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

SPEED POST/FAX
Ph : 0364-2534039
Fax: 0364-2534040
email: nerpc@ymail.com
website: www.nerpc.gov.in

No. NERPC/NETeST/2026/ 2118–2161

23rd October 2026

सेवा में / To

As per list attached

विषय: 35 वीं एन.ई टेस्ट बैठक का कार्यवृत्त - विषयक
Sub: Minutes of 35th NETeST meeting - reg.

महोदय/महोदया,

कृपया आपकी जानकारी और आवश्यक कार्रवाई के लिए, 09 अक्टूबर 2026 (शुक्रवार) को सुबह 10:00 बजे होटल रैडिसन ब्लू, गुवाहाटी में आयोजित 35 वीं NETeST (NER टेलीकम्युनिकेशन SCADA और टेलीमेट्री) बैठक का कार्यवृत्त इसके साथ संलग्न है। यह कार्यवृत्त एन.ई.आर.पी.सी की वेबसाइट www.nerpc.gov.in पर भी उपलब्ध है।

कृपया कोई भी टिप्पणी जल्द से जल्द एन.ई.आर.पी.सी सचिवालय को सूचित करें।

यह सदस्य सचिव, एन.ई.आर.पी.सी के अनुमोदन से जारी किया जाता है।

Sir/Madam,

Please find enclosed herewith the minutes of the 35th NETeST (NER Telecommunication SCADA & Telemetry) meeting which was held on 09th October 2026 (Friday) at 10:00 hrs at Hotel Radisson Blu, Guwahati 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.

This issues with the approval of Member Secretary, NERPC.

भवदीय / Yours faithfully,

23/X/2026

(डी.के. बौरी / D.K Bauri)
निदेशक / Director

Distribution List:

1. Managing Director, AEGCL, Bijuli Bhawan, Guwahati – 781 001
2. Managing Director, APGCL, Bijuli Bhawan, Guwahati – 781 001
3. Managing Director, APDCL, Bijuli Bhawan, Guwahati – 781 001
4. Managing Director, MSPCL, Electricity Complex, Keishampat, Imphal – 795 001
5. Managing Director, MSPDCL, Secure Office Bldg. Complex, South Block, Imphal – 795 001
6. Director (Transmission), MePTCL, Lumjingshai, Short Round Road, Shillong – 793 001
7. Director (Generation), MePGCL, Lumjingshai, Short Round Road, Shillong – 793 001
8. Director (Distribution), MePDCL, Lumjingshai, Short Round Road, Shillong – 793 001
9. Director (Tech.), TSECL, Banamalipur, Agartala -799 001.
10. Director (Generation), TPGCL, Banamalipur, Agartala -799 001.
11. GM (Transmission), TPTL, Bidyut Bhaban, Banamalipur, Agartala -799 001.
12. Chief Engineer (WE Zone), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
13. Chief Engineer (TP&MZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
14. Chief Engineer (Commercial) -cum- CEI, DoP, Govt. of Arunachal Pradesh, Itanagar- 791111
15. Engineer-in-Chief, P&E Department, Govt. of Mizoram, Aizawl – 796 001
16. Engineer-in-Chief, Department of Power, Govt. of Nagaland, Kohima – 797 001
17. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
18. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad, Haryana-121003
19. Group GM, NTPC, Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
20. Vice President (Plant), OTPC, Badarghat Complex, Agartala, Tripura – 799014
21. ED, PGCIL/NERTS, Dongtieh-Lower Nongrah, Lapalang, Shillong -793 006
22. AGM (BD), NVVN, Core 5, 3rd floor, Scope Complex, 7 Institutional Area, Lodhi Rd., N. Delhi-3
23. Vice President, PTCIL, 2nd Floor, NBCC Tower, 15, Bhikaji Cama Place, New Delhi – 110066
24. Dy. COO, CTUIL, "Saudamini", 1st Floor, Plot No. 2, Sector-29, Gurugram, Haryana – 122001
25. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066
26. Chief Engineer, NPC Division, Central Electricity Authority, New Delhi – 110066
27. ED, NERLDC, Dongtieh, Lower Nongrah, Lapalang, Shillong -793 006
28. CGM, AEGCL, Bijuli Bhawan, Guwahati – 781001
29. CGM, APGCL, Bijuli Bhawan, Guwahati – 781001
30. CGM, DISCOM, Bijuli Bhawan, Guwahati – 781001
31. Head of SLDC, Dept. of Power, Govt. of Arunachal Pradesh, Itanagar – 791111
32. CGM, (LDC), SLDC Complex, AEGCL, Kahilipara, Guwahati-781 019
33. Head of SLDC, MSPCL, Imphal – 795001
34. Head of SLDC, MePTCL, Lumjingshai, Short Round Road, Shillong – 793 001
35. Head of SLDC, P&E Deptt. Govt. of Mizoram, Aizawl – 796 001
36. Head of SLDC, Dept. of Power, Govt. of Nagaland, Dimapur – 797103
37. Head of SLDC, TSECL, Agartala – 799001
38. Chief Engineer (Elect), Loktak HEP, Vidyut Vihar, Kom Keirap, Manipur- 795124
39. DGM (O&M), OTPC, Badarghat Complex, Agartala, Tripura – 799014
40. Director, NETC, 2C, 3rdFloor, D21Corporate Park, DMRC Building Sector 21, Dwarka, Delhi-77
41. Head, Transmission, KMTL, 7th Floor, Fulcrum, Sahar Road, Andheri (E), Mumbai-400099
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

23/X/2026

(डी.के. बौरी / D.K Bauri)
निदेशक / Director

सत्यमेव जयते

MINUTES

OF

35TH NETeST MEETING

Time of meeting: 10:00 Hrs.

Date of meeting: 09th October, 2026 (Friday)

Venue: Hotel Radisson Blu, Guwahati

Contents

Proceedings of the Meeting: **4**

1. PART-A: CONFIRMATION OF MINUTES **5**

1.1. Confirmation of Minutes of 34th Meeting of NETeST Sub-Committee of NERPC 5

2. PART-B: ITEMS FOR DISCUSSION **6**

AGENDA FROM NERPC 6

2.1. CEA (Cyber Security in Power Sector) Regulation-2026: NERPC 6

2.2. Progress of SCADA/EMS ULDC-III Project of NER: NERPC 7

2.3. Status of AMC of SCADA/EMS ULDC-II Project of NER: NERPC 9

2.4. Performance Audit of Communication systems installed at ISTS/SLDC stations: NERPC 12

2.5. Communication System Outage Planning: NERPC 14

2.6. Introduction and Go-Live of Communication System Outage Planning Portal (CSOPP): NERLDC 17

2.7. Guidelines on Availability of Communication system: NERPC 18

2.8. Status of establishment of Cyber Security Operation Centre (C-SOC) at SLDCs: NERPC 21

2.9. Regional Cyber Security Coordination Forums for NER: NERPC 23

AGENDA FROM NERLDC 25

2.10. Deployment of Firewalls in OT Infrastructure in Compliance with CEA Cyber Security Regulations, 2026: NERLDC 25

2.11. Strengthening of ER–NER Inter-Regional Communication Connectivity in NER: NERLDC/CTU 27

2.12. Unsatisfactory performance of 400 kV Binaguri – Bongaigaon link (ER–NER redundant communication path): NERLDC 31

2.13. Recurring outage of Misa Fibcom SDH node on AC supply failure despite DC power backup: NERLDC 32

2.14. Root Cause Analysis (RCA) for non-availability of VoIP connectivity at critical stations over Fibcom network: NERLDC 33

2.15. Shifting of Fibre optic (SDH-PDH) Panel from its current location to new location-NHPC(Loktak): NERLDC 34

2.16. Status of AMC for SAMAST System in NER States: NERLDC 36

2.17. Status of ADMS System in NER States: NERLDC 38

AGENDA FROM MSPCL (Manipur) 41

2.18. Execution of Regular Preventive Maintenance (PM) of Communication Equipment by AMC Agency under "Establishment of Optical Fibre Communication System for Wide Band Communication Expansion Plan in NER", and formulation of Plan for Missed Substations in recent PM work by the Agency: MSPCL (Manipur) 41

AGENDA FROM MePTCL (Meghalaya) 42

2.19. Communication system for LILO of 132 KV Mendipathar-Nangalbibra S/C line at 220/132 KV Nangalbibra (ISTS) substation: MePTCL 42

2.20. Establishment of 132 KV Kalain substation between 132 KV Lumshnong and Panchgram substations: MePTCL 44

AGENDA FROM ASSAM 45

2.21. Non submission of budgetary offer by M/s GE Vernova T&D Ind. Ltd for AMC of SCADA/EMS: AEGCL 45

AGENDA FROM PGCIL 46

2.22. Non availability of proper environmental conditions in communication equipment room at Loktak and Doyang: PGCIL 46

AGENDA FROM PwC 46

2.23. Status update of SAMAST and pending payments: PwC 46

AGENDA FROM CTUIL 47

2.24. Capacity Upgradation to STM-64 for ER-NER Inter regional connectivity in NER region: CTUIL 47

2.25. Network Assessment and planning for Migration from Legacy SDH to MPLS-TP technology for NER ISTS communication network- w.r.t 10th JC minutes, 18th NPC meeting & its deliberations: CTUIL 53

2.26. Restoration of ER–NER Redundant Communication Path via Bongaigaon–Binaguri-1 OPGW Link & BNC-Rangia-Bongaigaon-Alipurdwar link: CTUIL 57

2.27. Discrepancies pertaining to Availability report generated from NER UNMS: CTUIL 58

3. PART-C: ITEMS FOR UPDATE/FOLLOW-UP 60

NORTH EASTERN REGIONAL POWER COMMITTEE

MINUTES OF 35TH NETeST MEETING HELD ON 09.10.2026 (FRIDAY) AT 10:00 HRS

Proceedings of the Meeting:

Member Secretary, NERPC, welcomed all the participants from various utilities and NER States to the 35th NETeST meeting. At the outset, he requested to NERLDC that many issues pertaining to status of projects in NER are being discussed in the sub group meeting of their cyber security meeting which is duplicity of TeST meeting. He suggested that issues related to cyber issues should be discussed in threadbare for the benefits of NER.

He further emphasized the need for timely implementation of the SCADA/EMS Phase-III project in the NER. He stated that there should be no further delay in finalization of the DPR and requested all NER States to furnish their consent i.e. 70:30 ratio at the earliest so that the project could be taken forward within the envisaged timeline. He cautioned that any further delay may lead to escalation in the overall project cost.

He noted with concern that the AMCs of SCADA/EMS Phase -II, SAMAST and ADMS should be completed at the earliest. He also informed that during the 18th NPC meeting the issue for installation of MPLS-TP as the pilot project in NER has also been discussed which is an important step towards strengthening the communication infrastructure and enhancing the reliability of the power system. The MoM is awaited.

He also requested all the utilities to submit their agenda on time so that members could deliberate the issue and resolve amicably.

He apprised the forum that the NERPC Guest House at Guwahati is ready and has commenced operations from 01.10.2026. He informed that the constituents may avail the facility by making bookings.

Thereafter, he requested Director (Communication), NERPC to take up the agenda items for detailed deliberation.

1. PART-A: CONFIRMATION OF MINUTES

1.1. Confirmation of Minutes of 34th Meeting of NETeST Sub-Committee of NERPC

The minutes of the 34th meeting of NETeST Sub-committee held on 23.07.2026 at Guwahati was circulated vide letter No. NERPC/NETeST/2026/1438-1477 dated 07th August, 2026.

NERLDC vide email dated 28th August 2026 requested to add the missing annexures in the 34th NETeST meeting Minutes.

Accordingly, Annexures C 3.1_8, C 3.1_22a and C 3.1_22b have been uploaded in the website of NERPC alongside the minutes of 34th NETeST meeting.

Additionally, CTU intimated the following modification in para 3 of the minutes under the agenda item 2.18:

As per Minutes	***Proposed Modification***
Further, it was informed that all the nodes in the other regions have already been upgraded to STM-64….	Further, CTUIL informed that a similar type of exercise for upgradation of nodes to STM-64 is being done in other regions for Inter regional connectivity….

The Sub-committee agreed to the modification proposed by CTU.

The Sub-committee confirmed the minutes of the 34th NETeST meeting with the above modifications.

2. PART-B: ITEMS FOR DISCUSSION

AGENDA FROM NERPC

2.1. CEA (Cyber Security in Power Sector) Regulation-2026: NERPC

In exercise of the powers conferred by sub-section (1) of section 177 read with clause (c) of section 73 of the Electricity Act, 2003(36 of 2003), the Central Electricity Authority has issued the following regulations relating to Cyber Security in power sector for ensuring safe and secure operation and maintenance of electrical plants and electrical lines, namely: *"Central Electricity Authority (Cyber Security in Power Sector) Regulations, 2026"* on 31/07/2026. These regulations shall come into force with effect from 1st April 2027.

Deliberation of the Sub-committee:

Deputy Director, NERPC delivered a brief presentation on the *"Central Electricity Authority (Cyber Security in Power Sector) Regulations, 2026"* highlighting the key aspects (Copy of slides attached at **Annexure B 2.1 (i)**). *The important regulations and actions to be initiated by the various utilities were deliberated in detailed and the important aspects of the regulations which need to be complied by the States w.e.f. 1st April, 2027 were summarized at* ***Annexure-B 2.1 (ii)***.

Member Secretary, NERPC advised all the concerned stakeholders to take necessary steps for implementation of the regulations and stated that a special session shall be organised for all the states and utilities to create awareness about *"CEA (Cyber Security in Power Sector) Regulations, 2026"*.

The forum noted the important aspects of the regulations along with the actionable points by utilities and requested that the issue may also be highlighted in the upcoming 32nd TCC & NERPC meetings.

The Sub-committee noted as above.

***Action: NERLDC, NERPC and* all the states and utilities.**

2.2. Progress of SCADA/EMS ULDC-III Project of NER: NERPC

With reference to the NER SCADA/EMS ULDC-III Project which the 26th Monitoring Committee of PSDF had assigned to POWERGRID for implementation. PSDF has agreed to provide 70% of the cost of the project as grant and 30% of the cost of the project shall be contributed by POWERGRID as an equity.

During the 31st NERPC/TCC meeting held on 11th- 12th March 2026 at Aizawl, Mizoram following were recommended:

NERPC forum noted the consensus among the constituent states for implementation of the NER SCADA/EMS ULDC-III Project under the 70:30 funding mechanism.

Emphasizing that the comprehensive DPR already includes the AMC, the forum advised POWERGRID to proactively take up the matter with their higher management to secure the necessary approvals for executing the AMC component.

In the 33rd NETeST meeting, the issue on the AMC portion was also deliberated.

During the **34th NETeST meeting**, POWERGRID–ULDC apprised the forum that the revised DPR for the SCADA/EMS Upgradation Phase-III Project of the North Eastern Region is being prepared which will be completed by August, 2026. As part of the DPR preparation, budgetary quotations are being obtained from various vendors. The Bill of Quantities (BoQ) has been finalized based on the BoQ submitted by Grid-India to PSDF in May 2025, with a few additional items incorporated based on the experience gained from the ongoing SCADA/EMS upgradation projects in the Eastern and Northern Regions. Member Secretary, NERPC stated that the final DPR as prepared by POWERGRID shall be shared with all the concerned states along with the estimated cost break up. The forum also nominated nodal officers for the implementation of SCADA/EMS phase-III.

During the **242nd OCC meeting**, POWERGRID submitted the cost estimate of the project with detailed breakup of each state (attached as **Annexure B 2.2**) and timeline of the project as 36 months after the sanction order of PSDF. The cost estimate and break up for each state has been shared via e -mail dated 25/09/2026.

As per the DPR, the estimated cost of the SCADA/EMS Upgradation/Replacement Project for the North-Eastern Region is approximately ₹919.67 Crore at March 2026

price level, inclusive of the cost of a seven (7) year Annual Maintenance Contract (AMC) and excluding IDC (Nil).

The project cost as intimated by POWERGRID during 242nd OCC Meeting comprises:

₹730.94 Crores towards Supply, Installation, Testing and Commissioning of the SCADA/EMS system and associated infrastructure. ₹188.73 Crores towards AMC for a period of seven (7) years.

In accordance with the PSDF funding pattern, the proposed PSDF Grant, as intimated by POWERGRID during 242nd OCC Meeting, works out to ₹700.39 Crore, comprising 70% of the project cost and 100% of the AMC cost. The balance amount of ₹219.28 Crore shall be funded by POWERGRID through its internal resources/equity contribution.

During deliberation, POWERGRID clarified that the proposed 36-month period would be reckoned from the date of sanction of PSDF funding, while the post-award project execution period would be 24 months from the date of issue of Letter of Award (LoA). It was further informed that the tendering process would be initiated after sanction of the PSDF funding.

NER States agreed to the proposed implementation timeline of 36 months from the date of sanction of PSDF Fund.

Accordingly, Powergrid was conveyed to submit the DPR for PSDF Funding at the earliest.

In view of the same, following updates are requested from POWERGRID:

1. Status of DPR (to be updated by POWERGRID)
2. Board Approval of each State (to be updated by each SLDC)

<u>Deliberation of the Sub-committee:</u>

PGCIL apprised the forum that the DPR for implementation of NER SCADA/EMS ULDC-III project is at the approval stage with the higher management of POWERGRID and is expected to be submitted to PSDF by 20/10/2026.

The forum noted that Board approval for the 70:30 funding mechanism for implementation of NER SCADA/EMS ULDC-III project has been received from

Arunachal Pradesh, Mizoram (via e-mail dated 02/09/2026) and Manipur (via e-mail dated 01/10/2026).

Assam, Meghalaya, Tripura and Nagaland submitted that the proposal for Board approval would be put up after obtaining detailed tariff calculations for each state from POWERGRID.

MS, NERPC opined that the States may mention only the consent for 70%:30% PSDF funding pattern in their Board of Directors approval, and not any specific figure.
The forum advised PGCIL to submit the detailed tariff calculations for each state within a week. The forum noted that further deliberations in this matter shall be taken up in the upcoming 32nd TCC & NERPC meetings.

The Sub-committee noted as above.

Action: PGCIL and all states.

2.3. Status of AMC of SCADA/EMS ULDC-II Project of NER: NERPC

In the 32nd NETeST meeting held on 29th August 2025, Tripura and other NER states expressed concern about the exorbitantly high price of AMC quoted by M/s GE Vernova for the existing SCADA/EMS system. Accordingly, a NERPC special meeting on Extension of Comprehensive-AMC of SCADA/EMS system of NER states was held on 06th November 2025, wherein the scope of work and a common price for a two-year AMC extension were finalised with M/s GE Vernova, and the NER states were to sign their respective AMC contracts within 3 months from the issuance of the minutes of the special meeting.

In the 34th NETeST meeting, the status of AMC of each SLDC was updated as tabulated below.

Sl. No.	***Control Centre***	***Original AMC Expiry (7+2)***	***Extended AMC Expiry Date***	***Status as per 34th NETeST Meeting***	***Latest status***
1	AP	31-03-2027	Not required at present	Not required at present	
2	Assam	11-11-2024	11-11-2026	M/s GE Vernova T&D will give the offer for three	

				years AMC within 7–10 days.	
3	Manipur	07-11-2025	Under awarding stage	E-mail regarding clarification of LoA sent to M/s GE. M/s GE has assured to send confirmation by July-2026.	LoA for extension of AMC for 2 years (2nd phase), from 08.11.2025 to 07.11.2027, issued to M/s GE T&D India Ltd. vide No. 4/SLDC/AMC/SCADA/EMS /2024/MSPCL(PURCH)/367 5-80 dated 09th September 2026. (Annexure C 3.1_24
4	Meghalaya	31-03-2025	31-03-2027	Not required at present	
5	Mizoram	30-04-2026	Under awarding stage	LoA issued to M/s GE Vernova T&D on 02/04/2026. Issue regarding BG submission will be resolved by July-2026.	
6	Nagaland	31-03-2027	Not required at present	Not required at present	
7	Tripura	31-03-2025	Under awarding stage	LoA issued. M/s GE will send confirmation shortly.	

As per the tentative schedule submitted by POWERGRID (242nd OCC meeting), the SCADA/EMS Upgradation Project under NER ULDC Phase-III is expected to be completed by August 2029. Hence, the existing SCADA/EMS systems of all NER states are required to be kept under AMC till the commissioning and taking over of the new system under ULDC Phase-III. It is to be noted that the extended AMC of Assam is expiring on 11th November 2026, and the AMC of Arunachal Pradesh, Meghalaya and Nagaland are expiring on 31st March 2027.

All states are requested to ensure that the AMC is extended accordingly, without any gap in OEM support.

Deliberation of the Sub-committee:

The status update of AMC of SCADA/EMS ULDC-II for NER as per 35th NETeST are as follows:

Sl. No.	Control Centre	Original AMC Expiry (7+2)	Extended AMC Expiry Date	Status as per 34th NETeST Meeting	Status as per 35th NETeST Meeting
1	AP	31-03-2027	Not required at present	Not required at present	Not required at present. The forum advised AP to take necessary action for renewal before expiry of the AMC.
2	Assam	11-11-2024	11-11-2026	M/s GE Vernova T&D will give the offer for three years AMC within 7–10 days.	M/s GE Vernova T&D has shared a budgetary quote for AMC of 2 years for Rs. 2.93 crore (excluding taxes)) via e mail dated 07/10/2026. Further deliberations shall be held in the special meeting with M/s GE Vernova T&D.
3	Manipur	07-11-2025	Under awarding stage	E-mail regarding clarification of LoA sent to M/s GE. M/s GE has assured to send confirmation by July-2026.	LoA for extension of AMC for 2 years (2nd phase), from 08.11.2025 to 07.11.2027, issued to M/s GE T&D India Ltd. on 09th September 2026.
4	Meghalaya	31-03-2025	31-03-2027	Not required at present	Not required at present. The forum advised Meghalaya to take necessary action for renewal before expiry of the AMC.
5	Mizoram	30-04-2026	Under awarding stage	LoA issued to M/s GE Vernova T&D on 02/04/2026. Issue regarding BG submission will be resolved by July-2026.	BG not yet submitted by M/s GE Vernova T&D.
6	Nagaland	31-03-2027	Not required at present	Not required at present	Not required at present. The forum advised Nagaland to take necessary action for renewal before expiry of the AMC.
7	Tripura	31-03-2025	Under awarding stage	LoA issued. M/s GE will send confirmation shortly.	M/s GE Vernova T&D has not yet conveyed acceptance of the issued LoA.

Constituent members of NER expressed displeasure on the delayed response and offer by M/s GE Vernova whenever they requested them. They opined that if the lukewarm response continues, they should be black listed in NER.

The forum decided to convene a special meeting with the concerned team/officers of M/s GE Vernova T&D to finalize the extension of AMC for the existing SCADA/EMS ULDC Phase-II for Assam as well as the States whose AMC in going to expire on March-2027.

The Sub-committee noted as above.

Action: NERPC, NERLDC and all states.

2.4. Performance Audit of Communication systems installed at ISTS/SLDC stations: NERPC

As per Clause 10 of Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017 – "The RPC Secretariat shall conduct a performance audit of communication system annually as per the procedure finalized in the forum of the concerned RPC. Based on the audit report, RPC Secretariat shall issue necessary instructions to all stakeholders to comply with the audit requirements within the time stipulated by the RPC Secretariat."

The Communication Audit Committee of North Eastern Region vide NERPC letter dated 30.07.2024 has been formed based on the provision of Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017.

In the 32nd NETeST meeting, the forum requested the data from the following utilities as per the table described below to conduct the communication audits:

Sl No.	State/Utility	Name of sub station
1	Arunachal Pradesh	SLDC Arunachal Pradesh, Chimpu
2	Assam	Kahilipara and Sarusajai
3	Nagaland	SLDC Nagaland
4	Meghalaya	NEHU and SLDC Meghalaya
5	Manipur	SLDC Manipur
6	Tripura	SM Nagar (Tripura)
7	Mizoram	SLDC Mizoram

8	PGCIL	Nirjuli, Aizawl, Dimapur, Imphal and Misa
9	Indigrid	SM Nagar, PK Bari
10	NHPC	Loktak
11	NEEPCO	Kathaguri

The data from all the NER states, PGCIL and Indigrid has been received via e-mails. PGCIL has submitted the data for NEEPCO (Kathalguri) and NHPC (Loktak) via e-mail dated 23/04/2026. Data from Assam in respect of Sarusajai sub station is still awaited.

The communication audits in respect of SLDC Tripura, SM Nagar (Tripura) and SM Nagar (Indigrid) have been completed on 14th May 2026 and 15th May 2026 respectively. The communication audit reports in respect of SLDC Tripura, SM Nagar (Tripura) and SM Nagar (Indigrid) have been shared over e-mails dated 28/07/2026.

The completion status of communication audit is as detailed below:

Completed	Pending
Assam: Kahilipara	**Arunachal Pradesh**: SLDC Arunachal Pradesh, Chimpu
Meghalaya: NEHU and SLDC Meghalaya	**Assam:** Sarusajai
Tripura: SLDC Tripura and SM Nagar (Tripura)	**Nagaland:** SLDC Nagaland
Indigrid: SM Nagar	**Manipur:** SLDC Manipur
	Mizoram: SLDC Mizoram
	PGCIL: Nirjuli, Aizawl, Dimapur, Imphal and Misa
	Indigrid: PK Bari
	NHPC: Loktak
	NEEPCO: Kathalguri

The communication audit plan for the pending stations is as mentioned below:

Sl No.	Month	Target Stations
1	October-2026	**Assam:** Sarusajai, **PGCIL:** Misa
2	November-2026	**NEEPCO:** Kathalguri **Arunachal Pradesh**: SLDC Arunachal Pradesh

3	December-2026	**Nagaland:** SLDC Nagaland **PGCIL:** Dimapur
4	January 2027	**Mizoram:** SLDC Mizoram

The communication audits in respect of **Sarusajai (Assam)** and **Misa (PGCIL)** has been planned from 13/10/2026 to 15/10/2026.

Deliberation of the Sub-committee:

The forum noted the communication audit plan as planned by NERPC and also advised all the concerned states and utilities to comply with the communication audit report and to submit a point-wise compliance report to NERPC.

NERPC further submitted that nominations for communication audits in respect of Sarusajai (Assam) and Misa (PGCIL) have been requested from Assam, PGCIL and NERLDC. In this regard, nominations have been received from NERLDC and PGCIL. Nomination from Assam is still awaited. Assam was further requested to submit the requisite data for communication audit of Sarusajai substation.

Assam agreed to submit their nomination for audit as well as the requisite data for Sarusajai substation within a week.

The Sub-committee noted as above.

Action: NERPC, NERLDC, PGCIL and Assam.

2.5. Communication System Outage Planning: NERPC

As per Regulation 7.3 of Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017:

Quote:

The RPC Secretariat shall be responsible for outage planning for communication system in its region. RPC Secretariat shall process outage planning such that uninterrupted communication system is ensured.

Unquote

Communication System Outage Planning will be limited to the following systems:

a. ISTS Communication System including ISGS
b. Intra-state Communication System being utilized for ISTS Communication
c. ICCP links between Main & Backup RLDCs, Main & Backup SLDCs & Main & Backup NLDCs.

d. Inter-regional AGC links
e. Any other system agreed by the sub-group

- Communication System Outage Planning (CSOP) meeting shall be conducted during the third week of every month normally (preferably through VC) to discuss and approve the proposed outages of communication links and equipment.
- In case of any emergency outage requirement of communication links and equipment, Entities/Users/Owners may directly apply to respective RLDC with intimation to respective RPCs on D-2 basis. Confirmation of approval/rejection will be provided on D-1 basis by RLDCs in consultation with respective RPCs considering 24hrs processing window.
- Detailed SOP of Communication System Outage Planning circulated
- As per Communication system outage planning SOP provision, Monthly Communication system Outage planning meeting needs to be conducted in current month for approval of planned outage of communication equipment's and links in next month.
- Hence, it is proposed to start outage planning for Communication system in line with provisions of Communication system regulations, 2017.

In the 32nd NETeST meeting, NERLDC presented a draft list of critical communication elements which impacts the NER grid during outage. The forum requested all constituents to review the list and provide their inputs, including any modification, additions of any communication links, devices, or related elements, at the earliest.

It was further decided that proposal for communication system outages shall be discussed and approved along with the monthly OCC Shutdown of Transmission elements, and the status would be updated in the subsequent NETeST meetings on a quarterly basis for the information of members.

In the 33rd NETeST meeting, the forum noted that planned communication shutdown proposals from May-2026 onwards shall be put up for deliberation in OCC shutdown meetings by all the concerned utilities. The forum also advised NERLDC to allow D-2 communication shutdown proposals only in case of emergency.

In the 34th NETeST meeting, the forum advised NERLDC to incorporate minor modifications in the outage portal so that the communication related shutdowns can be segregated from the OCC proposed shutdowns. Further, the forum advised all the concerned utilities to apply monthly communication shutdown proposals in the outage portal of NERLDC.

Deliberation of the Sub-committee:

The agenda was taken up along with Agenda B 2.6.

DM, NERLDC presented the Communication System Outage Planning Portal (CSOPP) to the forum wherein all the details of the portal were deliberated and discussed.

It was informed that the Manuals (SOP) for the Communication System Outage Planning Portal (CSOPP) are available on the portal and are attached herewith from **Annexure-2.5(1) to Annexure-2.5(3).**

Each entity is requested to furnish the details of the nodal officers and persons requiring access to the portal via email to NERLDC and NERPC with details such as Name, Email Id and Designation.

The portal will be available to access via URL: ***https://csopp.nerldc.in***. The forum agreed to punch the planned outage of December 2026 via the CSOPP portal and emergency shutdowns with immediate effect.

The forum advised all the stakeholders to provide NERLDC with the requisite details of their respective nodal officers and of the officers requiring access to the portal and to complete the registration on the Communication System Outage Planning Portal (CSOPP) for NER.

After detailed deliberations, the forum decided to implement the Communication System Outage Planning using the above portal ***w.e.f. 1st December, 2026***.

The Sub-committee noted as above.

Action: NERLDC, all constituents.

2.6. Introduction and Go-Live of Communication System Outage Planning Portal (CSOPP): NERLDC

North Eastern Regional Load Despatch Centre (NERLDC), in coordination with NERPC, has developed the Communication System Outage Planning Portal (CSOPP) for the constituent entities of the NER Grid.

NERLDC will present the key workflows of the portal, including login and two-factor authentication, asset registration, submission of outage proposals, confirmation and declaration of outages, and application for emergency outages.

The roles and responsibilities of the entities, applicable timelines, and the onboarding process for go-live will also be explained during the session.

As part of the onboarding process, each entity is requested to furnish the following details of its Nodal Officer:

Name

Designation

Phone Number

Email ID

Further, each entity is requested to provide the details of the person(s) who will require access to the CSOPP portal, as follows:

Name

Desired Username

Email ID

The above details may be provided to NERLDC for creation of the necessary user accounts and access credentials.

The forum is requested to take note of the above and start using the CSOPP portal with effect from 15th October 2026.

<u>Deliberation of the Sub-committee:</u>

NERLDC apprised the forum that the Communication System Outage Planning Portal (CSOPP) for the constituent entities of the NER Grid has been developed in-house by NERLDC and the portal shall ***go live from 15th October 2026***.

NERLDC further demonstrated the key workflows of the portal, including login and two-factor authentication, asset registration, submission of outage proposals, confirmation and declaration of outages, and application for emergency outages.

The forum advised NERLDC to conduct an online training for handholding purpose for all the states and utilities and to provide the URL for registration on the portal. ED, NERLDC advised NERLDC to share the SoP for operating the Communication System Outage Planning Portal (CSOPP) for NER along with the URL for registration via e-mail to all the constituents.

The forum advised all the stakeholders to provide NERLDC with the requisite details of their respective nodal officers and of the officers requiring access to the portal and to complete the registration on the Communication System Outage Planning Portal (CSOPP) for NER. The forum also put in record appreciation to Sh. Sakal Deep, DM for in-house development of the portal.

The Sub-committee noted as above.

Action: NERLDC and all constituents.

2.7. Guidelines on Availability of Communication system: NERPC

CERC vide order dated 19.01.2024 had approved the "Guidelines on Availability of Communication System" under the *Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017*.

- In 28th NETeST meeting, the sub-committee decided that CTU shall provide the details of communication channels to NERLDC and NERLDC shall forward the information of the channels to NERPC for computation of availability of the communication systems.
- CTU agreed to provide the list of channels as per guidelines from UNMS. Member Secretary, NERPC asked CTU to provide the information within 2 weeks. CTU has not provided the requisite information. CTU to update on the matter.
- In 30th NETeST Meeting, CTU apprised the forum that sharing the desired list of communication channels comes under the operational aspect of grid communication and CTU being a planning body shall not be responsible for sharing the list of communication channels. CTU informed that they file

Petition in Hon'ble CERC in October-2024 in this regard & hearing for the petition has been scheduled on 13/02/25. CTU further stated that the course of action shall be decided as per the hearing of Hon'ble CERC.

- NERPC responded that as per Communication regulations shared by the Hon'ble CERC in January-2024, it is the responsibility of CTU to share the details of channels for communication. NERPC further stated that it is important to determine the channels whose availability is to be calculated. ULDC-POWERGRID agreed to share the list of important ISTS channels.
- The forum advised ULDC-POWERGRID to share the list of important ISTS channels by 10th February-2025.

In 31st NETeST meeting, ULDC-POWERGRID shared the list of important ISTS channels to NERPC. However, the forum noted that the format of the shared list does not clarify the type of service for which the channel is being used. Moreover, the nature of the outages and the duration of the down time of the channels are not specified. PGCIL responded that these evolving requirements should be resolved after the proper tagging process is completed.

In the 32nd NETeST meeting, it was informed that the uniform format for Communication Availability was approved in 16th NPC meeting. The forum agreed to adopt the finalized format as approved in 16th NPC meeting.

Further, PGCIL informed that the standard naming convention of Communication channels and equipment is under finalization. The forum advised Powergrid/CTU to share the requisite information at the earliest so that the NERPC can issue the Availability of Communication System.

In the 34th NETeST meeting, PGCIL apprised the forum that the issues pertaining to M/s ECI and M/s Tejas make equipment have been resolved and the naming convention has been streamlined and updated in UNMS. The issues related to M/s Fibcom make equipment are also under progress and shall be completed by 15th August 2026.

NERLDC has shared the partially verified Communication Availability report for the month of August 2026 as shared by CTUIL via e- mail dated 24/09/2026. The channel availability reports for the month of August 2026 is attached as **Annexure B 2.7 (i) and (ii)**.

However, these reports cannot be verified by NERLDC due to following pending issues in the UNMS-NER System:

1. The report submitted is only a summary pertaining to POWERGRID. It is requested to CTUIL to provide the corresponding report for all other Transmission Service Providers (TSPs) as well.

2. Naming Nomenclature Standardization – Lack of Uniformity Across Vendors: NERLDC has raised persistent operational challenges due to the lack of a standardized naming convention for services within the U-NMS system. The service identifiers auto-generated by different OEM platforms such as ECI, ABB, and Fibcom are often ambiguous and do not clearly indicate the nature or function of the respective service (e.g., RTU, PMU, VoIP). This ambiguity hampers efficient fault identification and resolution during service disruptions. PGCIL has informed that naming nomenclature is under implementation.

At present most of the services nomenclature is standardized. (14 services nomenclature standardization is pending)

Deliberation of the Sub-committee:

NERLDC apprised the forum that currently 95% of all communication links are reporting clearly in UNMS. The communication links of all other private TSPs except Indigrid have been configured and integrated by PGCIL. Indigrid submitted that support from M/s GE Vernova T&D is awaited to complete the configuration and integration works.

Regarding naming nomenclature, PGCIL submitted that the issues pertaining to ECI and Tejas make equipment have been completely resolved. POWERGRID further submitted that the issues related to alarm logs of Fibcom related equipment have been resolved and the issue with the inventory list for Fibcom make equipment is being addressed.

Further, the forum advised all transmission licensees to furnish the reasons for outage of communication channels in the availability report.

The forum requested NERPC to issue the Communication Availability for PGCIL and other TSPs ***w.e.f. November, 2026.***

The Sub-committee noted as above.

Action: PGCIL, M/s GE Vernova T&D and Indigrid.

2.8. Status of establishment of Cyber Security Operation Centre (C-SOC) at SLDCs: NERPC

As per Clause 3(j) of the Information Technology (Information Security Practices and Procedures for Protected System) Rules, 2018, organizations with protected systems are mandated to establish a Cyber Security Operation Centre (C-SOC) to implement real-time preventive, detective, and corrective controls against cyber threats.

Furthermore, following a review meeting chaired by the Secretary (Power) on 21.03.2025, it was mandated that SOC proposals submitted under the PSDF-funded scheme must include indigenous SOC and NOC solutions, along with a 5-year Annual Maintenance Contract (AMC).

During the 31st NERPC meeting, Chairperson, NERPC opined that NERPC Secretariat shall take over the responsibility of preparing the DPRs and NITs for all the constituent states (with the exception of Assam). This centralized approach aims to ensure the standardization of systems, encourage participation from reputed vendors, and facilitate the cost-effective implementation of the project across the region.

To achieve this, NERPC forum suggested that a Sub-Committee comprising representatives from all the concerned states, NERLDC, and NERPC be formed to thoroughly review and finalize the DPR.

The Sub-Committee would comprise 1 member each from Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Tripura and NERLDC and NERPC Secretariat would be Convener of the committee.

In view of the above, a letter requesting the nomination of officers (Name, Designation, Contact No., Email ID) possessing the requisite technical background not below the rank of Executive Engineer (EE), was sent via e-mail dated 02/04/2026. The nominations were requested latest by 10th April 2026.

Nominations of Nodal officer from DoP, Arunachal Pradesh, P&E Mizoram, Manipur, Meghalaya and SLDC Tripura have been received by NERPC Secretariat.

In the 34th NETeST meeting, Member Secretary, NERPC had apprised the forum that TESG meeting of PSDF Secretariat had been held on 22/07/2026 wherein it had been conveyed that in principle agreement had been given for the project with minor observations. NERPC had e-mailed to all the 5 NER states (Meghalaya, Manipur, Mizoram, Tripura and Arunachal Pradesh) to submit the following requisite information:

1. Approval of the project from the Board / Senior Management of the respective utility.
2. Format A-6, duly filled in and signed, as stipulated in the DPR.
3. Detailed list of existing equipment presently available at the respective SLDC's.

In this regard, response has been received from Meghalaya vide e-mail dated 27/07/2026 wherein data as requested in Sl No. 2 & 3 above has been furnished. It has been further mentioned that board approval shall be given upon finalisation in the upcoming BoD meeting for Meghalaya.

Board approvals have been obtained for Arunachal Pradesh and Mizoram.
Assam and Nagaland are also requested to update the current status.

Deliberation of the Sub-committee:

NERPC informed that the Board Approvals for the establishment of Cyber Security Operation Centres (C-SOC) at SLDCs of NER have been obtained from Manipur, Mizoram, Tripura and Arunachal Pradesh, however, Board Approval from Meghalaya only is still awaited. Forum requested Meghalaya to send the approval at the earliest to avoid unnecessary delay in executing the project. Meghalaya agreed.

On enquiry, Assam informed that the NIT have already been published and the outcome of the same will be intimated in the next meeting.

Nagaland informed that they have sent the letter to NERPC seeking consent if the NIT can be floated since TESG approval has been approved. MS, NERPC informed that he will seek input from PSDF Secretariat and reply back to Nagaland at the earliest.

The Sub-committee noted as above.

Action: Meghalaya, Nagaland & NERPC.

2.9. Regional Cyber Security Coordination Forums for NER: NERPC

The Government of India, through Information Technology Act-2000 laid the foundation of CERT-In, an organization dedicated to the cause of Cyber Security Standards, Compliances, Incident Response and Guidance. The GoI, Ministry of Power, CEA and Central Electricity Regulatory Commission brought in multi-layered approach to coordinate cyber defence, considering the intensity and complexity of the cyber threat perceptions in Indian Power Sector.

Brief of the relevant Regulations with respect to regional-sub-sectoral coordination forums are given under:

i. Clause 53(1) & (2) of IEGC 2023 stipulate as below:
   a) The sectoral CERT (Computer Emergency Response Team) for wings of power sector, as notified by Government of India, from time to time, shall form a Cyber Security Coordination Forum with members from all concerned utilities and other statutory agencies to coordinate and deliberate on the cyber security challenges and gaps at appropriate level. A sub-committee of the same shall be formed at the regional level.
   b) The sectoral CERT shall lay down rules of procedure for carrying out their activities.

ii. The draft Central Electricity Authority (Cyber Security in Power Sector) Regulations, 2025 proposes the following (at Clause 5):

The Authority through separate order may also designate sub sectoral CERTS in Power Sector for Generation, Transmission, Distribution, Grid Operation and any other sub-sector, along with their roles and responsibilities, to assist CSIRT-Power.

The Government of India after reviewing the needs of Cyber Security in Critical Infrastructure Sector, created dedicated Sectoral CERTs. Following the directives of GOI/ CERT-In, MOP created six sectoral CERTs and designated nodal organisations, as listed below:

S.No.	Sectoral CERT	Nodal Organization
1	CERT – Thermal	NTPC
2	CERT – Hydro	NHPC
3	CERT – Transmission	POWERGRID

4	CERT – Distribution	DP&T Division, CEA
5	CERT – Grid Operation	NLDC
6	CERT – Renewable Energy	MNRE/SECI

The status of Regional Cyber security Coordination Forum (Thermal, Hydro and Transmission) in NER may be discussed.

In 31st TCC Meeting, the forum opined that the item is to be further discussed in Sub-Committee meeting(s) for detailed study/deliberation/clarification and is therefore referred to the Sub-Committee(s) of NERPC.

In the 33rd NETeST meeting, after detailed deliberations, the forum agreed that each nodal agency shall form a sub-committee for each sectoral CERT for NER grid consisting of:

- Representatives specializing in Cyber Security/IT from the respective nodal agencies, NERLDC, NERPC and Central/State Sector Generators/IPPs (For CERT Thermal/Hydro)
- Representatives specializing in Cyber Security/IT from the respective nodal agencies, NERLDC, NERPC and Central/State sector Transmission utilities/other TSPs (for CERT-Transmission).

The forum also noted that the respective sub committees shall sit quarterly to discuss the cyber security issues of NER grid pertaining to that sector. A letter in this regard shall be issued by NERPC to all the concerned stakeholders.

Accordingly, NERPC has issued letters dated 08/05/2026 for formation of Sub-committees for:

1. CERT-Thermal to NTPC (Bongaigaon)
2. CERT-Hydro to NHPC
3. CERT-Transmission to POWERGRID, NERTS

<u>Deliberation of the Sub-committee:</u>

POWERGRID informed that they have formed the sectoral CERT-Transmission for NER and already convened two meetings (Online mode).

NERPC informed that the details as requested by NTPC for formation of Sectoral CERT-Thermal for NER have been shared by NERPC Secretariat to NTPC.

The forum advised NTPC (Bongaigaon) and NHPC to expedite the process for formation of Sectoral CERT-Thermal and Sectoral CERT-Hydro for NER at the earliest.

Regarding CERT- Distribution, MS, NERPC stated that as discussed during 18th NPC meeting, one lead Discom from the region maybe nominated as member and the Nodal agency is DP&T, CEA.

The forum after deliberation, nominated APDCL as member of CERT-Distribution.

The Sub-committee noted as above.

Action: NTPC and NHPC.

AGENDA FROM NERLDC

2.10. Deployment of Firewalls in OT Infrastructure in Compliance with CEA Cyber Security Regulations, 2026: NERLDC

As per Clause 5(13) of the Central Electricity Authority (Cyber Security in Power Sector) Regulations, 2026, entities are required to ensure the deployment of all necessary security devices, including firewalls, at the Electronic Security Perimeter. The deployed security system shall, inter alia, provide capabilities such as packet filtering, deep packet inspection, content/user/application-based filtering, encrypted traffic inspection, intrusion detection and prevention, geo-fencing, automatic signature and behavioural updates, user-controlled updates, and detection, inspection and filtering based on signatures and behavioural anomalies.

In view of the above regulatory requirement, all SLDCs and all other entities (PGCIL, NHPC, NTPC, NEEPCO, Indigrid, Resonia and KMTL) are requested to deploy suitable firewalls at the following OT-related infrastructure:

1. Substations, Generating Stations and Switching Stations where RTUs/SASs are reporting to the SLDC or NERLDC over the IEC-104 protocol.
2. PMUs reporting to the respective SLDCs or NERLDC.
3. Periphery of ICCP Routers to secure the communication interface between the concerned systems (only in SLDCs).
4. ADMS System and its associated RTUs (only in SLDCs).
5. The entities and SLDCs are requested to assess the existing OT communication

architecture and take necessary action for deployment of firewalls at the above-mentioned locations, ensuring that the deployed security solutions comply with the requirements specified under the CEA (Cyber Security in Power Sector) Regulations, 2026.

The status of compliance/action taken in this regard may also be shared with NERPC and NERLDC for review and further coordination.

Deliberation of the Sub-committee:

NERLDC apprised the forum of Clause 5(13) of the CEA (Cyber Security in Power Sector) Regulations, 2026, which requires deployment of firewalls and other security devices at the Electronic Security Perimeter.

The list of peripheries where deployment of firewall and other cyber security devices required are:

1. Substations, Generating Stations and Switching Stations where RTUs/SASs are reporting to the SLDC or NERLDC over the IEC-104 protocol.
2. PMUs reporting to the respective SLDCs or NERLDC.
3. Periphery of ICCP Routers to secure the communication interface between the concerned systems (only in SLDCs).
4. ADMS System and its associated RTUs (only in SLDCs).
5. Meters installed at stations for accounting

NERLDC presented the list of central stations where firewall is installed and not installed. The list is attached as **Annexure-B 2.10.** NERLDC requested all Central Sector stations to take necessary actions for deployment of firewall.

POWERGRID informed the forum that six of its stations already have firewalls rest stations are being covered in upcoming SAS upgradation.

NERLDC requested SLDCs to take up with respective vendors of OT system for deployment of firewalls.

The Sub-committee noted as above.

Action: All stakeholders.

2.11. Strengthening of ER–NER Inter-Regional Communication Connectivity in NER: NERLDC/CTU

The forum may note that strengthening of ER–NER inter-regional communication connectivity has been under deliberation in various forums, particularly in view of the increasing communication requirements of the North Eastern Region.

During the 9th NER CPM meeting held on 16.03.2026, the requirement for formation of an STM-64 ring in NER, including NERLDC and Backup NERLDC, was discussed based on inputs from POWERGRID, NLDC and NERLDC.

Subsequently, the matter was deliberated in the 34th NETeST meeting held on 23rd July 2026, wherein CTU proposed the following STM-64 path for formation of the ER–NER ring:

ER – 400 kV Bongaigaon (PG) – 220 kV BTPS – 220 kV Agia – 220 kV Boko – 400 kV Azara – 220 kV Sarusajai – 132 kV Kahilipara – NERLDC Guwahati – 132 kV Kahilipara – 132 kV Umtru – 132 kV Umiam-III – 132 kV Umiam-I – 132 kV NEHU – NERLDC Shillong – 132 kV Khliehriat – 132 kV Khliehriat (PG) – 400 kV Misa (PG) – 400 kV Balipara (PG) – 400 kV Bongaigaon (PG) – 220 kV Salakati – ER.

The forum was informed that nodes in the other regions had already been upgraded to STM-64. CTU accordingly requested POWERGRID and concerned STUs to furnish details regarding spare fibre availability, link lengths and repeater requirements for the proposed STM-64 OPGW links.

After deliberation, the forum agreed in principle for upgradation to STM-64 in NER up to NERLDC and Backup NERLDC along the proposed path.

During the same deliberation, AEGCL highlighted that the BTPS–Agia–Chaygaon/Boko–Mirza (Azara)–Sarusajai section is presently equipped with old OPGW supplied in 2011, and that replacement of the existing OPGW would be essential for reliable STM-64 deployment. The forum advised AEGCL to explore funding for replacement of the OPGW on the Assam section and requested AEGCL to expand/upgrade its OPGW network, to the extent feasible, considering the upcoming Backup NRLDC and Backup ERLDC at NERLDC Guwahati.

Further, during the **10th CPM** held on 07th August 2026, CTUIL requested POWERGRID and State constituents to furnish complete details regarding spare fibre availability, link lengths, repeater requirements and network connectivity for assessment of the STM-64 network. CTUIL also sought technical inputs for optimization of the proposed STM-64 network, including the possibility of reducing intermediate nodes and associated FOTE requirements.

NERPC and NERLDC emphasized that STM-64 upgradation is essential for NER and suggested that the planning activities should continue in parallel with the approval and implementation of the proposed MPLS-TP scheme. It was accordingly agreed that a separate technical meeting involving NERPC, NERLDC and POWERGRID would be convened for detailed deliberation on the technical issues.

Subsequently, the matter of migration from legacy SDH to MPLS-TP technology for the NER ISTS communication network was taken up. CTUIL informed the forum that, based on the recommendations of the Joint Committee on MPLS-TP, migration of the existing Main and Backup Control Centre communication network and associated ISTS stations to MPLS-TP is proposed to be taken up initially in NER.

During the MPLS-TP deliberations, the forum discussed spare fibre availability, STU node requirements, utilization of spare fibre cores, OPGW augmentation and optimization of the existing network. CTUIL informed that a minimum of two fibre pairs would generally be required for MPLS-TP implementation. It was also highlighted that spare fibre pairs are presently not available on certain links associated with NERLDC–Khliehriat, Umtru–Umiam-III and Khliehriat (Meghalaya)–Khliehriat (POWERGRID), although additional fibre availability may be assessed under the OPGW schemes already awarded.

