation	0	0	2	11	3	0	0
	LT Contracts	0	0	0	0	0	0	0
	ST Contracts	0	0	0	0	0	0	-20
Total Availability (C)(MW)	171	168	171	181	181	199	169	
Peak Surplus(+)/ Deficit(-) (IN MW)	95	106	71	80	38	55	48	
Average Surplus(+)/ Deficit(-) (IN MW)	111	116	96	104	74	76	81	



NAGALAND

Month	Jun-26							
	Time Period	00:00-02:00	02:00-05:00	05:00-08:00	08:00-14:00	14:00-17:00	17:00-22:00	22:00-24:00
Demand (MW)	Peak	110	115	160	150	176	183	149
	Average	89	87	119	110	135	151	109
Availability from various sources(MW)	ISGS-Coal+Gas	87	87	87	86	86	87	87
	ISGS-Hydro	51	48	51	53	64	87	72
	State Gas Generation	0	0	0	0	0	0	0
	State Hydro Generation	23	23	23	22	22	23	23
	State Solar Generation	0	0	0	0	0	0	0
	LT Contracts	0	0	0	0	0	0	0
	ST Contracts	-15	-5	0	0	0	0	0
Total Availability (C)(MW)		146	153	161	162	172	196	181
Peak Surplus(+)/ Deficit(-) (IN MW)		36	38	1	12	-4	13	32
Average Surplus(+)/ Deficit(-) (IN MW)		57	67	42	52	37	45	72



TRIPURA

Month	Jun-26							
	Time Period	00:00-02:00	02:00-05:00	05:00-08:00	08:00-14:00	14:00-17:00	17:00-22:00	22:00-24:00
Demand (MW)	Peak	348	310	370	447	451	441	434
	Average	309	279	281	372	393	407	376
Availability from various sources(MW)	ISGS-Coal+Gas	169	169	168	166	165	167	168
	ISGS-Hydro	55	52	55	57	68	93	77
	State Gas Generation	103	95	89	106	108	108	108
	State Hydro Generation	0	0	0	0	0	0	0
	State Solar Generation	0	0	2	3	1	0	0
	LT Contracts	25	25	32	72	70	27	25
	ST Contracts	0	0	0	0	0	0	20
	Total Availability (C)(MW)	352	340	346	402	411	395	397
Peak Surplus(+)/ Deficit(-) (IN MW)	4	30	-25	-45	-39	-46	-37	
Average Surplus(+)/ Deficit(-) (IN MW)	43	62	65	30	19	-12	21	