It is observed from the above deliberations that while STM-64 strengthening has already been agreed in principle, the subsequent planning for MPLS-TP migration is also progressing as the long-term communication technology for the NER ISTS network. However, finalization of the MPLS-TP architecture and associated requirements such as fibre availability, intermediate nodes, OPGW augmentation and network implementation are still under deliberation.

The forum may further note that the requirement for strengthening of ER–NER inter-regional communication connectivity has now assumed immediate importance in view of the upcoming commissioning of the NRLDC Backup Control Centre (BCC) SCADA and ERLDC Main-2 SCADA at NERLDC Guwahati.

Adequate bandwidth and reliable ER–NER communication connectivity would be required for operationalization of these systems. Therefore, the requirement for ER–NER strengthening needs to be addressed within the available implementation timeline.

At the same time, migration to MPLS-TP is envisaged as the future communication architecture and is considered for the NER ISTS communication network as pilot project. Accordingly, any interim strengthening should be planned to keep in view the subsequent MPLS-TP implementation, so that duplication of infrastructure and avoidable investment may be minimized.

In view of the above, the forum may deliberate on the following:

1. ***Immediate ER–NER bandwidth requirement:*** The communication bandwidth requirement associated with commissioning of NRLDC BCC-SCADA and ERLDC Main-2 SCADA may be assessed and an implementation roadmap may be finalized.
2. ***MPLS-TP as the long-term roadmap:*** The ongoing MPLS-TP planning may be considered while finalizing the ER–NER strengthening arrangement, including the availability of spare fibre, intermediate nodes, OPGW augmentation and implementation timelines.
3. ***Interim strengthening:*** In case the MPLS-TP network cannot be commissioned within the required timeframe, an interim strengthening of ER–NER connectivity may be considered to meet the immediate bandwidth requirement.
4. ***Utilization of STM-64 proposal***: The feasibility of implementing the already agreed-in-principle STM-64 strengthening as an interim arrangement may be examined, particularly for the ER–NER path up to NERLDC and Backup NERLDC, subject to availability and health of the optical fibre infrastructure.
5. ***Avoidance of duplication:*** The interim arrangement, wherever required, may be planned in such a manner that it can subsequently be integrated/migrated

into the proposed MPLS-TP architecture and does not result in avoidable duplication of communication infrastructure.

6.Technical assessment: CTUIL, POWERGRID, NERPC, NERLDC and concerned STUs may jointly assess the existing communication infrastructure, including spare fibre pairs, STM-64/SDH capacity, optical interfaces, link lengths, repeater/FOTE requirements, intermediate nodes and OPGW augmentation requirements, and finalize the feasible implementation approach.

7.Implementation timeline: The implementation plan may specifically take into consideration the commissioning schedule of NRLDC BCC-SCADA and ERLDC Main-2 SCADA, so that the required ER–NER communication bandwidth is available before their operationalization.

Deliberation of the Sub-committee:

CTUIL opined for exploring of an interim arrangement to meet the immediate bandwidth requirement for the upcoming NRLDC Backup Control Centre and ERLDC Main-2 Control Centre in Guwahati, as the upgradation to STM-64 will take almost one year.

As an interim measure for strengthening of ER–NER inter-regional communication connectivity to cater to the requirements of the upcoming back up NRLDC and Main-2 ERLDC SCADA at Guwahati, the forum advised ULDC-Powergrid to explore for enhancement of the bandwidth to meet the above requirement in line with the commissioning schedule of NRLDC BCC-SCADA and ERLDC Main-2 SCADA. At the same time NERLDC was also advised to follow up with NRLDC and ERLDC for appropriate bandwidth arrangement between NR, ER and NER region in such a way that internal requirement of NER are not impacted. The cost so involved shall be shared between ULDC-NR and ULDC-ER and shall be shared between NR and ER as per the prevailing regulations.

The issue of STM-64 and MPLS-TP were deliberated under Agenda Items 2.24 and 2.25 respectively.

The Sub-committee noted as above.

Action: ULDC-POWERGRID, CTUIL & NERPC.

2.12. Unsatisfactory performance of 400 kV Binaguri – Bongaigaon link (ER–NER redundant communication path): NERLDC

In the 34th NETeST meeting, restoration of the ER–NER redundant communication path via the 400 kV Binaguri – Bongaigaon OPGW link was recorded as completed. However, on 25th July 2026, due to poor performance of the Binaguri – Bongaigaon fibre, the services were reverted to 220 kV Salakati – Alipurduar, and the NER–ER links were again running over a single path.

POWERGRID informed on 07th August 2026 that healthy fibres had been connected and the link was kept under observation. Thereafter, the following ICCP protection links were shifted over 400 kV Binaguri – Bongaigaon: Guwahati – Delhi, Guwahati – Kolkata, Shillong – Delhi and Shillong – Kolkata. However, these links have been inconsistent since 15th September 2026. The Shillong – Kolkata ICCP Main link has also been fluctuating since 15th September 2026.

NERLDC has emphasised that the absence of alarms in NMS/UNMS, acceptable power levels or MAC address detection alone does not confirm the stability and reliability of a link. Until the stability of the Binaguri – Bongaigaon link is ensured, any outage of the Salakati – Alipurduar link may pose a risk to the continuity of NER services. Therefore, no planned outage of the Salakati – Alipurduar link will be allowed.

Mails dated 29th July 2026, 19th August 2026, 21st August 2026, 03rd September 2026, 17th September 2026 and 18th September 2026 (attached as **Annexure B 2.12**) were sent to POWERGRID-ULDC. However, the issue still persists.

POWERGRID-ULDC may update the status of rectification of the link and the shifting of ICCP and AGC services over 400 kV Binaguri – Bongaigaon link.

Deliberation of the Sub-committee:

POWERGRID informed that following steps have been taken till now for improvement of performance of the 400 kV Binaguri – Bongaigoan:

1. Connection of Fibcom-Bongaigoan to Tejas-Binaguri with amplifiers. However, this did not improve the performance.

2. Subsequently, Tejas-Bongaigaon to Tejas-Binaguri was connected and performance has improved.

However, the losses are still being observed in the Bongaigaon-Binaguri OPGW. POWERGRID informed that the Bongaigaon – Binaguri OPGW is more than 15 years old and requested forum to replace the OPGW.

Forum approved the replacement of Bongaigaon – Binaguri and requested CTUIL to make a comprehensive plan as discussed in the agenda 2.24. The forum noted that such important issues pertaining to NER requirement may be placed in NETeST forum so that it can be placed before NCT & NERPC Board meetings.

The Sub-committee noted as above.

Action: NERPC, CTU and POWERGRID.

2.13. Recurring outage of Misa Fibcom SDH node on AC supply failure despite DC power backup: NERLDC

Misa is a strategic node in the ULDC communication network of NER. On 30th July 2026 at 16:25 hrs, AC supply failure at Misa resulted in the Fibcom SDH going offline, despite the node being provisioned with a DC power system. This led to loss of RTU reporting of the following stations:

NERLDC Shillong: Dimapur, Kathalguri, Loktak, SM Nagar, PK Bari, Misa and Ziro.

NERLDC Guwahati: Balipara, Bongaigaon, Dimapur, Haflong, Kameng, Kopili, Salakati, Silchar, Subansiri, Tezu, Roing and Ziro.

This is not an isolated occurrence; similar incidents have been observed in the past. The UNMS event log of the Misa node for the period 28th January 2024 to 09th July 2026 shows 92 occurrences of "NE Unreachable" and 56 occurrences of "Power Missing". A mail dated 30th July 2026, along with the UNMS logs (attached as **Annexure B 2.13**), was sent to POWERGRID. Subsequently, POWERGRID-NERTS requested the site on 31st July 2026 to rectify the battery/DC power backup system.

POWERGRID may update the status of rectification at Misa, and the healthiness of the DC power system at other critical SDH nodes of NER.

Deliberation of the Sub-committee:

PGCIL apprised the forum that the DC power supply at Misa has been shifted to a healthy battery system. POWERGRID further submitted that the SDH at Misa has completed its useful life and requires replacement. The forum advised PGCIL to furnish complete details of the performance of the SDH at Misa and the cost involved in replacing the existing SDH. Further, it was decided that CTU may include the replacement of SDH in their plan and place the detailed list of SDHs to be replaced with the cost estimate in the upcoming 32nd TCC & NERPC meetings.

PGCIL further submitted that as a preventative measure, they had started periodic internal audit for their substations.

The Sub-committee noted as above.

Action: POWERGRID, NERPC and CTU.

2.14. Root Cause Analysis (RCA) for non-availability of VoIP connectivity at critical stations over Fibcom network: NERLDC

VoIP connectivity between NERLDC Shillong and the following critical substations/generating stations, which are connected over the Fibcom network, remained unavailable from 06th August 2026:

400 kV SM Nagar (ISTS)

400 kV PK Bari (ISTS)

400 kV Kameng HEP (NEEPCO)

400 kV New Kohima (KMTL)

132 kV AGTCCPP (RC Nagar)

220 kV Nangalbibra

400 kV Palatana (OTPC)

400 kV Subansiri (NHPC)

A mail dated 09th August 2026 (attached as **Annexure B 2.14**) was sent to POWERGRID-ULDC requesting the current status, root cause analysis, actions taken and the expected timeline for restoration.

The VoIP services were restored on 10th August 2026, after about four days; as per the site, a switch in the Fibcom link had hung. Further, during the rectification of the Fibcom link on 09th August 2026, a loop was created in the network, due to

which all VoIP phones of the NERLDC Shillong control room and two VoIP phones of the NERLDC Guwahati control room went out of service until 10th August 2026.

In the case of 400 kV New Kohima, the channel via Imphal remained down from 05th August 2026 due to the inter-patching link between Fibcom MUX and ABB MUX at Imphal (PG). The VoIP was restored only on 31st August 2026.

However, a formal root cause analysis from POWERGRID-ULDC is yet to be received.

POWERGRID-ULDC may submit the root cause analysis and the measures taken to avoid recurrence of such outages affecting multiple critical stations.

Deliberation of the Sub-committee:

POWERGRID informed that the RCA for the case of 06th August 2026 is submitted to NERLDC vide email 08th October 2026. POWERGRID further intimated that to minimize the wide scale outage of the VoIP network, they had distributed the VoIP logical switches to multiple locations of NER instead of keeping one logical switch in NERLDC which was the case on 06th August 2026. Further, POWERGRID informed that improvement will be taken care of in new VoIP system which is expected to be commissioned by July 2027.

The Sub-committee noted as above.

Action: POWERGRID.

2.15. Shifting of Fibre optic (SDH-PDH) Panel from its current location to new location-NHPC(Loktak): NERLDC

During the proposed Renovation & Modernization (R&M) works of Loktak Power Station, additional panels, which were not part of the earlier installation, are envisaged to be installed in the room presently housing the existing SDH-PDH panel. Considering the limited space and dimensional constraints of the room, it is proposed to shift the existing SDH-PDH panel to another suitable location within the Powerhouse of Loktak Power Station.

During the **242nd OCCM**, it was decided that POWERGRID, in coordination with NHPC, shall carry out a detailed site survey and identify a suitable alternate location

for shifting of the SDH-PDH panel. Thereafter, a special meeting shall be convened amongst NERPC, NERLDC, POWERGRID and NHPC to finalize the alternate communication arrangement for maintaining continuity of communication/data during the shifting work.

Accordingly, forum may discuss on all aspects ensuring that the existing communication services are not adversely affected during and after the R&M works.

Deliberation of the Sub-committee:

PGCIL apprised the forum that a joint survey is being carried out by PGCIL and NHPC at NHPC-Loktak for identification of a suitable alternate location for shifting the existing SDH-PDH panels and setting up of alternate communication arrangement for maintaining continuity of communication/data during the shifting work.

NERLDC highlighted following weak points in the NER communication network during the outage of Loktak Node:

- Imphal (PG) communication link redundancy will reduce as 132 kV Imphal – Loktak link will not be available, hence the link outage of 400 kV Imphal (PG) – New Kohima, 400 kV Imphal (PG) – Silchar (PG) and 132 kV Imphal (PG) – Dimapur may be avoided until necessary.
- Jiribam (PG) communication link redundancy will reduce as 132 kV Jiribam – Loktak link will not be available, hence the link outage of 132 kV Jiribam – Haflong and 132 kV Jiribam – Badarpur may be avoided until necessary.
- Ningthoukhong communication link redundancy will be reduced as 132 kV Loktak – Ningthoukhong will not be available. Hence, 132 kV Ningthoukhong – Imphal link outage may be avoided until necessary and data of 132 kV Ningthoukhong must be re-routed via 132 kV Ningthoukhong – Imphal link by SLDC Manipur in coordination with NERPSIP-POWERGRID.

The forum advised PGCIL and NHPC to complete the survey at the earliest and submit the findings to NERPC and NERLDC.

The Sub-committee noted as above.

Action: PGCIL and NHPC-Loktak.

2.16. Status of AMC for SAMAST System in NER States: NERLDC

As the SAMAST system is connected with the SCADA/EMS system of the states, regular maintenance is required to overcome operational challenges and to avoid cyber security concerns. The scope of work for AMC of SAMAST (software and hardware part) for NER states was discussed in the special meeting held on 15th October 2025, and the price negotiation with M/s PwC (software part) and M/s Infotek (hardware part) for a period of 3+2 years was carried out in the special meeting held on 30th January 2026, wherein Member Secretary, NERPC suggested that the NER states may issue LoA to M/s PwC and M/s Infotek at the earliest.

The status as updated by the states in the 34th NETeST meeting is tabulated below:

Sl. No.	***State***	***Software part (M/s PwC): Status as per 34th NETeST***	***Hardware part (M/s Infotek): Status as per 34th NETeST***	***Metering and AMR part: Status as per 34th NETeST***	***Status as per 35th NETeST Meeting***
1	Arunachal Pradesh	Pending. Put up for approval of govt. Expected by September-2026.	Pending. Put up for approval of govt. Expected by September-2026.	Pending. Proposal for issuance of LoA to M/s Kalkitech is put up for Govt. approval.	
2	Assam	3 years AMC going on	3 years AMC going on	LoA to be issued to M/s Genus. Approval pending from Finance Dept., Govt of Assam. Expected by August-2026.	
3	Meghalaya	LoA issued on 20/05/2026	LoA issued on 20/05/2026	LoA issued to M/s Genus on 01/07/2026	
4	Manipur	LoA will be issued shortly	LoA will be issued shortly	LoA will be issued to M/s Genus shortly	
5	Mizoram	LoA issued on 21/07/2026	LoA issued on 14/07/2026	Proposal for issuance of LoA to M/s Kalkitech is put up for govt. approval.	

6	Nagaland	Proposal for issuance of LoA to M/s PwC is put up for govt. approval.	Proposal for issuance of LoA to M/s Infotek is put up for govt. approval.	Proposal for issuance of LoA to M/s Kalkitech is put up for govt. approval. Expected by August-2026.	
7	Tripura	LoA shall be issued within 3 months.	LoA shall be issued within 3 months.	LoA shall be issued within 3 months.	

All states are requested to expedite the issuance of LoA for AMC of all parts of the SAMAST system.

Deliberation of the Sub-committee:

The status as updated by the states in the 35th NETeST meeting is tabulated below:

Sl. No.	***State***	***Software part (M/s PwC): Status as per 35th NETeST***	***Hardware part (M/s Infotek): Status as per 35th NETeST***	***Metering and AMR part: Status as per 35th NETeST***
1	Arunachal Pradesh	In-principle approval has been obtained from Govt. of AP. Financial approval pending.	In-principle approval has been obtained from Govt. of AP. Financial approval pending.	In-principle approval has been obtained from Govt. of AP. Financial approval pending.
2	Assam	3 years AMC going on	3 years AMC going on	LoA shall be issued to M/s Genus by October-2026.
3	Meghalaya	LoA issued on 20/05/2026	LoA issued on 20/05/2026	LoA issued to M/s Genus on 01/07/2026
4	Manipur	LoA will be issued shortly. Put up for administrative approval.	LoA will be issued shortly. Put up for administrative approval.	LoA will be issued shortly. Put up for administrative approval.

5	Mizoram	Approval from govt. pending	Approval from govt. pending	Govt. approval obtained. LoA would be issued to M/s Kalkitech soon.
6	Nagaland	Govt. approval obtained. LoA shall be issued soon.	Govt. approval obtained. LoA shall be issued soon.	Govt. approval obtained. LoA would be issued to M/s Kalkitech soon.
7	Tripura	Put up for administrative approval	Put up for administrative approval	Negotiations are underway with M/s Genus.

The Sub-committee noted as above.

Action: All stakeholders

2.17. Status of ADMS System in NER States: NERLDC

ADMS is a critical asset for managing demand during low-frequency and over-drawal conditions of the grid, and the system is also connected with the SCADA/EMS system at the SLDCs. A meeting was held on 05th May 2026 to discuss the ADMS AMC related issues of NER states, wherein the states highlighted cyber security/IOC issues and other operational challenges, and M/s Orbit submitted the proposed AMC charges for all states.

In the 34th NETeST meeting, the forum noted that the ADMS system is non-functional in many states and advised the respective states to switch off the non-functional ADMS system to ensure isolation of the SCADA system for cyber security reasons. Member Secretary, NERPC advised to take up the matter regarding AMC of ADMS in the upcoming TCC/NERPC meeting if not resolved by then. The status as updated in the 34th NETeST meeting is as follows:

Sl. No.	***Control Centre***	***AMC Expiry***	***Status as per 34th NETeST Meeting***	***Status as per 35th NETeST Meeting***
1	Arunachal Pradesh	31-03-2028	Upto 31-03-2028	
2	Assam	31-03-2027	Upto 31-03-2027	

3	Manipur	31-03-2025 (Expired)	Manipur has requested M/s Orbit for survey for budgetary estimates.	
4	Meghalaya	30-11-2026	Negotiation going on with M/s Orbit for budgetary offer of AMC along with NGFW.	
5	Mizoram	31-08-2027	Upto 31-08-2027	
6	Nagaland	Expired. (Original AMC date not available)	AMC expired in Nov-2023. Approval not received from Govt. of Nagaland.	
7	Tripura	System not under operation. Expiry date not available.	Budgetary offer received from M/s Orbit. Survey shall be carried out shortly.	

Deliberation of the Sub-committee:

The status as updated in the 35th NETeST meeting is as follows:

Sl. No.	***Control Centre***	***AMC Expiry***	***Status as per 35th NETeST Meeting***
1	Arunachal Pradesh	31-03-2028	Up to 31-03-2028
2	Assam	31-03-2027	Up to 31-03-2027
3	Manipur	31-03-2025 (Expired)	Manipur has requested M/s Orbit for survey for budgetary estimates. Funding sought from ADB.
4	Meghalaya	07-01-2027	Negotiation going on with M/s Orbit for budgetary offer of AMC along with NGFW.
5	Mizoram	31-08-2027	Up to 31-08-2027

6	Nagaland	Expired. (Original AMC date not available)	AMC expired in Nov-2023. Approval not received from Govt. of Nagaland.
7	Tripura	System not under operation. Expiry date not available.	Budgetary offer received from M/s Orbit. Survey shall be carried out shortly.

Cyber Security Enhancement of ADMS through Replacement of NGFW

MS, NERPC, reiterated that the Automatic Demand Management System (ADMS) serves as the first line of defence for grid safety and security, and emphasised the need for all NER States to take immediate and concerted action to ensure that their respective ADMS installations are fully functional and adequately secured. He expressed concern that the issue had not been accorded the requisite priority by some States.

He further noted that the replacement/installation of Next-Generation Firewalls (NGFWs) for strengthening the cyber security of ADMS and its associated systems had been deliberated in earlier meetings, and proposals had also been received from two vendors, including M/s Orbit. However, no tangible action had been initiated by the States so far.

In view of the critical importance of cyber security, MS, NERPC, advised all NER States to expedite action for the replacement of NGFWs in their respective ADMS installations. He further suggested that, subject to the agreement of all participating States and applicable procurement procedures, a coordinated procurement initiative under the aegis of NERPC may be considered for the turnkey supply, installation, configuration, testing and commissioning of two NGFW units for each State's ADMS system. Such an approach would facilitate uniformity in the make, model and quality of equipment, standardised implementation by a single selected vendor, compliance with applicable CERT-In guidelines, and optimisation of procurement and implementation costs through economies of scale.

The Sub-committee noted as above.

Action: All stakeholders.

AGENDA FROM MSPCL (Manipur)

2.18. Execution of Regular Preventive Maintenance (PM) of Communication Equipment by AMC Agency under "Establishment of Optical Fibre Communication System for Wide Band Communication Expansion Plan in NER", and formulation of Plan for Missed Substations in recent PM work by the Agency: MSPCL (Manipur)

1. It is to mention that maintaining an optimal telemetry availability across all 132/33 kV sub-stations of Manipur State Power Company Limited (MSPCL) is a mandatory requirement. Timely and periodic Preventive Maintenance (PM) of RTUs, DC Auxiliary Power Units, and Communication Nodes is crucial to sustain the overall telemetry availability index of Manipur.
2. Further, SLDC Manipur would like to highlight that the Preventive Maintenance (PM) of PDH and SDH component of Telemetry for past 3 years has not been done adequately. Upon which, SLDC Manipur has requested to undergo PM work to increase the telemetry availability data vide letter no: 5/1/(SLDC)/MSPCL/ SYS.LOGISTIC/ MAINTENANCE/ 2025/ 727-31 dated: 12th August, 2026.
3. Details of Preventive Maintenance (PM) performed for the past three (3) years

Year	PM of SDH	PM of PDH	REMARK
2024	04 out of 11	09 out of 11	PM works executed just once in a year.
2025	07 out of 11	00 out of 11	
2026	07 out of 11	09 out of 11	

Note:

i. No PM has been performed for the PDHs at 132/33 kV Karong SS and 132/33 kV Rengpang during the last 3 years

ii. No PM has been performed for the SDHs at 132/33kV Karong SS, 132/33 kV Rengpang SS, 132/33kV Hundung SS, 132/33kV Jiribam SS during the last 3 years.

iii. For substations in remote locations, SLDC Manipur is willing to assist with the PM works.

In view of the above, SLDC Manipur requests the Forum to deliberate and direct the executing agency to:

1. Undertake immediate PM works for the PDHs and SDHs left out during previous PM schedules.
2. Maintain all PM schedules strictly as per the AMC, i.e. two (2) times a year for all devices.
3. Maintain adequate replaceable units (transceivers, communication interface cards, power modules, etc) during field visits to ensure rectification of pending defects.

Deliberation of the Sub-committee:

The forum advised PGCIL to carry out the preventive maintenance works as per the provisions of the AMC and further advised Manipur to render on-ground support to POWERGRID.

The Sub-committee noted as above.

Action: POWERGRID and Manipur.

AGENDA FROM MePTCL (Meghalaya)

2.19. Communication system for LILO of 132 KV Mendipathar-Nangalbibra S/C line at 220/132 KV Nangalbibra (ISTS) substation: MePTCL

CEA had approved a temporary arrangement for looping in and looping out of 132 KV Mendipathar-Nangalbibra S/C line at 220/132 KV Nangalbibra (ISTS) substation. Acute Right of Way issues had delayed establishment of the temporary arrangement by almost two (2) years. Nangalbibra Bongaigaon Transmission Limited (NBTL) had provided the NOC for the above arrangement on the 25th September 2026 after approval of the engineering documents, drawings and technical particulars submitted by MePTCL.

Since the line termination works will be commencing from the 5th October 2026, MePTCL had submitted the protection settings to NERPC and NBTL via email on the 3rd October 2026. SCADA database changes are also being started at SLDC along

with application for ISTS connectivity via the NSWS portal. Metering being under the scope of CTUIL, the same will be taken up separately.

The communication system being envisaged includes OPGW connectivity between 220/132 KV Nangalbibra (ISTS) S/S and 132 KV Nangalbibra S/S. Since the LILO arrangement is temporary and final connectivity between ISTS and InSTS will be between 220/132 KV Nangalbibra (ISTS) S/S and 132 KV Nangalbibra S/S, OPGW connectivity with Mendipathar may be excluded. The OPGW route between the two nodes being around 5 km, NBTL may please confirm utilization of their FOTE installed at their end. Point-to-point PLCC connectivity will also be established between 220/132 KV Nangalbibra (ISTS) S/S and Mendipathar and Nangalbibra. Line differential protection will also be established between 220/132 KV Nangalbibra (ISTS) S/S and 132 KV Nangalbibra S/S.

Deliberation of the Sub-committee:

The forum agreed for the interim arrangement of OPGW during the LILO of 132 kV Mendipathar at 220/132 kV Nangalbibra (ISTS) i.e., the OPGW connectivity between 132 kV Nangalbibra and 220/132 kV Nanagalbibra will be established. 132 kV Nangalbibra will be further connected to the Nongstoin – Mawngap – NEHU SLDC. Further, forum stressed that line differential protection shall also be established between 220/132 kV Nangalbibra (ISTS) S/S and 132 kV Nangalbibra S/S.

Resonia highlighted that FOTE at 220 kV Nangalbibra does not have sufficient Small Form-Factor Pluggable (SFP) to connect the 132 kV Nangalbibra. MePTCL agreed that they would procure and install the necessary SFPs at both ends for the establishment of communication.

Based on the above interim arrangement forum requested NERLDC to issue FTC as and when the LILO is ready.

The Sub-committee noted as above.

Action: MePTCL and NBTL.

2.20. Establishment of 132 KV Kalain substation between 132 KV Lumshnong and Panchgram substations: MePTCL

CEA had approved establishment of LILO of 132 KV Lumshnong Panchgram line at 132 KV Kalain (AEGCL) substation. At present, there is no OPGW connectivity between 132 KV Lumshnong and Panchgram substations. AEGCL had informed that OPGW and PLCC connectivity will be established between Kalain and Panchgram. Since due to unavailability of funds, MePTCL is considering establishment of OPGW from Lumshnong through CTUIL, the process may take time. As such, the forum may decide on the communication system for data transmission from Kalain and its associated FTC since MePTCL will not be in a position right now to establish the OPGW connectivity.

Deliberation of the Sub-committee:

MePTCL informed that at present the 132 kV Lumshong – Panchgram section is neither equipped with PLCC or OPGW.

CGM (I/C), NERLDC stated that at least two independent communication paths must be made available for the First Time Charging (FTC) of the substation. He added that one OPGW path together with one PLCC path would also be acceptable for 132 kV Kalin to Panchgram section.

For the 132 kV Lumshnong – Kalain section AEGCL and MePTCL agreed to put PLCC for protection related coordination.

MePTCL further requested forum to plan the OPGW for 132 kV Lumshnong – Kalain. Forum requested the CTUIL to plan the OPGW for 132 kV Lumshnong – Kalain section during the special meeting as per the agenda 2.24.

The Sub-committee noted as above.

Action: Assam and Meghalaya.

AGENDA FROM ASSAM

2.21. Non submission of budgetary offer by M/s GE Vernova T&D Ind. Ltd for AMC of SCADA/EMS: AEGCL

The existing SCADA/EMS AMC, which was extended for a period of two years, is going to expire on 11.11.2026. The upgradation of the existing system is presently under process and is expected to take at least another two years for completion.

In view of the above, on 04.05.2026 M/S GE Vernova T&D Ind. Ltd. was requested to submit a techno-commercial offer for extension of the AMC for a period of two years, with a provision for further extension by one additional year, if required. The offer may accordingly be submitted for a total duration of three years. Initially, services shall be availed for two years, and the third year may be exercised based on requirement.

M/S GE Vernova T&D Ind. Ltd. was requested to submit the offer at multiple instances. The matter has been placed before NERPC in the special online meeting held on 03.06.2026 and 34th NETeST meeting held on 23.07.2026. As per deliberation of the 34th NETeST meeting, M/s GE Vernova T&D Ind. Ltd. assured to provide the offer within 10 days. Even after multiple follow-up, M/S GE Vernova T&D Ind. Ltd. is yet to submit the same.

The offer is required for timely formalization and execution of the contract.

Deliberation of the Sub-committee:

Assam informed that M/s GE Vernova T&D has shared a budgetary quote of Rs. 2.93 crore (excluding taxes) for a 2-year AMC on 07/10/2026 and currently negotiation is going on for various aspects including financial and enhancement of AMC period to 3 year.

The forum decided to convene a special meeting with the concerned team/officers of M/s GE Vernova T&D.

The Sub-committee noted as above.

Action: NERPC, Assam and M/s GE Vernova T&D.

AGENDA FROM PGCIL

2.22. Non availability of proper environmental conditions in communication equipment room at Loktak and Doyang: PGCIL

It has been observed that the communication equipment room at Loktak and Doyang is not maintained under suitable environmental conditions, particularly with respect to temperature control, as the room is not provided with a functional air-conditioning system. Consequently, the ambient temperature inside the room is becoming excessively high, which has caused the equipment to get faulty at both the locations.

In view of the above, it is essential to ensure proper cooling and adequate environmental conditions in the equipment room by providing a suitable and continuously operational air-conditioning system. This will help maintain the equipment within the prescribed operating temperature limits and prevent recurring faults and potential equipment damage."

Deliberation of the Sub-committee:

PGCIL apprised the forum that the concerned vendor has refused to execute the work due to non-workable environment.

The forum advised NHPC- Loktak and NEEPCO- Doyang to ensure proper cooling and adequate environmental conditions in the equipment room to maintain the life of communication equipment.

However, considering the criticality of the issue, the forum advised Powergrid to coordinate with the vendor and resolve the same at the earliest.

The Sub-committee noted as above.

Action: PGCIL, NHPC & NEEPCO.

AGENDA FROM PwC

2.23. Status update of SAMAST and pending payments: PwC

PwC presented the status update of SAMAST and pending payments for each state. The PPT is attached as **Annexure B 2.23.**

The Sub-committee noted as above.

AGENDA FROM CTUIL

2.24. Capacity Upgradation to STM-64 for ER-NER Inter regional connectivity in NER region: CTUIL

The need to enhance the existing communication infrastructure is increasing day by day to handle the surge in bandwidth demand driven by higher power flows, expanded SCADA operations, wide-area monitoring systems, and real-time protection signalling. With the integration of renewable energy sources, growing inter-regional transfers and the need for enhanced grid reliability, the communication backbone must evolve to support faster, more resilient and higher-capacity data transmission. Day by day there is increasing trend of services and applications, and hence more channels are getting connected to the ISTS communication network. There is also increase in requirement of redundant communication links such as dual redundancy for RTU, ICCP link between RLDC and NLDC, International ICCP links, redundancy in AGC, upcoming AMR scheme all over India, etc, based on the operational feedback.

NERLDC vide letter Ref No.: NERLDC/System Logistics/OT/Communication/ 8477 dtd 20.01.26, stated that upcoming Backup ERLDC, Backup NRLDC is coming up at NER (Guwahati), hence it is quite necessary to upgrade the capacity of inter-regional links in NER including Main & Backup NERLDC.

Transitioning to higher bandwidth of STM-64 has been evaluated accordingly and after discussion with stakeholders thru various RPC ***Sub-committee*** forums, it has been noted that this will not only provide the necessary bandwidth headroom but also ensure scalability for future requirements, reduce latency in critical grid operations and strengthen the overall reliability of the ISTS communication network.

This Agenda was discussed in 34th NETeST meeting where in the forum recommended the proposal for TCC/NERPC concurrence for STM-64 installation and link formation for the below mentioned nodes:

Path for STM-64:

ER - 400kV Bongaigaon(PG) - 220kV BTPS(Assam) - 220kV Agia (Assam) - 220kV Boko (Assam) - 400kV Azara (Assam) - 220kV Sarusujai (Assam) - 132kV Kahilipara (Assam) - NERLDC Guwahati– 132kV Kahilipara (Assam) - 132kV Umtru (Meghalaya) – 132kV Umiam III (Meghalaya) - 132kV Umiam I (Meghalaya) - 132kV NEHU (Meghalaya) – NERLDC Shillong – 132kV Khleihriat (Meghalaya) – 132kV Khleihriat(PG) – 400kV Misa (PG) – 400kV Balipara (PG) – 400kV Bongaigaon (PG)-220kV Salakati- ER to form a ring considering NERLDC.

Pictorial representation of the STM-64 path (as deliberated in 34th NETeST meeting) is shown below in the **Appendix -I.**

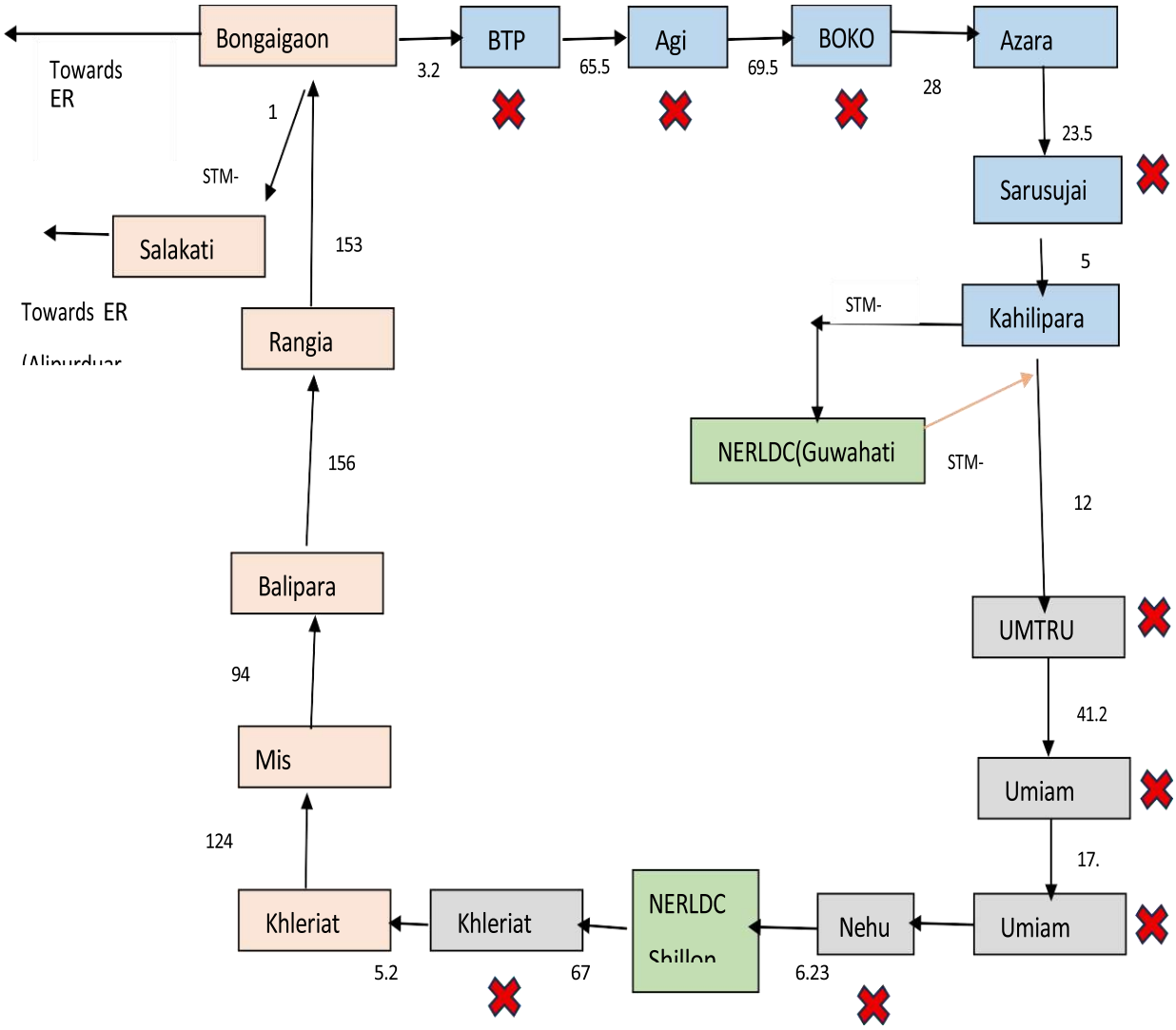


Fig: Appendix-I

Further, based on the deliberation in the 10th CPM meeting dtd 07.08.26, CTUIL has revised the nodes for STM-64 installation considering the distance between the stations/nodes. Pictorial representation of the revised STM-64 path is shown below in the **Appendix -II**.

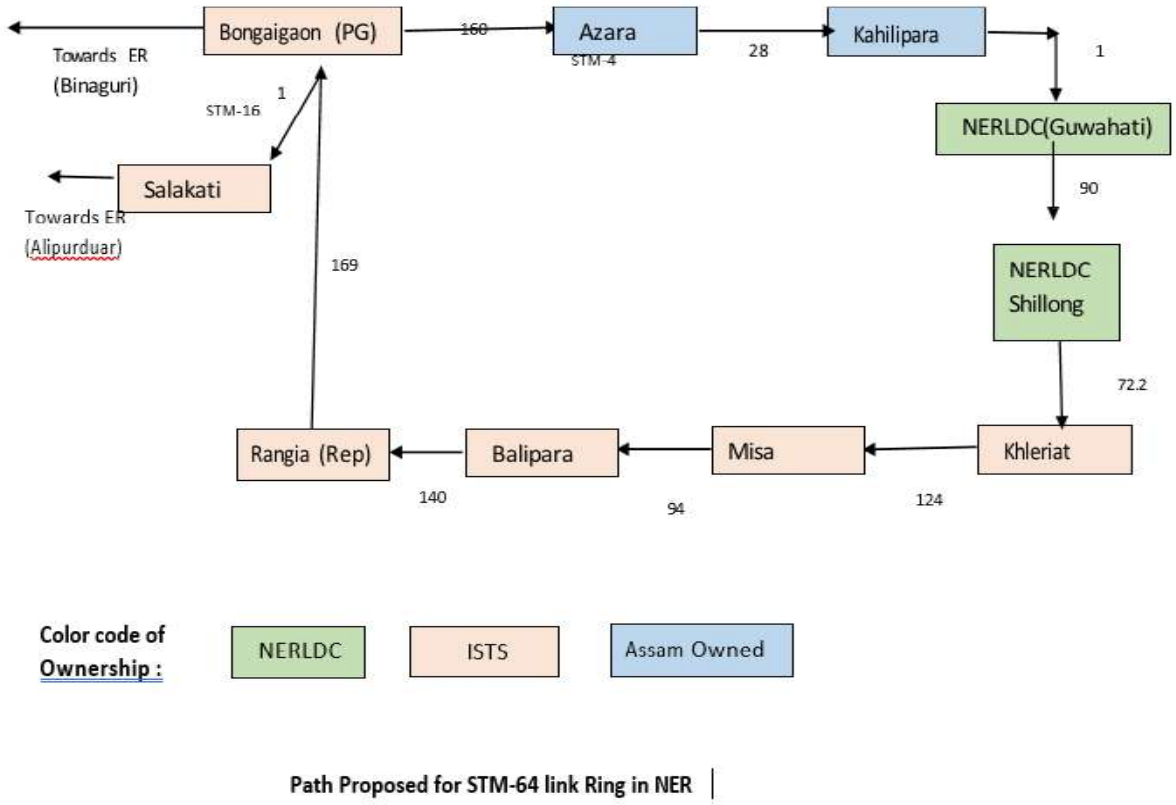


Fig: Appendix-II

Bypassing shall be done from FODP to FODP level at the intervening nodes in the path wherever STM-64 isn't considered in this scheme for the formation of STM-64 link.

Considering the criticality of inter -regional ER-NER link and redundancy and NLDC suggestion vide letter dtd 26.06.26 that the infrastructure shall be reviewed and strengthened for path, equipment, port, power-supply and last-mile diversity. Main and standby links should not share avoidable common dependencies, proposed STM-64 link will be established in separate fibre pair through STM-64 SDH equipment in addition to the existing link.

For complete upgradation (STM 64 capacity) from main RLDC (ERLDC, NRLDC)

NLDC to back up RLDC (ERLDC, NRLDC) at NERLDC Guwahati similar links need to be identified in ER and NR region.

Wherever end stations belong to state constituents power supply and space shall be provided by the states for installation of STM-64 FOTE.

POWERGRID/ STUs may confirm the spare fibre availability on the suggested STM-64 OPGW links mentioned below.

POWERGRID:

Sl.No	***Link Name***	***Spare Fibre availability***
1	400kV Bongaigaon(PG) - kV BTPS(Assam)	
2	Khleriat -Misa	
3	Misa-Balipara	
4	Balipara Bongaigaon	
5	Bongaigaon -Salakati	

Assam:

Sl.No	***Link Name***	***Spare Fibre availability***
1	BTPS -Agia	
2	Agia- Boko	
3	Boko- Azara	
4	Azara -Sarusajai	
5	Sarusajai- kahilipara	
6	Kahilipara- B/U NERLDC	
7	B/U NERLDC -kahilipara(UGFO)	
8	Kahilipara- Umtru	

Meghalaya:

Sl.No	***Link Name***	***Spare Fibre availability***
1	Umtru -Umiam III	
2	Umiam III -Umiam I	

3	Umiam I -Nehu	
4	Nehu – NERLDC Shillong	
5	NERLDC Shillong -Khleriat	
6	Khleriat (Meghalaya) – Khleriat PG	

Line length and repeater requirement for the above-mentioned links shall be confirmed by the concerned entities as per Appendix -I. POWERGRID, Assam & Meghalaya are also requested to confirm the availability of one pair Spare fibre for the above links.

Further as per MPLS JC report

The Rollover from SDH to MPLS of the existing Main & Backup control centers (SLDCs & RLDC) alongwith their existing ISTS stations (RTM/TBCB) is suggested to be implemented first in a smaller region like NER which shall also require spare fibre pair and MPLS-TP Equipment as MPLS-TP shall run in parallel to SDH.

Present Status of MPLS-TP roll out:

Draft TS has been prepared by CTUIL and floated with OEMs/POWERGRID for suggestions/comments and received comments/suggested are incorporated. Technical specifications has been circulated among MPLS JC Members.

MII relaxation for MPLS-TP is under review of MoP & MPLS TS approval & Implementation has been deliberated in 18th NPC meeting, minutes awaited.

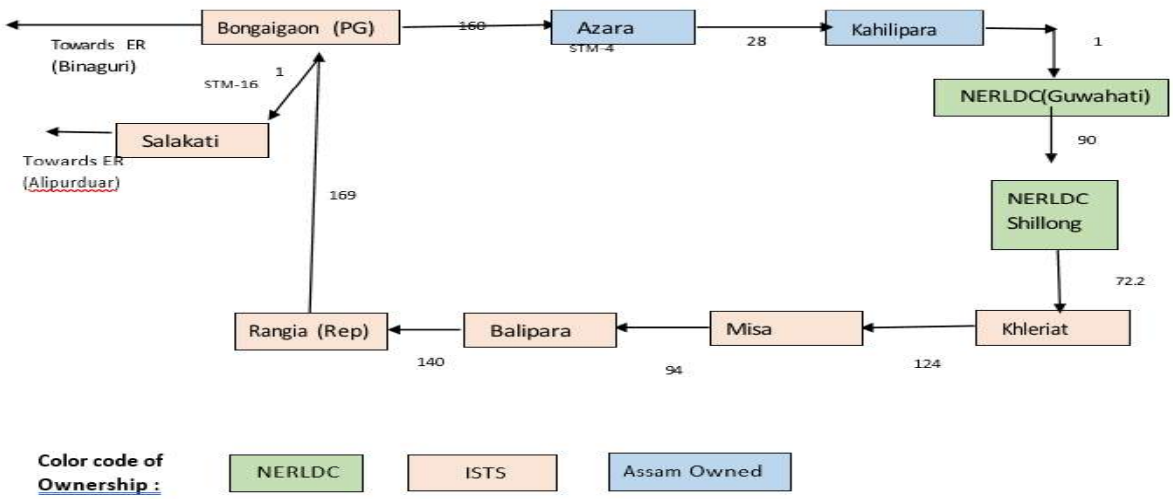
Accordingly, as per Appendix -II, 10 Nos. STM-64 FOTE are proposed for STM-64 (10G) link formation including NERLDC & Backup NERLDC.

<u>Deliberation of the Sub-committee:</u>

CTUIL informed that this issue has been discussed in the 34th NETeST meeting and further informed that the number of equipment required for STM-64 upgradation have been revised considering the bypassing arrangements at the nodes where distance between intermediate stations is less than 175 km.

Accordingly, total number of stations required for ***STM-64 upgradation is 10 Nos. of FOTE.***

The committee deliberated on the revised nodes for STM-64 installation as arrived during the 10th CPM meeting held on 07.08.26 considering the distance between the stations/nodes. The Pictorial representation of the revised STM-64 path is shown below:



Path Proposed for STM-64 link Ring in NER

AEGCL confirmed that direct fibre link exists between 400kV Bongaigaon PG S/s and 400kv Mirza S/s. It was also confirmed that AEGCL will be providing one pair of fibre for proposed STM-64 link formation.

MS NERPC stated that there is no clarity in the proposal by CTUIL and suggested to convene a special meeting to finalize the STM-64 path in consultation with POWERGRID, NERLDC and state constituents along with the following points and put up the proposal in the upcoming NERPC/TCC Meeting for approval.

1. For identification of the nodes which are required to be upgraded from STM-16 to STM-64.
2. Replacement plan of STM-4/STM-16 Nodes which have completed the seven years of life (EOL).
3. Requirement of OPGW to achieve the STM-64 ring.
4. Requirement of any other OPGW in NER.

The Sub-committee noted as above.

Action: CTU, Assam, NERLDC and PGCIL.

2.25. Network Assessment and planning for Migration from Legacy SDH to MPLS-TP technology for NER ISTS communication network- w.r.t 10th JC minutes, 18th NPC meeting & its deliberations: CTUIL

Joint committee of MPLS-TP has recommended the following:

As per Clause no 5.3.3 of JC MPLS-TP report

The Rollover from SDH to MPLS of the existing Main & Backup control centers (SLDCs & RLDC) along with their existing ISTS stations (RTM/TBCB) is suggested to be implemented first in a smaller region like NER.

This Rollover is suggested to be connected through additional pairs of fibers on MPLS TP Network with suitable and optimized provision of repeaters and proper configuration on Regional/National UNMS. Moreover, to meet the space constraints in the Control Room (CR) of the stations, the equipment panels can be optimized for SDH & MPLS equipment.

There may be some intervening STU nodes on the ISTS paths, which shall also be taken up after deliberations in appropriate RPC forums for the said network implementations.

After completion of the rollover of MPLS TP Network in the ISTS system, the existing nodes of IPP/RE/Bulk consumers etc. shall be required to ensure integration of their existing communication equipment in line with the above-mentioned steps for rollover to MPLS TP Network and proper configuration on Regional/National UNMS.

Accordingly, CTUIL has prepared a Draft Technical Specifications for MPLS-TP.

In view of upcoming MPLS, all entities shall ensure that each station must have two channels (2+2 configuration) each for Main Control Centre and Backup Control Centre in compliance to the CERC-approved Interfacing Requirements under the CERC Communication Regulations 2017 with adequate redundancy at both node and communication path levels.

CTUIL has studied the NER Communication network through UNMS and available database and prepared the preliminary MPLS-TP network (Attached as Appendix -III) to be implemented in NER.

Deliberation in 10th CPM dtd 07.08.26:

CTUIL requested to furnish details related to ring connectivity, spare fibre availability, spare port availability and MPLS-TP equipment requirements. CTUIL informed that spare fibre details have been partially received and requested POWERGRID to furnish the remaining information at the earliest.

During deliberations, POWERGRID stated that fibre availability may not be a major constraint for migration from SDH to MPLS-TP. However, stakeholders highlighted that involvement of STU nodes, wherever required, needs to be deliberated with the concerned utilities. CTUIL clarified that the final network architecture is yet to be finalized and the requirement of intermediate STU nodes shall be assessed during detailed planning.

The forum discussed utilization of spare fibre cores for MPLS-TP implementation. It was observed that spare fibre cores reserved for grid applications should be utilized on priority in accordance with the CEA Guidelines. The possibility of OPGW augmentation/upgradation was also discussed in locations where adequate spare fibres may not be available.

Meghalaya informed that spare fibre pairs are presently not available on certain communication links associated with NERLDC-Khliehriat, Umtru-Umiam-III and Khliehriat (Meghalaya)-Khliehriat(POWERGRID). CTUIL informed that the OPGW laying on the said lines have already been awarded and additional spare fibre availability may be assessed under the awarded schemes.

Further, for Planning of MPLS-TP network in NER, it is suggested to provide the following details:

All the entities are requested to provide their inputs for further modifications

/updation /additions /deletion of nodes in the proposed preliminary network for optimization and resource utilization.

Availability of 2 pairs of Spare fibres and Length of the links for assessment of repeater requirement on all the links between the nodes shall be provided as per **Annexure – B 2.25.**

Spare port details of all the nodes considered for MPLS rollout as ***per Appendix - III.***

Accordingly, as per Appendix-III, 58 Nos. of MPLS-TP FOTE (ISTS – 43, Assam -7, Meghalaya-4, Arunachal Pradesh-2, Manipur-1, Tripura- 1) (Tentative) are required for rollout from SDH to MPLS-TP. Further, the rollout from SDH to MPLS TP was deliberated in 18th NPC, the same shall be implemented as per 18th NPC Minutes.

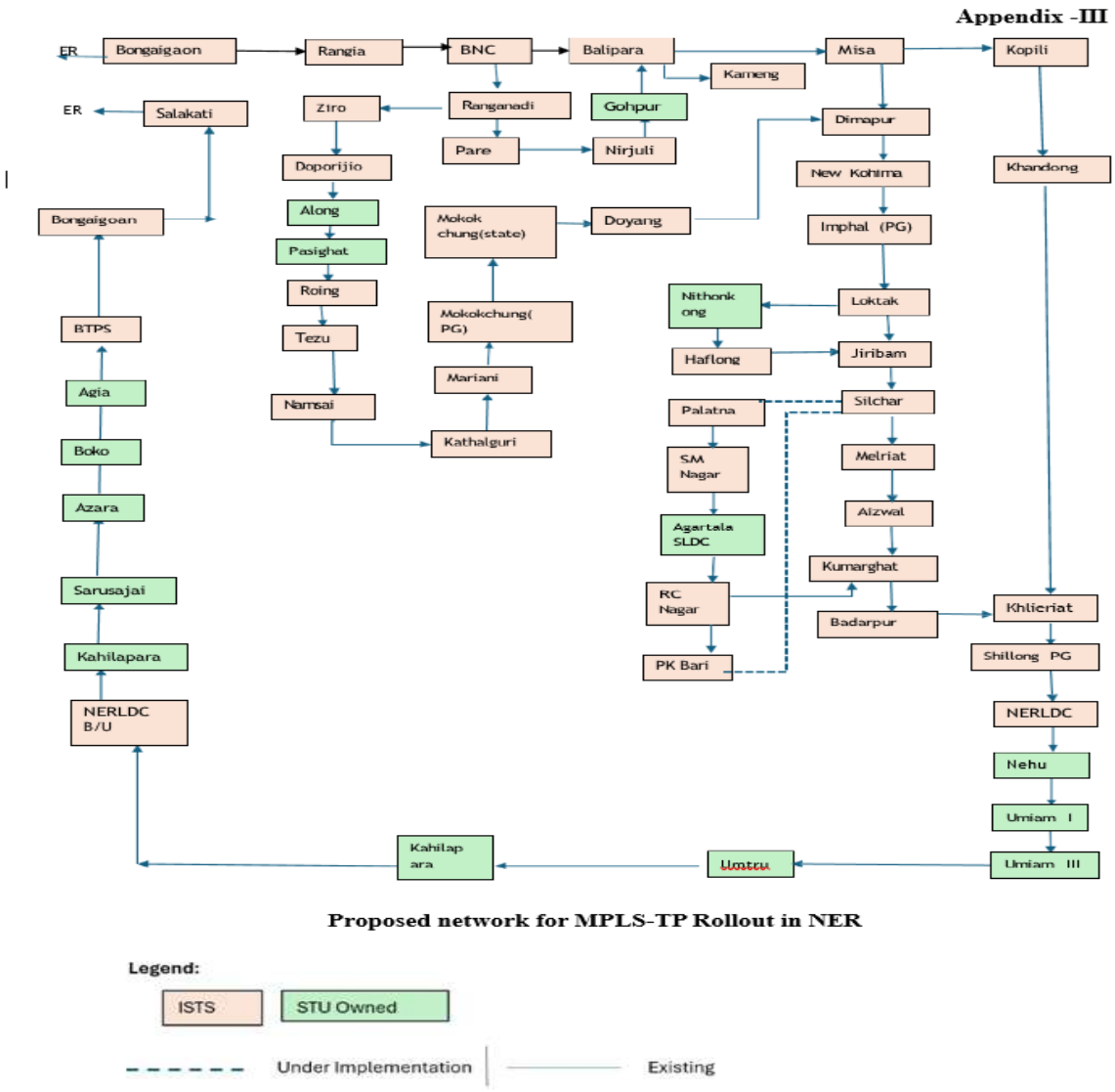


Fig: Appendix-III

Deliberation of the Sub-committee:

CTUIL informed that the preliminary network for MPLS implementation has been prepared by them. All the entities are required to provide any further modifications/ suggestions for the network suggested.

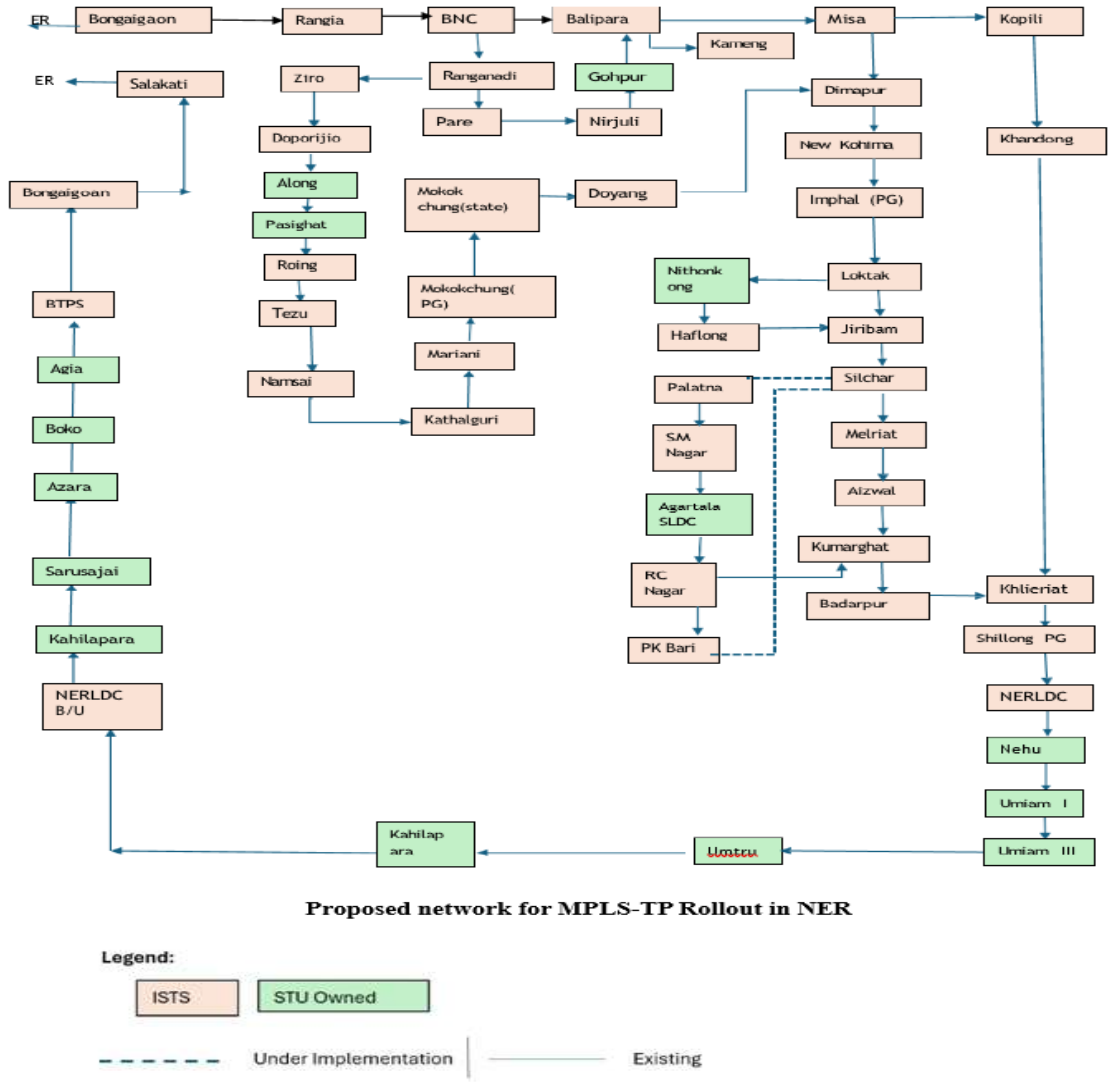
All the entities are required to confirm the availability of 2 pairs of Spare fibre, and length of the links for repeater assessment, status of 2+2 Configuration and other details as per the format provided on all the links for formation of MPLS-TP ring. Further, CTUIL suggested that all entities have to ensure that the nodes are configured in the 2+2 Configuration for the implementation of MPLS -TP as per MPLS JC report.

They also informed that during 18th NPC meeting following points were submitted:

1. Technical Specifications of MPLS-TP for ISTS communication system submitted by Joint Committee for Introduction of MPLS Technology in ISTS Communication system.
2. CTUIL shall proceed with the MPLS-TP pilot implementation after completion of the requisite concurrence and approval process.
3. The issue of MII relaxation shall be examined and finalized during implementation of the project.
4. CTUIL shall submit proposal, incorporating the finalized technical requirements and necessary approvals/concurrences, interoperability issues with Regional/National UNMS for consideration in the next NCT meeting

Accordingly, as per the proposed network as given in diagram below, 58 Nos. of MPLS-TP FOTE (ISTS – 43, Assam -7, Meghalaya-4, Arunachal Pradesh-2, Manipur-1, Tripura- 1) (Tentatively) are required for rollout from SDH to MPLS-TP.

Appendix -III



Member Secretary, NERPC stated that the MoM of 18th NPC is awaited and based on the decision of NPC further action will be discussed.

The Sub-committee noted as above.

Action: ULDC-POWERGRID, CTUIL & NERPC.

2.26. Restoration of ER–NER Redundant Communication Path via Bongaigaon–Binaguri-1 OPGW Link & BNC-Rangia-Bongaigaon-Alipurdwar link: CTUIL

Deliberation in 10th CPM dtd 07.08.26:

1. Redundant path through 400 kV Binaguri – Bongaigaon:

POWERGRID informed that traffic had been shifted to the Bongaigaon-Binaguri-1 OPGW link. However, the OPGW is an old fibre cable and high attenuation is being observed on the link. POWERGRID further informed that fibre rectification work is presently under progress.

2. Redundant path through BNC-Rangia-Bongaigaon-Alipurdwar:

POWERGRID informed that the communication link has been established through FIBCOM equipment. However, high fibre losses are still being observed on certain sections of the route. Further, POWERGRID informed that the identified fibre loss issues on the NER side have been rectified. However, the status of restoration activities on the ER side needs to be confirmed.

Deliberation of the Sub-committee:

After deliberation the forum suggested to CTUIL that a formal agenda for rectification of high fibre losses on certain sections of Bongaigaon-Alipurduar link in ER side shall be placed to TeST forum of ERPC and NERPC will depute a concern officer accordingly.

The Sub-committee noted as above.

Action: CTU, PGCIL and NERPC.

2.27. Discrepancies pertaining to Availability report generated from NER UNMS: CTUIL

A. Integration of NMS of NERPSIP and Comprehensive T&D-Arunachal Pradesh with U-NMS System – State-wise Progress:

1. Arunachal Pradesh: Delivery of Tejas-supplied NMS is still awaited.
2. Manipur: Installation and commissioning of NMS are undergoing
3. Nagaland: Completed.
4. Meghalaya: Installation and commissioning of NMS are undergoing
5. Mizoram: Completed.
6. Tripura: Completed.

Deliberation in 10th CPM dtd 07.08.26:

CTUIL sought an update on the integration of NERPSIP and Comprehensive T&D Arunachal Pradesh NMS with U-NMS. POWERGRID informed that commissioning activities for Arunachal Pradesh have been completed and receipt of log certification from SLDC is pending. Manipur, Nagaland, Tripura and Mizoram have been integrated with U-NMS, while the remaining activities for Meghalaya are under

progress and expected to be completed shortly. Meghalaya assured the forum that the pending integration activities shall be completed at the earliest.

CTUIL requested the concerned utilities to complete the pending activities in a time bound manner.

POWERGRID may update the status for the states pending for completion.

B. Naming Nomenclature Standardization – Lack of Uniformity Across Vendors:

Deliberation in 10th CPM dtd 07.08.26:

POWERGRID informed that the majority of the activities have been completed and only a few Fibcom-related issues remain pending. CTUIL requested to complete the pending activities in a time-bound manner.

POWERGRID vide mail dtd 03.10.26 informed that 14/146 channels are pending.

POWERGRID may update the status.

C. Outage Reason to be mentioned in the Availability report:

Reason for Communication channel outage (Event wise) shall be provided in the availability report for certification of availability by NERPC.

POWERGRID may update the status.

D. Consideration of all ISTS nodes for calculation of Availability of communication: Deliberation in 10th CPM dtd 07.08.26:

POWERGRID informed that modifications are being carried out in coordination with Sterlite to enable generation of reports in line with the NPC-approved format, including incorporation of channel-wise details. POWERGRID further informed that the activity is under progress and is expected to be completed by 30th September 2026. CTUIL requested POWERGRID to complete this long-pending activity within the committed timeline.

Owner/entity wise & channel wise availability report shall also be generated as per format approved in 16th NPC meeting dtd 04.07.25.

Deliberation of the Sub-committee:

A. ***Integration of NMS of NERPSIP and Comprehensive T&D-Arunachal Pradesh with U-NMS System – State-wise Progress:*** PGCIL apprised the forum that the Tejas supplied NMS in Arunachal Pradesh has been commissioned. PGCIL further submitted that installation and commissioning of NMS at Manipur and Meghalaya shall be completed by October-2026 and December-2026 respectively.

B. ***Naming Nomenclature Standardization – Lack of Uniformity Across Vendors:*** Regarding naming nomenclature, PGCIL submitted that the issues pertaining to ECI and Tejas make equipment have been completely resolved. POWERGRID further submitted that the issues related to alarm logs of Fibcom make equipment have been resolved and the issue with the inventory list for Fibcom make equipment is being addressed.

C. **Outage Reason to be mentioned in the Availability report:** ULDC-Powergrid agreed to furnish the reasons for outage of communication channels in the availability report.

D. ***Consideration of all ISTS nodes for calculation of Availability of communication:*** NERLDC apprised the forum that, currently 95% of all the communication links are reporting clearly in UNMS. The communication links of all other private TSPs except Indigrid have been configured and integrated by PGCIL. Indigrid submitted that support from M/s GE Vernova T&D is awaited to complete the configuration and integration works. The forum noted that further deliberation in this matter shall be held in the special meeting with M/s GE Vernova T&D.

The Sub-committee noted as above.

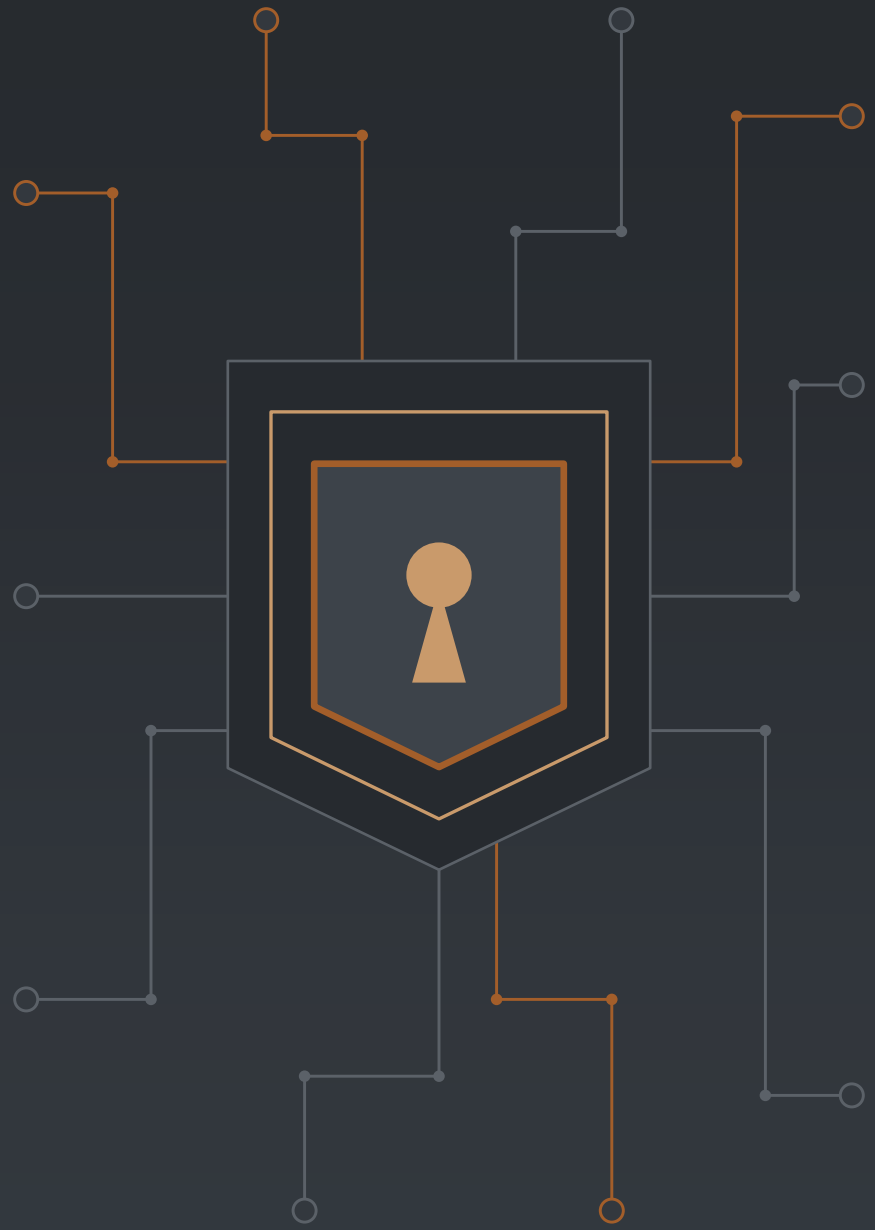
Action: PGCIL, Indigrid, M/s GE

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

The follow up items are attached at **Annexure C 3.1.**

****

Annexure B 2.1 (i)



GAZETTE: 31 JULY 2026 · CEA WEBSITE: 12 AUGUST 2026

Central Electricity Authority · Ministry of Power · India

Cyber Security in Power Sector

Regulations, 2026

Cybersecurity framework for India's power sector

17	10	2	1 Apr 2027
REGULATIONS	CHAPTERS	SCHEDULES	IN FORCE

PRESENTED BY

A. De · Deputy Director, NERPC, Shillong

Regulation status & commencement

Sources: Gazette notification, CEA Cyber Security Regulations 2026

Notification

CEA Cyber Security Regulations, 2026 were published in the Gazette of India on 31 July 2026.

Effective date

The Regulations come into force from 1 April 2027.

Specified provisions

Regulations 5(9), 5(24), 5(33), 5(39), 6(2) and 6(7) take effect on dates specified separately by CEA with Central Government approval.

1. The 2026 Regulations build on the CEA Cyber Security in Power Sector Guidelines, 2021.

2. The Regulations are issued under the Electricity Act, 2003 and are aimed at secure operation and maintenance of power plants and lines.

Applicability

Regulation 2 — Scope and applicability

Covered entities

Entities owning, operating or managing operational-technology infrastructure connected to the interconnected power system and associated IT infrastructure.

Power generation / storage

For generating companies, captive generating plants and organisations with energy-storage systems, the Regulations apply where installed capacity is 50 MW or more.

Other entities

Includes transmission licensees, distribution licensees, National/Regional/State Load Despatch Centres, power exchanges and OTC platforms, subject to the specified scope.

CSIRT-Power: sector-level incident coordination

Regulation 4 — Computer Security Incident Response Team–Power

1. CSIRT-Power is the coordination agency for reporting and responding to cybersecurity incidents connected with the power sector.
2. It acts as the nodal agency for analysis, prediction, prevention and dissemination of information relating to power-sector cyber incidents.
3. It may collect incident-related information including network architecture, asset details, logs, cyber-forensic records and forensic images.
4. It coordinates with CERT-In, NCIIPC and other designated government agencies.
5. It supports alerts, advisories, threat intelligence, SOPs, benchmarks, security controls, exercises and cyber-crisis-management planning.

Governance & CISO requirements

Regulation 5(1)–(9) — Entity responsibilities

CISO + alternate

Entity must appoint a CISO and Alternate CISO from senior-management-level regular employees.

Reporting line

CISO should report to the head of the entity; required CISO contacts must be maintained and shared with relevant stakeholders.

Continuity

CISO and Alternate CISO positions should not simultaneously remain vacant; CISO appointment is for at least three years.

Dedicated security function

A dedicated information-security department, headed by the CISO, is to be established in India and operate 24×7.

Training

CISO must participate in a cybersecurity training programme for at least five working days in each financial year.

Executive ownership

Cybersecurity governance is connected directly to senior management and operational accountability.

Core cybersecurity controls

Regulation 5 — General cybersecurity requirements

1. Maintain a cyber-asset register covering ownership, hardware, firmware, software and patches; review at least annually and when new assets/systems are commissioned.
2. Maintain cyber-risk assessment and mitigation plans; update them at least every six months and review at least annually.
3. Provide online and offline backups of critical systems in a separate, secure and protected environment.
4. Conduct comprehensive cybersecurity audits covering critical systems at least once each financial year, with 9–15 months between consecutive audits.
5. Ensure purchased IT products comply with applicable Central Government orders and are tested accordingly.
6. Obtain ISO/IEC 27001 certification or a technical-standards certificate covering critical systems, as required by the Regulations.

Critical systems, testing & CII

Regulation 5 — Critical-system lifecycle and CII provisions

Before commissioning

New or modified critical systems require cybersecurity audit including vulnerability assessment and penetration testing before commissioning.

After commissioning

Information on new/modified critical systems, including system description and functionality, must be provided to CSIRT-Power within 30 days.

CII protection

Entities must provide relevant information for CII identification to NCIIPC and take prescribed steps after an asset is identified as CII.

OT/IT security & remote access

Regulations 5, 7 and 8 — OT/IT and cybersecurity policy requirements

1. Cybersecurity policy must address IT and operational-technology environments and align with business continuity.
2. Critical systems require defined access control, authentication, authorisation and accounting measures.
3. Procedures must be established for secure remote operation and secure updating of OT systems.
4. IT and OT systems are to be synchronised with a reference time source as required by the cybersecurity policy.
5. Electronic security perimeters and controls should be designed to monitor and control access to protected systems.
6. Critical infrastructure and protected systems should not be publicly exposed unless specifically approved based on business need, criticality and risk.

Cyber Crisis Management Plan (C-CMP)

Regulations 8 and 10 — Cybersecurity policy and crisis management

Plan

Maintain a defined incident-response and recovery plan, including risk-based response procedures and crisis classification.

Exercise

Test the effectiveness of the Cyber Crisis Management Plan at least once every year through exercises and mock drills.

Learn & improve

After an actual crisis, prepare a detailed report, capture lessons learned and update the plan using relevant stakeholder feedback.

Vendor cybersecurity requirements

Regulation 11 — Cybersecurity expectations for vendors

1. Vendors must provide documented and tested recovery procedures for supplied systems.
2. Digitally signed / valid and authenticated security patches and updates must be available during the required support/use period.
3. Vendors must disclose support/end-of-life information for supplied hardware, software and relevant third-party products.
4. Vendors must provide a Bill of Materials (BoM) for critical systems as required by CERT-In guidance.
5. Hardware and software should be hardened before supply, with security capabilities, secure configurations and controls enabled.
6. Vendors need a formal vulnerability-reporting process and must share relevant vulnerability information with CSIRT-Power.

Distributed generation / prosumer requirements

Regulation 12 — Vendor responsibilities for prosumer distributed generation resources

Data location

For prosumer distributed generation resources, applications, monitoring/control servers and real-time/historical data hosted on cloud platforms must be securely stored and remain within India.

Secure remote access

Remote access/operation and data exchange with aggregators and distribution licensees must use mutual authentication and secure, encrypted channels.

Trusted source

Vendor must provide information needed for verification of a trusted source in accordance with Central Government orders, directions or guidelines.

Cybersecurity audit & assurance

Regulation 13 and related assurance provisions

1. Audits must follow the scope specified in CEA cyber-audit guidelines and directions issued by CSIRT-Power / designated agencies.
2. Audit scope includes verification that findings from the previous cybersecurity audit have been closed.
3. The auditor is required to submit the cybersecurity audit report within six weeks of commencement of the audit.
4. Entities must maintain evidence and records demonstrating compliance with applicable requirements.
5. Self-audits, third-party audits, certification audits, mock drills and simulations form part of the wider assurance ecosystem.

Compliance roadmap for utilities — 2026 to 2027

Recommended implementation roadmap based on the notified requirements

1. Map applicability

Identify entity scope, OT/IT assets and critical systems.

2. Governance

Appoint CISO/Alternate CISO; establish 24×7 security function.

3. Asset & risk

Build asset register; perform risk assessment and mitigation planning.

4. Controls

Close gaps in access, segmentation, monitoring, backup, patching and remote access.

5. Assurance

Plan audits, VA/PT, certification and mock drills.

6. Go-live

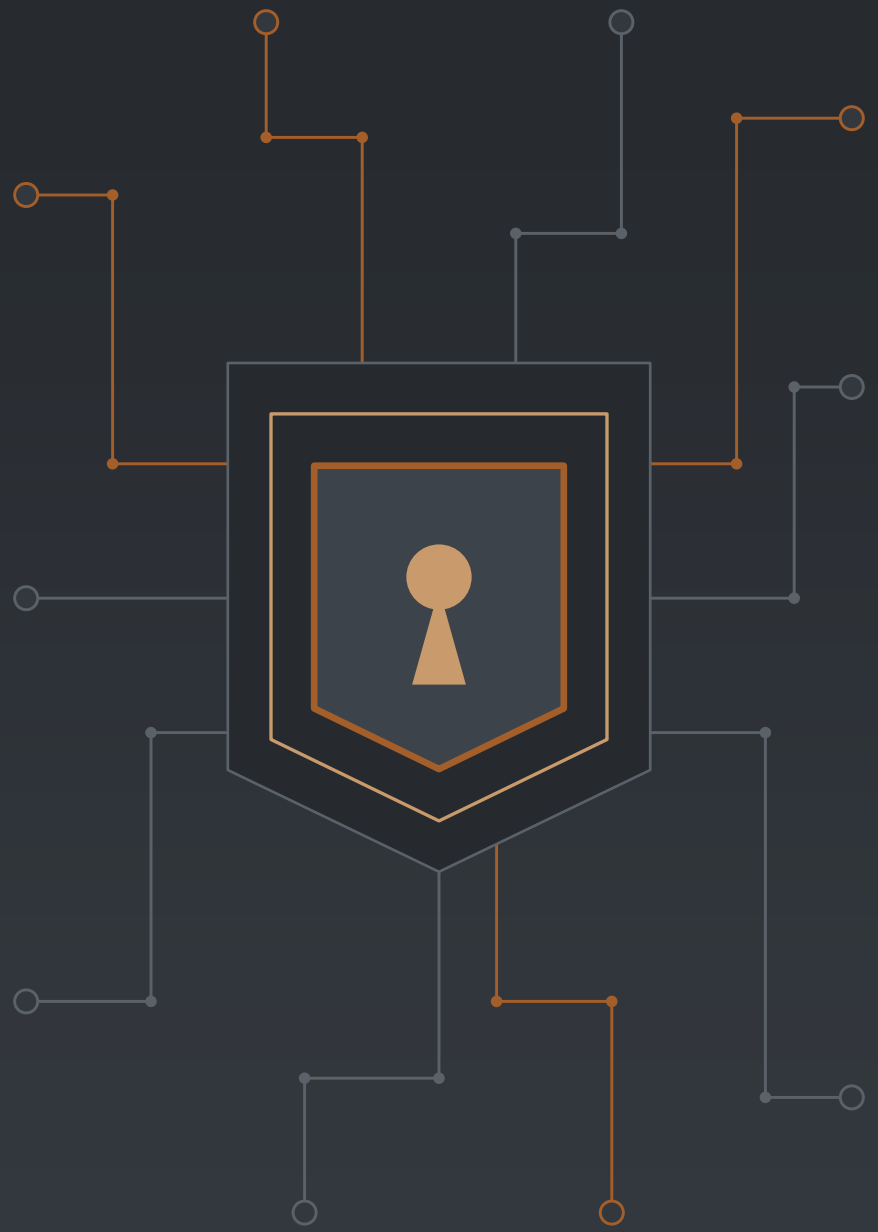
Target readiness before 1 Apr 2027 and track provisions with separate commencement dates.

Key takeaways

Educational presentation — consult the Gazette and applicable CEA directions for legal/compliance decisions

1. CEA's 2026 Regulations create a dedicated regulatory framework for cybersecurity in the power sector.
2. Core themes: governance, asset visibility, risk management, OT/IT protection, incident response, resilience, vendor security and auditability.
3. CSIRT-Power is the sector-level coordination point for cybersecurity incident response and information sharing.
4. Critical systems receive enhanced requirements for testing, backup, audit, certification and lifecycle management.
5. The Regulations generally commence on 1 April 2027, while specified provisions have separate commencement dates.
6. Utilities should use 2026 as the preparation period and align existing 2021 guideline controls with the new regulatory requirements.

Thank you



GAZETTE OF INDIA · 31 JULY 2026

Central Electricity Authority

Cyber Security in Power Sector

Regulations, 2026

Responsibilities checklist for covered entities

17	10	2	1 Apr 2027
REGULATIONS	CHAPTERS	SCHEDULES	IN FORCE

PRESENTED BY

A. De · Deputy Director, NERPC, Shillong

Checklist for every entity

Applies to all covered entities from 1 April 2027.

No	Responsibility	Clause
1	CISO and Alternate CISO designated: regular senior-management employees, Indian citizens and residents, engineering degree or equivalent, 15+ years in power sector or IT	5(1), 7(1)
2	Both posts never vacant together; Alternate acts in CISO's absence	5(2)
3	Roles defined per Central Government framework; CISO reports to head of entity (SLDC in a parent company: own CISO)	5(3), 5(4)
4	CISO tenure at least 3 years; role ring-fenced to cyber security only	5(5), 5(6)
5	CISO/Alternate contacts public and sent to CSIRT–Power and stakeholders; kept updated	5(7)
6	CISO training at least 5 man-days every FY	5(8)
7	Optional: board or senior-management member designated for compliance	15, 1st proviso
8	Cyber Security Policy aligned with BCP, covering IT and OT; head/board approval; annual review	5(10), Reg 8
9	Cyber Crisis Management Plan: prepared with CSIRT–Power, vetted by CERT-In, head/board approval, annual review	5(11), Reg 9
10	Incident Response and Recovery Plan; review every 6 months	5(35), 8(9)
11	Backup policy (backups not older than a month; restore tested), data retention, data privacy and internet access policies	8(17), 8(18), 8(21), 8(33)

Checklist for every entity (contd.)

Applies to all covered entities from 1 April 2027.

No	Responsibility	Clause
12	Systems classified critical / non-critical	5(16), 8(5)
13	Asset register of all cyber assets and critical systems; review every FY or on commissioning	5(25)
14	Cyber Risk Assessment and Mitigation Plan: update every 6 months, review every FY	5(26)
15	Vulnerability management, critical web applications identified, supply-chain risk process, phase-out and safe disposal	8(7), 8(30), 8(14), 8(22), 8(31), 8(32)
16	IT networks with CII separated from internet and other IT	5(12)
17	Security devices incl. firewalls at Electronic Security Perimeter with all prescribed capabilities; logs enabled; rules reviewed yearly	5(13), 5(37), 5(38)
18	Public web services and APIs deployed only after audit clearance; updates tested	5(14), 8(24)
19	Security devices for critical web applications	5(15)
20	Physical-security systems separated from critical systems' network	5(34)
21	Clocks synchronised; OT time source terrestrial or India-specific satellite, independent of internet	5(32), 8(27)
22	Continuous monitoring of IT and OT	5(36)
23	Remote access only for troubleshooting/emergency; CISO approval (non-critical) or risk assessment and approval (critical); logs kept 1 year	5(17), 8(15)

Checklist for every entity (contd.)

Applies to all covered entities from 1 April 2027.

No	Responsibility	Clause
24	Sensitive data encrypted and stored within India	5(19), 8(19)
25	Online and offline backups of critical systems in a separate safe environment	5(21)
26	Cyber security clauses and NDA in every SLA; vendor staff risk-assessed before access to critical systems	5(20), 8(12)
27	IT products tested per Central Government orders; FAT/SAT with cyber security tests	5(23), 5(31)
28	Vulnerability disclosure programme with vendors and CSIRT–Power	5(41)
29	Awareness programme and mock drills every 6 months	5(18)
30	Annual training for all with access to critical systems	8(20)
31	Cyber security audit of all critical systems every FY, 9–15 months apart; no three consecutive audits by same agency	5(22), Reg 13
32	Report within 6 weeks; critical/high fixed in 1 month, medium/low in 3 months; closure report within 6 months; CISO reports major findings to head/board	13(3), 14
33	Audit incl. VAPT before commissioning a new critical system; inform CSIRT–Power within 30 days	5(27), 5(28)
34	Self-audit every FY; gaps closed before next	15
35	Information to NCIIPC; within 60 days of CII identification, approach Appropriate Government for Protected System notification	5(29)

Checklist for every entity (contd.)

Applies to all covered entities from 1 April 2027.

No	Responsibility	Clause
36	CII not discoverable on public platforms without head/board approval	5(30)
37	Report incidents to CSIRT–Power and CERT-In within 6 hours; sabotage in critical systems within 24 hours	7(3)(a)
38	Detailed report, ATR and RCA shared; incident register maintained	7(3)(g), 5(42)
39	Logs: ICT 180 days; incident-related 365 days	8(33)
40	CCMP drill every year, no scenario repeated until all tested; post-crisis report and CCMP update	10(2), 10(3)
41	Comply with CSIRT–Power directions; act on CERT-In and Government advisories	4(3), 7(3)(e)
42	Change management with version control and roll-back; OT patches OEM-signed and tested offline	8(25)
43	Quarterly compliance review by CISO; custody of the 12 First Schedule documents	7(3)(b), 7(3)(i)

Additional checklist for OT

Not applicable to power exchanges and OTC platforms (2(1)(b)).

No	Responsibility	Clause
1	OT physically isolated from internet and IT; any IT–OT link only on business need, risk assessment, head/board approval and continuous monitoring	6(1)
2	Control and real-time data over a dedicated channel, isolated from internet, within India (cross-border only via separate system and unidirectional gateway)	6(3)
3	Remote operation only if necessary, within India, with head/board approval	6(4), 8(16)
4	OT equipment complies with Central Government orders	6(5)
5	OT communication system isolated from IT's	6(6)
6	OT segmented into trust levels	6(8)
7	Inter-entity OT channel protected by its owner	6(9)
8	IT–OT data through separate channels and unidirectional gateways	8(28)

Deferred items

These start on dates the Authority will notify with prior approval of the Central Government.

No	Responsibility	Clause
1	Information Security Division under the CISO, in India, round the clock	5(9)
2	ISO/IEC 27001 or Technical Criteria Certificate for all critical systems	5(24)
3	Designated courses for all personnel incl. vendor O&M staff	5(33)
4	IT and OT procured from trusted sources	5(39), 6(7)
5	OT perimeter devices at interconnection with communication system; signature updates offline	6(2)

Vendor duties

Regulation 11 binds every vendor; Regulation 12 adds duties for vendors of prosumer DGRs.

No	Responsibility	Clause
1	Tested recovery procedures for supplied systems	11(1)
2	Signed/validated patches for contract period or useful life, whichever later	11(2)
3	Integration document for third-party components; end-of-life details	11(3), 11(4)
4	Bill of Materials per CERT-In guidelines	11(5)
5	Hardened hardware and software	11(6)
6	Vulnerability reporting process; report to CSIRT–Power	11(7)
7	Prosumer DGR vendors: data within India and encrypted; secure, mutually authenticated channels; trusted-source information (existing DGRs from a notified date)	12(1)–(3)

Key timelines

Event-based deadlines and recurring duties.

When	What	Clause
Within 6 hours	Report incident to CSIRT–Power and CERT-In	7(3)(a)
Within 24 hours of conclusion	Report sabotage in critical systems	7(3)(a)
Within 30 days of commissioning	Inform CSIRT–Power of new / replaced critical system	5(28)
Within 60 days of NCIIPC identification	Approach Appropriate Government for Protected System	5(29)
6 weeks / 6 months from audit start	Audit report / closure report	13(3), 14(1)
1 month / 3 months from report	Fix critical-high / medium-low vulnerabilities	13(3)
Every quarter	CISO compliance review	7(3)(b)
Every 6 months	Awareness and mock drills; CRAMP update; IRRP review	5(18), 5(26), 5(35)
Every year	CSP and CCMP review; CCMP drill; perimeter rules; training	5(10), 5(11), 10(2), 5(38), 8(20)
Every FY	Cyber security audit (9–15 months apart); self-audit; CISO training; asset register, CRAMP, backup and retention reviews	5(22), 15, 5(8), 5(25), 5(26), 8(18), 8(33)

Thank you

Annexure B 2.2

POWERGRID CORPORATION OF INDIA LTD. - COST ENGINEERING DEPARTMENT		
ABSTRACT COST ESTIMATE		
REPLACEMENT / UPGRADATION OF EXISTING SCADA / EMS SYSTEM AT SLDCS OF NORTH EASTERN REGION UNDER ULDC PHASE-III)		
(March 2026 Price Level)		
Sl. No.	**Description**	**Amount (in Cr)**
	Equipment Cost	
A	**Supply**	
i	OPGW cable & accessories	
ii	SAS Upgradation	
i	SCADA & Communicaiton System	517.05
	Sub- Total A	**517.05**
B	Training charges	5.367
C	Installation, Testing and Commissioning	16.08
D	Inland Freight and Insurance (@ 8%)	41.36
E	**Taxes and Duties**	
i	GST @ 18% (on Supply cost & Services)	96.9304
	Total (A to E)	**676.7966**
F	Incidental Expenditure during Construction (@ 5%)	33.84
G	Contingency (@ 3%)	20.3
	Total (A to G)	**730.94**
H	Interest During Construction (IDC)	0
	Grand Total	**730.94**
I	AMC Charges @ 30 % of supply & Services of the scheme	**188.73**

POWERGRID CORPORATION OF INDIA LTD. - COST ENGINEERING DEPARTMENT

ABSTRACT COST ESTIMATE

REPLACEMENT / UPGRADATION OF EXISTING SCADA / EMS SYSTEM AT SLDCS OF NORTH EASTERN REGION UNDER ULDC PHASE-III)

(March 2026 Price Level)

SL No.	SLDC	SCADA _ EMS Supply	Supply GST	F&I	Erection	Erection GST	Training	Training GST	AMC Charges	Total	without AMC
1	Assam	₹ 80,90,14,243.00	₹ 14,56,22,563.70	₹ 6,47,21,139.44	₹ 2,12,79,576.00	₹ 38,30,323.68	₹ 76,66,436.80	₹ 13,79,958.62	₹ 29,39,24,011.93	₹ 1,34,74,38,253.21	₹ 1,05,35,14,241.28
2	Tripura	₹ 74,49,19,992.97	₹ 13,40,85,598.70	₹ 5,95,93,599.44	₹ 2,74,87,576.00	₹ 49,47,763.68	₹ 76,66,436.80	₹ 13,79,958.62	₹ 27,34,32,279.42	₹ 1,25,35,13,205.66	₹ 98,00,80,926.25
3	Meghalaya	₹ 75,08,65,617.97	₹ 13,51,55,811.20	₹ 6,00,69,249.44	₹ 1,61,20,814.40	₹ 29,01,746.59	₹ 76,66,436.80	₹ 13,79,958.62	₹ 27,15,13,197.06	₹ 1,24,56,72,832.12	₹ 97,41,59,635.06
4	Manipur	₹ 71,25,17,758.37	₹ 12,82,53,196.50	₹ 5,70,01,420.67	₹ 1,51,60,536.00	₹ 27,28,896.48	₹ 76,66,436.80	₹ 13,79,958.62	₹ 25,75,98,116.21	₹ 1,18,23,06,319.66	₹ 92,47,08,203.45
5	Mizoram	₹ 70,29,24,806.37	₹ 12,65,26,465.10	₹ 5,62,33,984.51	₹ 2,65,13,496.00	₹ 47,72,429.28	₹ 76,66,436.80	₹ 13,79,958.62	₹ 25,82,21,159.04	₹ 1,18,42,38,735.77	₹ 92,60,17,576.73
6	Nagaland	₹ 71,88,58,809.97	₹ 12,93,94,585.80	₹ 5,75,08,704.80	₹ 2,68,21,016.00	₹ 48,27,782.88	₹ 76,66,436.80	₹ 13,79,958.62	₹ 26,39,70,658.39	₹ 1,21,04,27,953.26	₹ 94,64,57,294.87
7	AP	₹ 73,14,14,917.37	₹ 13,16,54,685.10	₹ 5,85,13,193.39	₹ 2,74,56,856.00	₹ 49,42,234.08	₹ 76,66,436.80	₹ 13,79,958.62	₹ 26,86,40,607.77	₹ 1,23,16,68,889.16	₹ 96,30,28,281.39
	Total	₹ 5,17,05,16,146.02	₹ 93,06,92,906.28	₹ 41,36,41,291.68	₹ 16,08,39,870.40	₹ 2,89,51,176.67	₹ 5,36,65,057.60	₹ 96,59,710.37	₹ 1,88,73,00,029.81	₹ 8,65,52,66,188.84	₹ 6,76,79,66,159.03
		₹ 517.05	₹ 93.07	₹ 41.36	₹ 16.08	₹ 2.90	₹ 5.37	₹ 0.97	₹ 188.73	₹ 865.53	₹ 676.80

Communication System Outage Planning Portal (CSOPP)

North Eastern Regional Load Despatch Centre — Grid-India

STANDARD OPERATING PROCEDURE

For RPC Users

Audience	RPC users — the North Eastern Regional Power Committee
Covers	Regional oversight: reviewing outages, recording CSOP outcomes, and remarks
Prerequisite	You have completed first login and 2FA setup (see the separate 2FA SOP)
Your role	Regional oversight — you see all entities, take part in CSOP, and record RPC remarks

Contents

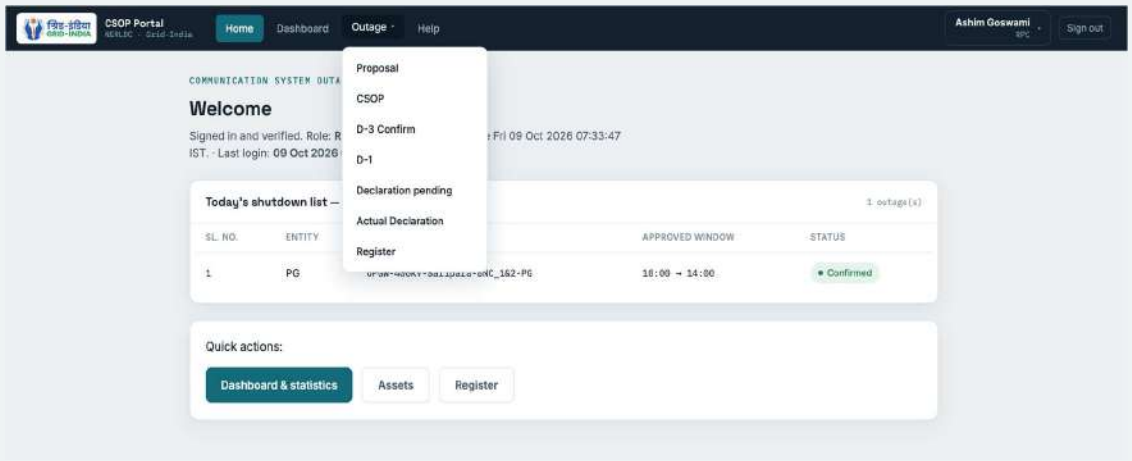
1. Your role 3
2. Reviewing the regional picture 3
3. Recording CSOP outcomes 4
4. Adding RPC remarks on declared outages 5
5. Searching and exporting 6
6. Your account 6
7. Quick reference 6

1. Your role

As an RPC user you have regional oversight of communication outages across the North Eastern grid. You can see every entity's proposals, decisions and declarations — not just one entity's. Your active tasks are recording CSOP outcomes and adding RPC remarks on declared outages; everything else is for review.

The menus you use are:

- **Outage ▾** — Proposal, CSOP, D-3 Confirm, D-1, Declaration, Actual Declaration and Register.
- **Dashboard** — statistics across all entities.

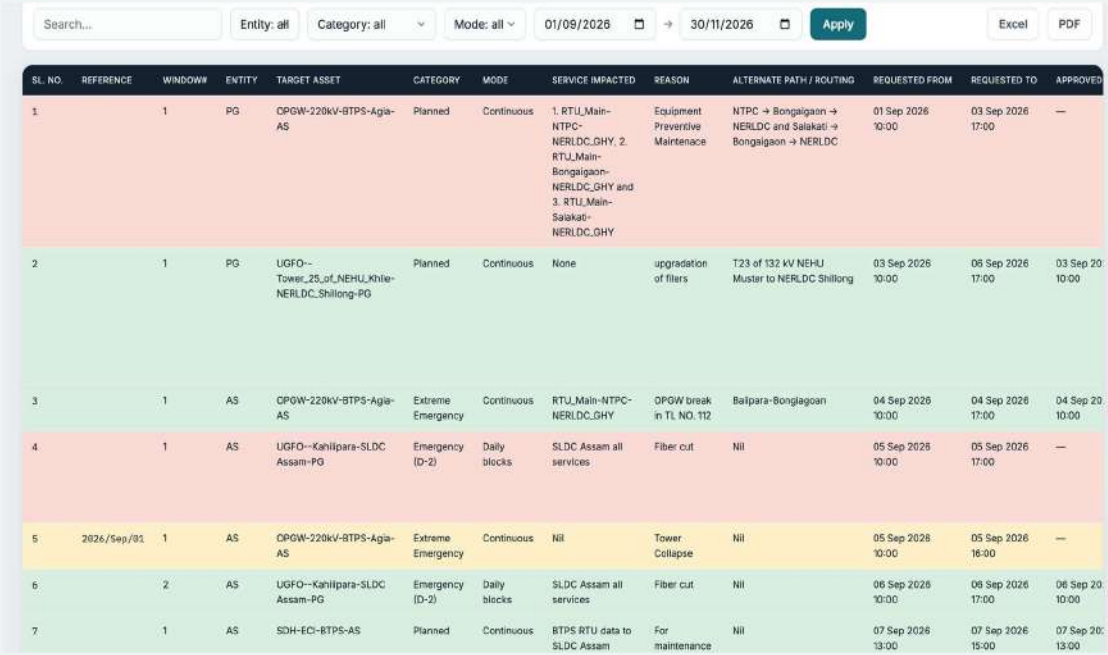


> **NOTE**
> Asset registration and verification, emergency decisions, and notification settings are handled by entities and RLDC. Those menus do not appear for RPC users.

2. Reviewing the regional picture

All the read-only pages under Outage show every entity's data, giving you the complete regional view:

- **Proposal** — all proposals, expandable to see each window and its status.
- **Register** — every proposed window, colour-coded (green approved, red rejected, yellow pending), with search, date filter and Excel/PDF export.
- **Actual Declaration** — declared windows with actual times, deviations in minutes, and all three remarks.
- **D-3 Confirm / D-1 / Declaration pending** — the operational work-lists for the region.
- **Dashboard** — asset and outage statistics across entities and categories.



SL. NO.	REFERENCE	WINDOW#	ENTITY	TARGET ASSET	CATEGORY	MODE	SERVICE IMPACTED	REASON	ALTERNATE PATH / ROUTING	REQUESTED FROM	REQUESTED TO	APPROVED
1		1	PG	OPGW-220kV-BTPS-Agia-AS	Planned	Continuous	1. RTU_Main-NTPC-NERLDC_GHY, 2. RTU_Main-Bongaigaon-NERLDC_GHY and 3. RTU_Main-Salakati-NERLDC_GHY	Equipment Preventive Maintenace	NTPC → Bongaigaon → NERLDC and Salakati → Bongaigaon → NERLDC	01 Sep 2026 10:00	03 Sep 2026 17:00	—
2		1	PG	UGFO--Tower_25_of_NEHU_Khle-NERLDC_Shillong-PG	Planned	Continuous	None	upgradation of filers	T23 of 132 kV NEHU Mustar to NERLDC Shillong	03 Sep 2026 10:00	06 Sep 2026 17:00	03 Sep 20 10:00
3		1	AS	OPGW-220kV-BTPS-Agia-AS	Extreme Emergency	Continuous	RTU_Main-NTPC-NERLDC_GHY	OPGW break in TL NO. 112	Balipara-Bongiagoan	04 Sep 2026 10:00	04 Sep 2026 17:00	04 Sep 20 10:00
4		1	AS	UGFO--Kahilipara-SLDC Assam-PG	Emergency (D-2)	Daily blocks	SLDC Assam all services	Fiber cut	Nil	05 Sep 2026 10:00	05 Sep 2026 17:00	—
5	2026/Sep/01	1	AS	OPGW-220kV-BTPS-Agia-AS	Extreme Emergency	Continuous	Nil	Tower Collapse	Nil	05 Sep 2026 10:00	05 Sep 2026 16:00	—
6		2	AS	UGFO--Kahilipara-SLDC Assam-PG	Emergency (D-2)	Daily blocks	SLDC Assam all services	Fiber cut	Nil	06 Sep 2026 10:00	06 Sep 2026 17:00	06 Sep 20 10:00
7		1	AS	SDH-ECI-BTPS-AS	Planned	Continuous	BTPS RTU data to SLDC Assam	For maintenance	Nil	07 Sep 2026 13:00	07 Sep 2026 15:00	07 Sep 20 13:00

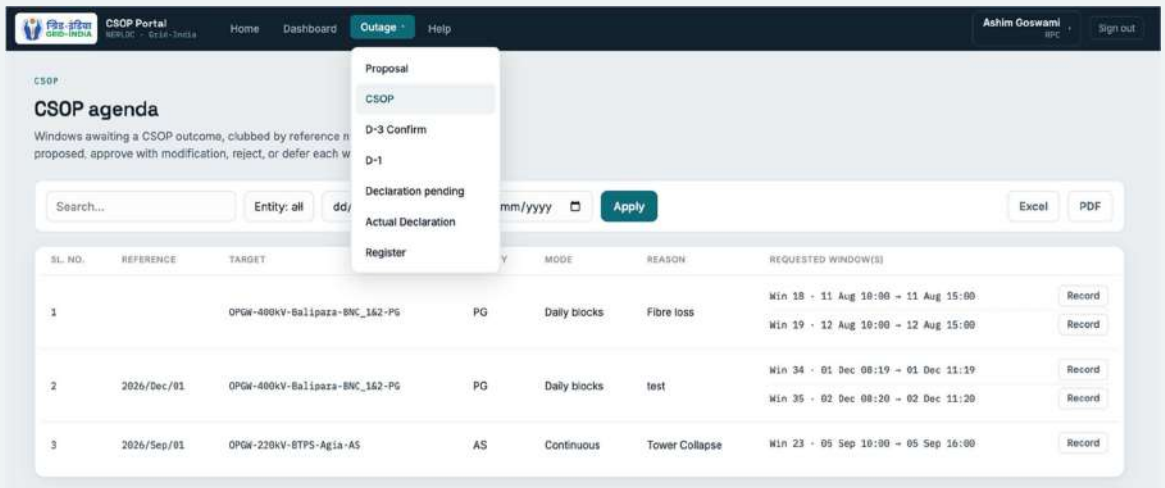
3. Recording CSOP outcomes

Planned outages come to the CSOP page for decision at the monthly CSOP meeting. As an RPC user you take part in recording the outcome for each proposed window. There are four possible outcomes.

Outcome	Meaning	Remark required?
Approved as proposed	Approved with the requested window unchanged.	No
Approved with modification	Approved, but with a changed window.	Yes — mandatory
Rejected	Not approved.	Yes — mandatory
Deferred	Held over; the window dies and must be re-proposed.	Yes — mandatory

Step 1 Open the CSOP agenda

Choose Outage ▾ → CSOP. This lists the windows awaiting a CSOP decision.

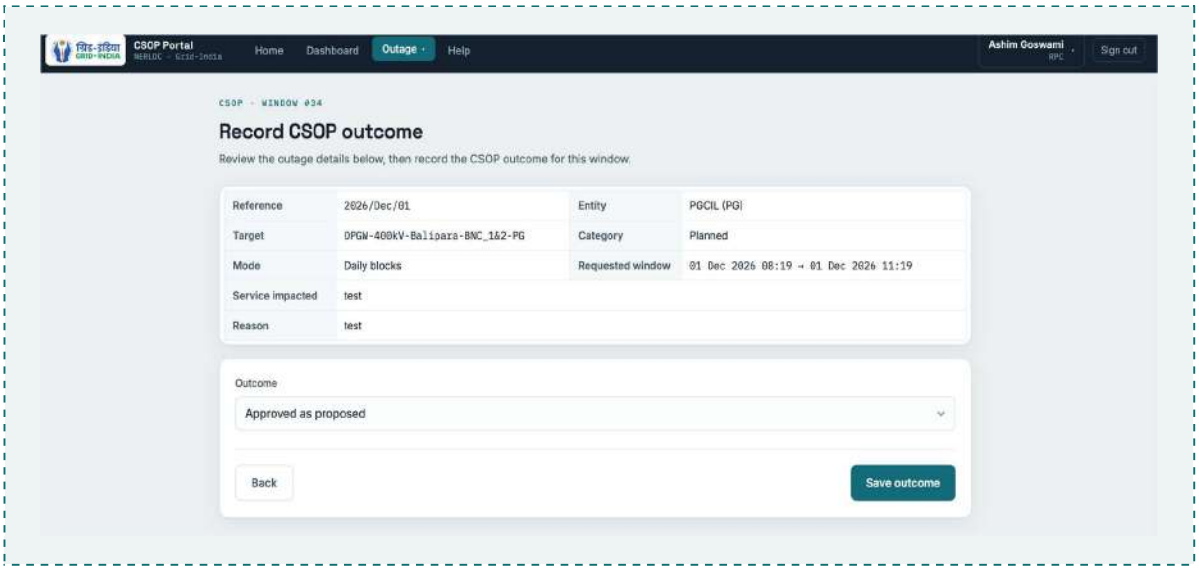


Step 2 Record the outcome

Select a window and choose the outcome.

For Approved with modification, enter the modified approved window (the new start/end times).

For modification, rejection or deferral, a reason/remark is mandatory — the entity sees it.



Step 3 Save

Save the outcome. Approved windows move to the entity's D-3 confirmation stage; the decision appears on the Register and proposal page, colour-coded.

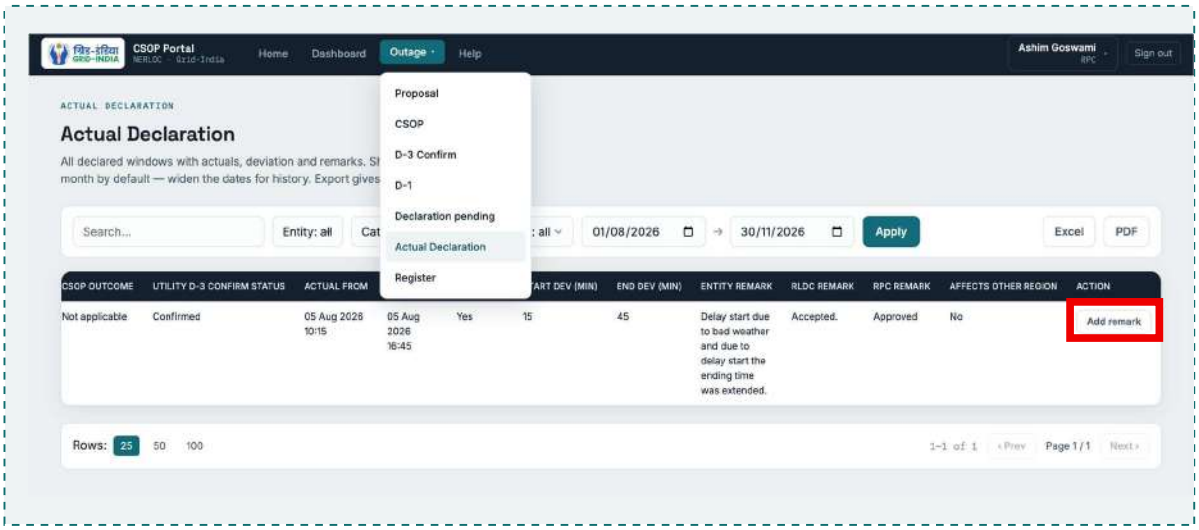
> **IMPORTANT**
> When approving with modification, set the approved window to the exact times being granted — the entity is bound by the approved window, and any difference from their request is shown to them as a modification.

4. Adding RPC remarks on declared outages

After an entity declares the actual outcome of an outage, you can record an RPC remark against that window. Your remark is one of the three (entity / RLDC / RPC) held on record for each declaration — for example, an oversight observation on a deviation.

Step 1 Open Actual Declaration

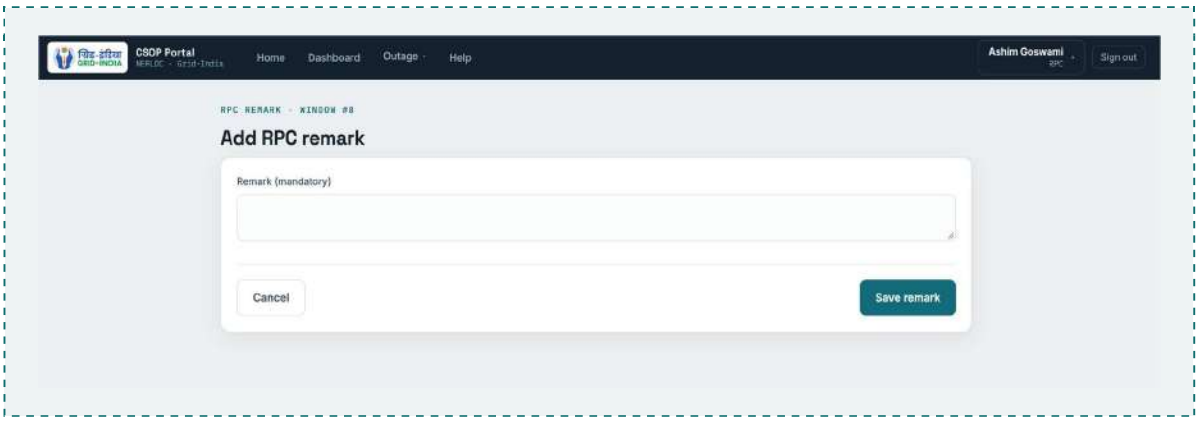
Choose Outage ▾ → Actual Declaration. This lists all declared windows, with actual times and deviations in minutes.



Step 2 **Add your remark**

Find the window and select Add remark.

Enter your RPC remark and save. It is stored against the window and shown in the RPC-remark column.



5. Searching and exporting

On the Register and Actual Declaration pages you can narrow the view and export it for meetings or records:

- Use the search box and the entity / date filters to focus on a period or an entity.
- The date window defaults to the current and next month; widen it to see history.
- Export the filtered set to Excel or PDF using the export buttons.

6. Your account

Change your password: open your name at the top-right → Change password.

Lost your 2FA device? use a backup code to log in, or contact the RLDC administrator to reset your 2FA (see the 2FA SOP).

7. Quick reference

Task	Where	Notes
Record CSOP outcome	Outage → CSOP	Remark required except plain approve

Task	Where	Notes
Add RPC remark	Outage → Actual Declaration	On declared windows
Review region / export	Register, Dashboard	All entities; Excel / PDF export

Need help?

For any difficulty using the portal, or to have your 2FA reset, contact the RLDC administrator at NERLDC.

Communication System Outage Planning Portal (CSOPP)

North Eastern Regional Load Despatch Centre — Grid-India

STANDARD OPERATING PROCEDURE

First Login & Two-Factor Authentication (2FA) Setup

Audience	All portal users — Entity, RLDC and RPC
Applies to	First-time login and mandatory 2FA enrolment
Prerequisite	A username and first-time password issued by the RLDC administrator via email as per the request of the entity.
You will need	A computer with a web browser, and a smartphone with an authenticator app
Time required	About 5 minutes

What is 2FA and why is it required?

The CSOPP portal protects your account with Two-Factor Authentication (2FA). In addition to your password, you must enter a 6-digit code that changes every 30 seconds, generated by an app on your smartphone. This means that even if someone learns your password, they cannot log in without your phone.

2FA setup is mandatory. The very first time you log in, the portal will require you to enrol your authenticator app before you can use any other part of the system. This is a one-time setup — after that, you simply open the app to read your code at each login.

Before you begin — install an authenticator app

On your smartphone, install one of the following free authenticator apps from your app store. Any of them works — if you already use one, keep using it.

- Google Authenticator (Android / iPhone)
- Microsoft Authenticator (Android / iPhone)
- Authy, FreeOTP, or any other TOTP-compatible authenticator

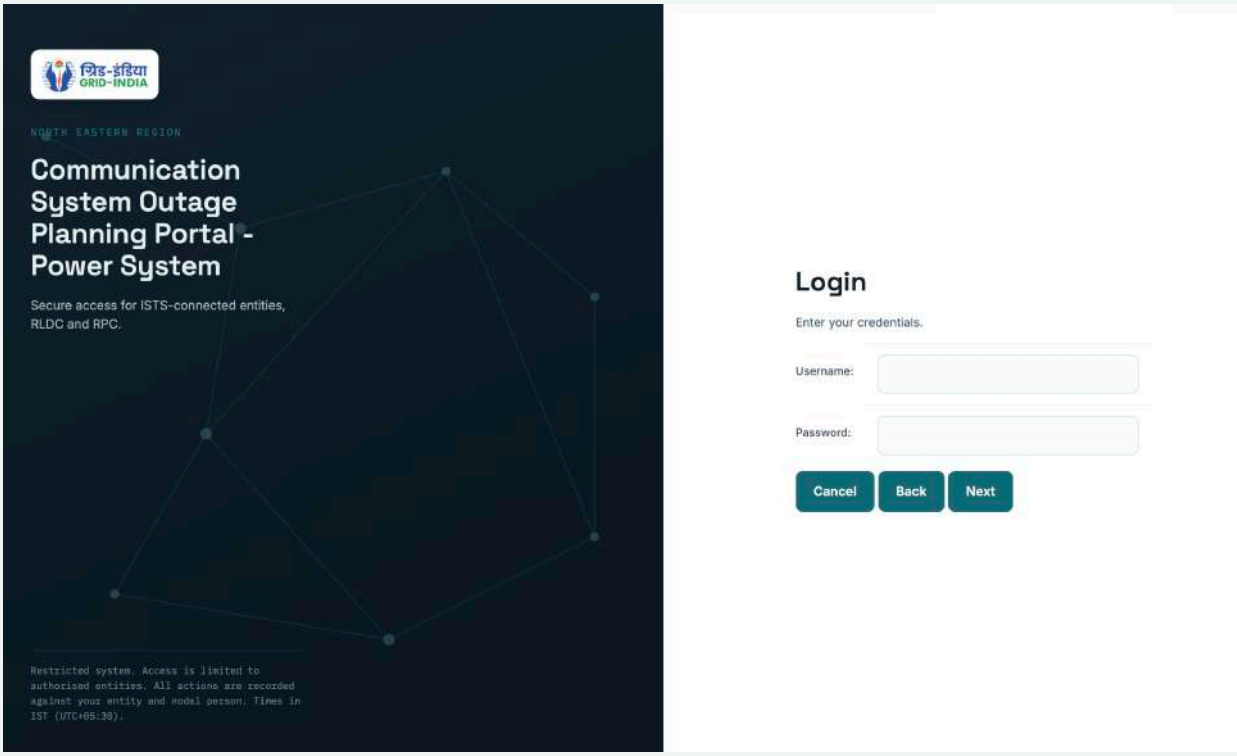
> **IMPORTANT**
> Do not use SMS or email for these codes — the portal uses an authenticator app only. Make sure your phone's date and time are set to “automatic”, otherwise the codes will be rejected.

Step-by-step: first login and 2FA setup

Step 1 Open the portal and sign in

Open your web browser and go to the CSOPP portal address provided by the RLDC administrator.

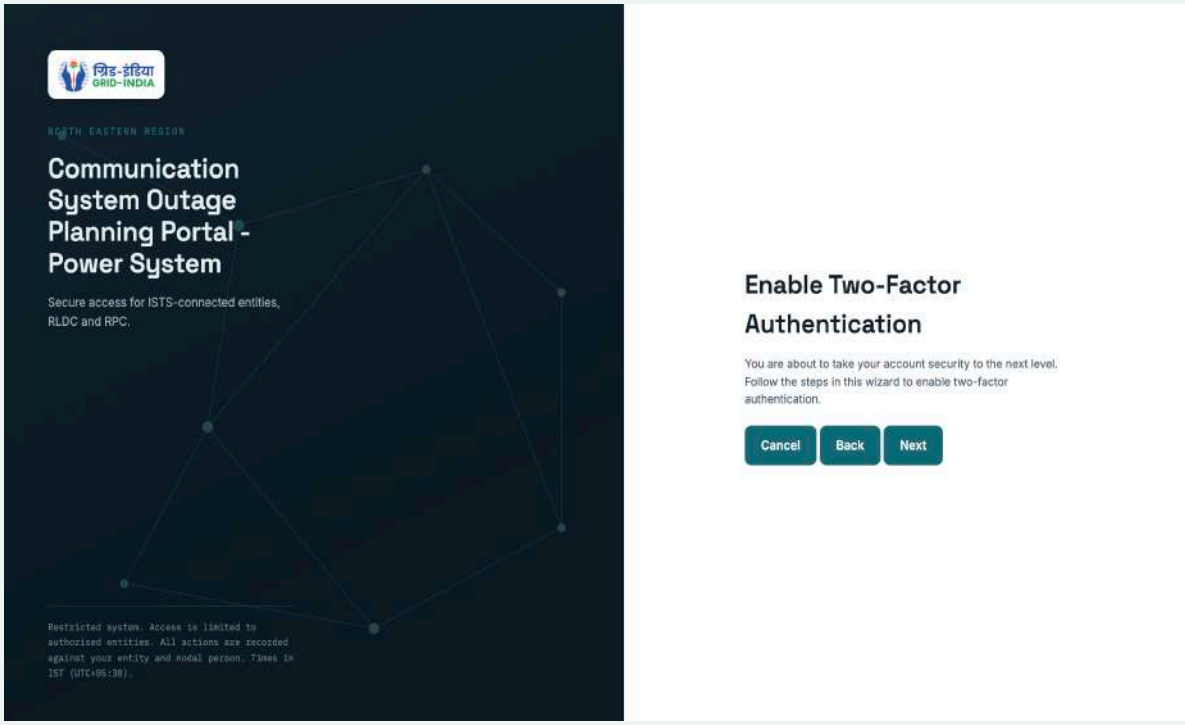
Enter the username and first-time password you were issued, and select Login.



Step 2 Begin 2FA enrolment

Because this is your first login, the portal automatically takes you to the 2FA setup page. You cannot skip this step or reach any other page until it is complete.

Select Start / Next to begin.

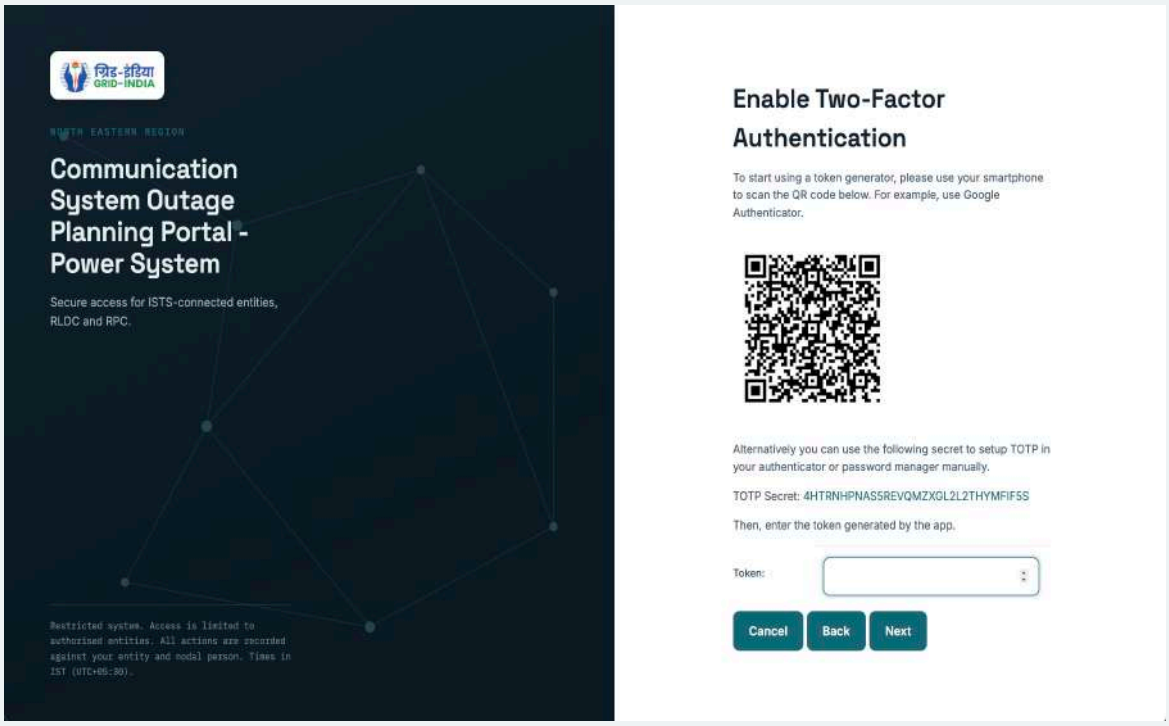


Step 3 Scan the QR code with your authenticator app

The portal now shows a QR code on your screen.

Open your authenticator app on your phone, choose “Scan a QR code” (or the “+” / “Add account” option), and point your phone camera at the QR code on the screen.

The app will add an entry named “CSOPP Portal” and immediately begin showing a 6-digit code that refreshes every 30 seconds.



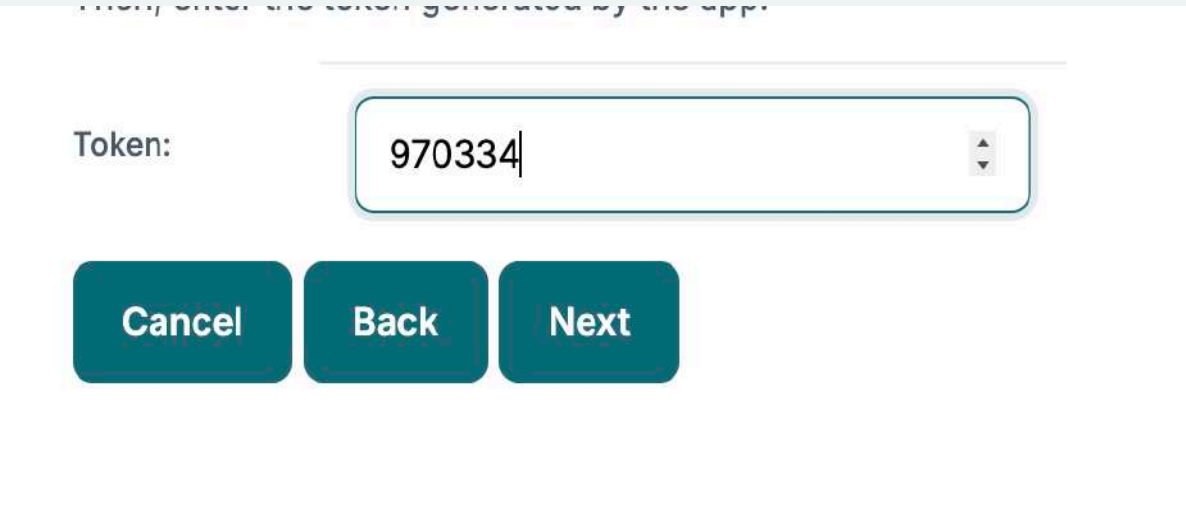
IMPORTANT
Your QR code is unique and secret to you. Never share it, photograph it for others, or send it by email or chat. Anyone who has it can generate your login codes.

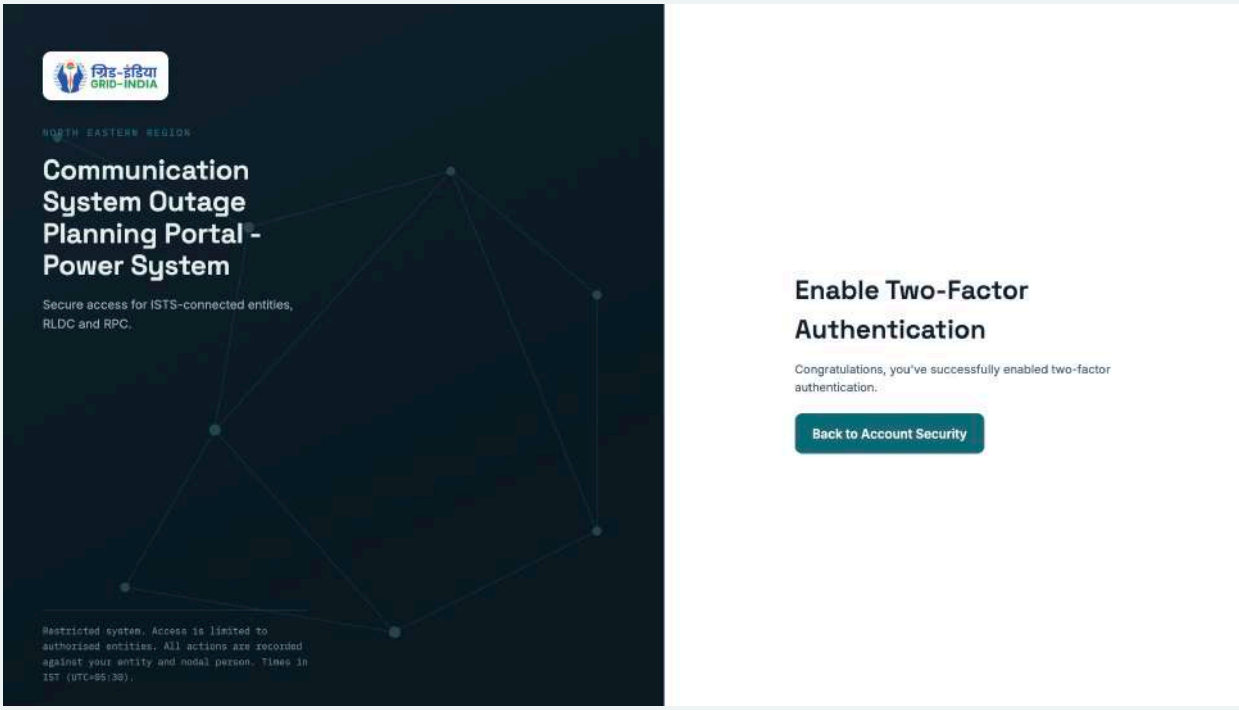
Step 4 Enter the 6-digit code to confirm

Read the current 6-digit code shown in your authenticator app for “CSOPP Portal”.

Type it into the “Token” box on the portal and select Next / Verify.

Enter it promptly — each code is valid for only 30 seconds. If it changes while you are typing, use the new code.



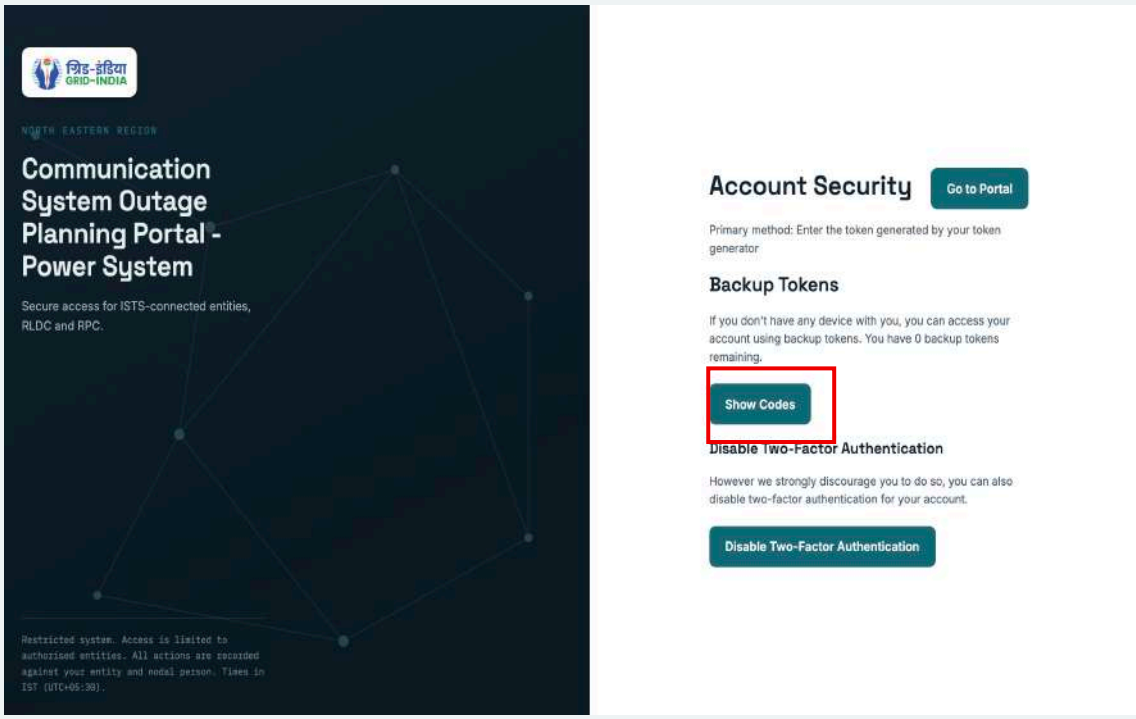


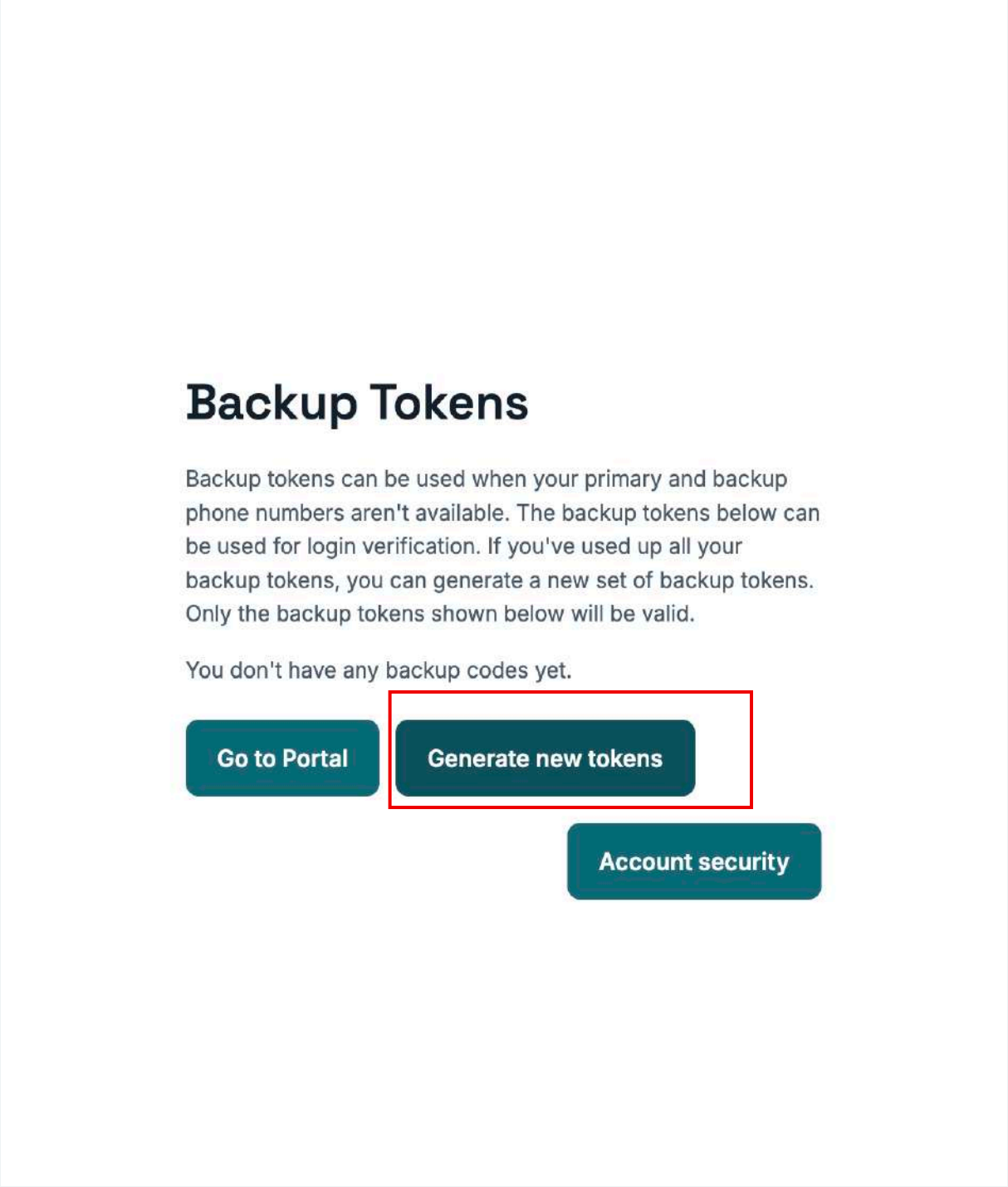
Step 5 Save your backup codes

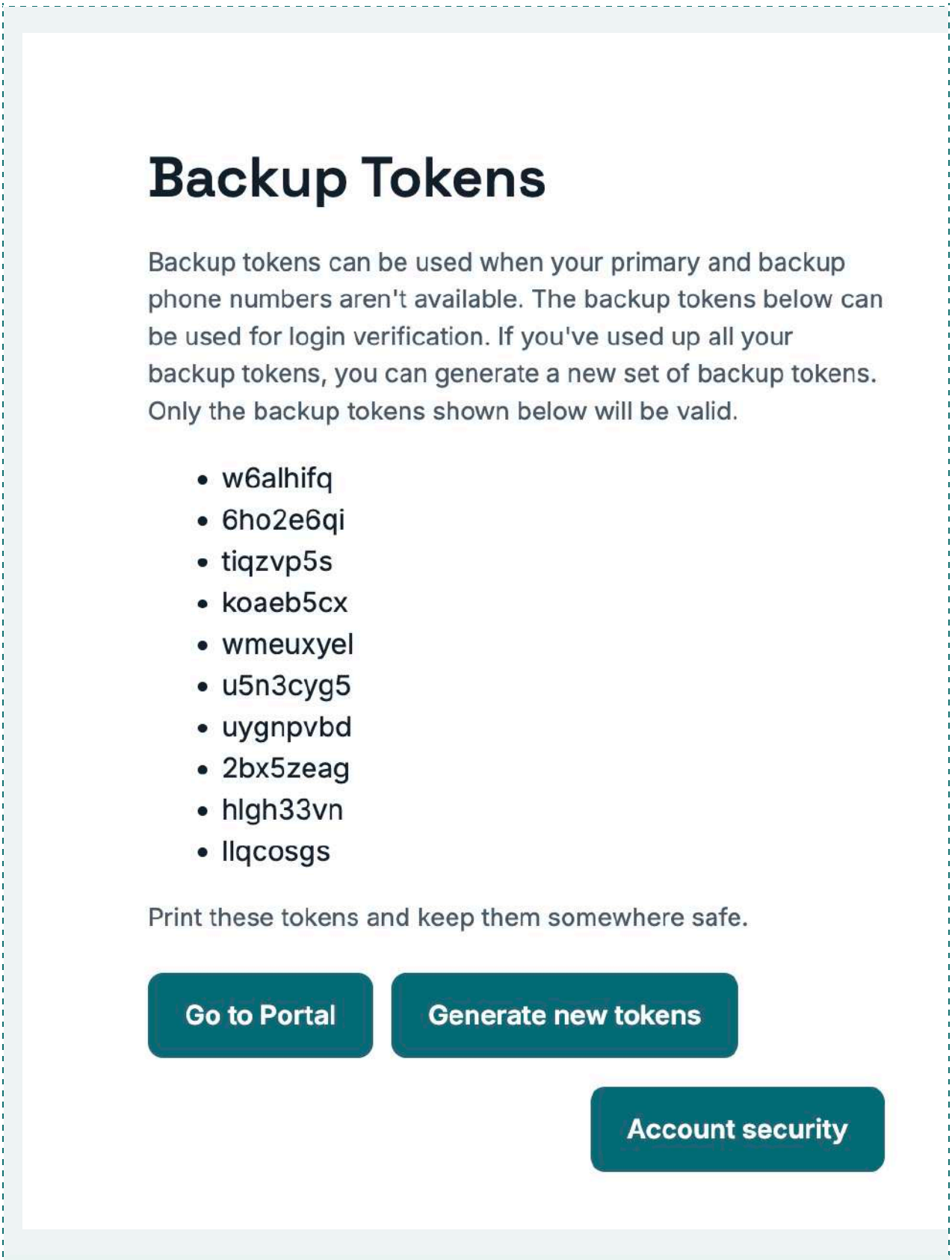
After verifying, the portal shows a set of one-time backup codes. These let you sign in if you ever lose access to your phone.

Write them down or print them and keep them somewhere safe and private — not saved in the portal or in an email to yourself.

Each backup code works only once.



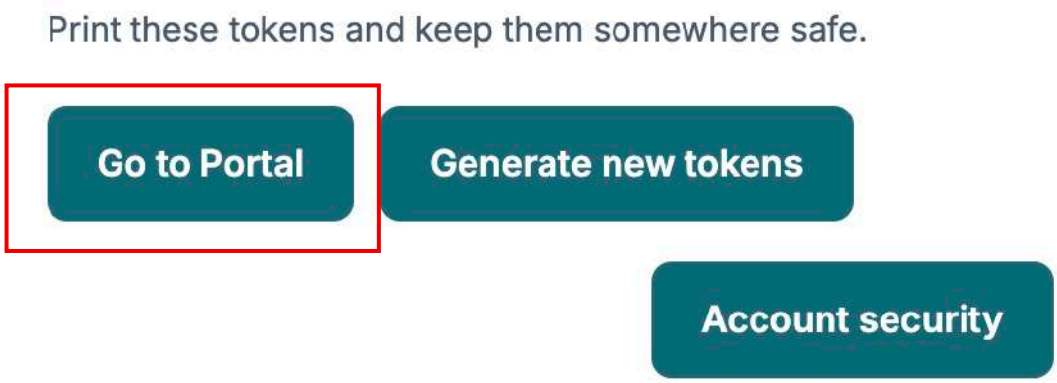

Backup Tokens
Backup tokens can be used when your primary and backup phone numbers aren't available. The backup tokens below can be used for login verification. If you've used up all your backup tokens, you can generate a new set of backup tokens. Only the backup tokens shown below will be valid.
You don't have any backup codes yet.
Go to Portal
Generate new tokens
Account security



NOTE

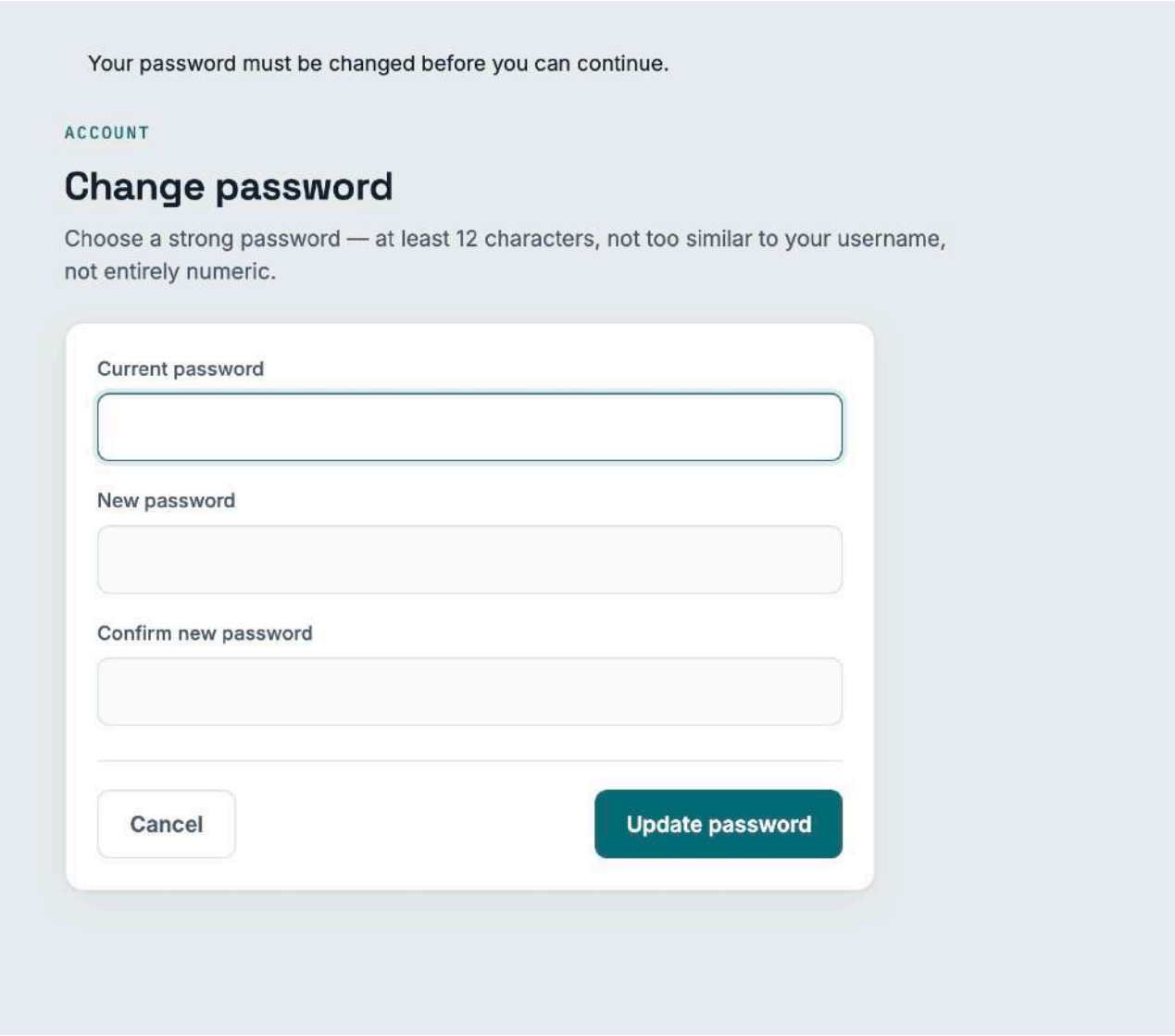
If you do not see a backup-codes screen, you can generate them later from your account settings, or ask the RLDC administrator. Keeping backup codes is strongly recommended.

Step 6 Setup complete — Click on the Go to Portal



Step 7 Setup complete — Change Password:

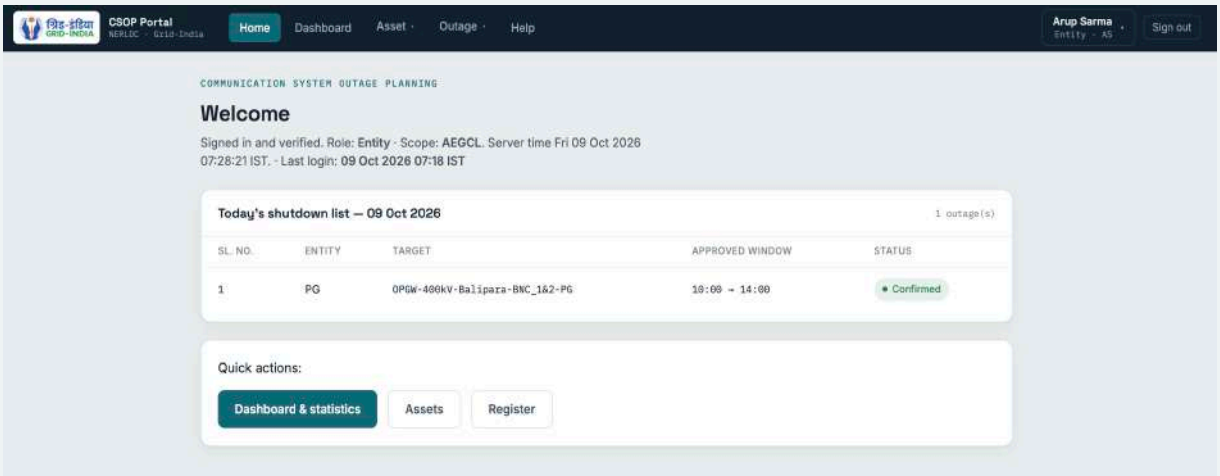
After first time setup you will be asked to change the password



Step 8 Setup complete — you are signed in

That's it. 2FA is now enabled on your account and you are taken to the portal home page.

From now on, each time you log in you will enter your username and password, then the current 6-digit code from your authenticator app.



Logging in from now on

Every subsequent login takes three quick entries:

- Enter your username and password, and select Login.
- Open your authenticator app and read the current 6-digit code for “CSOPP Portal”.
- Type the code into the portal and select Login. You're in.

> **NOTE**
> The portal does not “remember” your device — you will be asked for a fresh code at every login. This is intentional, for security.

Troubleshooting

Problem	What to do
The 6-digit code is rejected / “invalid token”.	Almost always a clock problem. On your phone, set date & time to “automatic / network-provided”. Then read a fresh code and try again. Enter the code quickly — it changes every 30 seconds.
I lost my phone / got a new phone.	Use one of your saved backup codes to log in, then re-enrol your new phone. If you have no backup codes, contact the RLDC administrator to reset your 2FA.
I never received / can't find my backup codes.	Generate new ones from your account settings after logging in, or ask the RLDC administrator. Old backup codes stop working once you generate new ones.
The QR code won't scan.	Improve lighting, hold the phone steady, or use the “enter a setup key” option in your app if the portal shows a text key beneath the QR code.
I'm stuck on the setup page and can't reach anything else.	That is by design — 2FA setup must be completed first. Follow steps 3–4 to finish enrolment; the portal will then open normally.
I think someone else may have set up 2FA on my account.	Contact the RLDC administrator immediately to have your account's 2FA reset and re-issued.

Keep your account safe

- Never share your password, your 6-digit codes, your QR code, or your backup codes with anyone — including colleagues or IT staff.
- The portal administrator will never ask you for your password or codes.
- Change your first-time password after your first login (User menu → Change password).
- Keep your backup codes somewhere private and offline.

Need help?

For any difficulty completing 2FA setup, or to have your 2FA reset, contact the RLDC administrator at NERLDC.

Communication System Outage Planning Portal (CSOPP)

North Eastern Regional Load Despatch Centre — Grid-India

STANDARD OPERATING PROCEDURE

For Entity Users

Audience	Entity (utility) users — POWERGRID and State entities in the NER grid
Covers	Everything an entity user does in the portal, from assets to outage declaration
Prerequisite	You have completed first login and 2FA setup (see the separate 2FA SOP)
Your role	Register assets, propose and confirm outages, declare what actually happened

Contents

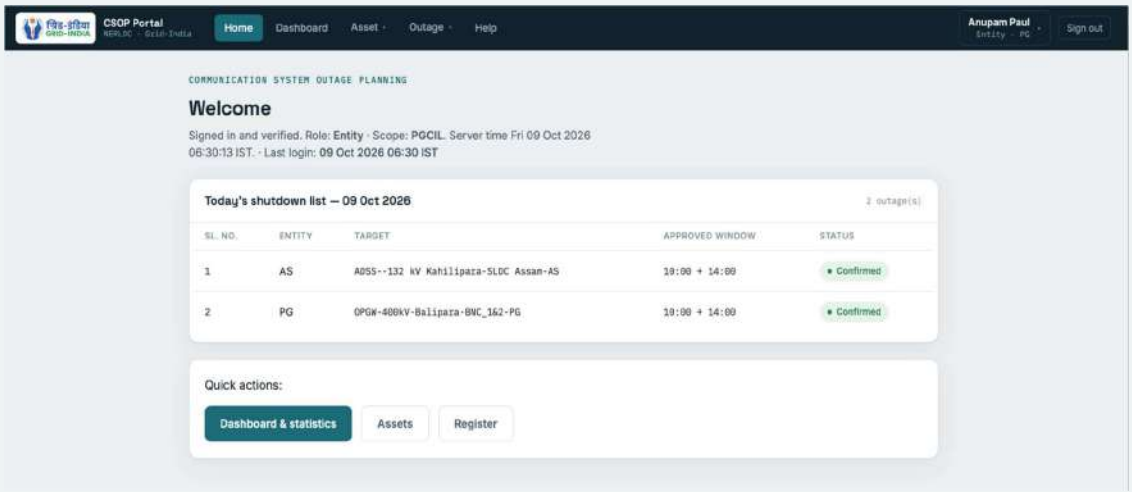
1. Getting oriented 3
2. Understanding the outage lifecycle 3
3. Registering your assets 3
4. Proposing a planned outage 4
5. Confirming an approved outage (D-3) 6
6. Declaring what actually happened 6
7. Applying for an emergency outage 7
8. Applying for an Extreme Emergency outage 7
9. Viewing records and reports 8
10. Your account 8
11. Quick reference — deadlines 8

1. Getting oriented

After you log in, you land on the Home page. It shows today's shutdown list, your last login time, and quick links. Along the top is the navigation bar; the menus you use most are:

- **Asset** ▾ — view all assets and register your own.
- **Outage** ▾ — propose outages, apply for extreme emergencies, confirm, declare, and view the register and reports.
- **Help** — your SOPs, available any time.

Your name is at the top-right; that menu holds My profile (update your name) and Change password.



NOTE

You only ever see and act on your own entity's data. Every proposal you submit is given an official reference number in the form YYYY/Mon/NN (for example 2026/Sep/01) — use this number when referring to an outage in correspondence.

2. Understanding the outage lifecycle

Each planned outage moves through these stages, and each has a deadline worth knowing.

Stage	What happens	Key deadline
Propose	You submit a planned outage for next month.	By the 8th of the previous month
CSOP	RLDC / RPC approve, modify, reject or defer it.	At the monthly CSOP meeting
Confirm (D-3)	You confirm you still intend to take it.	By D-3 (3 days before)
Avail & declare	You take the outage, then declare what happened.	Declare before the freeze
Freeze	Records lock for compliance.	10th of the following month

IMPORTANT

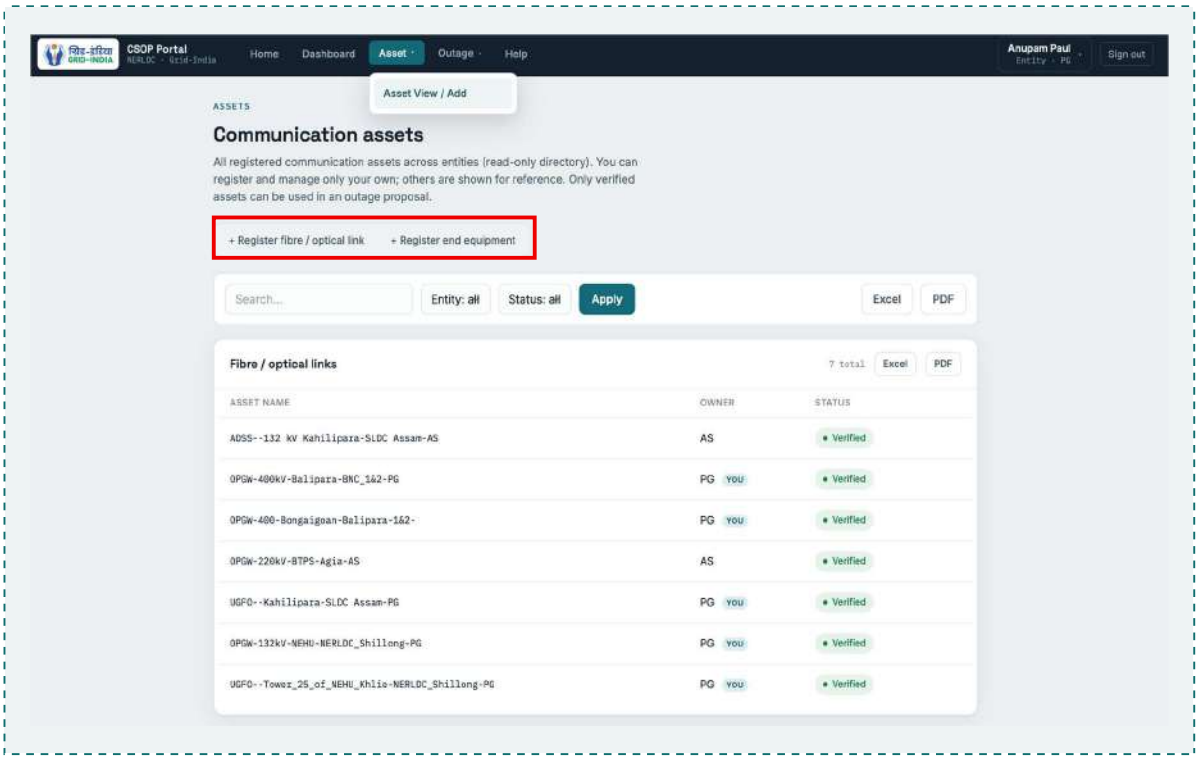
If you do not CONFIRM by D-3, the approved outage lapses and cannot be revived that cycle. If you do not DECLARE before the freeze, it is recorded as non-compliance.

3. Registering your assets

You can only propose an outage on a verified asset, so register your assets first. There are two kinds: fibre / optical links (OPGW, UGFO, ADSS) and end equipment (SDH, PDH, DCPS, MUX).

Step 1 Open the asset list

Asset ▾ → Asset View / Add.



Step 2 Register and submit

Choose fibre link or end equipment, fill in the details accurately, and Submit. The asset is created as Pending and enters the RLDC verification queue; RLDC is notified automatically.

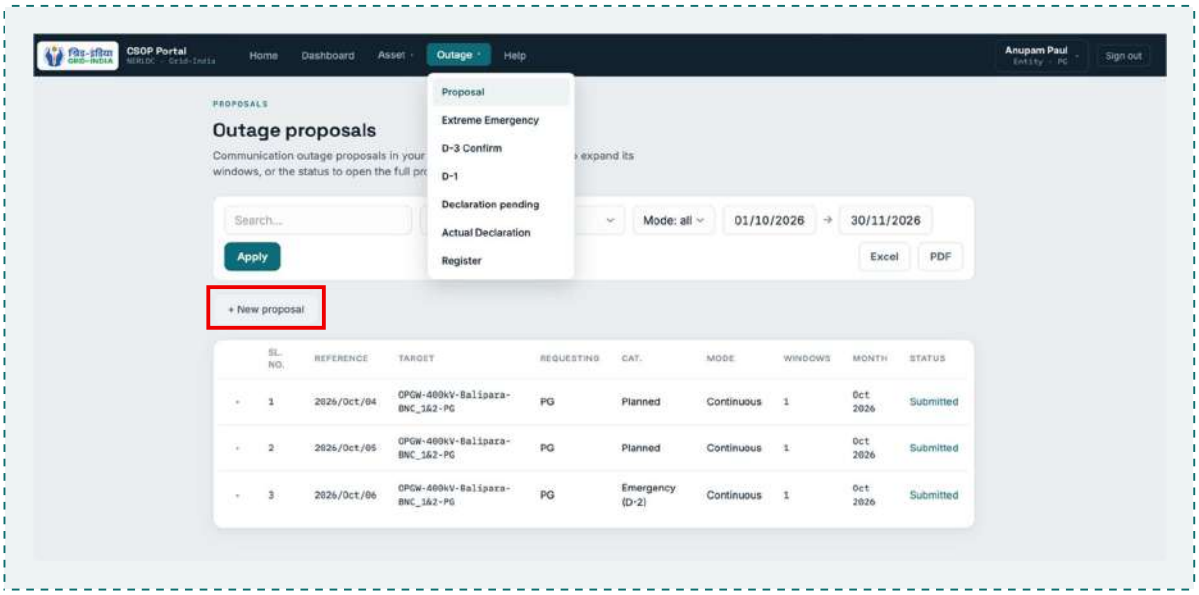
Status colours: Pending (awaiting RLDC — still editable), Verified (approved, locked, usable in proposals), Rejected (edit and resubmit, addressing RLDC's reason).

4. Proposing a planned outage

> **IMPORTANT**
> Planned outages for a month must be submitted by the 8th of the previous month. After that the planned window is closed — use Emergency or Extreme Emergency instead (Sections 7 and 8).

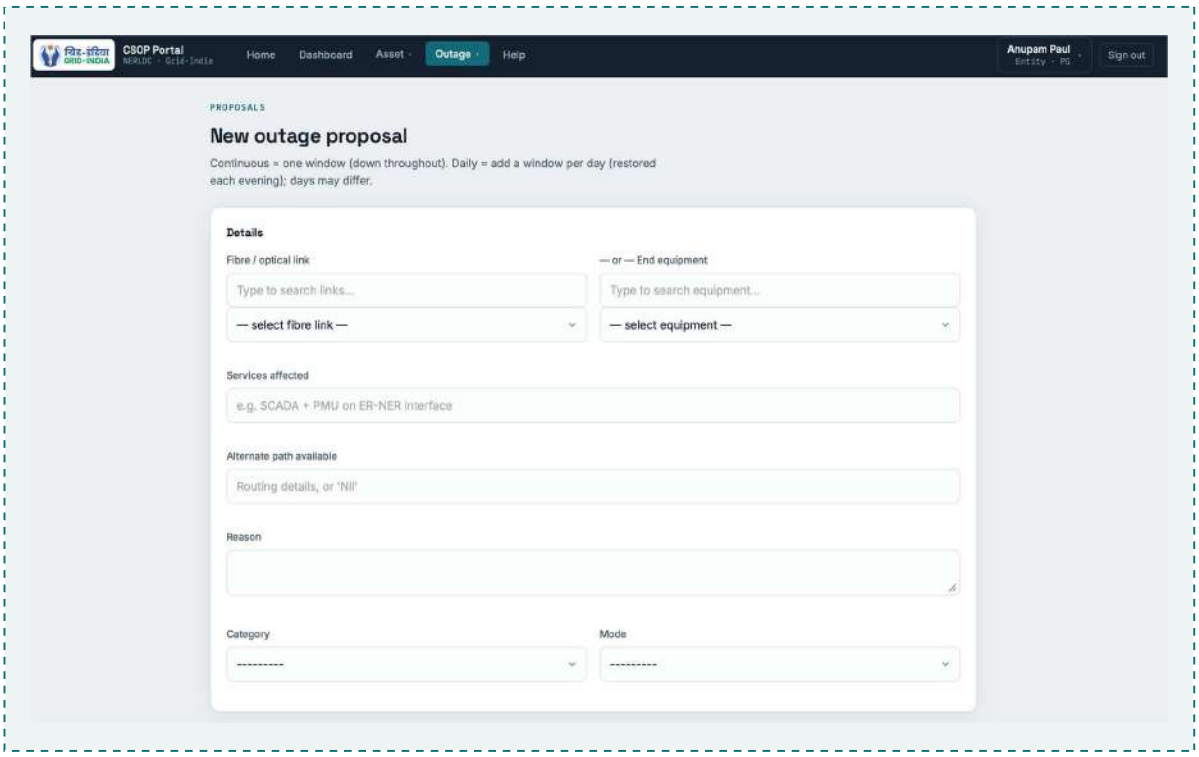
Step 1 Open the proposal page

Outage ▾ → Proposal, then start a new proposal.



Step 2 Choose asset, category and mode

Pick the verified asset. Set category to Planned. Choose the mode — Continuous (one unbroken window) or Daily (a repeating daily window over several days).



Step 3 Describe and add windows

Enter the service(s) impacted, the reason, and any alternate path. Add the requested date(s) and times.

Step 4 Submit

Review and Submit. Your proposal receives its reference number (YYYY/Mon/NN) and appears at the next CSOP meeting. Track it on the Proposal page and the Register.

NOTE

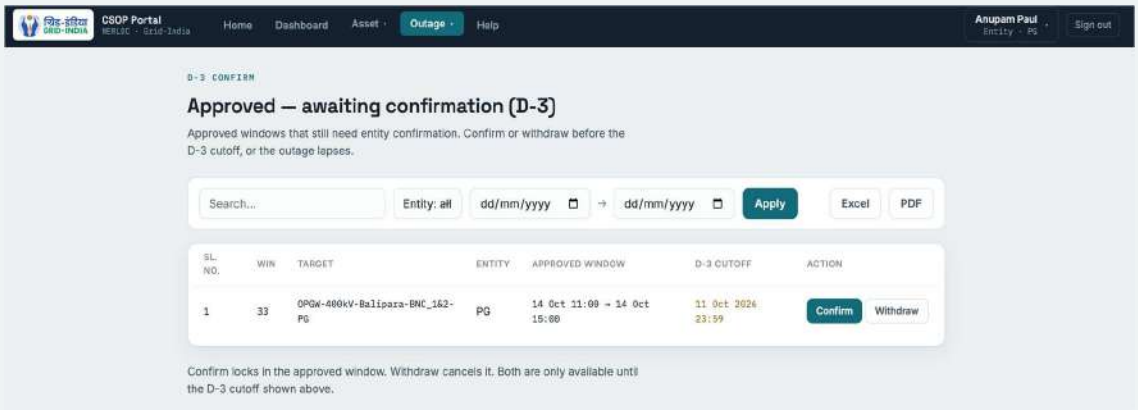
> After CSOP each window shows an outcome — Approved (green), Approved with modification (green — check the changed window), Rejected or Deferred (red). If modified, the approved times may differ from your request; always check.

5. Confirming an approved outage (D-3)

An approved outage is not final until you confirm it, by D-3 (end of the third day before the outage).

Step 1 Open D-3 Confirm

Outage ▾ → D-3 Confirm — your approved windows awaiting confirmation.



Step 2 Confirm or withdraw

Confirm each window you still intend to take, or Withdraw to release it cleanly.

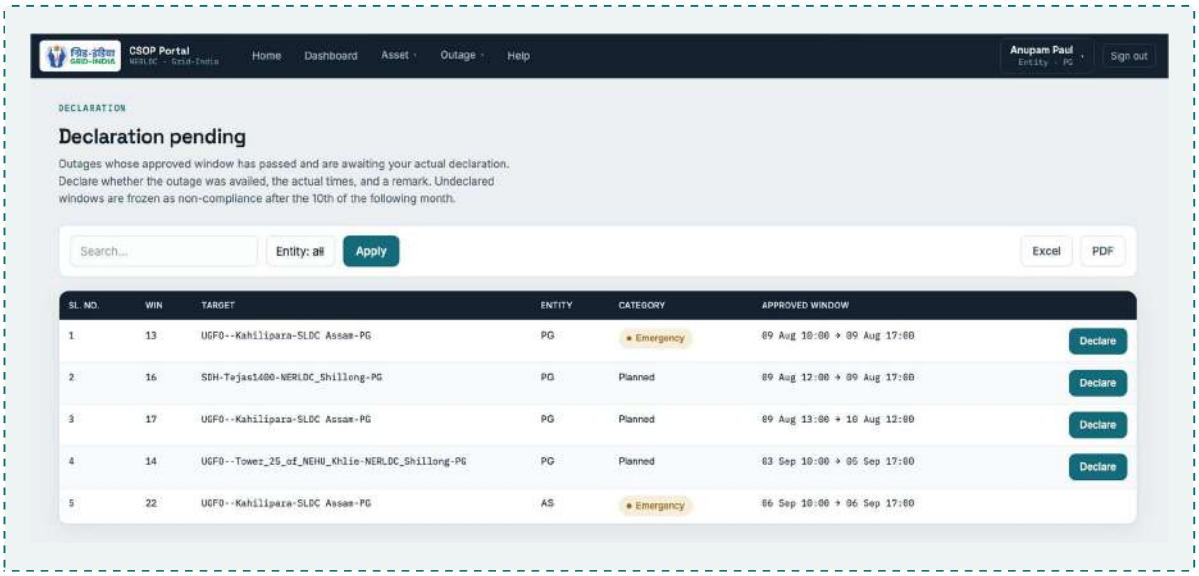
> **IMPORTANT**
> If not confirmed by the D-3 cutoff (23:59:59 IST, three days before), the window automatically lapses and cannot be revived that cycle.

6. Declaring what actually happened

After the window passes, declare the actual outcome — this is mandatory and drives compliance and deviation tracking.

Step 1 Open Declaration pending

Outage ▾ → Declaration pending — windows open for declaration.



Step 2 Declare and submit

Declare whether the outage was availed; if yes, enter actual start and end times. Add your entity remark. Submit — it moves to Actual Declaration. Any difference of one minute or more from the approved window is recorded as a deviation, shown in minutes.

> **IMPORTANT**
> Declare before the freeze on the 10th of the following month. Undeclared windows past the freeze are recorded as non-compliance.

7. Applying for an emergency outage

When an outage is needed at short notice, use the Emergency route. Emergencies skip CSOP — RLDC decides directly, and RLDC's approval is itself the confirmation (no D-3).

Step 1 Start a proposal, category Emergency

Outage ▾ → Proposal, new proposal, category Emergency (D-2). The requested start must be at least D-2 (two days ahead).

Step 2 Submit

Submit. RLDC is notified immediately; you receive a copy confirming the submission. You are emailed the decision — approved, approved with a modified window, or rejected — with RLDC's reference.

> **NOTE**
> You may withdraw an emergency application up to 12:00 on D-1. After that it is locked.

8. Applying for an Extreme Emergency outage

Extreme Emergency is for outages that need attention sooner than the normal Emergency route allows — when the requested start is less than D-2 away. Use it when an asset needs immediate attention and cannot wait for the two-day emergency lead time.

8.1 When to use Extreme Emergency vs Emergency

Category	Requested start	Use when
Emergency (D-2)	At least D-2 (2 days ahead)	Urgent, but you have at least two days' notice

Category	Requested start	Use when
Extreme Emergency	From now up to 00:00 hrs of D-2	Immediate — the outage cannot wait for D-2

In every other respect Extreme Emergency behaves exactly like Emergency: it skips CSOP, RLDC decides it directly, RLDC approval is the confirmation, and there is no D-3 step.

8.2 How to apply

Step 1 Open the Extreme Emergency menu

Outage ▾ → Extreme Emergency. This opens the proposal form already set to the Extreme Emergency category.

Step 2 Enter the details and window

Choose the verified asset, describe the service impacted and reason, and enter the requested window. The requested start must be from now up to 00:00 hrs of D-2 — if you enter a start that is D-2 or further away, the portal will ask you to use the normal Emergency category instead; a start in the past is not accepted.

Step 3 Submit

Submit. RLDC is notified immediately by an EXTREME EMERGENCY alert, and you receive a copy. RLDC then records a decision and you are emailed the outcome, with any modified window and RLDC's reference. An approved extreme emergency goes straight to declaration once its window passes.

> **NOTE**
> Your extreme emergency is clearly flagged as “Extreme Emergency” in the portal and in all emails, so RLDC can see its higher urgency at a glance. As with a normal emergency, you may withdraw it up to 12:00 on D-1.

9. Viewing records and reports

Under the Outage menu, read-only pages let you track and export your outages. Exports (Excel and PDF) carry the Grid-India letterhead and can be filtered by date and entity:

- **Register** — every proposed window with its reference number and status, colour-coded (green approved, red rejected, yellow pending).
- **Actual Declaration** — declared windows with actual times, deviation minutes and remarks.
- **D-1 / Dashboard** — the next-day shutdown list and summary statistics.

10. Your account

My profile: update your first / last name (your email is managed by the administrator). **Change password:** from the same menu. You may be required to change your password on first login and periodically thereafter.

11. Quick reference — deadlines

Action	Deadline	If you miss it
Submit planned proposal	8th of previous month	Use Emergency or Extreme Emergency
Confirm approved outage	D-3 (3 days before)	Outage lapses — cannot be revived
Withdraw emergency / extreme	12:00 on D-1	Application is locked
Declare actuals	Before 10th of following month	Recorded as non-compliance

Need help?

For any difficulty, or to have an asset re-checked or your 2FA reset, contact the RLDC administrator at NERLDC.

Annexure B 2.7 (i)

Report Name	**Channel Availability Report**
Report Generated Time	**2026-09-02 13:37**
Report Duration	**2026-08-01 00:00 - 2026-08-31 23:59**

Sl No	**Name of the channel**	**Alias**	**Total No of Blocks in a month (B_T)**	**Final B_{AN}**(absolute number of time blocks in which the ith channel was 'not available'	**Final B_{GI}**(Number of timeblocks out of BANi, in which ith channel was 'not available' on account of act of God	**Final B_{LTI}**(Number of time-blocks out of BANi, in which ith channel was 'not available' for a duration less than or equal to one (01) minute in a timeblock and not more than ten (10) times in a day	**Final B_N =Final B_{AN}- Final B_{GI}- Final B_{LTI}**, the total number of time blocks, in which ith channel was not available after considering deemed availability status	**Availability of ith Channel, A_i =(B_T - Final B_Ni)*100/B_T**
1	ICCP_MAIN-MIZORAM_SLDC-NERLDC_SHL	NER-MN-MIZORAM_SLDC-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-ICCP-P	996.0	641	0	0	641	35.64
2	RTU_MAIN-TEZU-NERLDC_GHY	NER-AR-TEZU-TEJAS-PGNER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	724.0	103	0	2	101	86.05
3	RTU_MAIN-ROING-NERLDC_GHY	NER-AR-ROING-TEJAS-PGNER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	725.0	103	0	2	101	86.07
4	RTU_MAIN-NAMSAI-NERLDC_GHY	NER-AR-NAMSAI-FIBCOM-PGNER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1112.0	103	0	1	102	90.83
5	PMU_MAIN-NAMSAI-NERLDC_SHL	NER-AR-NAMSAI-FIBCOM-PGNER-ML-NERLDC-FIBCOM-PGNER-PMU-P	1385.0	103	0	1	102	92.64
6	RTU_MAIN-KATHALGURI-NERLDC_GHY	NER-AS-KATHALGURI-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU_101-P1	1010.0	71	0	0	71	92.97
7	RTU_MAIN-KATHALGURI-NERLDC_SHL	NER-AS-KATHALGURI-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU-P2	1676.0	106	0	0	106	93.68
8	RTU_MAIN-NAMSAI-NERLDC_SHL	NER-AR-NAMSAI-FIBCOM-PGNER-ML-NERLDC-ECI-PGNER-RTU-P2	2976.0	103	0	1	102	96.57
9	ICCP_PROT-NLDC-NERLDC_SHL	NR-DL-NLDC-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-ICCP-S (VLAN2005)	721.0	15	0	0	15	97.92
10	VOIP_MAIN-RTMC-NERLDC_SHL	NER-AS-RTAMC-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2728.0	44	0	0	44	98.39
11	VOIP_MAIN-NTPC-NERLDC_SHL	NER-AS-BONGAIGAON_NTPC-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	45	0	0	45	98.49
12	TWFL_FIBCOM_BONGAIGAON		2976.0	44	0	0	44	98.52
13	PMU_MAIN-KAHILIPARA-NERLDC_SHL	NER-AS-KAHILIPARA-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-PMU-P	2976.0	44	0	0	44	98.52
14	NERLDC-1:XS B:SAM_1 oPort 1-VC4#1VC3#2:VC12#24_ ES1:SM_10EE1_PCM E1 port 6-VC12#6		2976.0	43	0	0	43	98.56
15	ICCP_MAIN-BNLDC-NERLDC_SHL	NR-WB-BNLDC-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-ICCP-P (VLAN738)	242.0	3	0	0	3	98.76
16	ICCP_MAIN-NLDC-NERLDC_SHL	NR-DL-NLDC-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-ICCP-P (VLAN1005)	243.0	3	0	0	3	98.77
17	VOIP_MAIN-LOWER_SUBANSIRI-NERLDC_SHL	NER-AS-LOWER_SUBANSIRI-TEJAS-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-VOIP-P	247.0	3	0	0	3	98.79
18	VOIP_MAIN-KAMENG-NERLDC_SHL	NER-AR-KAMENG-FIBCOM-PGNER-ML-NERLDC-FIBCOM-PGNER-VOIP-P	432.0	3	0	0	3	99.31
19	RTU_MAIN-KOPILI-NERLDC_GHY	NER-AS-KOPILI-TEJAS-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P2	727.0	3	0	0	3	99.59
20	VOIP_MAIN-HAFLONG-NERLDC_SHL	NER-AS-HAFLONG-FIBCOM-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2733.0	10	0	0	10	99.63
21	ICCP_MAIN-ASSAM_SLDC-NERLDC_SHL	NER-AS-KAHILIPARA-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-ICCP-P	2722.0	8	0	0	8	99.71
22	RTU_MAIN-BONGAIGAON-NERLDC_GHY	NER-AS-BONGAIGAON-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU_101-P1	1092.0	3	0	0	3	99.73
23	RTU_MAIN-BALIPARA-NERLDC_GHY	NER-AS-BALIPARA-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1192.0	3	0	0	3	99.75
24	RTU_MAIN-HAFLONG-NERLDC_GHY	NER-AS-HAFLONG-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1282.0	3	0	0	3	99.77
25	RTU_MAIN-SURJAMANI_NAGAR-NERLDC_SHL	NER-TR-SURJAMANI_NAGAR-GE-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU-P1	1381.0	3	0	0	3	99.78
26	RTU_MAIN-PK_BARI-NERLDC_SHL	NER-TR-PK_BARI-GE-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU-P1	1381.0	3	0	0	3	99.78
27	RTU_MAIN-DIMAPUR-NERLDC_SHL	NER-NL-DIMAPUR-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU-P2	1373.0	3	0	0	3	99.78
28	RTU_MAIN-ZIRO-NERLDC_SHL	NER-AR-ZIRO-FIBCOM-PGNER-ML-NERLDC-FIBCOM-PGNER-RTU-P1	1371.0	3	0	0	3	99.78
29	RTU_MAIN-ZIRO-NERLDC_GHY	NER-AR-ZIRO-FIBCOM-PGNER-AS-NERLDC-FIBCOM-PGNER-RTU_101-P2	1370.0	3	0	0	3	99.78
30	AGC_PROT-NTPC-NLDC	NER-AS-BONGAIGAON_NTPC-ECI-PGNER-NR-DL-NLDC-PGNER-AGC-S	1101.0	2	0	0	2	99.82
31	VOIP_MAIN-BNC-NERLDC_SHL	NER-AS-BNC-FIBCOM-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2732.0	3	0	0	3	99.89
32	KHLIEHRIAT_VC12_0-0-41-10_0-0-13-14-2-7-2[S11-1-11]		2976.0	3	0	0	3	99.90
33	RTU_MAIN-DIMAPUR-NERLDC_GHY	NER-NL-DIMAPUR-ECI-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	2976.0	3	0	0	3	99.90
34	AGC_PROT-LOKTAK-NLDC	NER-MN-LOKTAK-FIBCOM-PGNER-NR-DL-NLDC-PGNER-AGC-S	1176.0	1	0	0	1	99.91
35	RTU_MAIN-DOYANG-NERLDC_SHL	NER-NL-DOYANG-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU_101-P2	1087.0	1	0	0	1	99.91
36	RTU_MAIN-NIRJULI-NERLDC_SHL	NER-AR-NIRJULI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-P1	2976.0	1	0	1	0	100.00
37	VOIP_MAIN-NIRJULI-NERLDC_SHL	NER-AR-NIRJULI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	1	0	1	0	100.00
38	VOIP_MAIN-PALATANA-NERLDC_SHL	NER-TR-PALATANA-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-VOIP-P	2523.0	1	0	1	0	100.00
39	RTU_MAIN-NIRJULI-NERLDC_GHY	NER-AR-NIRJULI-ECI-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P2	1951.0	1	0	1	0	100.00
40	RTU_MAIN-PALATANA-NERLDC_SHL	NER-TR-PALATANA-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU_101-P2	1086.0	1	0	1	0	100.00
41	RTU_MAIN-PALATANA-NERLDC_GHY	NER-TR-PALATANA-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU_101-P1	1007.0	1	0	1	0	100.00
42	BDR_SILCHAR_E1_link2		2976.0	0	0	0	0	100.00
43	badarpur_silchar_e1		2976.0	0	0	0	0	100.00
44	impglohtake1		2976.0	0	0	0	0	100.00
45	DTPCE1link01twdsSILCHARPGforRELAY		2976.0	0	0	0	0	100.00
46	BTPS NTPC:ES3:PE1_63 E1 port 1-VC12#1_XS B:SAMQ oPort 1-VC4#1VC3#1:VC12#21		2976.0	0	0	0	0	100.00
47	Bongaigaon-2: ES3:SM_10EE1_PCM E1 port 4-VC12#4_XS B:SAM_1 oPort 1-VC4#1VC3#1:VC12#3		2976.0	0	0	0	0	100.00
48	Imphal PG:MS:MCP30B VC12#1_XS A:SAMQ oPort 2-VC4#1VC3#3:VC12#63		2976.0	0	0	0	0	100.00
49	BTPS NTPC:XS B:SAMQ oPort 1-VC4#1VC3#1:VC12#2_ES3:PE1_63 E1 port 2-VC12#2		2976.0	0	0	0	0	100.00
50	DTPCE1link02twdsSILCHARPGforRELAY		2976.0	0	0	0	0	100.00
51	Misa Comtel:XS B:SAM16Q oPort 2-VC4#1VC3#1:VC12#2_TS7:PME1_21 E1 port 3-VC12#3		2976.0	0	0	0	0	100.00
52	Balipara:XS A:SAMQ oPort 1-VC4#1VC3#1:VC12#4_ES3:PE1_63 E1 port 5-VC12#5		2976.0	0	0	0	0	100.00
53	Balipara:XS A:SAMQ oPort 1-VC4#1VC3#1:VC12#19_ES3:PE1_63 E1 port 7-VC12#7		2976.0	0	0	0	0	100.00
54	Balipara:ES3:PE1_63 E1 port 4-VC12#4_XS A:SAMQ oPort 1-VC4#1VC3#1:VC12#2		2976.0	0	0	0	0	100.00
55	Balipara:XS A:SAMQ oPort 1-VC4#1VC3#2:VC12#36_ES3:PE1_63 E1 port 8-VC12#8		2976.0	0	0	0	0	100.00
56	NERLDC-1:XS B:SAM_1 oPort 1-VC4#1VC3#2:VC12#41_ ES2:SM_10EE1_PCM E1 port 18-VC12#18		2976.0	0	0	0	0	100.00
57	Bongaigaon-1: ES3:SM_10EE1_PCM E1 port 7-VC12#7_XS B:SAM_1 oPort 1-VC4#1VC3#1:VC12#1		2976.0	0	0	0	0	100.00
58	Balipara:XS A:SAMQ oPort 1-VC4#1VC3#1:VC12#14_ES3:PE1_63 E1 port 6-VC12#6		2976.0	0	0	0	0	100.00
59	Salakati-2:XS B:SAM_1 oPort 1-VC4#1VC3#1:VC12#4_ ES3:SM_10EE1_PCM E1 port 5-VC12#5		2976.0	0	0	0	0	100.00
60	NERLDC:XS A:SAMQ oPort 1-VC4#2VC3#1:VC12#1_ES1:PE1_63 E1 port 3-VC12#3		2976.0	0	0	0	0	100.00

61	Bongaigaon:ES2:PE1_63 E1 port 3-VC12#3_XS B:SAMQ oPort 1-VC4#1VC3#2:VC12#42		2976.0	0	0	0	0	100.00
62	LOOPMGMTTWRDSNMS		2976.0	0	0	0	0	100.00
63	KOLASIB SDH:TS2:DMFE_4_L2 EoS Port 2-VCG:VC12#1_TS3:SMD4 oPort 1-VC4#1VC3#1:VC12#3		2976.0	0	0	0	0	100.00
64	SILCHARTWFLDATAPROTECTION		2976.0	0	0	0	0	100.00
65	Jiribam_PG_VC12_0-0-41-5_0-0-13-0-3-4-3[S11-6-J1]		2976.0	0	0	0	0	100.00
66	NERLDC-1:XS B:SAM_1 oPort 1-VC4#1VC3#1:VC12#6_ ES1:SM_10EE1_PCM E1 port 1 VC12#1		2976.0	0	0	0	0	100.00
67	silchartomeiratDTPCLinkE1link03		2976.0	0	0	0	0	100.00
68	PGCIL SHILLONG (SDH):ES1:PE1_63 E1 port 6-VC12#6_XS A:SAMQ oPort 1-VC4#1VC3#1:VC12#2		2976.0	0	0	0	0	100.00
69	PGCIL SILCHAR_SDH:TS3:SMD4 oPort 1-VC4#1VC3#2:VC12#36_ES3:PE1_63 E1 port 1-VC12#1		2976.0	0	0	0	0	100.00
70	PGCIL SHILLONG (SDH):XS A:SAMQ oPort 1-VC4#1VC3#3:VC12#48_ES1:PE1_63 E1 port 14-VC12#14		2976.0	0	0	0	0	100.00
71	PGCIL SHILLONG _PDH2:XS B:SAM_1 oPort 1-VC4#1VC3#1:VC12#1_ ES3:SM_10EE1_PCM E1 port 2 VC12#2		2976.0	0	0	0	0	100.00
72	PGCIL_DIMAPUR(NE)_NERLDC SDH(NE)_TEJAS_2MBPS		2976.0	0	0	0	0	100.00
73	Misa:XS A:SAMQ oPort 1-VC4#1VC3#2:VC12#28_ES3:PE1_63 E1 port 3-VC12#3		2976.0	0	0	0	0	100.00
74	Misa:ES3:PE1_63 E1 port 2-VC12#2_XS A:SAMQ oPort 1-VC4#3VC3#1:VC12#12		2976.0	0	0	0	0	100.00
75	SILCHAR Comtel:TS7:PME1_21 E1 port 13-VC12#13_XS A:SAM16Q oPort 1-VC4#2VC3#2:VC12#42		2976.0	0	0	0	0	100.00
76	Loktak-ImphalDTPCLink		2976.0	0	0	0	0	100.00
77	Loktak-JiribamDTPCLink		2976.0	0	0	0	0	100.00
78	BUNERLDCLOOPMGMT		2976.0	0	0	0	0	100.00
79	RTU_MAIN-RANGANADI-NERLDC_GHY	NER-AR-RANGANADI-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P2	2976.0	0	0	0	0	100.00
80	RTU_MAIN-RANGANADI-NERLDC_SHL	NER-AR-RANGANADI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-P1	2976.0	0	0	0	0	100.00
81	RTU_MAIN-KOPILI-NERLDC_SHL	NER-AS-KOPILI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-P1	2976.0	0	0	0	0	100.00
82	RTU_MAIN-KHANDONG-NERLDC_SHL	NER-AS-KHANDONG-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-P1	2976.0	0	0	0	0	100.00
83	RTU_MAIN-SALAKATI-NERLDC_SHL	NER-AS-SALAKATI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-P1	2976.0	0	0	0	0	100.00
84	RTU_PROT-MELRIAT-NERLDC_SHL	NER-MZ-MELRIAT-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-S2	2976.0	0	0	0	0	100.00
85	VOIP_MAIN-MELRIAT-NERLDC_SHL	NER-MZ-MELRIAT-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
86	VOIP_MAIN-RANGANADI-NERLDC_SHL	NER-AR-RANGANADI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
87	PMU_MAIN-RANGANADI-NERLDC_SHL	NER-AR-RANGANADI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-PMU-P	2976.0	0	0	0	0	100.00
88	PMU_MAIN-SALAKATI-NERLDC_SHL	NER-AS-SALAKATI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-PMU-P	2976.0	0	0	0	0	100.00
89	VOIP_MAIN-KOPILI-NERLDC_SHL	NER-AS-KOPILI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
90	PMU_MAIN-KOPILI-NERLDC_SHL	NER-AS-KOPILI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-PMU-P	2976.0	0	0	0	0	100.00
91	VOIP_MAIN-KHANDONG-NERLDC_SHL	NER-AS-KHANDONG-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
92	RTU_MAIN-KHANDONG-NERLDC_GHY	NER-AS-KHANDONG-ECI-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P2	2976.0	0	0	0	0	100.00
93	VOIP_MAIN-KUMARGHAT-NERLDC_SHL	NER-TR-KUMARGHAT-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
94	VOIP_MAIN-PARE-NERLDC_SHL	NER-AR-PARE-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
95	RTU_MAIN-PARE-NERLDC_GHY	NER-AR-PARE-ECI-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	2976.0	0	0	0	0	100.00
96	ICCP_MAIN-ITANAGAR-NERLDC_SHL	NER-AR-ITANAGAR-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-ICCP-P	2976.0	0	0	0	0	100.00
97	VOIP_MAIN-DIMAPUR-NERLDC_SHL	NER-NL-DIMAPUR-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
98	VOIP_MAIN-MARIANI-NERLDC_SHL	NER-AS-MARIANI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
99	RTU_MAIN-MARIANI-NERLDC_SHL	NER-AS-MARIANI-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-P2	2976.0	0	0	0	0	100.00
100	PMU_MAIN-NEHU-NERLDC_SHL	NER-ML-NEHU-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-PMU-P	2976.0	0	0	0	0	100.00
101	PMU_MAIN-AGARTALA SLDC-NERLDC_SHL	NER-TR-AGARTALA-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-PMU-P	2976.0	0	0	0	0	100.00
102	ICCP_MAIN-AGARTALA SLDC-NERLDC_SHL	NER-TR-AGARTALA-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-ICCP-P	2976.0	0	0	0	0	100.00
103	ICCP_MAIN-NEHU-NERLDC_SHL	NER-ML-NEHU-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-ICCP-P	2976.0	0	0	0	0	100.00
104	VOIP_MAIN-SILCHAR-NERLDC_SHL	NER-AS-SILCHAR-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
105	PMU_MAIN-SILCHAR-NERLDC_SHL	NER-AS-SILCHAR-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-PMU-P	2976.0	0	0	0	0	100.00
106	VOIP_MAIN-BONGAIGAON-NERLDC_SHL	NER-AS-BONGAIGAON-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
107	RTU_MAIN-RCNAGAR-NERLDC_GHY-STITCH	NER-TR-RCNAGAR-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	2976.0	0	0	0	0	100.00
108	RTU_MAIN-BONGAIGAON-NERLDC_SHL	NER-AS-BONGAIGAON-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU_101-P2	2976.0	0	0	0	0	100.00
109	AGC_MAIN-NTPC-NLDC	NER-AS-BONGAIGAON_NTPC-ECI-PGNER-NR-DL-NLDC-PGNER-AGC-P	2976.0	0	0	0	0	100.00
110	RTU_MAIN-JIRIBAM-NERLDC_SHL	NER-MZ-JIRIBAM-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-P3	2976.0	0	0	0	0	100.00
111	RTU_MAIN-PARE-NERLDC_SHL	NER-AR-PARE-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU_101-P2	2976.0	0	0	0	0	100.00
112	VOIP_MAIN-AIZAWL-NERLDC_SHL	NER-MZ-AIZAWL-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
113	RTU_MAIN-AIZAWL-NERLDC_SHL	NER-MZ-AIZAWL-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-P2	2976.0	0	0	0	0	100.00
114	RTU_MAIN-NTPC-NERLDC_SHL	NER-AS-BONGAIGAON_NTPC-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU_101-P1	2976.0	0	0	0	0	100.00
115	VOIP_MAIN-IMPHAL-NERLDC_SHL	NER-MN-IMPHAL-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
116	RTU_MAIN-SILCHAR-NERLDC_GHY	NER-AS-SILCHAR-ECI-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	2976.0	0	0	0	0	100.00
117	VOIP_MAIN-KHELIRIHAT-NERLDC_SHL	NER-ML-KHLIEHRIAT-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2976.0	0	0	0	0	100.00
118	RTU_MAIN-BADARPUR-NERLDC_SHL	NER-AS-BADARPUR-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU-P1	2976.0	0	0	0	0	100.00
119	RTU_MAIN-KHLIEHRIAT-NERLDC_SHL	NER-ML-KHLIEHRIAT-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU-P1	2976.0	0	0	0	0	100.00
120	VOIP_MAIN-BADARPUR-NERLDC_SHL	NER-AS-BADARPUR-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2727.0	0	0	0	0	100.00
121	VOIP_MAIN-MISA-NERLDC_SHL	NER-AS-MISA-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2727.0	0	0	0	0	100.00
122	VOIP_MAIN-BALIPARA-NERLDC_SHL	NER-AS-BALIPARA-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	2725.0	0	0	0	0	100.00
123	RTU_MAIN-MELRIAT-NERLDC_SHL	NER-MZ-MELRIAT-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU-P3	2639.0	0	0	0	0	100.00
124	VOIP_MAIN-NANGALBIBRA-NERLDC_SHL	NER-ML-NANGALBIBRA-TEJAS-PGNER-ML-NERLDC-FIBCOM-PGNER-VOIP-P	2047.0	0	0	0	0	100.00
125	RTU_MAIN-DOYANG-NERLDC_GHY	NER-NL-DOYANG-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	2041.0	0	0	0	0	100.00
126	AGC_MAIN-LOWER_SUBANSIRI-NLDC	NER-AS-LOWER_SUBANSIRI-TEJAS-PGNER-NR-DL-NLDC-PGNER-AGC-P	1963.0	0	0	0	0	100.00
127	AGC_PROT-LOWER_SUBANSIRI-NLDC	NER-AS-LOWER_SUBANSIRI-TEJAS-PGNER-NR-DL-NLDC-PGNER-AGC-S	1962.0	0	0	0	0	100.00
128	VOIP_MAIN-NAMSAI-NERLDC_SHL	NER-AR-NAMSAI-FIBCOM-PGNER-ML-NERLDC-ECI-PGNER-VOIP-P	1957.0	0	0	0	0	100.00
129	RTU_MAIN-NTPC-NERLDC_GHY	NER-AS-BONGAIGAON_NTPC-ECI-PGNER-NER-AS-SLDC-ECI-PGNER-RTU_101-P2	1945.0	0	0	0	0	100.00
130	VOIP_MAIN-DOYANG-NERLDC_SHL	NER-NL-DOYANG-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-VOIP-P	1877.0	0	0	0	0	100.00
131	VOIP_SHILLONG_LOKTK	NER-MN-LOKTAK-FIBCOM-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	1861.0	0	0	0	0	100.00
132	VOIP_MAIN-JIRIBAM-NERLDC_SHL	NER-MZ-JIRIBAM-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	1858.0	0	0	0	0	100.00

133	RTU_MAIN-MELRIAT-NERLDC_GHY	NER-MZ-MELRIAT-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1854.0	0	0	0	0	100.00
134	PMU_MAIN-NEW_KOHIMA-NERLDC_SHL	NER-NL-KOHIMA-ABB-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-PMU-P	1678.0	0	0	0	0	100.00
135	TS_MAIN-BADARPUR-NERLDC_SHL	NER-AS-BADARPUR-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-TS-P	1676.0	0	0	0	0	100.00
136	RTU_MAIN-NEW_KOHIMA-NERLDC_SHL	NER-NL-KOHIMA-ABB-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU-P2	1675.0	0	0	0	0	100.00
137	TS_PROT-BADARPUR-NERLDC_SHL	NER-AS-BADARPUR-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-TS-S	1675.0	0	0	0	0	100.00
138	PMU_MAIN-KATHALGURI-NERLDC_SHL	NER-AS-KATHALGURI-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-PMU-P	1386.0	0	0	0	0	100.00
139	PMU_MAIN-SURJAMANI_NAGAR-NERLDC_SHL	NER-TR-SURJAMANI_NAGAR-GE-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-PMU-P	1382.0	0	0	0	0	100.00
140	RTU_MAIN-LOKTAK-NERLDC_SHL	NER-MN-LOKTAK-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1376.0	0	0	0	0	100.00
141	RTU_MAIN-MISA-NERLDC_SHL	NER-AS-MISA-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU-P1	1373.0	0	0	0	0	100.00
142	RTU_MAIN-AIZAWL-NERLDC_GHY	NER-MZ-AIZAWL-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1281.0	0	0	0	0	100.00
143	RTU_MAIN-NONGALBIBRA-NERLDC_GHY	NER-ML-NONGALBIBRA-TEJAS-PGNER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1281.0	0	0	0	0	100.00
144	RTU_MAIN-JIRIBAM-NERLDC_GHY	NER-MZ-JIRIBAM-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1280.0	0	0	0	0	100.00
145	RTU_MAIN-KUMARGHAT-NERLDC_GHY	NER-TR-KUMARGHAT-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1280.0	0	0	0	0	100.00
146	RTU_MAIN-MARIANI-NERLDC_GHY	NER-AS-MARIANI-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1279.0	0	0	0	0	100.00
147	AGC_MAIN-LOKTAK-NLDC	NER-MN-LOKTAK-FIBCOM-PGNER-NR-DL-NLDC-PGNER-AGC-P	1186.0	0	0	0	0	100.00
148	RTU_MAIN-BALIPARA-NERLDC_SHL	NER-AS-BALIPARA-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU_101-P2	1182.0	0	0	0	0	100.00
149	AGC_PROT-DOYANG-NLDC	NER-NL-DOYANG-FIBCOM-PGNER-NR-DL-NLDC-PGNER-AGC-S	1108.0	0	0	0	0	100.00
150	AGC_MAIN-KOPILI-NLDC	NER-AS-KOPILI-ECI-PGNER-NER-AS-BONGAIGAON_NTPC-ECI-PGNER-AGC-P	1102.0	0	0	0	0	100.00
151	RTU_MAIN-RC_NAGAR-NERLDC_SHL	NER-TR-RCNAGAR-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU_101-P1	1086.0	0	0	0	0	100.00
152	RTU_MAIN-KHLIEHRIAT-NERLDC_GHY	NER-ML-KHLIEHRIAT-ECI-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU_101-P2	1011.0	0	0	0	0	100.00
153	RTU_MAIN-BNC-NERLDC_GHY	NER-AS-BNC-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	1009.0	0	0	0	0	100.00
154	RTU_MAIN-LOKTAK-NERLDC_GHY	NER-MN-LOKTAK-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU_101-P2	1006.0	0	0	0	0	100.00
155	ICCP_MAIN-NAGALAND_SLDC-NERLDC_SHL	NER-MN-NAGALAND_SLDC-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-ICCP-P	995.0	0	0	0	0	100.00
156	RTU_MAIN-IMPHAL-NERLDC_GHY	NER-MN-IMPHAL-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	992.0	0	0	0	0	100.00
157	RTU_MAIN-SALAKATI-NERLDC_GHY	NER-AS-SALAKATI-FIBCOM-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P2	727.0	0	0	0	0	100.00
158	RTU_MAIN-KAMENG-NERLDC_GHY	NER-AR-KAMENG-FIBCOM-PGNER-AS-NERLDC-FIBCOM-PGNER-RTU-P1	726.0	0	0	0	0	100.00
159	ICCP_PROT-BNLDC-NERLDC_SHL	NR-WB-BNLDC-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-ICCP-S (VLAN743)	720.0	0	0	0	0	100.00
160	ICCP_PROT-NLDC-NERLDC_GHY	NR-DL-NLDC-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-ICCP-S (VLAN2006)	719.0	0	0	0	0	100.00
161	ICCP_PROT-BNLDC-NERLDC_GHY	NR-WB-BNLDC-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-ICCP-S (VLAN766)	718.0	0	0	0	0	100.00
162	ICCP_MAIN-MANIPUR_SLDC-NERLDC_SHL	NER-MN-MANIPUR_SLDC-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-ICCP-P	709.0	0	0	0	0	100.00
163	RTU_MAIN-MOKOKCHUNG-NERLDC_SHL	NER-NL-MOKOKCHUNG-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-RTU_101-P1	707.0	0	0	0	0	100.00
164	RTU_MAIN-PK_BARI-NERLDC_GHY	NER-TR-PK_BARI-GE-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P2	630.0	0	0	0	0	100.00
165	RTU_MAIN-SILCHAR-NERLDC_SHL	NER-AS-SILCHAR-ECI-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU_101-P2	628.0	0	0	0	0	100.00
166	RTU_MAIN-SURJAMANI_NAGAR-NERLDC_GHY	NER-TR-SURJAMANI_NAGAR-GE-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P2	626.0	0	0	0	0	100.00
167	VOIP_MAIN-MOKOKCHUNG-NERLDC_SHL	NER-NL-MOKOKCHUNG-FIBCOM-PGNER-NER-ML-NERLDC-ECI-PGNER-VOIP-P	430.0	0	0	0	0	100.00
168	VOIP_MAIN-KATHALGURI-NERLDC_SHL	NER-AS-KATHALGURI-FIBCOM-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-VOIP-P	319.0	0	0	0	0	100.00
169	VOIP_MAIN-SURJAMANI_NAGAR-NERLDC_SHL	NER-TR-SURJAMANI_NAGAR-GE-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-VOIP-P	318.0	0	0	0	0	100.00
170	ICCP_MAIN-BNLDC-NERLDC_GHY	NR-WB-BNLDC-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-ICCP-P (VLAN893)	240.0	0	0	0	0	100.00
171	ICCP_MAIN-NLDC-NERLDC_GHY	NR-DL-NLDC-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-ICCP-P (VLAN1006)	237.0	0	0	0	0	100.00
172	PMU_MAIN-LOWER_SUBANSIRI-NERLDC_SHL	NER-AS-LOWER_SUBANSIRI-TEJAS-PGNER-NER-ML-NERLDC-FIBCOM-PGNER-PMU-P	230.0	0	0	0	0	100.00
173	RTU_MAIN-LOWER_SUBANSIRI-NERLDC_SHL	NER-AS-LOWER_SUBANSIRI-TEJAS-PGNER-NER-ML-NERLDC-ECI-PGNER-RTU-P1	230.0	0	0	0	0	100.00
174	RTU_MAIN-LOWER_SUBANSIRI-NERLDC_GHY	NER-AS-LOWER_SUBANSIRI-TEJAS-PGNER-NER-AS-NERLDC-FIBCOM-PGNER-RTU-P2	229.0	0	0	0	0	100.00
175	PGCIL DIMAPUR_SDH:XS A:SAMQ oPort 4-VC4#1VC3#3:VC12#59_XS A:SAMQ oPort 1-VC4#1VC3#3:VC12#51		50.0	0	0	0	0	100.00
176	PGCIL MISA_SDH:TS3:SMD4 oPort 2-VC4#1VC3#3:VC12#51_TS2:SMD4 oPort 1-VC4#1VC3#1:VC12#9		50.0	0	0	0	0	100.00
177	PGCIL KOPILI_SDH:TS3:SMD4 oPort 2-VC4#1VC3#1:VC12#9_XS B:SAMQ oPort 2-VC4#2VC3#3:VC12#57		50.0	0	0	0	0	100.00
178	PGCIL KHANGDONG_SDH:TS2:SMD4 oPort 1-VC4#2VC3#3:VC12#57_XS A:SAMQ oPort 1-VC4#2VC3#3:VC12#58		50.0	0	0	0	0	100.00
179	PGCIL KHILEHRIAT_SDH:TS3:SMD4 oPort 2-VC4#2VC3#3:VC12#58_XS B:SAMQ oPort 1-VC4#2VC3#1:VC12#18		50.0	0	0	0	0	100.00

Report Name	**Channel Availability Report**
Report Generated Time	**2026-09-02 13:37**
Report Duration	**2026-08-01 00:00 - 2026-08-31 23:59**

Availability Summary		
Sl. No.	**Attribute**	**Value**
1	Total Count	179
2	Sum of A_i	17756.89
3	Availability of Communication System (A_{CS}) = Sum(	99.20

In line with the cyber security regulations and guidelines published by CERC, CEA and other regulatory authorities' installation of Firewall is essential at ISTS stations reporting to NERLDC. The status of firewall at central sector is tablutated below:

SL. NO.	CENTRAL STATIONS	OWNER	Firewall Status
1	RC Nagar	NEEPCO	Not available.
2	132 kV Aizawl	PGCIL	Available
3	132 kV Badarpur	PGCIL	Available for ULDC-RTU. Not Available for SAS Gateway
4	400 kV Balipara	PGCIL	Available for ULDC-RTU. Not Available for SAS Gateway
5	+/- 800 kV HVDC BNC	PGCIL	Available
6	400 kV Bongaigoan	PGCIL	Not available
7	750 MW BgTPP	NTPC	Not available
8	220 kV Dimapur	PGCIL	Available
9	75 MW Doyang	NEEPCO	Not available.
10	132 kV Haflong	PGCIL	Available
11	400 kV Imphal	PGCIL	Not available.
12	132 kV Nirjuli	PGCIL	Available
13	132 kV Jiribam	PGCIL	Available
14	Kathalguri Gas Based Plant	NEEPCO	Not available.
15	Khandong HEP	NEEPCO	Available
16	132 kV Khliehriat	PGCIL	Available for ULDC-RTU.

SL. NO.	CENTRAL STATIONS	OWNER	Firewall Status
			Not Available for SAS Gateway
17	Kameng HEP	NEEPCO	Not available.
18	Kopili HEP	NEEPCO	Available
19	132 kV Kumarghat	PGCIL	Available
20	Loktak HEP	NHPC	Not available.
21	400 kV Mariani	PGCIL	Available
22	132 kV Melriat	PGCIL	Available.
23	400 kV Misa	PGCIL	Available for ULDC-RTU. Not Available for SAS Gateway
24	220 kV Mokokchung	PGCIL	Not available.
25	132 kV Namsai	PGCIL	Available
26	400 kV New Kohima	Apparva	Not available.
27	Palatana Gas plant	OTPC	Not available.
28	Pare HEP	NEEPCO	Not available.
29	400 kV PK Bari	Indigrid	Not available.
30	Panyor (Ranganadi) HEP	NEEPCO	Not available.
31	132 kV Roing	PGCIL	Not available.
32	220 kV Salakati	PGCIL	Not available.
33	400 kV Silchar	PGCIL	Not available.
34	400 kV SM Nagar	Indigrid	Not available.

SL. NO.	CENTRAL STATIONS	OWNER	Firewall Status
35	132 kV Tezu	PGCIL	Not available.
36	132 kV Ziro	PGCIL	Available for ULDC-RTU. Not Available for SAS Gateway
37	220 kV Nangalbibra	Sterlite	Available
38	Lower Subansiri-HEP	NHPC	Not Available

Subject: Urgent: Unsatisfactory performance of 400 kV Binaguri - Bongaigaon link - reg

Summary of mails (latest first)

#	Date	From
14	18.09.2026 08:50	Sakal Deep (ट्र ीब)
13	18.09.2026 07:53	Santanu Rudrapal { पश्चिम प }
12	18.09.2026 05:20	Sakal Deep (ट्र ीब)
11	17.09.2026 11:30	Sakal Deep (ट्र ीब)
10	04.09.2026 06:38	Somara Lakra (प प पूर्व प)
9	03.09.2026 11:27	Kamlesh Baishya {ट्र श Baishya}
8	03.09.2026 11:24	Somara Lakra (प प पूर्व प)
7	03.09.2026 08:44	Sakal Deep (ट्र ीब)
6	21.08.2026 07:35	Sakal Deep (ट्र ीब)
5	19.08.2026 05:04	Sakal Deep (ट्र ीब)
4	19.08.2026 04:58	Santanu Rudrapal { पश्चिम प }
3	19.08.2026 04:46	Sakal Deep (ट्र ीब)
2	07.08.2026 15:08	Kamlesh Baishya {ट्र श Baishya}
1	29.07.2026 05:18	Sakal Deep (ट्र ीब)

14. 18.09.2026 08:50
From: Sakal Deep (ट्र ीब) <skldeep@grid-india.in>
To: Santanu Rudrapal { पश्चिम प } <santanu.rudrapal@powergrid.in>, Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>
Cc: ms-nerpc <ms-nerpc@gov.in>, Brieflee Lyngkhoi <brieflee.lyngkhoi@gov.in>, Dharmendra Kumar Javeri {ि.ट्रश रू श} <javeri@powergrid.in>, Manish Kumar Tiwari { ब ट्रभप िंप } <manish.tiwari@powergrid.in>, Anupam Acharya {ई भ उ द्यप } <anupam@powergrid.in>, Anupam Paul {ई भ ँ } <anupam.p@powergrid.in>, Shiv Kumar Gupta { .ट्रश द्रभ्रीं} <shivkumar@powergrid.in>, Kaushal Suman {ट्र क्ष भ } <k.suman@powergrid.in>, Nabadipa Das { पी पीप } <dasnabadipa07@powergrid.in>, Saugato Mondal (क्षपिं ि) <saugato@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>, Ankur Gulati (ई ट्रभ द्रभर्पबि) <ankurgulati@grid-india.in>, NLDC SCADA <nldc.scada@grid-india.in>, Vipul Anand { भ उ ी} <vipulanand@powergrid.in>, Arun Kumar Singh { .ट्रश } <singh_ak@powergrid.in>, "A. De" <alik.erpc@gov.in>, Dinesh Kumar Bauri <dkbauri.cea@gov.in>, Somara Lakra (प प पूर्व प) <somara.lakra@grid-india.in>

Sir,
The absence of alarms in NMS/UNMS, acceptable power levels, or MAC address detection alone does not confirm the stability and reliability of the communication links.
It has been observed that the performance of the 400 kV Binaguri–Bongaigaon link is not satisfactory, and similar instability issues have been encountered earlier as well.
In view of the criticality of the link for catering to NER services, it is requested to kindly take necessary corrective measures to ensure that the Binaguri–Bongaigaon link is healthy, stable, and reliable.
Further, until the stability of the link is ensured, any outage of the Salakati–Alipurduar link may pose a risk to the continuity of NER services. Therefore,any kind of planned outage of Salakati–Alipurduar will not be allowed. In the event of an outage
of the Salakati–Alipurduar link resulting in disruption of NER services, the matter shall be reviewed with the concerned ULDC team for necessary accountability.
Your cooperation in ensuring the reliability of the communication network is requested.
Regards,
Sakal Deep/ ट्र ीब
North Eastern Regional Load Despatch Centre/ ऑ म शब प शि
ट्र
Grid Controller of India Limited/ ि

ट्र ह च एि प शि
(A Government of India Enterprise) / (पि ट्र प ट्र पऑ)

13. 18.09.2026 07:53
From: Santanu Rudrapal { पश्चिम प } <santanu.rudrapal@powergrid.in>
To: Sakal Deep (ट्र ीब) <skldeep@grid-india.in>, Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>
Cc: ms-nerpc <ms-nerpc@gov.in>, Brieflee Lyngkhoi <brieflee.lyngkhoi@gov.in>, Dharmendra Kumar Javeri {ि.ट्रश रू श} <javeri@powergrid.in>, Manish Kumar Tiwari { ब ट्रभप ि प } <manish.tiwari@powergrid.in>, Anupam Acharya {ई भ उ द्यप } <anupam@powergrid.in>, Anupam Paul {ई भ ँ } <anupam.p@powergrid.in>, Shiv Kumar Gupta { .ट्रश द्रभगिप <shivkumar@powergrid.in>, Kaushal Suman {ट्र क्ष भ } <k.suman@powergrid.in>, Nabadipa Das { पी पीप } <dasnabadipa07@powergrid.in>, Saugato Mondal (क्षपि) <saugato@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>, Ankur Gulati (ईट्रभ द्रभपबि) <ankurgulati@grid-india.in>, NLDC SCADA <nldc.scada@grid-india.in>, Vipul Anand { भउ ी} <vipulanand@powergrid.in>, Arun Kumar Singh { .ट्रश } <singh_ak@powergrid.in>, "A. De" <alik.erpc@gov.in>, Dinesh Kumar Bauri <dkbauri.cea@gov.in>, Somara Lakra (प प प्र प) <somara.lakra@grid-india.in>

शिप द्र ट्र ि: ि ीि/RESTRICTED
Dear Sir,
There is no alarm in NMS/UNMS on the route for these links and the power levels are also in acceptable margin. Also NER ULDC team confirmed regarding receipt of traces and we are also getting MAC in ECI SDH at ERLDC. However, end to end ping test is being done
for further checking.
It is also requested to configure protected for these ICCP links. NER ULDC is kindly requested to provide the KLM details at handover point after protecting these links.
पि ी पि / Best Regards
पि भ प / Santanu Rudrapal
ऑ प ीट्र /
Dy. General Manager
ेट्र ट्र्यि प शि द्यप / Unified Load Despatch & Communication (ULDC)
म श-II, शब भ प , ट्र ह ट्र पि/ERTS-II, RHQ-Kolkata,
प ि ट्रि प हश च एि प शि/Power Grid Corporation of India Ltd.
Address: CF-17, Action Area-1C, New Town, Kolkata-700156 (WB)
Mobile: 9434735848
Email: santanu.rudrapal@powergrid.in

12. 18.09.2026 05:20
From: Sakal Deep (ट्र ीब) <skldeep@grid-india.in>
To: Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>, Santanu Rudrapal { पश्चिम प } <santanu.rudrapal@powergrid.in>
Cc: ms-nerpc <ms-nerpc@gov.in>, Brieflee Lyngkhoi <brieflee.lyngkhoi@gov.in>, Somara Lakra (प प प्र प) <somara.lakra@grid-india.in>, Ashok Kumar Naik { .ट्रश पनै } <aknaik@powergrid.in>, Vibhay Kumar { ट्रभप} <vibhay@powergrid.in>, Dharmendra Kumar Javeri {ि.ट्रश रू श} <javeri@powergrid.in>, manishtiwari <manish.tiwari@powergrid.in>, Anupam Acharya {ई भ उ द्यप } <anupam@powergrid.in>, Anupam Paul {ई भ ँ } <anupam.p@powergrid.in>, Shiv Kumar Gupta { .ट्रश द्रभगिप <shivkumar@powergrid.in>, Kaushal Suman {ट्र क्ष भ } <k.suman@powergrid.in>, Nabadipa Das { पी पीप } <dasnabadipa07@powergrid.in>, Saugato Mondal (क्षपि) <saugato@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>, Ankur Gulati (ईट्रभ द्रभपबि) <ankurgulati@grid-india.in>, NLDC SCADA <nldc.scada@grid-india.in>, Vipul Anand { भउ ी} <vipulanand@powergrid.in>, Arun Kumar Singh { .ट्रश } <singh_ak@powergrid.in>, "A. De" <alik.erpc@gov.in>, Dinesh Kumar Bauri <dkbauri.cea@gov.in>

Sir,
In addition to the below mentioned links below link is also fluctuating since 2215 hrs of 15.09.2026
VLAN738: Shillong - Kolkata ICCP Main Link
Kindly take necessary actions at the earliest.
Regards,
Sakal Deep/ ट्र ीब
North Eastern Regional Load Despatch Centre/ ऑ म शब प शि
ट्र
Grid Controller of India Limited/ ि
ट्र ह च एि प शि
(A Government of India Enterprise) / (पि ट्र प ट्र पऑ)

11. 17.09.2026 11:30

<ankurgulati@grid-india.in>, NLDC SCADA <nldc.scada@grid-india.in>, Vipul Anand { भउ ी} <vipulanand@powergrid.in>, Arun Kumar Singh { .ट्रश } <singh_ak@powergrid.in>, "alikerpc " <alik.erpc@gov.in>, Dinesh Kumar Bauri <dkbauri.cea@gov.in>

शिप द्र ट्र ि: ि ीं ि/RESTRICTED
Dear Sir/Madam,
The works have been carried out and the protection link VLAN 766 of BNLDC Ghy have been shifted for testing. Intimated to SCADA team. The above link is under stability test. Once it is established,
the other links will also be shifted.
Regards
Kamlesh Baishya
Dy.Manager
ULDC

8. 03.09.2026 11:24
From: Somara Lakra (प प प्र प) <somara.lakra@grid-india.in>
To: Sakal Deep (ट्र ीब) <skldeep@grid-india.in>, Santanu Rudrapal { पश्चिम प } <santanu.rudrapal@powergrid.in>, Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>
Cc: "ms-nerpc@gov.in" <ms-nerpc@gov.in>, Brieflee Lyngkhoi <brieflee.lyngkhoi@gov.in>, Ashok Kumar Naik { .ट्रश फ्रौ} <aknaik@powergrid.in>, Vibhay Kumar { ट्रभप} <vibhay@powergrid.in>, Dharmendra Kumar Javeri {ि.ट्रश रू श} <javeri@powergrid.in>, Manish Kumar Tiwari { ब ट्रभप ि प} <manish.tiwari@powergrid.in>, Anupam Acharya {ई भ उ द्यप} <anupam@powergrid.in>, Anupam Paul {ई भ ँ } <anupam.p@powergrid.in>, Shiv Kumar Gupta { .ट्रश द्रभिंप} <shivkumar@powergrid.in>, Kaushal Suman {ट्र क्ष भ } <k.suman@powergrid.in>, Nabadipa Das { पी पीप} <dasnabadipa07@powergrid.in>, Saugato Mondal (क्षपिं ि) <saugato@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>, Ankur Gulati (ई ट्रभ द्रभपबि) <ankurgulati@grid-india.in>, NLDC SCADA <nldc.scada@grid-india.in>, Vipul Anand { भउ ी} <vipulanand@powergrid.in>, Arun Kumar Singh { .ट्रश } <singh_ak@powergrid.in>, "alikerpc " <alik.erpc@gov.in>, Dinesh Kumar Bauri <dkbauri.cea@gov.in>

May take up activity at the earliest
Regards
S Lakra
HoR, NERLDC

7. 03.09.2026 08:44
From: Sakal Deep (ट्र ीब) <skldeep@grid-india.in>
To: Santanu Rudrapal { पश्चिम प } <santanu.rudrapal@powergrid.in>, Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>
Cc: "ms-nerpc@gov.in" <ms-nerpc@gov.in>, Brieflee Lyngkhoi <brieflee.lyngkhoi@gov.in>, Ashok Kumar Naik { .ट्रश फ्रौ} <aknaik@powergrid.in>, Vibhay Kumar { ट्रभप} <vibhay@powergrid.in>, Dharmendra Kumar Javeri {ि.ट्रश रू श} <javeri@powergrid.in>, Somara Lakra (प प प्र प) <somara.lakra@grid-india.in>, Manish Kumar Tiwari { ब ट्रभप ि प} <manish.tiwari@powergrid.in>, Anupam Acharya {ई भ उ द्यप} <anupam@powergrid.in>, Anupam Paul {ई भ ँ } <anupam.p@powergrid.in>, Shiv Kumar Gupta { .ट्रश द्रभिंप} <shivkumar@powergrid.in>, Kaushal Suman {ट्र क्ष भ } <k.suman@powergrid.in>, Nabadipa Das { पी पीप} <dasnabadipa07@powergrid.in>, Saugato Mondal (क्षपिं ि) <saugato@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>, Ankur Gulati (ई ट्रभ द्रभपबि) <ankurgulati@grid-india.in>, NLDC SCADA <nldc.scada@grid-india.in>, "ms-nerpc@gov.in" <ms-nerpc@gov.in>, Vipul Anand { भउ ी} <vipulanand@powergrid.in>, Arun Kumar Singh { .ट्रश } <singh_ak@powergrid.in>, "alikerpc " <alik.erpc@gov.in>, Dinesh Kumar Bauri <dkbauri.cea@gov.in>

Sir,
Reminder-2.
Please schedule the activity of shifting the services over 400 kV Binaguri - Bongaigaon link.
Regards,
Sakal Deep/ ट्र ीब
North Eastern Regional Load Despatch Centre/ ऑ म शब प शि
ट्र
Grid Controller of India Limited/ ि
ट्र ह च एि प शि
(A Government of India Enterprise) / (पि ट्र प ट्र पऑ)

6. 21.08.2026 07:35
From: Sakal Deep (ट्र ीब) <skldeep@grid-india.in>
To: Santanu Rudrapal { पश्चिम प } <santanu.rudrapal@powergrid.in>, Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>

Cc: Ashok Kumar Naik { .ट्रश फ्रै} <aknaik@powergrid.in>, Vibhay Kumar { ट्रभप} <vibhay@powergrid.in>, Dharmendra Kumar Javeri {ि.ट्रश रू श} <javeri@powergrid.in>, Somara Lakra (प प प्ट्र प) <somara.lakra@grid-india.in>, Manish Kumar Tiwari { ब ट्रभप िप} <manish.tiwari@powergrid.in>, Anupam Acharya {ई भ उ द्यप} <anupam@powergrid.in>, Anupam Paul {ई भ ँ} <anupam.p@powergrid.in>, Shiv Kumar Gupta { .ट्रश द्रभगो} <shivkumar@powergrid.in>, Kaushal Suman {ट्र क्ष भ} <k.suman@powergrid.in>, Nabadipa Das { पी पीप} <dasnabadipa07@powergrid.in>, Saugato Mondal (क्षर्पि ि) <saugato@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>, Ankur Gulati (ई ट्रभ द्रभपबि) <ankurgulati@grid-india.in>, NLDC SCADA <nldc.scada@grid-india.in>, "ms-nerpc@gov.in" <ms-nerpc@gov.in>, Vipul Anand { भउ ी} <vipulanand@powergrid.in>, Arun Kumar Singh { .ट्रश } <singh_ak@powergrid.in>

Sir,
Reminder-1.
Please schedule the activity of shifting the services over 400 kV Binaguri - Bongaigaon link.
Regards,
Sakal Deep/ ट्र ीब
North Eastern Regional Load Despatch Centre/ ऑ म शब प शि
ट्र
Grid Controller of India Limited/ ि
ट्र ह च एि प शि
(A Government of India Enterprise) / (पि ट्र प ट्र पऑ)

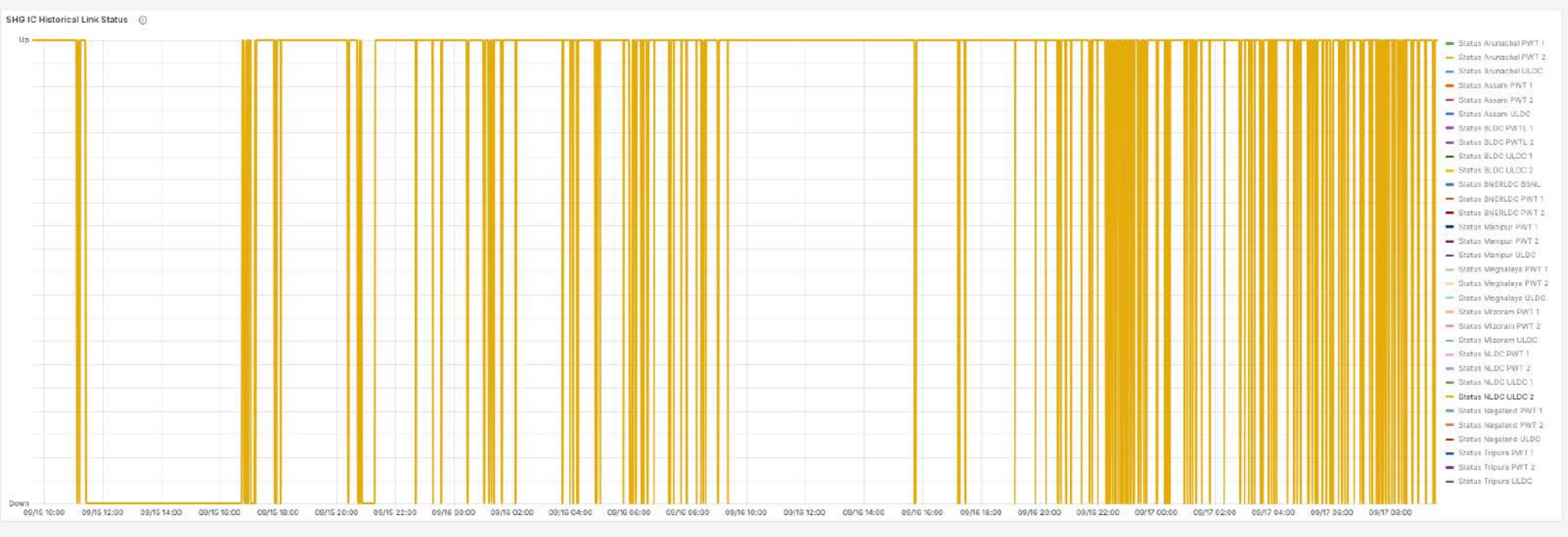
5. 19.08.2026 05:04
From: Sakal Deep (ट्र ीब) <skldeep@grid-india.in>
To: Santanu Rudrapal { पओम प} <santanu.rudrapal@powergrid.in>, Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>
Cc: Ashok Kumar Naik { .ट्रश फ्रै} <aknaik@powergrid.in>, Vibhay Kumar { ट्रभप} <vibhay@powergrid.in>, Dharmendra Kumar Javeri {ि.ट्रश रू श} <javeri@powergrid.in>, Somara Lakra (प प प्ट्र प) <somara.lakra@grid-india.in>, Manish Kumar Tiwari { ब ट्रभप िप} <manish.tiwari@powergrid.in>, Anupam Acharya {ई भ उ द्यप} <anupam@powergrid.in>, Anupam Paul {ई भ ँ} <anupam.p@powergrid.in>, Shiv Kumar Gupta { .ट्रश द्रभगो} <shivkumar@powergrid.in>, Kaushal Suman {ट्र क्ष भ} <k.suman@powergrid.in>, Nabadipa Das { पी पीप} <dasnabadipa07@powergrid.in>, Saugato Mondal (क्षर्पि ि) <saugato@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>, Ankur Gulati (ई ट्रभ द्रभपबि) <ankurgulati@grid-india.in>, NLDC SCADA <nldc.scada@grid-india.in>, "ms-nerpc@gov.in" <ms-nerpc@gov.in>, Vipul Anand { भउ ी} <vipulanand@powergrid.in>, Arun Kumar Singh { .ट्रश } <singh_ak@powergrid.in>

Sir,
Following services are requested to shift on Binaguri - Bongaigaon at the earliest:
VLAN 1006: Guwahati - Delhi ICCP Main link
VLAN985: Guwahati - Kolkata ICCP Main link
VLAN1005: Shillong - Delhi ICCP Main Link
VLAN738: Shillong - Kolkata ICCP Main Link
NER AGC Protection links.
Regards,
Sakal Deep/ ट्र ीब
North Eastern Regional Load Despatch Centre/ ऑ म शब प शि
ट्र
Grid Controller of India Limited/ ि
ट्र ह च एि प शि
(A Government of India Enterprise) / (पि ट्र प ट्र पऑ)

4. 19.08.2026 04:58
From: Santanu Rudrapal { पओम प} <santanu.rudrapal@powergrid.in>
To: Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>
Cc: Sakal Deep (ट्र ीब) <skldeep@grid-india.in>, Ashok Kumar Naik { .ट्रश फ्रै} <aknaik@powergrid.in>, Vibhay Kumar { ट्रभप} <vibhay@powergrid.in>, Dharmendra Kumar Javeri {ि.ट्रश रू श} <javeri@powergrid.in>, Somara Lakra (प प प्ट्र प) <somara.lakra@grid-india.in>, Manish Kumar Tiwari { ब ट्रभप िप} <manish.tiwari@powergrid.in>, Anupam Acharya {ई भ उ द्यप} <anupam@powergrid.in>, Anupam Paul {ई भ ँ} <anupam.p@powergrid.in>, Shiv Kumar Gupta { .ट्रश द्रभगो} <shivkumar@powergrid.in>, Kaushal Suman {ट्र क्ष भ} <k.suman@powergrid.in>, Nabadipa Das { पी पीप} <dasnabadipa07@powergrid.in>, Saugato Mondal (क्षर्पि ि) <saugato@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>, Ankur Gulati (ई ट्रभ द्रभपबि) <ankurgulati@grid-india.in>, NLDC SCADA <nldc.scada@grid-india.in>, "ms-nerpc@gov.in" <ms-nerpc@gov.in>, Vipul Anand { भउ ी} <vipulanand@powergrid.in>, Arun Kumar Singh { .ट्रश } <singh_ak@powergrid.in>

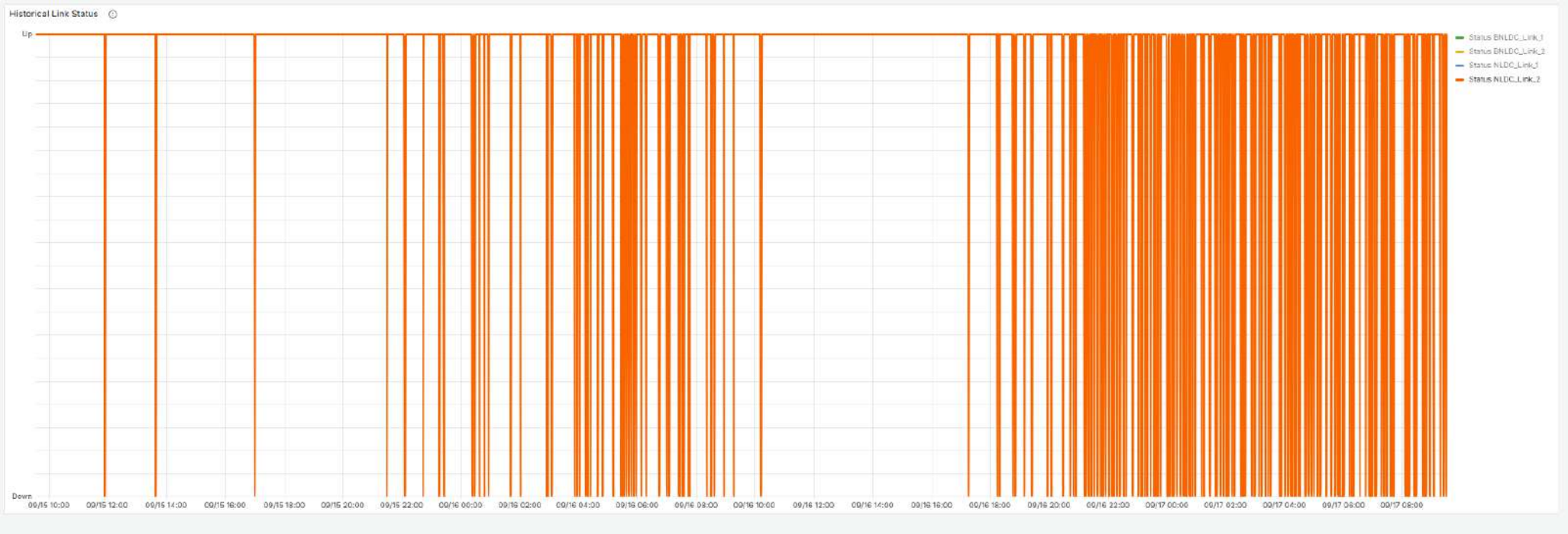
Attachment 1 of 4

VLAN-2005-Shillong-Delhi-ICCP-Link-2.png
(attached to mail 11 dated 17.09.2026)


SHG IC Historical Link Status
Up
Down
09/15 10:00
09/15 12:00
09/15 14:00
09/15 16:00
09/15 18:00
09/15 20:00
09/15 22:00
09/16 00:00
09/16 02:00
09/16 04:00
09/16 06:00
09/16 08:00
09/16 10:00
09/16 12:00
09/16 14:00
09/16 16:00
09/16 18:00
09/16 20:00
09/16 22:00
09/17 00:00
09/17 02:00
09/17 04:00
09/17 06:00
09/17 08:00
Status Arunachal PWT 1
Status Arunachal PWT 2
Status Arunachal ULDC
Status Assam PWT 1
Status Assam PWT 2
Status Assam ULDC
Status BLDC PWTL 1
Status BLDC PWTL 2
Status BLDC ULDC 1
Status BLDC ULDC 2
Status BNERLDC BSNL
Status BNERLDC PWT 1
Status BNERLDC PWT 2
Status Manipur PWT 1
Status Manipur PWT 2
Status Manipur ULDC
Status Meghalaya PWT 1
Status Meghalaya PWT 2
Status Meghalaya ULDC
Status Mizoram PWT 1
Status Mizoram PWT 2
Status Mizoram ULDC
Status NLDC PWT 1
Status NLDC PWT 2
Status NLDC ULDC 1
Status NLDC ULDC 2
Status Nagaland PWT 1
Status Nagaland PWT 2
Status Nagaland ULDC
Status Tripura PWT 1
Status Tripura PWT 2
Status Tripura ULDC

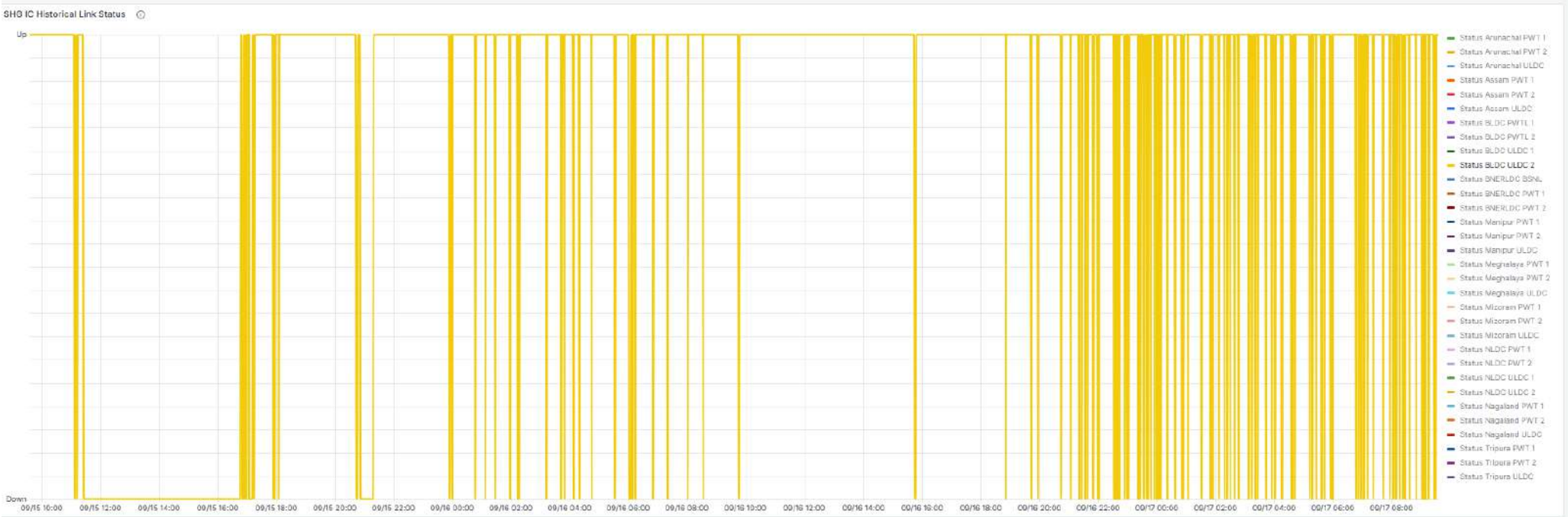
Attachment 2 of 4

VLAN-2006-Guwahati-Delhi-ICCP-Link-2.png
(attached to mail 11 dated 17.09.2026)


Historical Link Status
Up
Down
09/15 10:00
09/15 12:00
09/15 14:00
09/15 16:00
09/15 18:00
09/15 20:00
09/15 22:00
09/16 00:00
09/16 02:00
09/16 04:00
09/16 06:00
09/16 08:00
09/16 10:00
09/16 12:00
09/16 14:00
09/16 16:00
09/16 18:00
09/16 20:00
09/16 22:00
09/17 00:00
09/17 02:00
09/17 04:00
09/17 06:00
09/17 08:00
Status BNLDC_Link_1
Status BNLDC_Link_2
Status NLDC_Link_1
Status NLDC_Link_2

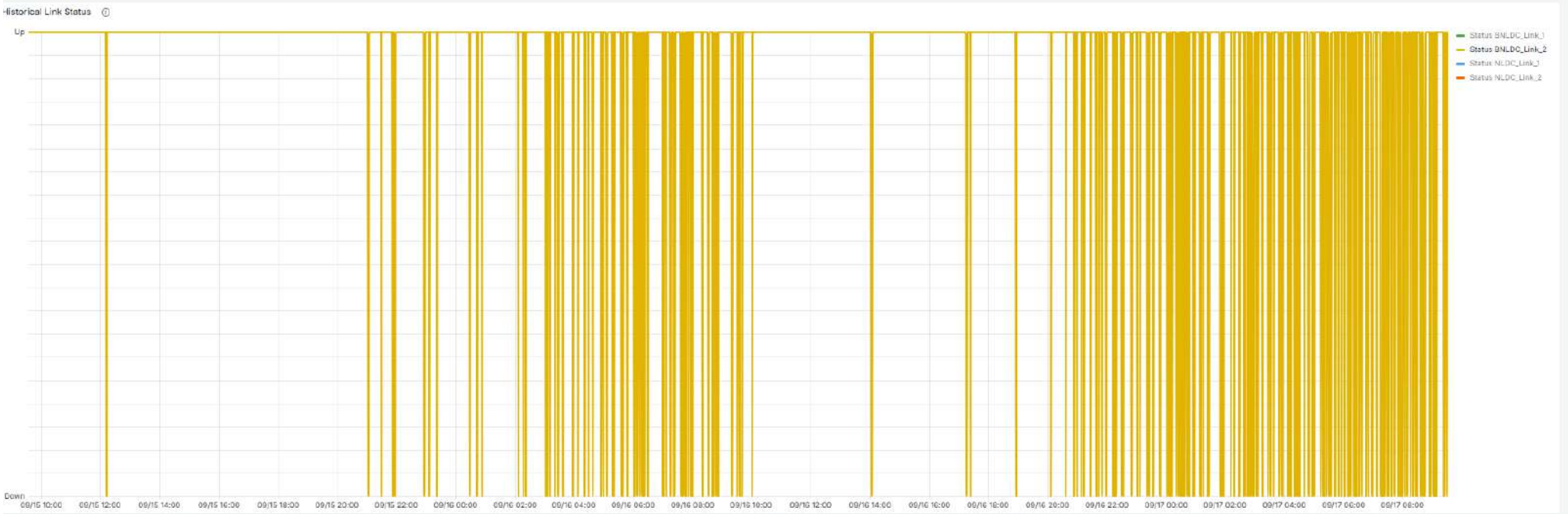
Attachment 3 of 4

VLAN-743-Shillong-Kolkata-ICCP-Link-2.png
(attached to mail 11 dated 17.09.2026)


SHG IC Historical Link Status
Up
Down
09/15 10:00
09/15 12:00
09/15 14:00
09/15 16:00
09/15 18:00
09/15 20:00
09/15 22:00
09/16 00:00
09/16 02:00
09/16 04:00
09/16 06:00
09/16 08:00
09/16 10:00
09/16 12:00
09/16 14:00
09/16 16:00
09/16 18:00
09/16 20:00
09/16 22:00
09/17 00:00
09/17 02:00
09/17 04:00
09/17 06:00
09/17 08:00
Status Arunachal PWT 1
Status Arunachal PWT 2
Status Arunachal ULDC
Status Assam PWT 1
Status Assam PWT 2
Status Assam ULDC
Status BLDC PWTL 1
Status BLDC PWTL 2
Status BLDC ULDC 1
Status BLDC ULDC 2
Status BNERLDC BSNL
Status BNERLDC PWT 1
Status BNERLDC PWT 2
Status Manipur PWT 1
Status Manipur PWT 2
Status Manipur ULDC
Status Meghalaya PWT 1
Status Meghalaya PWT 2
Status Meghalaya ULDC
Status Mizoram PWT 1
Status Mizoram PWT 2
Status Mizoram ULDC
Status NLDC PWT 1
Status NLDC PWT 2
Status NLDC ULDC 1
Status NLDC ULDC 2
Status Nagaland PWT 1
Status Nagaland PWT 2
Status Nagaland ULDC
Status Tripura PWT 1
Status Tripura PWT 2
Status Tripura ULDC

Attachment 4 of 4

VLAN-766-Guwahati-Kolkata-ICCP-Link-2.png
(attached to mail 11 dated 17.09.2026)


Historical Link Status
Up
Down
Status BNLDC_Link_1
Status BNLDC_Link_2
Status NLDC_Link_1
Status NLDC_Link_2
09/15 10:00
09/15 12:00
09/15 14:00
09/15 16:00
09/15 18:00
09/15 20:00
09/15 22:00
09/16 00:00
09/16 02:00
09/16 04:00
09/16 06:00
09/16 08:00
09/16 10:00
09/16 12:00
09/16 14:00
09/16 16:00
09/16 18:00
09/16 20:00
09/16 22:00
09/17 00:00
09/17 02:00
09/17 04:00
09/17 06:00
09/17 08:00

Subject: Urgent Attention Required: Repeated Failure of Misa Fibcom SDH on AC Supply Failure – DC-Backed Equipment Going Offline

Summary of mails (latest first)

#	Date	From
2	31.07.2026 04:57	Nabadipa Das { पी पीप }
1	30.07.2026 13:49	Sakal Deep (ट्र ीब)

2. 31.07.2026 04:57
From: Nabadipa Das { पी पीप } <dasnabadipa07@powergrid.in>
To: anand.singh <anand.singh@ptfl.in>, Ananya Neog <ap.neog@gmail.com>
Cc: Manish Kumar Tiwari { ब ट्रभप िंप } <manish.tiwari@powergrid.in>, Saugato Mondal (क्षपिं ि) <saugato@grid-india.in>, Anupam Acharya {ई भ उ द्यप } <anupam@powergrid.in>, NERLDC SCADA <nerldc.scada@grid-india.in>, Sakal Deep <skldeep@grid-india.in>, Anupam Paul {ई भ ँ } <anupam.p@powergrid.in>, Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>, Vipul Anand { भ उ ी} <vipulanand@powergrid.in>

शिप द्र ट्र ि: िं ीं ि/RESTRICTED
Dear Sir/Madam,
With reference to the trailing mail, it is to inform you that a communication has been received from NERLDC regarding disruption of RTU reporting following the outage of the Misa Fibcom SDH node due to AC supply failure.
It is a matter of serious concern that, despite the availability of a DC power backup system, the node is going offline during AC power interruptions. Considering that Misa is a critical SDH node in the ULDC communication network, any outage at this location
results in loss of communication and telemetry from several downstream stations, thereby affecting real-time system monitoring and operation across both Shillong and Guwahati RLDC areas.
In view of the above, you are requested to urgently attend MISA site and carry out necessary rectification of the battery/DC power backup system to prevent recurrence of such incidents.
The matter may kindly be treated as most urgent.
With Regards,
ीबपीप / Nabadipa Das
Powergrid, NER
ULDC, Guwahati

1. 30.07.2026 13:49
From: Sakal Deep (ट्र ीब) <skldeep@grid-india.in>
To: Kamlesh Baishya {ट्र श Baishya} <kamlesh156@powergrid.in>, Vipul Anand { भउ ी} <vipulanand@powergrid.in>, Nabadipa Das { पी पीप } <dasnabadipa07@powergrid.in>, Anupam Paul {ई भ ँ } <anupam.p@powergrid.in>
Cc: Manish Kumar Tiwari { ब ट्रभप िंप } <manish.tiwari@powergrid.in>, Saugato Mondal (क्षपिं ि) <saugato@grid-india.in>, Anupam Acharya {ई भ उ द्यप } <anupam@powergrid.in>, NERLDC SCADA <nerldc.scada@grid-india.in>

Sir,
This is to bring to your kind attention a recurring issue at the Misa Fibcom SDH node, where AC supply failure is causing the equipment to go offline despite it being provisioned with a DC power system.
At 16:25 hrs on 30/07/2026, AC supply failure at Misa Fibcom SDH resulted in loss of RTU reporting at the following stations:
NERLDC Shillong: Dimapur, Kathalguri, Loktak, SM Nagar, PK Bari, Misa, Ziro
NERLDC Guwahati: Balipara, Bongaigaon, Dimapur, Haflong, Kameng, Kopoli, Salakati, Silchar, Subansiri, Tezu, Roing, Ziro
Since the SDH is equipped with a DC power system, an AC supply outage alone should not cause the device to go offline.
This is not an isolated occurrence — similar incidents have been observed in the past, and the corresponding UNMS logs are attached for reference.
Given that Misa is a strategic node in the ULDC network with wide-reaching downstream impact across both Shillong and Guwahati RLDC areas, I request that this matter be looked into on priority and resolved at the earliest, including a check of the DC power backup health at the site.
Regards,
Sakal Deep (ट्र ीब)

Logistics
North Eastern Regional Load Despatch Centre, Shillong
Power System Operation Corporation Ltd./ प ि उ श ट्र प श .
(A Government of India Enterprise)

Attachments:

Misa_node_log.xlsx (95 KB)

Attachment 1 of 1

Misa_node_log.xlsx
(attached to mail 1 dated 30.07.2026)

Sheet: Sheet 1 (809 rows, first 400 shown)

Title	Events Grid								
Creation Time	Jul 09, 2026 04:03 PM								
Severity	Issue	Date	Node	IP Address	Resource	Event ID	Ticket	Event Type	Vendor
Normal	NE Unreachable - Cleared	Jul 09, 2026 03:50:43 PM	misa	misa	misa	261900011077		Network Alarm	FIBCOM
Normal	Loss of Frame - Cleared	Jul 09, 2026 03:50:43 PM	misa	misa	STM16-1-11-8	261900003819	TKT45484	Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jul 09, 2026 12:42:45 PM	misa	misa	STM16-1-13-8	261900008879		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jul 09, 2026 12:42:44 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261900008878		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jul 09, 2026 04:09:47 AM	misa	misa	E1-1-41-22	261890006538		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jul 09, 2026 04:09:46 AM	misa	misa	E1-1-41-23	261890006537		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jul 09, 2026 04:09:46 AM	misa	misa	E1-1-41-24	261890006536		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jul 09, 2026 04:09:45 AM	misa	misa	E1-1-41-26	261890006534		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jul 09, 2026 04:09:45 AM	misa	misa	E1-1-41-25	261890006535		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jul 09, 2026 04:09:44 AM	misa	misa	E1-1-41-35	261890006533		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jul 09, 2026 03:10:37 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	261900003142		Network Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Jul 08, 2026 05:20:30 PM	misa	misa	misa	261840007970		Application Alarm	FIBCOM

Normal	Payload Type Mismatch - Cleared	Jul 03, 2026 10:49:30 AM	misa	misa	E1-1-41-10	261840007971		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jul 03, 2026 10:04:24 AM	misa	misa	STM16-1-13-8	261840007508		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Jul 03, 2026 03:31:34 AM	misa	misa	misa	261840003784		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jul 03, 2026 12:33:55 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	261840000192		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jul 02, 2026 01:02:04 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261830009170		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jul 02, 2026 05:21:41 AM	misa	misa	STM16-1-11-7	261830004669		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jul 02, 2026 05:21:39 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	261830004670		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jul 02, 2026 04:48:07 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	261830004392		Network Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Jul 02, 2026 04:09:04 AM	misa	misa	misa	261820004414		Application Alarm	FIBCOM
Normal	Loss of Frame - Cleared	Jun 21, 2026 09:55:26 PM	misa	misa	STM16-1-11-8	261720021532	TKT45252	Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jun 21, 2026 11:56:41 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	261720018099		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jun 18, 2026 04:09:01 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261690007758		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Jun 16, 2026 04:16:07 PM	misa	misa	misa	261670008947		Network Alarm	FIBCOM
Normal	Loss of Frame - Cleared	Jun 16, 2026 03:12:15 PM	misa	misa	STM16-1-11-8	261670005701	TKT45225	Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Jun 16, 2026 11:34:37 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	261670004955		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jun 01, 2026 05:28:00 AM	misa	misa	STM16-1-13-8	261520004480		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jun 01, 2026 04:13:12 AM	misa	misa	E1-1-41-35	261510003836		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jun 01, 2026 04:13:12 AM	misa	misa	E1-1-41-22	261510003831		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jun 01, 2026 04:13:12 AM	misa	misa	E1-1-41-24	261510003833		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jun 01, 2026 04:13:12 AM	misa	misa	E1-1-41-26	261510003835		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jun 01, 2026 04:13:12 AM	misa	misa	E1-1-41-23	261510003832		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jun 01, 2026 04:13:12 AM	misa	misa	E1-1-41-25	261510003834		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 31, 2026 04:38:27 PM	misa	misa	STM16-1-11-7	261510014857		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 30, 2026 05:37:23 AM	misa	misa	STM16-1-11-7	261500007888		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 30, 2026 05:37:23 AM	misa	misa	STM16-1-13-8	261500007886		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 29, 2026 10:56:06 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261490028290		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	May 29, 2026 09:37:10 PM	misa	misa	ps_dc_2-1-34	261490026532		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 29, 2026 05:46:57 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	261490020778		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 29, 2026 05:37:55 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	261490006781		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	May 28, 2026 06:15:43 PM	misa	misa	STM16-1-13-8	261480022027		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 27, 2026 02:11:15 PM	misa	misa	STM16-1-13-8	261470012520		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	May 27, 2026 11:28:42 AM	misa	misa	misa	261470009213		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 27, 2026 08:43:39 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	261470006662		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 25, 2026 10:30:57 AM	misa	misa	STM16-1-11-7	261450008532		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 24, 2026 08:20:46 PM	misa	misa	VC4-1-13-003 VC4-1-13-003	261440020151		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 24, 2026 08:20:43 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261440020150		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 24, 2026 06:27:12 PM	misa	misa	VC4-1-13-002 VC4-1-13-002	261440018672		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 24, 2026 04:31:24 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	261440016065		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 24, 2026 04:02:27 PM	misa	misa	STM16-1-13-8	261440015355		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 23, 2026 02:57:33 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	261430012972		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 23, 2026 08:16:02 AM	misa	misa	STM16-1-11-7	261430006723		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	May 21, 2026 06:23:40 PM	misa	misa	E1-1-41-8	261410015760		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	May 21, 2026 06:14:16 PM	misa	misa	E1-1-41-15	261410015892		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 21, 2026 03:41:08 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261410012851		Network Alarm	FIBCOM

Normal	NE Unreachable - Cleared	May 19, 2026 12:22:04 PM	misa	misa	misa	261390008157		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 17, 2026 11:49:53 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	261370008534		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 17, 2026 11:13:23 AM	misa	misa	STM16-1-13-8	261370007506		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 17, 2026 11:13:23 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	261370007508		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 11, 2026 12:34:56 PM	misa	misa	VC4-1-13-002 VC4-1-13-002	261310010600		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 11, 2026 12:34:55 PM	misa	misa	STM16-1-13-8	261310010599		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	May 11, 2026 12:14:15 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261310009292		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	May 11, 2026 09:32:13 AM	misa	misa	ps_dc_2-1-33	261310006154		Hardware Alarm	FIBCOM
Normal	NE Unreachable - Cleared	May 10, 2026 02:21:00 PM	misa	misa	misa	261300883135		Network Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	May 09, 2026 04:04:23 PM	misa	misa	misa	261020010614		Application Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 23, 2026 07:59:54 AM	misa	misa	STM16-1-11-7	261130002488		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 23, 2026 07:59:51 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	261130002487		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Apr 23, 2026 04:06:52 AM	misa	misa	E1-1-41-25	261120000907		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Apr 23, 2026 04:06:52 AM	misa	misa	E1-1-41-24	261120000906		Network Alarm	FIBCOM

Normal	Payload Type Mismatch - Cleared	Apr 23, 2026 04:06:52 AM	misa	misa	E1-1-41-22	261120000904		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Apr 23, 2026 04:06:52 AM	misa	misa	E1-1-41-23	261120000905		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Apr 23, 2026 04:06:51 AM	misa	misa	E1-1-41-26	261120000909		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 22, 2026 06:54:16 PM	misa	misa	STM16-1-13-8	261120010415		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 22, 2026 11:18:34 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	261120003660		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 21, 2026 04:40:05 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261110007476		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 21, 2026 04:40:05 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	261110007474		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 21, 2026 04:01:31 PM	misa	misa	VC4-1-13-002 VC4-1-13-002	261110006779		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 21, 2026 04:01:31 PM	misa	misa	STM16-1-13-8	261110006781		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 20, 2026 12:00:17 PM	misa	misa	STM16-1-11-7	261100009298		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Apr 20, 2026 12:00:10 PM	misa	misa	misa	261100009332		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 18, 2026 03:19:52 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261080017002		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Apr 18, 2026 12:25:31 AM	misa	misa	ps_dc_2-1-33	261080000281		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 17, 2026 11:10:15 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	261070011937		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 17, 2026 11:10:14 AM	misa	misa	STM16-1-13-8	261070011932		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Apr 16, 2026 09:39:08 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	261060007015		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 16, 2026 09:16:42 AM	misa	misa	STM16-1-13-8	261060006329		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 16, 2026 08:48:05 AM	misa	misa	STM16-1-11-7	261060006121		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 16, 2026 07:40:30 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	261060004549		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 13, 2026 12:31:15 PM	misa	misa	VC4-1-13-002 VC4-1-13-002	261030010291		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 13, 2026 12:23:03 PM	misa	misa	STM16-1-13-8	261030010292		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 12, 2026 12:22:10 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	261020010613		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Apr 12, 2026 12:21:31 PM	misa	misa	misa	261020011096		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 10, 2026 03:03:50 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	261000016198		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 10, 2026 08:00:40 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	261000007274		Network Alarm	FIBCOM
Normal	Server Signal Fail - Cleared	Apr 10, 2026 08:00:40 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	261000007244		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 10, 2026 08:00:30 AM	misa	misa	STM16-1-13-8	261000007273		Network Alarm	FIBCOM
Normal	Loss of Signal - Cleared	Apr 10, 2026 08:00:13 AM	misa	misa	STM16-1-11-6	261000007241		Network Alarm	FIBCOM
Normal	Loss of Signal - Cleared	Apr 10, 2026 08:00:09 AM	misa	misa	STM16-1-13-8	261000007242		Network Alarm	FIBCOM
Normal	Alarm Indication Signal - Cleared	Apr 10, 2026 07:37:15 AM	misa	misa	STM16-1-11-6	261000007061		Network Alarm	FIBCOM

Normal	Alarm Indication Signal - Cleared	Apr 10, 2026 07:37:01 AM	misa	misa	STM16-1-13-8	261000007071		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Apr 09, 2026 05:35:19 PM	misa	misa	ps_dc_2-1-34	260990011619		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 08, 2026 12:28:59 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	260980012612		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Apr 07, 2026 12:27:49 PM	misa	misa	misa	260970012017		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 07, 2026 11:11:50 AM	misa	misa	STM16-1-13-8	260970010341		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Apr 05, 2026 12:54:52 AM	misa	misa	ps_dc_2-1-33	260950000649		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Apr 03, 2026 10:22:34 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260930011175		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Apr 02, 2026 04:53:00 PM	misa	misa	misa	260920018710		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Mar 31, 2026 07:18:13 PM	misa	misa	misa	260900018586		Network Alarm	FIBCOM
Normal	Alarm Indication Signal - Cleared	Mar 31, 2026 06:54:37 AM	misa	misa	STM16-1-11-6	260900006314		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Mar 30, 2026 08:23:28 PM	misa	misa	ps_dc_2-1-33	260890017056		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 30, 2026 05:56:13 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	260890014575		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 28, 2026 12:03:58 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	260870008997		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 28, 2026 11:50:40 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260870008880		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 28, 2026 11:08:28 AM	misa	misa	STM16-1-13-8	260870008475		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Mar 28, 2026 11:08:28 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260870008478		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Mar 27, 2026 02:24:16 PM	misa	misa	misa	260860014111		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Mar 27, 2026 11:13:25 AM	misa	misa	E1-1-41-63	260860004007		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 27, 2026 10:12:32 AM	misa	misa	STM16-1-11-7	260860009035		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 27, 2026 10:12:32 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260860009028		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 23, 2026 12:12:30 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	260820008314		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 23, 2026 11:56:27 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260820008119		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 23, 2026 11:31:02 AM	misa	misa	STM16-1-11-7	260820007793		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 23, 2026 11:31:00 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260820007791		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 23, 2026 11:14:25 AM	misa	misa	STM16-1-13-8	260820007606		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 23, 2026 11:14:24 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260820007602		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Mar 20, 2026 05:30:29 PM	misa	misa	misa	260790014810		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 20, 2026 10:56:49 AM	misa	misa	STM16-1-11-7	260790008613		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 20, 2026 10:56:45 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260790008612		Network Alarm	FIBCOM
Normal	NE Communication Suspended - Cleared	Mar 19, 2026 05:02:24 PM	misa	misa	misa	260780014155		Network Alarm	FIBCOM

Normal	Payload Type Mismatch - Cleared	Mar 19, 2026 04:11:47 PM	misa	misa	E1-1-41-37	260780013617		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 18, 2026 11:19:52 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	260770018868		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 18, 2026 12:34:49 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	260770012138		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 18, 2026 11:46:45 AM	misa	misa	STM16-1-11-7	260770010814		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 18, 2026 11:46:43 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260770010812		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 18, 2026 11:17:57 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260770009926		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 18, 2026 11:17:57 AM	misa	misa	STM16-1-13-8	260770009927		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 16, 2026 11:06:50 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260750012210		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Mar 15, 2026 09:22:44 PM	misa	misa	misa	260740023733		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 15, 2026 12:35:04 PM	misa	misa	VC4-1-13-002 VC4-1-13-002	260740014497		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 15, 2026 12:35:04 PM	misa	misa	STM16-1-13-8	260740014498		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Mar 13, 2026 11:55:41 PM	misa	misa	misa	260720017821		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Mar 12, 2026 03:07:28 PM	misa	misa	misa	260710013966		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 12, 2026 01:31:56 PM	misa	misa	STM16-1-11-7	260710012305		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 12, 2026 01:30:34 PM	misa	misa	VC4-1-13-003 VC4-1-13-003	260710012306		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Mar 12, 2026 10:47:48 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260710008250		Network Alarm	FIBCOM
Normal	Loss of Frame - Cleared	Mar 11, 2026 08:11:01 PM	misa	misa	STM16-1-11-8	260700012985	TKT42861	Network Alarm	FIBCOM
Normal	NE Communication Suspended - Cleared	Mar 11, 2026 09:56:32 AM	misa	misa	misa	260700008028		Network Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Mar 11, 2026 04:03:58 AM	misa	misa	misa	260690012957		Application Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Mar 09, 2026 04:52:36 PM	misa	misa	misa	260680013988		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 08, 2026 02:22:54 PM	misa	misa	STM16-1-11-7	260670014754		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 08, 2026 02:22:48 PM	misa	misa	VC4-1-13-003 VC4-1-13-003	260670014716		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 08, 2026 01:42:13 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	260670013783		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 08, 2026 12:11:03 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	260670011555		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 08, 2026 11:33:07 AM	misa	misa	STM16-1-13-8	260670010600		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 08, 2026 11:32:14 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260670010601		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Mar 07, 2026 08:17:42 AM	misa	misa	ps_dc_2-1-33	260660006138		Hardware Alarm	FIBCOM
Normal	Unit Missing - Cleared	Mar 06, 2026 08:38:22 AM	misa	misa	emap8s-1-21	260650007518		Hardware Alarm	FIBCOM
Normal	Loss of Frame - Cleared	Mar 06, 2026 08:30:15 AM	misa	misa	STM16-1-11-8	260650007519	TKT42795	Network Alarm	FIBCOM

Normal	Payload Type Mismatch - Cleared	Mar 06, 2026 12:42:22 AM	misa	misa	E1-1-41-2	260650000472		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Mar 04, 2026 10:46:14 PM	misa	misa	misa	260630016174		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 03, 2026 11:34:15 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260620008825		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 02, 2026 03:40:49 PM	misa	misa	VC4-1-13-002 VC4-1-13-002	260610010885		Network Alarm	FIBCOM
Normal	Server Signal Fail - Cleared	Mar 02, 2026 03:40:48 PM	misa	misa	VC4-1-13-002 VC4-1-13-002	260610010868		Network Alarm	FIBCOM
Normal	Alarm Indication Signal - Cleared	Mar 02, 2026 03:40:36 PM	misa	misa	STM16-1-13-8	260610011461		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Mar 02, 2026 03:40:33 PM	misa	misa	STM16-1-13-8	260610010884		Network Alarm	FIBCOM
Normal	Loss of Signal - Cleared	Mar 02, 2026 03:40:17 PM	misa	misa	STM16-1-13-8	260610010866	TKT42763	Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 26, 2026 11:13:56 AM	misa	misa	STM16-1-11-7	260570008389		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 26, 2026 11:13:56 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260570008390		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Feb 24, 2026 07:53:47 AM	misa	misa	misa	260550006322		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Feb 23, 2026 09:55:49 PM	misa	misa	ps_dc_2-1-33	260540013690		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 23, 2026 03:21:55 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	260540010051		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 21, 2026 10:58:27 AM	misa	misa	STM16-1-13-8	260520007660		Network Alarm	FIBCOM
Normal	Remote Defect Indication - Cleared	Feb 20, 2026 10:41:47 AM	misa	misa	STM16-1-11-8	260510003791	TKT42666	Network Alarm	FIBCOM

Normal	Degraded Signal - Cleared	Feb 20, 2026 10:41:47 AM	misa	misa	STM16-1-11-8	260510003792		Hardware Alarm	FIBCOM
Normal	Alarm Indication Signal - Cleared	Feb 20, 2026 10:41:47 AM	misa	misa	STM16-1-11-8	260510008331		Network Alarm	FIBCOM
Normal	Loss of Frame - Cleared	Feb 19, 2026 04:16:06 PM	misa	misa	STM16-1-11-8	260500011342	TKT42668	Network Alarm	FIBCOM
Normal	Loss of Signal - Cleared	Feb 19, 2026 03:16:15 PM	misa	misa	STM16-1-11-8	260500011221	TKT42667	Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 19, 2026 12:45:00 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	260500009585		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Feb 18, 2026 07:42:34 AM	misa	misa	misa	260490006475		Network Alarm	FIBCOM
Normal	NE Communication Suspended - Cleared	Feb 17, 2026 02:13:28 PM	misa	misa	misa	260480012273		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 14, 2026 02:45:20 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	260450011387		Network Alarm	FIBCOM
Normal	Fan Degraded - Cleared	Feb 13, 2026 10:36:23 PM	misa	misa	fan_1-1-1	260440016254		Environment Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 11, 2026 11:52:05 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	260420009001		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 11, 2026 11:37:29 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260420008800		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 11, 2026 11:12:59 AM	misa	misa	STM16-1-11-7	260420008497		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 11, 2026 11:12:58 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260420008494		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 11, 2026 10:59:41 AM	misa	misa	STM16-1-13-8	260420008303		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 11, 2026 10:59:41 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260420008304		Network Alarm	FIBCOM

Normal	Payload Type Mismatch - Cleared	Feb 10, 2026 11:04:20 AM	misa	misa	E1-1-41-20	260410003661		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Feb 10, 2026 11:04:19 AM	misa	misa	E1-1-41-17	260410003657		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Feb 10, 2026 11:04:19 AM	misa	misa	E1-1-41-16	260410003658		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Feb 10, 2026 11:04:19 AM	misa	misa	E1-1-41-18	260410003659		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Feb 10, 2026 11:04:19 AM	misa	misa	E1-1-41-19	260410003660		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 09, 2026 11:46:40 AM	misa	misa	STM16-1-13-8	260400009923		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 09, 2026 11:46:39 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260400009921		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Feb 08, 2026 12:17:59 AM	misa	misa	misa	260390000225		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 06, 2026 11:40:28 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	260370009251		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 06, 2026 11:31:54 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260370009131		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Feb 06, 2026 01:16:29 AM	misa	misa	ps_dc_2-1-34	260370001002		Hardware Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Feb 03, 2026 08:06:16 AM	misa	misa	ps_dc_2-1-34	260340006612		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 02, 2026 10:51:22 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260330009352		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 01, 2026 11:08:26 AM	misa	misa	STM16-1-11-7	260320008313		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Feb 01, 2026 11:08:26 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260320008312		Network Alarm	FIBCOM

Normal	UB2 Power Missing - Cleared	Jan 31, 2026 03:58:51 PM	misa	misa	ps_dc_2-1-33	260310012685		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 30, 2026 11:40:36 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	260300009978		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Jan 29, 2026 09:38:34 PM	misa	misa	misa	260290015014		Network Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Jan 29, 2026 04:07:30 AM	misa	misa	misa	260280006077		Application Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 28, 2026 06:12:44 AM	misa	misa	STM16-1-13-8	260280006076		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 27, 2026 10:30:20 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260270009400		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 26, 2026 04:02:53 AM	misa	misa	STM16-1-11-7	260250005927		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 25, 2026 08:20:20 PM	misa	misa	STM16-1-13-8	260250015514		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 25, 2026 06:01:59 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	260250005926		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 25, 2026 06:01:59 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260250005928		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 24, 2026 12:12:43 PM	misa	misa	STM16-1-13-8	260240010769		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Jan 24, 2026 12:03:09 PM	misa	misa	ps_dc_2-1-34	260240010593		Hardware Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Jan 23, 2026 05:56:18 PM	misa	misa	ps_dc_2-1-33	260230014717		Hardware Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Jan 23, 2026 12:22:26 AM	misa	misa	misa	260230000379		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Jan 22, 2026 11:31:27 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260220008003		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 22, 2026 11:22:31 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	260220007863		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 22, 2026 10:53:02 AM	misa	misa	STM16-1-13-8	260220007480		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 22, 2026 10:53:02 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260220007479		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Jan 22, 2026 09:29:27 AM	misa	misa	ps_dc_2-1-33	260220006608		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 20, 2026 01:19:11 PM	misa	misa	STM16-1-13-8	260200011158		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 20, 2026 01:19:11 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	260200011156		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 20, 2026 01:19:11 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	260200011157		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 19, 2026 06:10:59 PM	misa	misa	STM16-1-11-7	260190014683		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 19, 2026 06:10:57 PM	misa	misa	VC4-1-13-003 VC4-1-13-003	260190014682		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 19, 2026 04:29:09 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260190004886		Network Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Jan 19, 2026 04:02:46 AM	misa	misa	misa	260130013990		Application Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Jan 18, 2026 05:19:52 PM	misa	misa	misa	260180013695		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 18, 2026 04:44:06 AM	misa	misa	STM16-1-11-7	260180004729		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Jan 18, 2026 04:44:06 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	260180004725		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 17, 2026 11:08:34 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260170009499		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jan 15, 2026 03:57:23 PM	misa	misa	E1-1-41-43	260150012593		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Jan 15, 2026 03:24:57 PM	misa	misa	E1-1-41-7	260150012144		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 15, 2026 11:35:12 AM	misa	misa	STM16-1-11-7	260150009287		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 13, 2026 05:19:39 PM	misa	misa	STM16-1-13-8	260130014335		Network Alarm	FIBCOM
Normal	NE Software Error: Cannot Retrieve CPL - Cleared	Jan 13, 2026 05:03:44 PM	misa	misa	misa	260130014067		Device Event	FIBCOM
Normal	NE Software Error: Cannot Set External Time - Cleared	Jan 13, 2026 05:03:44 PM	misa	misa	misa	260130014066		Device Event	FIBCOM
Normal	NE Unreachable - Cleared	Jan 13, 2026 05:03:40 PM	misa	misa	misa	260130014152		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 12, 2026 10:52:13 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260120007657		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Jan 12, 2026 01:21:05 AM	misa	misa	misa	260120000832		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 11, 2026 10:25:16 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	260110006491		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 11, 2026 10:25:16 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	260110006492		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 11, 2026 10:25:16 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260110006494		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 11, 2026 10:25:16 AM	misa	misa	STM16-1-11-7	260110006493		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Jan 10, 2026 08:31:46 AM	misa	misa	STM16-1-13-8	260100006313		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 10, 2026 08:31:46 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260100006314		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Jan 10, 2026 02:49:06 AM	misa	misa	ps_dc_2-1-33	260100002598		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 07, 2026 11:42:55 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	260070007472		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 07, 2026 11:16:08 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260070007184		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 07, 2026 11:16:08 AM	misa	misa	STM16-1-11-7	260070007183		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 07, 2026 10:56:41 AM	misa	misa	STM16-1-13-8	260070007010		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 07, 2026 10:56:41 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	260070007012		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 05, 2026 10:08:49 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	260050006617		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 05, 2026 10:08:49 AM	misa	misa	STM16-1-11-7	260050006618		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 05, 2026 10:08:48 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	260050006619		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Jan 05, 2026 06:26:31 AM	misa	misa	misa	260050004703		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 03, 2026 01:13:27 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	260030007546		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Jan 01, 2026 10:35:03 PM	misa	misa	STM16-1-13-8	260010013794		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 30, 2025 10:14:16 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253640007334		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Dec 29, 2025 03:28:20 PM	misa	misa	STM16-1-11-7	253630010942		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Dec 29, 2025 11:02:23 AM	misa	misa	misa	253630008061		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Dec 28, 2025 06:04:04 AM	misa	misa	misa	253620004822		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Dec 27, 2025 07:18:07 AM	misa	misa	ps_dc_2-1-34	253610005412		Hardware Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Dec 26, 2025 11:43:48 AM	misa	misa	misa	253600008937		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 23, 2025 09:26:55 PM	misa	misa	STM16-1-11-7	253570016044		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 23, 2025 10:52:51 AM	misa	misa	STM16-1-13-8	253570005872		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Dec 22, 2025 12:38:41 PM	misa	misa	misa	253560007274		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 19, 2025 03:27:10 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	253530009094		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 19, 2025 06:53:44 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	253530004746		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 19, 2025 06:53:44 AM	misa	misa	STM16-1-13-8	253530004748		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 19, 2025 06:53:44 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	253530004747		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Dec 17, 2025 04:52:37 PM	misa	misa	misa	253510009705		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 16, 2025 10:33:15 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253500006080		Network Alarm	FIBCOM

Normal	Alarm Received from NE in Illegal Format - Cleared	Dec 14, 2025 04:04:39 AM	misa	misa	misa	253470005504		Application Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 13, 2025 11:30:25 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253470005809		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Dec 13, 2025 11:00:01 AM	misa	misa	misa	253470005541		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 10, 2025 05:54:50 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253440003806		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 09, 2025 04:23:21 PM	misa	misa	STM16-1-11-7	253430006684		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 09, 2025 01:06:06 PM	misa	misa	VC4-1-13-003 VC4-1-13-003	253430006685		Network Alarm	FIBCOM
Normal	NE Communication Suspended - Cleared	Dec 09, 2025 12:58:21 PM	misa	misa	misa	253430006659		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Dec 09, 2025 12:45:53 PM	misa	misa	misa	253430006567		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 08, 2025 11:36:23 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	253420005206		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 08, 2025 10:53:37 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	253420004965		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Dec 07, 2025 12:26:39 PM	misa	misa	ps_dc_2-1-34	253410006238		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 07, 2025 04:16:33 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253410003097		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 06, 2025 01:06:28 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253400000585		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Dec 04, 2025 08:10:45 AM	misa	misa	misa	253380005105		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Dec 04, 2025 12:20:06 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253380000182		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 03, 2025 11:10:39 AM	misa	misa	STM16-1-11-7	253370006696		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 03, 2025 11:10:38 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	253370006694		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 03, 2025 10:57:01 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	253370006566		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 03, 2025 10:57:01 AM	misa	misa	STM16-1-13-8	253370006568		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 03, 2025 12:36:25 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	253370000288		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Dec 01, 2025 06:09:29 PM	misa	misa	misa	253350009970		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 01, 2025 03:33:48 PM	misa	misa	STM16-1-11-7	253350008400		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Dec 01, 2025 12:13:28 PM	misa	misa	E1-1-41-36	253350006994		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Dec 01, 2025 12:13:28 PM	misa	misa	E1-1-41-37	253350006995		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Dec 01, 2025 07:40:56 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253350005116		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Dec 01, 2025 04:04:43 AM	misa	misa	ps_dc_2-1-34	253350003605		Hardware Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Dec 01, 2025 04:02:59 AM	misa	misa	misa	253340003074		Application Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 30, 2025 08:43:21 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	253340005539		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Nov 30, 2025 08:43:21 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	253340005540		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 28, 2025 04:02:59 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253320003089		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 28, 2025 03:24:49 AM	misa	misa	STM16-1-11-7	253320003095		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 28, 2025 02:57:56 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	253320002832		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Nov 25, 2025 04:52:35 PM	misa	misa	misa	253290009264		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Nov 24, 2025 03:08:01 PM	misa	misa	ps_dc_2-1-33	253280006975		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 23, 2025 11:21:40 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253270006243		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Nov 22, 2025 11:52:34 AM	misa	misa	ps_dc_2-1-34	253260006523		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 22, 2025 03:42:13 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	253260003258		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 22, 2025 03:42:13 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	253260003259		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 20, 2025 10:57:27 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253240006302		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 18, 2025 01:22:10 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	253220006333		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 18, 2025 11:13:31 AM	misa	misa	STM16-1-11-7	253220005385		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Nov 18, 2025 11:13:27 AM	misa	misa	misa	253220005429		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 18, 2025 10:50:30 AM	misa	misa	STM16-1-13-8	253220005287		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Nov 18, 2025 10:50:30 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	253220005286		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 16, 2025 08:49:21 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	253200010838		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 16, 2025 03:35:48 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	253200008634		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Nov 16, 2025 03:58:58 AM	misa	misa	misa	253200003107		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Nov 14, 2025 11:38:28 PM	misa	misa	ps_dc_2-1-33	253180013298		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 14, 2025 10:34:08 PM	misa	misa	STM16-1-11-7	253180012791		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 10, 2025 11:22:00 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253140005345		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 10, 2025 07:01:07 AM	misa	misa	STM16-1-11-7	253140003718		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 10, 2025 07:01:07 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	253140003717		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 10, 2025 07:01:07 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	253140003719		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 10, 2025 07:01:07 AM	misa	misa	STM16-1-13-8	253140003720		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 10, 2025 07:01:07 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	253140003721		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Nov 09, 2025 02:01:24 AM	misa	misa	ps_dc_2-1-34	253130001004		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 08, 2025 11:27:44 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	253120004913		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 08, 2025 10:58:41 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	253120004683		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Nov 06, 2025 07:59:41 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	253100010105		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Nov 06, 2025 04:52:36 PM	misa	misa	misa	253100008763		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 05, 2025 09:24:11 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253080006109		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 04, 2025 02:05:12 PM	misa	misa	STM16-1-13-8	253080006108		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Nov 02, 2025 04:03:31 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	253050002560		Network Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Nov 02, 2025 04:03:31 AM	misa	misa	misa	253050002559		Application Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Oct 31, 2025 04:52:36 PM	misa	misa	misa	253040007071		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 28, 2025 11:31:24 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	253010010255		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 28, 2025 09:41:33 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	253010005192		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 28, 2025 09:41:33 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	253010005193		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 28, 2025 09:41:33 AM	misa	misa	STM16-1-11-7	253010005194		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Oct 27, 2025 12:13:09 AM	misa	misa	ps_dc_2-1-34	253000000104		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 26, 2025 12:54:21 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	252990000326		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 26, 2025 12:54:07 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	252990000325		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Oct 25, 2025 04:11:27 PM	misa	misa	STM16-1-11-7	252980007455		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Oct 25, 2025 03:52:29 PM	misa	misa	ps_dc_2-1-33	252980007280		Hardware Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Oct 25, 2025 04:04:57 AM	misa	misa	misa	252970004523		Application Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Oct 24, 2025 09:41:39 AM	misa	misa	misa	252970004966		Network Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Oct 24, 2025 06:30:58 AM	misa	misa	ps_dc_2-1-34	252970003416		Hardware Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Oct 21, 2025 04:05:10 AM	misa	misa	misa	252930008072		Application Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Oct 20, 2025 04:52:36 PM	misa	misa	misa	252930007735		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Oct 19, 2025 11:28:13 AM	misa	misa	misa	252920005044		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Oct 17, 2025 08:22:29 AM	misa	misa	misa	252900004196		Network Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Oct 17, 2025 04:05:03 AM	misa	misa	misa	252890008874		Application Alarm	FIBCOM
Normal	UB2 Power Missing - Cleared	Oct 16, 2025 11:14:19 PM	misa	misa	ps_dc_2-1-33	252890008875		Hardware Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Oct 15, 2025 04:05:15 AM	misa	misa	misa	252780006315		Application Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Oct 14, 2025 01:28:22 AM	misa	misa	misa	252870000673		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 10, 2025 10:45:11 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	252830004927		Network Alarm	FIBCOM

Normal	UB2 Power Missing - Cleared	Oct 07, 2025 10:21:09 AM	misa	misa	ps_dc_2-1-33	252800004646		Hardware Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 06, 2025 06:42:03 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	252790002980		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Oct 05, 2025 04:52:36 PM	misa	misa	misa	252780007398		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 04, 2025 11:07:50 AM	misa	misa	STM16-1-11-7	252770005500		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 04, 2025 10:49:50 AM	misa	misa	STM16-1-13-8	252770005352		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 03, 2025 10:13:26 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	252760007014		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 03, 2025 10:11:41 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	252760006996		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 03, 2025 10:11:41 AM	misa	misa	STM16-1-11-7	252760006994		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Oct 03, 2025 05:33:59 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	252760004139		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 30, 2025 11:24:53 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	252730012562		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Sep 30, 2025 08:19:59 AM	misa	misa	misa	252730004921		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 29, 2025 11:09:28 AM	misa	misa	STM16-1-11-7	252720006766		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 29, 2025 11:09:26 AM	misa	misa	VC4-1-13-003 VC4-1-13-003	252720006764		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 29, 2025 10:50:06 AM	misa	misa	STM16-1-13-8	252720006600		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 29, 2025 10:50:06 AM	misa	misa	VC4-1-13-002 VC4-1-13-002	252720006602		Network Alarm	FIBCOM

Normal	UB2 Power Missing - Cleared	Sep 28, 2025 06:20:19 AM	misa	misa	ps_dc_2-1-34	252710007128		Hardware Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Sep 27, 2025 04:58:51 PM	misa	misa	misa	252700008256		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 25, 2025 06:40:03 PM	misa	misa	STM16-1-11-7	252680008762		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Sep 25, 2025 11:52:35 AM	misa	misa	misa	252680005731		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 24, 2025 10:50:42 AM	misa	misa	STM16-1-13-8	252670003524		Network Alarm	FIBCOM
Normal	Payload Type Mismatch - Cleared	Sep 24, 2025 10:28:22 AM	misa	misa	E1-1-41-40	252670003251		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 23, 2025 09:55:13 AM	misa	misa	STM16-1-11-7	252660003540		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 23, 2025 09:55:11 AM	misa	misa	VC4-1-13-004 VC4-1-13-004	252660003539		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Sep 22, 2025 04:41:49 PM	misa	misa	misa	252650004282		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 21, 2025 04:53:37 PM	misa	misa	VC4-1-13-001 VC4-1-13-001	252640004519		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 21, 2025 04:53:37 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	252640004518		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 21, 2025 04:53:37 PM	misa	misa	VC4-1-13-002 VC4-1-13-002	252640004520		Network Alarm	FIBCOM
Normal	Alarm Received from NE in Illegal Format - Cleared	Sep 20, 2025 04:07:35 AM	misa	misa	misa	252620003905		Application Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 19, 2025 12:19:17 PM	misa	misa	VC4-1-13-004 VC4-1-13-004	252620003869		Network Alarm	FIBCOM

Normal	ECC Link Down - Cleared	Sep 19, 2025 11:36:17 AM	misa	misa	VC4-1-13-001 VC4-1-13-001	252620003617		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 19, 2025 11:20:59 AM	misa	misa	STM16-1-11-7	252620003470		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Sep 18, 2025 04:52:36 PM	misa	misa	misa	252610003916		Network Alarm	FIBCOM
Normal	NE Unreachable - Cleared	Sep 17, 2025 01:28:04 AM	misa	misa	misa	252600000443		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 16, 2025 04:55:16 PM	misa	misa	STM16-1-13-8	252590006451		Network Alarm	FIBCOM
Normal	ECC Link Down - Cleared	Sep 16, 2025 04:55:16 PM	misa	misa	VC4-1-13-003 VC4-1-13-003	252590006452		Network Alarm	FIBCOM

Subject: VoIP Connectivity Unavailability at Critical Stations over Fibcom

Summary of mails (latest first)

#	Date	From
2	09.08.2026 04:36	Palash Jyoti Borah (प हिं हप)
1	09.08.2026 04:34	Palash Jyoti Borah (प हिं हप)

2. 09.08.2026 04:36
From: Palash Jyoti Borah (प हिं हप) <palash14.india@grid-india.in>
To: "kamlesh156@powergrid.in" <kamlesh156@powergrid.in>, "manish.tiwari@powergrid.in" <manish.tiwari@powergrid.in>
Cc: Biswajit Sahu (परूि प) <biswajit@grid-india.in>, Saugato Mondal (क्षपि) <saugato@grid-india.in>, NERLDC SCADA <nerldcscada@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>

हे / हे प,
PFA relevant snaps showing the outage since 06-08-2026.
प हिं हप Palash Jyoti Borah
भ ीट्र (ँरू ि)/ Chief Manager (Logistics)
ऑ म श प श्रश
प्र /NERLDC, Shillong
ि ट्र ह च एि प शि (िएि प) / Grid Controller of India Limited (GRID-INDIA)
(formerly known as Power System Operation Corporation Limited/ POSOCO)

Attachments:

img2.jpeg
img1.jpeg

1. 09.08.2026 04:34
From: Palash Jyoti Borah (प हिं हप) <palash14.india@grid-india.in>
To: "kamlesh156@powergrid.in" <kamlesh156@powergrid.in>, "manish.tiwari@powergrid.in" <manish.tiwari@powergrid.in>
Cc: Biswajit Sahu (परूि प) <biswajit@grid-india.in>, Saugato Mondal (क्षपि) <saugato@grid-india.in>, NERLDC SCADA <nerldcscada@grid-india.in>, NERLDC SCADA <nerldc.scada@grid-india.in>

हे / हे प,
It is noted with concern that the VoIP connectivity between NERLDC Shillong and several critical substations/ generating stations remains unavailable which are over Fibcom, despite continuous follow-up from our end over the past two days. The list of substations/generating
stations are as follows:
400KV SM Nagar(ISTS)
400KV PK Bari(ISTS)
400KV Kameng HEP_NEEPCO
400KV New Kohima(KMTL)
132KV AGTCCPP_RC Nagar
220KV Nangalbibra
400KV Palatana OTPC
400KV Subhansiri_NHPC
As of now, no satisfactory update or restoration timeline has been received from the concerned ULDC Fibcom engineers. The prolonged outage is adversely affecting operational communication and requires immediate attention.
You are requested to treat this matter as high priority and provide:
- Current status of the issue,
- Root cause analysis,
- Actions taken for restoration, and
- Expected timeline for service recovery.
An immediate response and expeditious resolution of the issue are solicited.
प हिं हप Palash Jyoti Borah
भ ीट्र (ँरू ि)/ Chief Manager (Logistics)
ऑ म श प श्रश
प्र /NERLDC, Shillong

ि ट्र ह च एि प शि (िएि प) / Grid Controller of India Limited (GRID-INDIA)
(formerly known as Power System Operation Corporation Limited/ POSOCO)

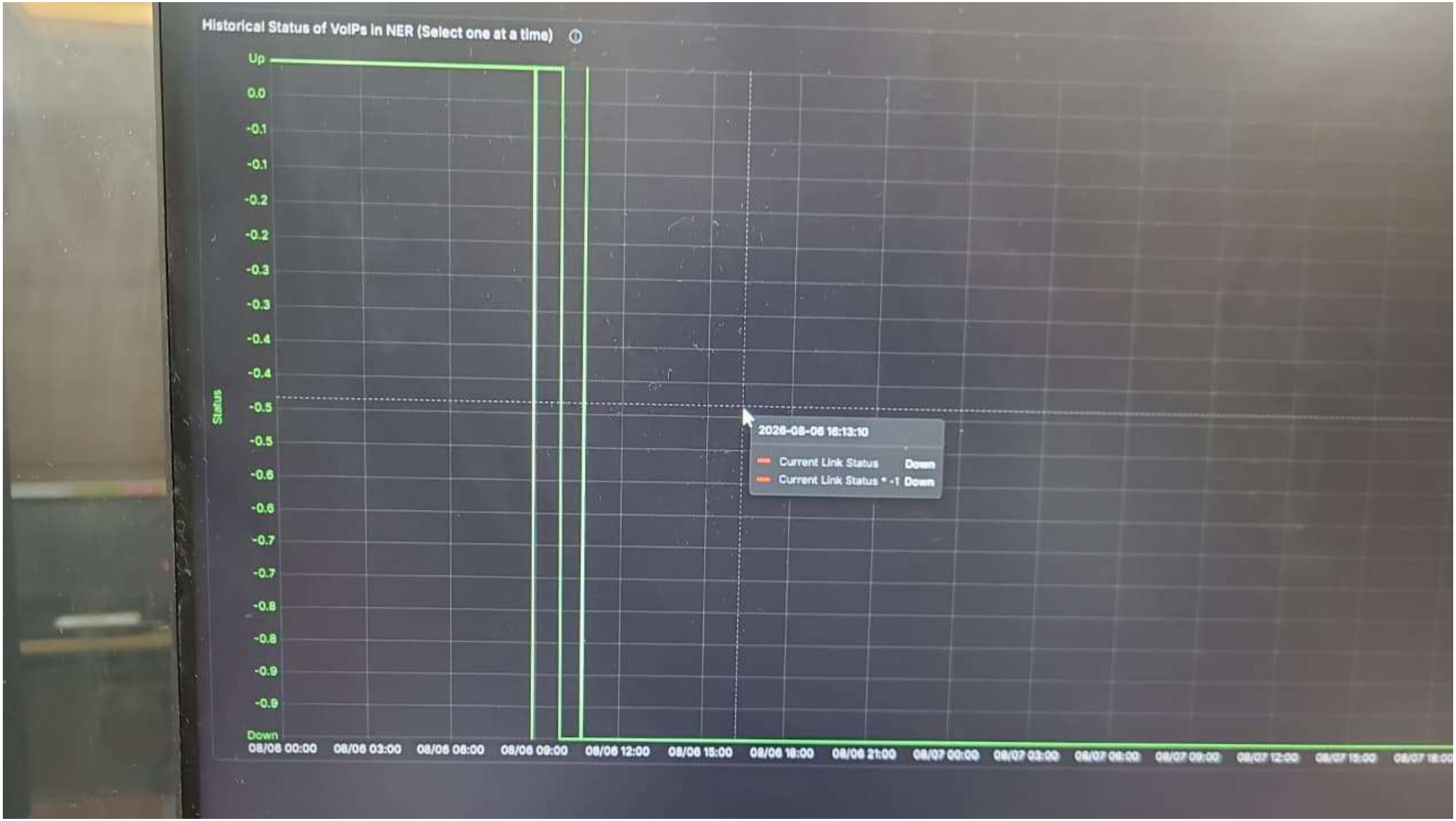
Attachment 1 of 2

img1.jpeg
(attached to mail 2 dated 09.08.2026)

name
Kameng HEP
Historical Status of VoIPs in NER (Select one at a time)
2026-08-06 10:42:10
Current Link Status Down
Current Link Status * -1 Down
Up
0.0
-0.1
-0.1
-0.2
-0.2
-0.3
-0.3
-0.4
-0.4
-0.5
-0.5
-0.6
-0.6
-0.7
-0.7
-0.8
-0.8
-0.9
-0.9
Down
Status
08/06 00:00
08/06 03:00
08/06 06:00
08/06 09:00
08/06 12:00
08/06 15:00
08/06 18:00
08/06 21:00
08/07 00:00
08/07 03:00
08/07 06:00
08/07 09:00
08/07 12:00
08/07 15:00

Attachment 2 of 2

img2.jpeg
(attached to mail 2 dated 09.08.2026)


Historical Status of VoIPs in NER (Select one at a time)
Up
0.0
-0.1
-0.1
-0.2
-0.2
-0.3
-0.3
-0.4
-0.4
-0.5
-0.5
-0.6
-0.6
-0.7
-0.7
-0.8
-0.8
-0.9
-0.9
Down
Status
08/06 00:00
08/06 03:00
08/06 06:00
08/06 09:00
08/06 12:00
08/06 15:00
08/06 18:00
08/06 21:00
08/07 00:00
08/07 03:00
08/07 06:00
08/07 09:00
08/07 12:00
08/07 15:00
2026-08-06 16:13:10
Current Link Status Down
Current Link Status * -1 Down

Annexure B 2.23

35th NETeST Meeting
State-wise SAMAST Status

09 October 2026

Agenda

1. Manipur SAMAST Status
2. Mizoram SAMAST Status
3. Tripura SAMAST Status
4. AMC Status: State-Wise

Manipur SAMAST Status

	Milestone#1 Design phase	Milestone#2 H/W installation & commissioning	Milestone#3 Factory Acceptance Testing	Milestone#4 Site Acceptance Testing	Milestone#5 User training and Go Live
Timelines	• Completion of milestone approval received on **23 May 2022**	• Completion of milestone approval received on **20 March 2023**	• Completion of milestone approval received on **6 January 2023**	• SAT of all software modules completed on **20 June 2025**	• Go-live of SAMAST modules completed on **30 June 2025.** • Warranty support period completed on **30 June 2026.**
Invoicing & payment status	• Total invoicing **INR 5,31,00,000/- (100% of contract value).** Payment received **INR 4,77,90,000/- (90% of Contract Value)** • Milestone #5: Payment pending of **INR 53,10,000/-.** Aging is **267+ days**				
Key issues to discuss	• **Pending Payment of INR 53,10,000/- as on 30-Sept-2026.** • MSPCL has received funds from PSDF and is requested to expedite the payment process. • SLDC has provided project completion letter, and release letter to return Bank Guarantee.				

Mizoram SAMAST Status

Timelines	• Completion of milestone approval received on **15 March 2022.**	• Completion of milestone approval received on **24 March 2023**	• Completion of milestone approval received on **9 January 2023**	• SAT of all software modules completed on **14 Feb 2024**	• Go-live of SAMAST modules completed on **19 July 2024** • Warranty support period completed on **19 July 2025**
Invoicing & payment status	• Total invoicing **INR 5,31,00,000/- (100% of contract value).** Payment received **INR 4,64,36,526/-(~87.45% of Contract Value).** • Milestone #4: **Part-payment made**. Balance pending **INR 13,53,474/-** Aging is **760+ days.** • Milestone #5: Full payment pending **INR 53,10,000/-** Aging is **411+ days.** • Total payment pending **INR 66,63,474/- (~12.55% of Contract value).**				
Key issues to discuss	• **Pending Payment of INR 66,63,474/- as on 30-Sept-2026.** • P&ED has submitted the requisition to PSDF for the balance payment • SLDC to provide project completion letter, and to return Bank Guarantee • **Discussion on the limitations of providing any further performance guarantees following project completion and expiration of the 1-year warranty support.**				

Tripura SAMAST Status

Timelines	• Completion of milestone approval received on **23 May 2022**	• Completion of milestone approval received on **04 December 2023**	• Completion of milestone approval received on **28 April 2023**	• SAT of all software modules completed on **18 June 2024**	• Go-live of SAMAST modules completed on **29 June 2024** • Warranty support period completed on **29 June 2025**
Invoicing & payment status	• Total invoicing **INR 5,31,00,000/- (100% of contract value).** Payment received **INR 4,77,90,000/- (90% of Contract Value)** • Milestone #5: Payment pending of **INR 53,10,000/-.** Aging is **282+ days**				
Key issues to discuss	• **Pending Payment of INR 53,10,000/- as on 30-Sept-2026.** • TSECL has received funds from PSDF and is requested to expedite the payment process. • SLDC to provide project completion letter, and to return Bank Guarantee • **Discussion on the limitations of providing any further performance guarantees following project completion and expiration of the 1-year warranty support.**				

AMC Status: State-Wise

State	Status
• Assam	3 Years of AMC is on-going
• Meghalaya	5 Years of AMC is on-going
• Arunachal Pradesh	Pending
• Manipur	Pending
• Mizoram	Pending
• Nagaland	Pending
• Tripura	Pending

Thank you

pwc.com

© [2026] PwC. All rights reserved. PwC refers to the PwC network and/or one or more of its member firms, each of which is a separate legal entity. Please see www.pwc.com/structure for further details.

Annexure-B 2.25

	Link Name	Spare Fibre Availability	Link Length (Km)
1	Bongaigaon- Rangia		
2	Rangia-BNC		
3	BNC-Balipara		59.54
4	Balipara-Misa		95.4
5	Misa-Kopili		75.788
6	Kopili-Khandong		11.56
7	Khandong-Khlieriat		42.48
8	Khlieriat-Shillong PG		
9	Shillong PG-NERLDC		
10	NERLDC-Nehu		
11	Nehu-Umiam I		
12	Umiam I-Umiam III		
13	Umiam III-Umtru		
14	Umtru-kahilapara		
15	Kahilapara-NERLDC B/U		
16	NERLDC B/U-Kahilapara		
17	Kahilapara-Sarusajai		
18	Sarusajai-Azara		
19	Azara-Boko		
20	Boko-Agia		
21	Agia-BTPS		
22	BTPS-Bongaigaon		3.119
23	Bongaigaon-Salakati		0.6
24	BNC-Ranganadi		129.335
25	Ranganadi-Pare		7.5
26	Pare-nirjuli		
27	Nirjuli-Gohpur		42.5
28	Gohpur-Balipara		
29	Balipara-Kameng		57.21
30	Ranganadi-ziro		44.523
31	Ziro-Doporijio		
32	Doporijio-Along		
33	Along-Pasighat		
34	Pasighat-Roing		102.88
35	Roing-tezu		73
36	Tezu-Namsai		95.241

37	Namsai-Kathalguri		
38	Kathalguri-Mariani		162.864
39	Mariani-mokokchung(PG)		48.8
40	mokokchung(PG)-mokokchung(state)		1.4
41	mokokchung(state)-Doyang		
42	Doyang-Dimapur		92.526
43	Dimapur-New kohima		
44	New kohima-Imphal(PG)		272
45	Misa-dimapur		123.52
46	Imphal(PG)-Loktak		35.04
47	Loktak-Jiribam		82.4
48	Jiribam-Silchar		
49	Silchar-Melriat		143.5
50	Melriat-aizwal		6.719
51	Aizwal-Kumarghat		130.906
52	Kumarghat-Badarpur		
53	Badarpur-khlieriat		76.646
54	Loktak-Nithonkong		
55	Nithonkong-haflong		
56	Haflong-Jiribam		100.67
57	Silchar-Palatana (U/C)		495
58	Palatna-SM Nagar		37.2
59	SM Nagar-Agartala SLDC		
60	Agartala SLDC-RC Nagar		8.384
61	RC Nagar-Kumarghat		
62	RC Nagar-PK Bari		
63	PK Bari-Silchar (U/C)		137.045

Annexure C 3.1

Sl No	Issue	Action Taken / Deliberation	Action to be taken by	Timeline	Remarks
1	Backup SLDC: Arunachal Pradesh	SLDC Arunachal Pradesh informed that Backup SLDC will be established in 132 kV Niglok Station and construction work will be starting soon by Pasighat Transmission divsion with expected time of completion in two (02) years.	SLDC Arunachal Pradesh / State Govt: Secure budget approval and initiate construction.	1.5 to 2 years post-approval	Proposal is with government for funding approval
	Backup SLDC: Assam	SLDC Assam informed that LoA is under final review and expected to be awarded by end of July – 2026 with completion expected in two (02) years.	AEGCL: Issue LoA and commence civil construction.	2 years from LoA issuance	LoA issued on 29/09/2026 with completion timeline of 02 years.
	Backup SLDC: Manipur	The building infrastructure is fully ready at the 400 kV Thoubal Substation.	MSPCL: Provide update for 34th NETeST / Maintain readiness for SCADA integration.	Ready	The building infrastructure is fully ready at the 400 kV Thoubal Substation.
	Backup SLDC: Meghalaya	The LoA is awarded and completions is expected by January 2027.	MePTCL: Complete the ongoing infrastructure construction.	Jan-27	Jan-27
	Backup SLDC: Mizoram	SLDC Mizoram informed that civil works has already started in which existing control room building of 132 kV Kolasib will be augmented.NERLDC emphasised that Battery and UPS room should be on Ground Floor in order to accommodate heavy electrical equipment.	PE&D, Mizoram: Issue work order and execute construction.	2 years from May 2026	Civil Work under progress
	Backup SLDC: Nagaland	The building infrastructure is fully ready at the 132 kV New Secretariat Substation.	DoP Nagaland: Provide update for 35th NETeST / Maintain readiness for SCADA integration.	Ready	The building infrastructure is fully ready at the 132 kV New Secretariat Substation.
	Backup SLDC: Tripura	Renovation works are under progress and expected to be completed by December 2026.	TPTL: Complete the ongoing renovation work.	3 to 4 months	Renovation works are under progress and expected to be completed by December 2026.
2	Planning for OPGW connectivity of 220 kV Agomoni S/s AEGCL	Joint Survey done between AEGCL and POWERGRID on 16.07.2026. MOM to be finalised after comments from POWERTEL and AEGCL communication division. POWERGRID sent request to AEGCL communication division for a joint meeting to finalise the configuration. "may include about fibre sharing".	AEGCL: Update status of LILO at Agomoni. CTUIL & POWERGRID: Provide fiber utilization details and update on alternate communication path.	At the earliest	Joint meeting conducted, OPGW configuration finalised and MOM issued. AEGCL to intimate in advance as huge traffic being catered via Alipurduar Salakati link.
3	Connectivity of Tejas network developed by AEGCL and POWERGRID-ULDC to enhance the reliability of NER communication network.	1.BgTPP (NTPC) to BTPS (AEGCL) connectivity:SDH shifted and installed at BTPS (NTPC). However, fibre break observed between BTPS (NTPC) and BTPS (AEGCL). Target: 31.08.2026 2. NERLDC Guwahati to SLDC Assam connectivity: Completed link established 3.Mariani (PG) to Mariani (AEGCL) connectivity: Completed	ULDC-POWERGRID & AEGCL: Complete connectivity for BgTPP-BTPS and NERLDC-SLDC and update status.	End of April-2026	Rectification attempted. Spare fibre core identified from Bongaigaon PG end. But the same core not being identified at BTPS end. Complex configuration of fibre observed in FODP's at both end. As traffic of POWERTEL also being catered, works planned to be carried out with data shutdown by end of Oct'26.
4	Cyber Security Concerns in ADMS Architecture across NER States and Implementation of Mitigation Measures	APDCL has approached M/s JIO fpr SIM services. 34th NETeST forum advised other states to follow similar strategy. M/s Orbit has shared cost estimate with all states for NGFW and AMC of ADMS. Negotiations are in progress.	All NER SLDCs: Deploy M2M SIM cards at remote stations; Procure Next Generation Firewall (NGFW).	At the earliest (Before Jan 2027 AMC expiry)	APDCL has approached M/s JIO fpr SIM services. 34th NETeST forum advised other states to follow similar strategy. M/s Orbit has shared cost estimate with all states for NGFW and AMC of ADMS. Negotiations are in progress.
5	Usage of POWERTEL OPGW in view of the order of Hon'ble CERC against petition no. 494/MP/2020	a. Attempted for rectification of 400 kV Silchar Imphal link in the month of June'26 and July'26 as well. OPGW break/discontinuity observed at 22 kM from Silchar. However, rectification couldn't be completed due to local issue and landslide. b. Regarding 132 kV Aizawl Kumarghat: Team was involved in: i) Attempting rectification of 400 kV Silchar Imphal link. ii) Restoration of OPGW of 132 kV Nirjuli-Lekhi-Chimpu line. (Request from DOP for charging of the line). The restoration took considerable time due to the inclement weather and hilly terrain making it difficult for mapower and material mobilisation. Target: 31.09.2026.	POWERGRID-ULDC: Update the status of each OPGW link and restoration of unhealthy fibers.	Sep-26	1. Rectification completed at 22 kM from Silchar end. Additional, fault observed at 14.157 kM which has been rectified. 2. 132 kV Aizawl Kumarghat to be attempted by 15.11.2026. OPGW AMC team involved in multiple fibre related issues of ULDC and POWERTEL. 3. Restoration of OPGW of 132 kV Nirjuli-Lekhi-Chimpu line: Restored.
6	Optimised utilisation of OPGW & FOTE across NER (NERPSIP, Comprehensive T&D, State-owned, TBCBs, ULDCs)	NERLDC Presented a presentation on the use case of inter-patching. The same is attached as Annexure_8_Interpatching. POWERGRID informed the forum that 68 number of SFPs are procured and currently under transit. Once received the same will be handed over to NERPSIP for completion of the inter-patching.	POWERGRID-ULDC, POWERGRID-NERPSIP, and POWERGRID-CTDS: Update status and submit consolidated list of issues to OCC.	August 2026 (for link configuration) / Immediate update	68 No SFP supplied and received at Guwahati.
7	Establishing Comm Link between 400 kV New Kohima & 220 kV Zhadima via 220 kV Zhadima–New Kohima Line (Restoration due to Link Failure)	DoP Nagaland and KMTL informed that work is completed from their respect. Coordination from PGCIL is required for further connectivity. PGCIL informed that the work will be completed by September 2026.	DoP-Nagaland, POWERGRID, and KMTL (Apraava): Provide completion status of configuration to enable utilization of OPGW.	Sep-26	UNMS integrated on 07/09/2026
8	Request to integrate data of Panyor and Pare in Chimpu S/s RTU	DoP Arunachal Pradesh informed that digital data are integrated. The integration of Analog data is under process and will be integrate by August 2026.	DoP-Arunachal Pradesh: Update status on installation of MFTs and CMRs and their integration with Chimpu RTU.	Aug-26	The integration of Analog data is under process and will be integrate by November 2026.

9	Dual Connectivity: Manipur	Second Connectivity being proposed in State Reliable Communication Scheme.	MSPCL: Lay secondary OPGW/ADSS cable and update status.	At the earliest	Two new communication link i.e Yurebam-Imphal (PG) and Imphal (PG)-400kV Thoubal are included in State Reliable Communication Scheme DPR
	Dual Connectivity: Mizoram	Second Connectivity proposal under consideration of Government. SLDC will be connected with 132 kV Lungmual via ADSS Cable	PE&D Mizoram: Expedite the establishment of a second fiber connectivity without waiting for the Reliable Comm project.	At the earliest	Proposal is with government for funding approval
10	RTU Re-configuration: Mokokchung S/s (POWERGRID)	Out of 16 POWERGRID-owned stations, 12 are reporting parallelly to NERLDC Shillong and NERLDC Guwahati. Configuration of remaining 4 stations is pending.	POWERGRID-NERTS / POWERGRID-ULDC: Configure RTU to enable parallel reporting to both Shillong and Guwahati.	Target: 30.09.2026	Completed
	RTU Re-configuration: Roing S/s (POWERGRID)	Out of 16 POWERGRID-owned stations, 12 are reporting parallelly to NERLDC Shillong and NERLDC Guwahati. Configuration of remaining 4 stations is pending.	POWERGRID-NERTS / POWERGRID-ULDC: Configure RTU to enable parallel reporting to both Shillong and Guwahati.	Target: 31.08.2026	Completed
	RTU Re-configuration: Tezu S/s (POWERGRID)	Out of 16 POWERGRID-owned stations, 12 are reporting parallelly to NERLDC Shillong and NERLDC Guwahati. Configuration of remaining 4 stations is pending.	POWERGRID-NERTS / POWERGRID-ULDC: Configure RTU to enable parallel reporting to both Shillong and Guwahati.	Target: 30.09.2026	Completed
11	UNMS Issues: Integration of NMS (NERPSIP & Comp. T&D) with U-NMS	Nagaland, Mizoram, Tripura: Completed. Manipur, Meghalaya: Install/comm completed, integration target March end. Arunachal Pradesh: Tejas NMS delivery awaited.Under progress for NMS of NERPSIP-Meghalaya, NERPSIP-Assam, NERPSIP-Manipur and CTDS-Arunachal Pradesh	NERPSIP / POWERGRID: Complete integration for Manipur and Meghalaya; expedite delivery for Arunachal Pradesh.	March end (Manipur/Meghalaya)	i) **Manipur:** NMS commissioned. Tejas route addition with 50m LAN cable- under progress. ii) **Meghalaya:** UNMS integration pending due to delay in deployment of ABB Engineer under ongoing project (NERPSIP). As confirmed by SLDC Meghalaya - IP not updated by ABB engineer during visit at site. iii) **Arunachal CTDS**: Tejas-supplied NMS is commissioned, configuration been re-checked by CTDS & Tejas Engineer-Dani Nime,being integrated to UNMS shortly. iv) **Mizoram:** Tejas NMS node is integrated to UNMS.
	UNMS Issues: Integration of FOTE (Indigrid & Apraava)	•M/s GE Veronva is not providing technical help to Indigrid for integration of GE MUX in UNMS. MS NERPC requested that Indigrid should be present in the meeting to discuss the matter. •Apraava: POWERGRID will take up with ABB team after completion of Assam-NERPSIP nodes. •Sterlite: Completed for Nangalbibra and Bongaigaon.	ULDC-POWERGRID, Indigrid, Apraava: Implement necessary changes for SNMP and IP configuration. CTUIL: Expedite onboarding.	At the earliest	**M/s INDIGRID**- has planned for deployment of GE engineer for SNMP protocol (MiB file) & FOTE integration in October month before festive dates. A separate mail forwarded to NERLDC dtd. 05/10/2026. **Apraava (ABB)**- Integrated to UNMS. **Sterlite:** Completed for Nangalbibra and Bongaigaon.
	UNMS Issues: Naming Nomenclature Standardization	ECI and Tejas completed. Fibcom will be completed by end of the September 2026.	POWERGRID: Standardize naming convention for services within the U-NMS system and update status.	May 2026	As on 03.10.26, PGCIL informed that 14/146 channels are pending. Further, few services are taken into correction, substantially pending reduced to approx. 10/146.
	UNMS Issues: Supply of 2 x 6 kVA UPS System across NER SLDCs and NERPC	Procurement of 2X 6 KVA UPS UNMS cancelled. Procurement of 2X 20KVA UPS for VoIP and UNMS agreed upon by 34th NETeST forum	POWERGRID: Complete deployment of UPS systems across NER SLDCs and NERPC.	August 2026	Cost estimate under preparation. Target: Dec'26.
	UNMS Issues: Mismatch in Link Status for ABB devices (NERPSIP-Assam)	ABB-NERPSIP team is currently working on it and the issue is expected to be resolved by August – 2026.	ULDC-POWERGRID / NERPSIP: Resolve status mismatch and update status.	At the earliest	Matter informed to NERPSIP for deployment of ABB Engr. As requestedd by (ABB Engr) new set of IP list was subsequently shared from UNMS via mail dtd. 14/08/2026. ABB/NERPSIP was continuously followed up for resolving the mismatch in ABB link. Response awaited.
	UNMS Issues: Discrepancies regarding Fibcom services	Fibcom informed that problem is resolved. The same will be cross checked by NERLDC and POWERGRID.	ULDC-POWERGRID: Coordinate with Fibcom to fix routing and status discrepancies. Update status.	At the earliest	As per mail dtd. 22/07/26- all discrepancies of FIBCOM-stitching related resolved except: (iv) Emap cards are unreachable: unreachable left only - 12/80 Node & 48/192- EMPA8S
	UNMS Issues: Non-POWERGRID stations not considered for Communication Availability	Post integration of Apprarva and Indigrid nodes the same will be resolved.	POWERGRID / Members: Discuss and implement inclusion of all ISTS/ISGS stations in UNMS availability reports.	At the earliest	Currently all the non-powergrid nodes that are being commisioned are simultaneously getting integrated into UNMS eg: Apraava's 400kV New kohima- 220kV Zhadima link (on dtd. 07/09/26).
12	Missing link OPGW in 132 kV Karong-Kohima line	Mainpur informed that they will not be able to consider the same in their reliable communication scheme due to administrative issue. MS NERPC informed the forum that NERPC will write a letter to MD MSPCL to request once again to include the Mao – Karong Section also under Manipur State Reliable communication Scheme.	MSPCL: Update status on inclusion of Mao-Kohima communication link in Manipur's DPR for PSDF funding.	At the earliest	No communication received from MD, MSPCL. Further, the said missing link is not included in the DPR submitted by MSPCL to PSDF
13	Feeble condition of State-Estimator of NERLDC SCADA system due to low availability of Real-time Telemetry	All NER States: Prioritize integrity of RTUs and communication systems to increase data availability. Aspire for 95% minimum telemetry availability and update progress. Average availability for August 2026: AR (40.57%), AS (79.43%), MN (32.71%), ML (75.64%), MZ (25.39%), NL (26.84%), TR (51.33%).	All NER States: Prioritize integrity of RTUs and communication systems to increase data availability. Aspire for 95% minimum telemetry availability and update progress.	Continuous effort	All NER States: Prioritize integrity of RTUs and communication systems to increase data availability. Aspire for 95% minimum telemetry availability and update progress.
14	CERC Order Adherence (556/MP/2020): Mizoram	Being done by Mizoram	PE&D Mizoram: Resume submission of the monthly progress reports.	Monthly	Being done by Mizoram
	CERC Order Adherence (263/MP/2020): Nagaland	Being done by Nagaland	DoP Nagaland: Submit the progress reports on a strict monthly basis.	Monthly	Being done by Nagaland
	CERC Order Adherence (201/MP/2020): Tripura	Tripura is not submitting the report monthly and submitted report is not as per the format of CERC. Forum requested to submit the reports in format immediately and monthly basis.	SLDC Tripura / TPTL: Submit pending monthly progress reports immediately.	Monthly / Immediate	Being done by Tripura
	CERC Order Adherence (197/MP/2020): Arunachal Pradesh	As informed by DoP, Arunachal Pradesh Sh. Ojing Jerang has retired. Forum requested DoP Arunachal Pradesh to nominate the new nodal person immediately.	DoP Arunachal Pradesh: Submit pending monthly progress reports immediately.	Monthly / Immediate	DoP Arunachal Pradesh: Submit pending monthly progress reports immediately.
15	State Reliable Communication Scheme: Arunachal Pradesh	DoP Arunachal Pradesh as present the scheme is not required as maximum infrastructure is being completed in CTDS project	-		DoP Arunachal Pradesh as present the scheme is not required as maximum infrastructure is being completed in CTDS project
	State Reliable Communication Scheme: Assam	Under discussion of TESG	AEGCL: Update on the review status from TESG.	At the earliest	Under discussion of Appraisal
	State Reliable Communication Scheme: Manipur	DPR prepared and under review of planning department.	MSPCL: Expedite completion and submission of the DPR to PSDF and update status.	May 2026	Final DPR submitted to PSDF by MSPCL
	State Reliable Communication Scheme: Meghalaya	Under discussion of TESG	MePTCL: Update on the review status from TESG.	At the earliest	Under discussion of Appraisal

	State Reliable Communication Scheme: Tripura	Tripura informed that communication infrastructure is completed in NERPSIP scheme. However, they will prepare DPR for RTU replacement.	TPTL / SLDC Tripura: Complete reassessment and submit DPR to PSDF if required. Update status.	At the earliest	DPR under preparation.
16	Implementation of Guwahati Islanding Scheme	PSDF monitoring committee approved funding. AEGCL proposed communication part under State Reliable Comm Scheme. Forum advised exploring own resources for communication components (FOTE at Dispur and Azara) to avoid delays. Decided in 239th OCC to implement in phases: Stage 1 without Karbi-Langpi, Jawaharnagar, and Chandrapur; Stage 2 with original plan post OPGW commissioning.	AEGCL: 1) Install FOTE at Dispur & Azara using own funds. 2) Proceed with tendering process immediately without waiting for PSDF approval for communication part. 3) Seek technical clarifications (e.g., UFR delay) from NERPC.	Immediate	Tendering on-going
17	Real-time data of POWERGRID bays at AEGCL stations: Srikona	POWERGRID completed its jurisdiction of work. Remaining to be completed by AEGCL.	AEGCL: Engage vendor, complete hardware installation and RTU configuration.	At the earliest	POWERGRID completed its jurisdiction of work. Remaining to be completed by AEGCL.
	Real-time data of POWERGRID bays at AEGCL stations: Hailakandi	POWERGRID completed its jurisdiction of work. Remaining to be completed by AEGCL.	AEGCL: Resolve telemetry issue and update status.	At the earliest	POWERGRID completed its jurisdiction of work. Remaining to be completed by AEGCL.
	Real-time data of POWERGRID bays at AEGCL stations: Pavoi S/s	POWERGRID completed its jurisdiction of work. Remaining to be completed by AEGCL.	AEGCL: Resolve telemetry issue and update status.	At the earliest	POWERGRID completed its jurisdiction of work. Remaining to be completed by AEGCL.
18	Restoration of OPGW owned by Manipur (132 kV Churachandpur – Ningthoukhong link)	Link of Manipur state sector to be rectified by MSPCL.	MSPCL / POWERGRID-ULDC: Provide update on the restoration of the OPGW link.	Dependent on law & order situation	Restored. Data reporting from 28/09/2026 evening.
19	Fiber Optic Expansion (Central Sector): 400kV Bongaigaon (PG) - 220kV Salakati - 220kV BTPS	The original vendor M/s TCIL has agreed to restart the work.Target: 30.09.2026	POWERGRID-NERTS: Update status on the progression of work.	9/30/2026	Target: Dec'26.
	Fiber Optic Expansion (Central Sector): 400kV Mirza (Azara) – Byrnihat (Killing)	FODP and Approach cable laying completed. Link to be commissioned. Target: 31.08.2026.	POWERGRID-NERTS: Update status on completion of the entire work.	8/31/2026	Completed and applied for ToC to NERLDC on 24.08.2026. To be received.
	Fiber Optic Expansion (Central Sector): 400kV Silchar – Palatana	Works re-started from April 2026. (229/248) kM completed, 13 kM completed after re-start. It is to be noted that works have been greatly affected due to inclement weather and monsoon. Target: 30.09.2026	POWERGRID-NERTS: Update status on the progression of work.	9/30/2026	Completed. Commissioning under progress.
20	Fiber-Optic projects approved in 17th TCC/RPC: Additional Communication Scheme	Detailed update provided by POWERGRID. Attached as Annexure C 3.1 _22a in MoM for 34th NETeST	POWERGRID-ULDC: Update the status of the scheme.	At the earliest	Detailed update provided by POWERGRID. Attached as Annexure C 3.1 _20a in MoM for 35th NETeST
	Fiber-Optic projects approved in 17th TCC/RPC: Reliable Communication Scheme	Detailed update provided by POWERGRID. Attached as Annexure C 3.1 _22b in MoM for 34th NETeST	POWERGRID-ULDC: Update the status of the replacement and new fibre installations.	At the earliest	Certificate of Successful Trial Operation issued by NERLDC vide Ref. No. NERLDC/Logistics/Communication/Reliable Communication Scheme/9816 dated 22nd September 2026 for 132 kV Jiribam – Haflong (97.115 km) and 132 kV Khandong – Khliehriat Ckt-1 (43.007 km), trial operation completed at 00:00 hrs of 11th August 2026 (attached as Annexure C 3.1_20b).
21	Integration of Dikshi HEP real time data and pending Voice communication	In 33rd NETeST, it was decided that NERPC Secretariat shall discuss the matter with DoP, Arunachal Pradesh / Dikshi. Previously (29th NETeST), it was informed that Dikshi HEP connected to a leased line and VOIP connection was in process.	DoP-Arunachal Pradesh / Dikshi Utility: Expedite the integration of real-time data and resolve pending voice communication. Update status.	At the earliest	
22	Feasibility to connect Lekhi Substation over Fiber-Optic Network	As per mail dated 26.05.2026, POWERGRID requested confirmation for closure of the issue as DOP,AP confirmed that no shifting of communication panels and FODP will be done to the new building	POWERGRID / DoP-Arunachal Pradesh: Provide update on the establishment of the communication link and RTU connectivity.	At the earliest	Completed. Agenda may be dropped
23	URTDSM Phase-II (ISTS portion): floating of NIT and award of cintract	TS and BoQ prepared. NIT expected by August 2026.	POWERGRID	Aug-26	The URTDSM Phase-II Project Status: URTDSM Phase-II (ISTS Portion)- Floating of NIT: Bid documents under preparation, NIT Expected by November'26. URTDSM Phase-II: Award of Contract and Implementation Schedule: To be finalized after floating of NIT and completion of tendering process.
	Extension of AMC of URTDSM Phase-I (expiring December 2026)	To be extended up to 2 years with same rate & terms and conditions. LoA expected by end of September 2026.	POWERGRID	Sep-26	Extension of AMC of URTDSM Phase-I (expiring December 2026): Extension of AMC under finalization with contractor M/s GE, expected to be issued by November 26.

28	Concerning telemetry situation of SCADA data of AP state owned substations:Training sessions on O&M by CTDS team	Non reporting of 132 kV Napit, 132 kV Niglok, 132 kV Seppa, 132 kV Khonsa, 132 kV Holongi, 132 kV Bhalukpong, 132 kV Lekhi, 132 kV Bameng and 132 kV Yachuli to NERLDC	CTDS-AP (POWERGRID)	At the earliest	Non reporting of 132 kV Napit, 132 kV Niglok, 132 kV Seppa, 132 kV Khonsa, 132 kV Holongi, 132 kV Bhalukpong, 132 kV Lekhi, 132 kV Bameng and 132 kV Yachuli to NERLDC
	Concerning telemetry situation of SCADA data of AP state owned substations:Handing over of stations commissioned under Comprehensive Scheme to DoP AP		CTDS-AP (POWERGRID)	At the earliest	
	Additional FOTE at Loktak	The FOTE equipment has been received at the site. Installation and commissioning are pending. Powergrid is exploring the engagement of a local agency as an alternative to expedite the installation and commissioning activities. The work is targeted for completion by September 2026.	POWERGRID	06 months	Supplied and installed. However, room temperature not proper for commissioning. Already, FIBCOM mux got faulty due to room conditions. As such, commissioning to be done subject to proper environmental conditions.
	Additional FOTE at Bongaigoan	Installation completed. Link testing through new FOTE to be completed by end July 2026 in coordination with NERLDC.	POWERGRID	06 months	SAT completed. Link Testing pending due to non availibility of healthy spare fibre.
	Additional FOTE for AGC Locations: Subansiri	Will be Completed in July-2026.	POWERGRID	06 months	Completed and uploaded in NMS.
	Additional FOTE for AGC Locations: Doyang	Will be Completed in July-2026.	POWERGRID	06 months	Supplied and installed. However, room temperature not proper for commissioning. Already, FIBCOM mux got faulty due to room conditions. As such, commissioning to be done subject to proper environmental conditions.
29	OPGW replacement on 132 kV NEHU – Khliehriat Ckt-1	Supply of items by December-2026.	POWERGRID	18 months	Supply affected due to global shortage, volatile market prices and steep price hike of optical fiber and allied raw materials.
	UGFO from Tower-25 to NERLDC Shillong over 132 kV Mawlyndep – NEHU line	Supply of items by December-2026.	POWERGRID	18 months	
	Replacement of 132 kV Kahilipara – Umtru – Umiam Stg.III – Umiam Stg. I - NEHU	Supply of items by December-2026.	POWERGRID	18 months	
	OPGW replacement on 132 kV Sarusajai - Umtru	Supply of items by December-2026.	POWERGRID	18 months	
	2x24F UGFO from NERLDC Guwahati to Gantry of Kahilipara	Supply of items by December-2026.	POWERGRID	18 months	
	OPGW and associated equipment on 132 kV Dharmanagar – Dullavcherra -Hialakandi line	Hardware-fittings supplied at Silchar. OPGW expected by August-2026.	POWERGRID	24 months	OPGW supply completed. Stringing planned from 1st week of Nov'2026.
	400 kV PK Bari (Indigrid) – Silchar (PG)	Under NIT stage	POWERGRID	30 months	Under tendering.
	220 kV Kathalguri – Mariani (PG)	Under NIT stage	POWERGRID	30 months	

डेटा वर्गीकरण : प्रतिबंधित/RESTRICTED

Annexure C 3.1_20(a)

Additional Communication Scheme (by ULDC-NERTS) approved in 17th TCC/RPC											
			Status as in 35th NETeST Meeting								
Name of the link	From (A-end)	To (B-end)	Approach cable between Gantry and FODB status (A-end)	FOTE Status (A-end)	DCPS Status (A-end)	Interpatching with existing FOTE A-end (If any)	Approach cable between Gantry and FODB status (B-end)	FOTE Status (B-end)	DCPS Status (B-end)	Interpatching with existing FOTE B-end (If any)	ToC Status
132 kV Silchar - Hailakandi (Part of line)	Silchar	Hailakandi	Completed	Pending	Pending	Pending	Completed	Material Delivered	Material Delivered	Pending	
132 kV Roing – Pasighat	Roing	Pasighat	Completed	Completed	Completed	Done	Completed	Completed	Completed	Done	ToC issued by NERLDC on 30th June 2026
132 kV Roing – Tezu	Roing	Tezu	Completed	Completed	Completed	Done	Completed	Completed	Completed	Done	ToC issued by NERLDC on 12th May 2026
132 kV Tezu – Namsai	Tezu	Namsai	Completed	Completed	Completed	Done	Completed	Completed	Completed	Done	ToC issued by NERLDC on 12th May 2026
132 kV Tuirial – Kolasib	Tuirial	Kolasib	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Applied on 14.08.2026 to NERLDC.
400 kV Balipara – Kameng	Balipara	Kameng	Completed	Completed	Completed	Done	Completed	Completed	Completed	Done	ToC issued by NERLDC on 30th June 2026
400 kV Bongaigoan – Killing (Brynihat)	Bongaigoan	Killing	Completed	Not in Scope	Completed	Not in scope	Completed	Installed. Commissioning Pending	Completed	Pending	
400 kV Silchar – Killing (Brynihat)	Silchar	Killing	Material Delivered	Material Delivered	Material Delivered	Pending	Material Delivered	Material Delivered	Material Delivered	Pending	Severe ROW issue faced under Silchar Jurisdiction at Tower locations 71 and 72.

Annexure C 3.1_20(b)

List of Links to be implemented for replacement of old FO under Reliable Communication Scheme in NER region												
SN	Name of Link	34th NETeST	35th NETeST									
		Interpatching with existing FOTE at B end (if any)	OPGW Status	Approach cable between Gantry and FODB (A-end)	FOTE Status at A end	DCPS Status at A end	Interpatching with existing FOTE at A end (if any)	Approach cable between Gantry and FODB (B-end)	FOTE Status at B end	DCPS Status at B end	Interpatching with existing FOTE at B end (if any)	TOC Status
1	NEHU-Shillong UNDER GROUND FO	Not in scope of project	UGFO laying completed. Jointing at T-23 and UGFO dressing pending at JB location (T-23) due to absence of spare fibre in overhead OPGW Nehu Khlierihat link (12F).	NA	Completed	Not in scope of project	Not in scope of project	NA	Completed	Not in scope of project	Completed	
2	Khliehriat(MESEB)-Khliehriat(PGCIL)	Not in scope of project	Completed	Completed	Not in scope of project	Not in scope of project	Not in scope of project	Completed	Completed	Completed	Completed	Issued by NERLDC on 23/01/2026
3	Khliehriat-Khandong(PGCIL)	Not in scope of project	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Not in scope of project	Issued by NERLDC on 22/09/2026
4	Khandong(PGCIL)-Koplili(PGCIL)	Not in scope of project	Completed	Completed	Completed	Completed	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Issued by NERLDC on 23/01/2026
5	Misa(PGCIL)-Koplili(PGCIL)	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Completed	Completed	Completed	Not in scope of project	Issued by NERLDC on 21/02/2025
6	Misa(PGCIL)-Balipara(PGCIL)	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Issued by NERLDC on 19/11/2025
7	Misa(PGCIL)-Dimapur(PGCIL)	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Issued by NERLDC on 07/01/2026
8	Badarpur(PGCIL)-Khliehriat(PGCIL)	Not in scope of project	Completed	Completed	Not in scope of project	Not in scope of project	Not in scope of project	Completed	Completed	Completed	Completed	Issued by NERLDC on 05/01/2026
9	Badarpur(PGCIL)-Kumarghat(PGCIL)	Not in scope of project	Completed	Completed	Not in scope of project	Not in scope of project	Not in scope of project	Completed	Not in scope of project	Not in scope of project	Not in scope of project	Issued by NERLDC on 23/10/2025
10	Agartala Gas(PGCIL)-Kumarghat(PGCIL)	Not in scope of project	Completed.	Completed	Not in scope of project	Not in scope of project	Not in scope of project	Completed.	Not in scope of project	Not in scope of project	Not in scope of project	Issued by NERLDC on 23/10/2025
11	Agartala(PGCIL)-Agartala Gas(PGCIL)	Already installed under NER FO Expansion Scheme. Scope deleted.	Already installed under NER FO Expansion Scheme. Scope deleted.									
12	Dimapur (PGCIL)-Kohima(PGCIL)	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Completed	Not in scope of project	Not in scope of project	Not in scope of project	Issued by NERLDC on 30/03/2026
13	Kohima(NAG)-Imphal(PGCIL)	Not in scope of project	Completed	Completed	Not in scope of project	Not in scope of project	Not in scope of project	Completed	Not in scope of project	Not in scope of project	Not in scope of project	Issued by NERLDC on 30/03/2026

List of Links to be implemented new under Reliable Communication Scheme in NER region

S No	Name of Link	35th NETeST									
		OPGW Status	Approach cable between Gantry and FODB (A-end)	FOTE Status at A end	DCPS Status at A end	Interpatching with existing FOTE at A end (if any)	Approach cable between Gantry and FODB (B-end)	FOTE Status at B end	DCPS Status at B end	Interpatching with existing FOTE at B end (if any)	ToC status
1	Mariani (new)- Misa II	Completed.	Completed	Completed	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Issued by NERLDC on 19.11.2025
2	Bongaigaon III (quad)-Balipara	Completed	Completed	Completed	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Issued by NERLDC on 15.12.2025
4	Misa - Kopli	Completed	Completed	Completed	Not in scope of project	Completed	Completed	Completed	Completed	Completed	Issued by NERLDC on 23/01/2026
5	Jiribam - Haflong	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Supplied. To be installed.	Completed	Issued by NERLDC on 22/09/2026
6	Biswanath Chariali - Biswanath Chariali(Pavoi)	Completed	Completed	Completed	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Issued by NERLDC on 05/01/2026
7	Kopili Khandong-other circuit	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	WIP	Issued by NERLDC on 12.05.2026
8	Khandong Khliehriat other circuit	Completed	Completed	Completed	Completed	Completed	Completed	Completed	Completed	WIP	Issued by NERLDC on 12.05.2026
9	Balipara - Bongaigoan Line 1&2	Completed	Completed	Completed	Not in scope of project	Completed	Completed	Completed	Not in scope of project	Completed	Issued by NERLDC on 15.12.2025
10	Aizawl-Jiribam	WIP	WIP	WIP	Completed	WIP	WIP	WIP	WIP	WIP	
11	UGFO from Tower 25 of 132kV Nehu-Mawlyndep line to NERLDC Shillong*	Survey Commenced									

Subject: Letter of Award (LOA) for "Extension of Annual Maintenance Contract (AMC) of SCADA-EMS system at SLDC, MSPCL for 2 (two) years (2nd phase)"

Summary of mails (latest first)

#	Date	From
1	10.09.2026 08:08	LAISHRAM RICHARD

1. 10.09.2026 08:08
From: LAISHRAM RICHARD <laishram.richard@manipur.gov.in>
To: "deveshjha" <devesh.jha@gevernova.com>
Cc: "GAURAVKHANDUJA" <GAURAV.KHANDUJA@gevernova.com>, "HirakjyotiKalita" <Hirakjyoti.Kalita@gevernova.com>, "gmsldcmanipur" <gmsldcmanipur@gmail.com>, "md mspcl" <md.mspcl@gmail.com>, "palash14india" <palash14.india@grid-india.in>, "skldeep" <skldeep@grid-india.in>

This email has not originated from Grid-India. Do not click on attachment or links unless sender is reliable. Malware/ Viruses can be easily transmitted via email.
Sir,
Submitting herewith the Letter of Award (LOA) for "Extension of Annual Maintenance Contract (AMC) of SCADA-EMS system at SLDC, MSPCL" for another 2 (two) years (2nd phase) with effect from 08.11.2025 upto 07.11.2027 for kind information and further necessary
action.
Hard copy of the same will be dispatched soon.
With regards,
Laishram Richard Singh,
Deputy General Manager (IT & Logistics),
MSPCL

Attachments:

LOA for AMC of SCADA-EMS system of SLDC, MSPCL.pdf (5309 KB)

Attachment 1 of 1

LOA for AMC of SCADA-EMS system of SLDC, MSPCL.pdf
(attached to mail 1 dated 10.09.2026)

MANIPUR STATE POWER COMPANY LIMITED

Keishampat Junction, Imphal – 795001

Corporate Office: Electricity Complex, Patta No. 1293 under 87(2), Khwai Bazar, Keishampat, Imphal – 795001, Manipur, INDIA

Fax : +91385 2450702
Tele: +91385 2450050

No. 4/SLDC/AMC/SCADA/EMS/2024/MSPCL(PURCH)/3675-80 Imphal, the 9th Sept, 2026

To,

M/S GE T&D India Ltd.
A-225, Sector-83
Noida - 201305,
Uttar Pradesh

Subject: Letter of Award (LOA) for "Extension of Annual Maintenance Contract (AMC) of SCADA-EMS system at SLDC, MSPCL for 2 (two) years (2nd phase)"

Ref:

i. Contract Agreement No. CC-CS/304-NER/SCADA-1728/3/G4/CA-III/4912(IV) dated 02.04.2014
ii. Minutes of the special meeting on "Extension of Comprehensive AMC of SCADA/EMS System of NER States" dated 06.11.2025
iii. Govt letter No. POWER/17/2025-POW-PD-Part (1) dated 20.04.2026
iv. LOA No. 4/SLDC/AMC/SCADA/EMS/2024/MSPCL(PURCH)/4592-99 dated 06.01.2025

Dear Sir,

1.0 This Letter of Award (LoA) is given for the "Extension of Annual Maintenance Contract (AMC) of SCADA-EMS system at SLDC MANIPUR for another 2 (two) years (2nd Phase)" with effect from 08.11.2025 upto 07.11.2027 in continuation to the contractual clause of the SCADA/EMS system AMC Contract Ref. No: CC-CS/304-NER/SCADA-1728/3/G4/CA-III/4912(IV) dt. 2nd April, 2014; wherein "the employer may extend the duration of maintenance for a period of 2 years at the same rates, terms and conditions" and minutes of the Special meeting on "Extension of Comprehensive AMC of SCADA/EMS System of NER States" held on 6th November, 2025 with below exclusion from availability calculation.

2.0 Scope of Work:

2.1 Deputation of 2 engineers at SLDC Control centre
2.2 Back-office support from Noida
2.3 Control Centre Comprehensive AMC
2.4 System availability should be maintained at 90% and will be as per existing System Availability calculation.
2.5 VPS – Preventive Maintenance and Fault Diagnosis only. VPS can be maintained using spares available with SLDC (MSPCL). However, the support shall not be covered under availability calculation.
2.6 eDNA-L1(GE) and L2 Support (Kalkitech)

- L-1 (Basic trouble shooting, data indexing if any segment corrupted).

- L-2 (Regeneration of License only as eDNA is obsolete declared by OEM)
- In case of data loss (even after data indexing), the required source code is not available as product is end of life. Data can only be retrieved through manual entry for maximum 25 points.

2.7 Required antivirus for supplied hardware, to be maintained up to date at all time.

2.8 Annual cyber security Audit from third party agency (only Vulnerability Assessment). Vulnerability mitigation shall be limited to configuration changes only.

2.9 SAN/ NAS/ Tape Library storage availability shall be included in the offer, however Ge Vernova shall ensure quick restoration of the SAN/ NAS/ Tape Library storage in case of any failure. Restoration shall be done in maximum 90 business days. Post 90 days SLA will be applicable.

2.10 Support for existing UPS/DG set will be provided however; SLA will be applicable post 90 business days. However, 30 battery cells shall be provided to MSPCL.

2.11 M/s GE Vernova T&D Ltd. shall suggest remedial action in case of database errors. In case MSPCL is not able to perform the same, M/s GE Vernova T&D Ltd. shall be paid for the job as per mutually agreed rate.

2.12 Checkpoint external Firewall support is limited to patch updates if available with OEM.

3.0 Exclusions:

3.1 Any upgrade (hardware & software)

3.2 Signature and patch updates for End of Support Products.

3.3 TV Screens – 55 inch

3.4 VC System.

3.5 Printer and Maintenance laptop.

3.6 Supply of new Battery/ UPS/ DG.

3.7 Any RTU and field equipments

3.8 L-3 Support for deep application issues and customization for eDNA.

3.9 3rd party audits, mitigations and support for other audits not done by M/s. GE Vernova T&D Ltd.

3.10 Any IT/OT device integration.

3.11 Any item not mentioned in above scope of work.

4.0 This Letter of Award incorporates amendment made for GST in the extended AMC portion and Quarterly base price amended as Rs. 25,50,000 for 1st year and Rs. 28,00,000.00 for the 2nd Year without taxes. GST will be applicable @18% and price variation will be applicable as per the Terms and Procedures of Payment and Price Adjustment in the Main Contract. The cost of the extended AMC exclusive of any price variation for a period of two years shall, therefore, be as follows:

MANIPUR STATE POWER COMPANY LIMITED
Keishampat Junction, Imphal – 795001

Corporate Office: Electricity Complex, Patta No. 1293 under 87(2), Khwai Bazar, Keishampat, Imphal – 795001, Manipur, INDIA
Fax : +91385 2450702
Tele: +91385 2450050

Sl. No	Particulars	AMC amount for 1st year (in ₹)	AMC amount for 2nd year (in ₹)
1	Quarterly Invoice Base Value of SLDC, Manipur	25,50,000.00	28,00,000.00
2	No. of Quarters	04 (four)	04 (four)
3	4 Quarters AMC Value	**1,02,00,000.00**	**1,12,00,000.00**
4	GST@18%	18,36,000.00	20,16,000.00
5	Total cost of AMC (including GST)	1,20,36,000.00	1,32,16,000.00
		Total in ₹ =	**2,52,52,000.00**

₹ 2,52,52,000.00 (say)

(Rupees two crore fifty-two lakh fifty-two thousand) only

5.0 You are requested to submit the contract performance bank guarantee (CPBG) amounting to ₹ 10,70, 000.00 (Rupees ten lakh seventy-one thousand) only, which is 5% of the AMC value as being done with Grid-India. The calculation has been shown in the following table:

Sl. No.	Particulars	Amount (in ₹)
1	Maintenance price for 2 years (F)	2,14,00,000.00
2	Bank Guarantee@ 5% of F (G)=(F)*5%	10,70,000.00

₹ 10,70,000.00 (say)

(Rupees ten lakh seventy thousand) only

6.0 This extension of the Maintenance Contract shall be treated as a separate contract, independent of the previous AMC, and GE Vernova T&D India Ltd. shall be relieved of all obligations under the previous AMC.

7.0 You are requested to send the acceptance LoA to the undersigned.

Yours faithfully,

(Th. Bimol Singh)
Managing Director,
MSPCL

Copy to:

1. The Secretary to the Hon'ble Chief Minister, for kind information of the Hon'ble Chief Minister
2. The Secretary (Power), Government of Manipur
3. The Executive Director (Technical), MSPCL
4. The Executive Director (Finance & Accounts), MSPCL.
5. The General Manager (SLDC/Planning), MSPCL
6. The Guard File

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

SPEED POST/FAX
Ph : 0364-2534039
Fax: 0364-2534040
email: nerpc@ymail.com
website: www.nerpc.gov.in

No.: NERPC/Communication/2025/ 2976 - 3002 . November 10, 2025

सेवा में/To

As per list attached.

Subject: Minutes of the special meeting on AMC of SCADA/EMS system of NER states - reg.

विषय: एन.ई.आर राज्यों की SCADA/EMS प्रणाली की AMC पर विशेष बैठक का कार्यवृत्तके संबंध में ।

महोदय/महोदया,

कृपया पूर्वोत्तर राज्यों में SCADA/EMS प्रणाली के वार्षिक रखरखाव अनुबंध (AMC) पर मेसर्स GE वर्नोवा की टीम के साथ 6 नवंबर, 2025 (गुरुवार) को सुबह 11:00 बजे "NERLDC कॉन्फ्रेंस हॉल", गुवाहाटी में आयोजित विशेष बैठक के कार्यवृत्त संलग्न देखें। यह कार्यवृत्त NERPC की वेबसाइट www.nerpc.gov.in पर भी उपलब्ध है।

कृपया किसी भी टिप्पणी से जल्द से जल्द NERPC को अवगत कराएँ।

Sir/Madam,

Please find enclosed herewith the minutes of the special meeting on Annual Maintenance Contract (AMC) of SCADA/EMS system in NER states with the team of M/s GE Vernova which was held on **6th November, 2025 (Thursday) at 11:00 Hrs at "NERLDC Conference Hall"**, Guwahati. The minutes is also available on the website of NERPC: www.nerpc.gov.in

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

भवदीय / Yours faithfully,

10/XI/2025

(डी.के. बौरी / D.K Bauri)
निदेशक / Director

NORTH EASTERN REGIONAL POWER COMMITTEE
Shillong

Record of discussion of Special Meeting on "Extension of Comprehensive-AMC of SCADA/EMS System of NER States"

Date: 06.11.2025
Venue: NERLDC Conference Hall, Guwahati

A special meeting was convened under Chairmanship of Member Secretary, NERPC on 6th November, 2025 at the NERLDC Conference Hall, Guwahati, to deliberate on the extension of the Comprehensive Annual Maintenance Contract (C-AMC) for the existing SCADA/EMS System of the North Eastern Region (NER) States.

Member Secretary, NERPC, welcomed all delegates and expressed appreciation for their participation. He wishes for productive discussions on the important matter of AMC of Existing SCADA System. Representatives from all NER States attended the meeting, except Manipur participated through online mode. Officials from NERPC, NERLDC, and M/s GE Vernova T&D India Limited (GE VERNOVA INDIA) were also present.

The list of participants is attached as **Annexure-1.**

Background

During the 32nd NeTEST Meeting held on 29th August, 2025, Tripura and other North Eastern Region (NER) States expressed concern about the exorbitantly high prices of Annual Maintenance Contract (AMC) quoted by M/s GE Vernova for the existing SCADA .

Accordingly, it was decided to convene a special meeting at Guwahati with the M/s GE Vernova to resolve the pending issues pertaining to the AMC for SCADA Project of the NER States.

A. <u>The following deliberation were made in the meeting:</u>

1. Assam representative informed that the AMC agreement for SCADA/EMS System was pending due to observations raised by AEGCL's Law Department, primarily concerning the Bank Guarantee (BG) forfeiture

clause in the event of contract termination. Subsequently, Assam and GE Vernova India mutually agreed to revise the relevant clause and execute the contract agreement at the earliest.
Other NER States also conveyed their willingness to sign the Letter of Award (LOA) once the AMC prices are rationalized.

2. At present, AMC Offers were given by M/s GE Vernova to Meghalaya and Tripura. The quotation for Tripura State was approximately ₹3.66 crore for a two-year period with a 90% target availability, while Meghalaya's quotation was approximately ₹2.71 crore for the same period and availability.

3. Tripura sought clarification on whether 90% availability was adequate for SLDC operations and how it compared to RLDC levels. CGM (SL), NERLDC informed that to reflect higher operational sensitivity at RLDCs, RLDCs are stipulated to 99.95% availability.

   Further, he communicated that presently, three regions are having GE M/s GE Vernova systems namely Southern, Western & North-Eastern Regions. The new C-AMC of M/s GE Vernova system is being done in coordination with Corporate Centre, GRID-INDIA. SRLDC had already placed the LoA for new C-AMC with a 99.95% system availability. NERLDC, also following the same pattern.

4. Forum opined that for NER SLDCs, availability up to 90% would be acceptable as it is in line with the LoA placed by SLDC-Puducherry & SLDC-Assam.

5. On a query regarding External Firewall (Check Point) replacement under AMC, GE Vernova clarified that if the hardware had reached End-of-Life (EoL), hardware upgrade would be necessary, which would involve additional cost. SLDC Assam had already communicated this issue to GE via email; GE assured that a formal reply would be provided.

6. Meghalaya raised concern regarding the reduced scope of work in the latest GE VERNOVA INDIA offer, particularly exclusion of 3rd-party audits and vulnerability mitigation.

   - GE clarified that, considering multiple audits (e.g., NCIIPC), it was not always feasible for GE to address every observation. GE's 3rd-party vulnerability assessments are conducted after apprising auditors of the legacy system limitations, whereas NCIIPC audits often apply latest technology standards.

- NERLDC informed that since OT systems are in hard isolation (no Internet exposure), penetration testing may not be required.
- SLDC Assam requested GE to comply with CSIRT-Power guidelines to the extent possible. GE VERNOVA INDIA agreed to the same.

B. Finalization of Scope of Work for NER State SLDCs

After detailed deliberation, forum agreed to adopt the Scope of work similar to Assam for their respective C-AMC of SCADA/EMS System. The Scope of Work in line with the Scope of Work of SLDC Assam was discussed and finalized as follows:

1. Deputation of 2 engineers at SLDC control centre – Agreed by NER States
2. Back-office support from Noida – Agreed by NER States
3. Control Centre Comprehensive AMC – Agreed by NER States
4. VPS – Preventive Maintenance and Fault Diagnosis only. VPS can be maintained using spares available with SLDC however the support shall not be covered under availability calculation. - Agreed by NER States

   Further, informed that;

   - SLDC Arunachal Pradesh stated that no VPS spares are left and SLDC Nagaland also reported exhausted spares.
   - CGM (SL), NERLDC requested all the NER SLDCs to review their existing spares. The same needs to be communicated to GE VERNOVA INDIA for replenishment.
   - MS, NERPC emphasized regular maintenance and ensuring replenishment of working spares and GE Vernova agreed to replenish VPS spares during the existing 7 + 2-year AMC period.
5. eDNA – L1 (GE) and L2 Support (Kalkitech) - Agreed by NER States
   - L-1(Basic trouble shooting, data indexing if any segment corrupted).
   - L-2 (Regeneration of license only as eDNA is obsolete declared by OEM.).
   - In case of data loss (even after data indexing), the required source code is not available as product is end of life. Data can only be retrieved through manual entry for maximum 25 points.
6. Required Antivirus for the supplied hardware – Agreed by NER States

7. Annual Cyber Security Audit from third party agency (only Vulnerability Assessment). Vulnerability mitigation shall be limited to configuration changes only.

   - GE to look into their tied-up party (M/s AKS). CGM (SL), NERLDC requested GE VERNOVA INDIA to conduct extensive cyber security audit as NCIIPC is raising questions on the report submitted by M/s AKS. CGM (SL) also communicated that a few of the audit compliances may not be addressable due to obsolete hardware and software. MS, NERPC requested GE to do more comprehensive audit. - Agreed by NER States

8. SAN/NAS/Tape Library storage availability shall be included in the offer however; GE shall ensure quick restoration of the SAN/NAS/Tape Library storage in case of any failure restoration will be done in maximum 90 business days. Post 90 business days SLA will be applicable.

   - GE explained that cluster configuration takes significant time; hence, the 90-day grace period has been considered. - Agreed by NER States

9. Support for existing UPS & DG will be provided however; SLA will be applicable post 90 business days will be applicable.
   - Forum advised to keep DG in Auto Mode to minimize dependency on UPS and batteries. GE VERNOVA INDIA will look into the matter - Agreed by NER States.

10. GE shall suggest remedial action in case of database errors. Integration of new stations/bays shall be the prime responsibility of Owner (SLDC). In case Owner is not able to perform the same GE shall be paid for the job as per mutually agreed rate.
    - MS, NERPC urged all SLDCs to build in-house capability in database modelling. Further, GE agreed to train SLDC personnel on RTU integration at site level through online mode.

11. Replacement of Degraded Battery Cells – Agreed by NER States.

12. Checkpoint external Firewall support limited to patch updates if available with OEM
    - If external firewalls are directly purchased by SLDCs, GE will not cover them under AMC. Technical support to be availed directly from OEM - Agreed by NER States.

All NER states agreed for all the points of the finalised Scope of work as mentioned above.

C. Discussion on Price Rationalization:

In the case of Assam, the price offered by M/s GE Vernova during November 2024 for the C-AMC was as follows:

- 1st Year: ₹ 0.96 Cr
- 2nd Year: ₹ 1.07 Cr (with 10 % year-wise escalation)
- Total: ₹ 2.04 Cr (excl. GST) / ₹ 2.41 Cr (incl. 18 % GST)

For Assam, the offer was based on a factor of 2.52 times the running AMC rate prevailing at that time.

In the current offer for Meghalaya, the total two-year cost was quoted as ₹ 2.71 Cr (excl. GST). M/s GE Vernova clarified that this quotation was derived using the same 2.52× factor with an additional 10 % escalation every year.

Further, it was informed that:

- For Meghalaya and Tripura, the existing AMC expired during March 2025.
- For Manipur, the AMC will expire on 07 November 2025.
- For Mizoram, the AMC will expire during April 2026.

MS, NERPC observed that the prices offered for Meghalaya and Tripura were higher than Assam's, despite these being smaller States with comparatively lower system demand. He emphasized that it would be difficult for the States to justify higher AMC costs and suggested the rate can be around ₹ 1.0 Cr per year for better acceptability by higher Management.

He further noted that the new SCADA/EMS project is expected to go live within two years, and there is a possibility of requiring a third-year AMC extension in the interim.

In response, M/s GE Vernova agreed for a revised common rate for other State and rationalized its offer which is given as below:

Year	Proposed Price (in ₹ Cr)	Remarks
1st Year	1.02	Comparable to Assam 2024 reference rate
2nd Year	1.12	10 % escalation on 1st year price

Total (2 Years)	**2.14 Cr (excl. GST)**	**Common offer for all NER States each.**

<u>After detailed deliberation, the following decisions were made :</u>

1. Forum agreed to the revised price offer of ₹ 2.14 Cr (excl. GST) for the two-year AMC applicable to all participating NER States except Assam, Arunachal Pradesh & Nagaland.
2. M/s GE VERNOVA INDIA informed that the current C-AMC for SCADA of Arunachal Pradesh & Nagaland remains valid until 2027, and therefore, no fresh offer can be provided at this stage.
3. It was agreed that, within three months from issuance of the Minutes of the meeting, Meghalaya, Tripura, and Manipur to finalize and sign their respective AMC contracts with M/s GE Vernova. Mizoram shall follow subsequently.
4. The forum requested M/s GE Vernova to submit a detailed cost justification for the increase over the previous AMC pricing. The same has been attached as **<u>Annexure-2</u>**.
5. GE Vernova assured that Assam would be offered a reasonable rate for the third-year extension of its AMC when it becomes due.
6. MS, NERPC assured that the matter would be placed in the upcoming NERPC meeting to apprise higher authorities of the States.
7. Finally, the forum and NER States unanimously agreed on the rationalized scope and cost components for the two-year extended C-AMC for SCADA/EMS System. M/s GE Vernova India shall submit the revised offers accordingly, and the NER States shall proceed with signing the Letters of Award (LOAs) by taking their respective internal approvals.

The meeting concluded with a Vote of Thanks to the Chair.

****

No. POWER/17/2025-POW-PD-Part(1)
GOVERNMENT OF MANIPUR
SECRETARIAT: POWER DEPARTMENT

Receipt No. 249
Date 24.04.2026
Office of the Managing Director
Manipur State Power Company Ltd
Keishampat, Imphal-795001

Imphal, the 20th April, 2026

Receipt No: 49 (27/04/26)
Office of General Manager
SLDC, MSPCL

To

The Managing Director, MSPCL
Manipur

Subject: Request for Administrative Approval (A/A) for extension of AMC for SCADA/EMS system at SLDC, Manipur for 2 (two) years (2nd phase).

Sir,

In inviting a reference to your letter No. 14/6(SLDC)/GM(PD)/2018-MSPCL/5010-II dated 6th March, 2026 on the above subject, I am directed to convey approval of the Government for extension of the Annual Maintenance Contract (AMC) of the SCADA/EMS system at SLDC, Manipur for 2 years (2nd phase) with M/s GE Vernova India subject to compliance with the relevant rules, regulations, and codal formalities in force.

GM/SLDC

Enclosed: As stated above.

Yours faithfully

(Athing Kasar)
Under Secretary (Power)
Government of Manipur

Copy to:

Commissioner (Power), Govt. of Manipur

DGM(S/D)
For pursuing

CIN:U40101MN2013SGC008344

MANIPUR STATE POWER COMPANY LIMITED

Keishampat Junction, Imphal – 795001

Corporate Office:- Electricity Complex, Patta No. 1293 under 87(2), Khwai Bazar, Keishampat, Imphal – 795001, Manipur, INDIA

Fax : +91 385 2450702
Tele: +91 385 2450050

No. 4/SLDC/AMC/SCADA/EMS/2024/MSPCL(PURCH)/4592-99 Imphal, the 6th January, 2025

To,

M/S GE T&D India Ltd.
A-225, Sector-83
Noida-201305, Uttar Pradesh

Sub: Expansion/Upgradation of existing SCADA/EMS System of NERLDC and SLDCs of North-Eastern Region - Extension of AMC of SCADA-EMS system installed at SLDC, MSPCL, Yurembam for 2 (two) years.

Ref:

1. Contract Agreement No. CC-CS/304-NER/SCADA-1728/3/G4/CA-III/4912(IV) dated 02.04.2014.
2. Final Amendment No. NESH/CSM/FY:2021-22/109/164 dated 18.03.2021.
3. Minutes of the 25th NETeST Meeting held on 25.05.2023.
4. Minutes of the 26th NETeST follow-up special meeting held on 9.01.2024.
5. Govt letter No. MSPCL-5/2/2021-POWER-PD dated 02.12.2024

Dear Sir,

1.0 This Letter of Award (LoA) is given for the "Extension of Annual Maintenance Contract of SCADA-EMS system at SLDC MANIPUR" for another 2 (two) years with effect from 08.11.2023 upto 07.11.2025 in continuation to the contractual clause of the SCADA/EMS system AMC Contract Ref. No: CC-CS/304-NER/SCADA-1728/3/G4/CA-III/4912(IV) dt. 2nd April, 2014; wherein "the Employer may extend the duration of maintenance for a period of 2 years at the same rates, terms and conditions" with below exclusions from availability calculation:

a) VPS Spares due to OEM having declared product version as EOS/EOL. However, GE shall be responsible for the preventive maintenance and troubleshooting of faults should they arise.

b) Fortinet Firewall due to product version being declared by OEM as EOS/EOL.

2.0 This Letter of Award incorporates amendment made for GST in the extended AMC portion and Quarterly base price amended as Rs. 5,84,849.40 without taxes. GST will be applicable @18% and price variation will be applicable as per the Terms and Procedures of Payment and Price Adjustment in the Main Contract. The cost of the extended AMC exclusive of any price variation for a period of two years shall, therefore, be as follows:

Sl. No.	Particulars	Amount (Rs.)
1	Quarterly Invoice Base Value of SLDC, Manipur	5,84,849.40
2	No. of Quarters	08 (eight)
3	8 Quarters AMC Value	46,78,795.20
4	GST@18%	8,42,183.14
5	Total cost of AMC (including GST)	55,20,978.34

Say= Rs. 55,20,978.00

(Rupees fifty five lakh twenty thousand nine hundred seventy eight) only

3.0 The above mentioned changes have been proposed as per the discussion held during the follow-up meeting of 26th NETeST meeting on 9th January 2024.

4.0 You are requested to submit the bank guarantee amounting to Rs. 12,76,961.00, which is 2% of the Supply, Service and Maintenance portion as deliberated in the 26th NETeST meeting held on 09.01.2024. The calculation has been shown in the following table:

Sl. No.	Particulars	Amount (Rs.)
1	Supply Portion and Service Portion of the 7 NER states (F)	40,82,89,617.00
2	Supply and Service Portion of SLDC, MANIPUR (G)=(F)/7	5,83,27,088.10
3	Maintenance Portion (E)	55,20,978.34
4	Total Amount (H)=(G)+(E)	6,38,48,066.44
5	Bank Guarantee@ 2% of Total Amount (I)=(H)*2%	12,76,961.33

Say= Rs. 12,76,961.00

(Rupees twelve lakh seventy six thousand nine hundred sixty one) only

5.0 This extension of Maintenance Contract shall be an integral part of the Maintenance Contract Agreement No. CC-CS/304-NER/SCADA-1728/3/G4/CA-III/4912(IV) dated 02.04.2014.

6.0 You are requested to send the acceptance LoA to the undersigned

Yours faithfully,

(Ng. Subhachandra Singh)
Managing Director, MSPCL

Copy to:

1. The P.P.S. to the Hon'ble Minister (Power), for kind information of the Hon'ble Minister (Power)
2. The Commissioner (Power), Government of Manipur
3. The Executive Director (Technical), MSPCL
4. The Executive Director (Finance & Accounts), MSPCL.
5. The General Manager (SLDC/Planning), MSPCL
6. The Deputy General Manager (Sys. Opt., SLDC), MSPCL.
7. The Guard File

List of Participants in 35th NETeST meeting held on 09.10.2026 at Hotel Radisson Blu, Guwahati

S.No	Name	Designation	Organization	Email-Id	Contact No.	Signature
1	AMLAN JYOTI CHAKRAVORTY	AGM	AEGCL	amlan.chakravorty@aegcl.co.in	8638905841	
2.	ASHUTOSH BHATTACHARYA	GM	AEGCL	gm.tcc@aegcl.co.in	99541-06916	
3	RUPJYOTI DAS	DM	SLDC, ASSAM	itrandacell.sldc@aegcl.co.in	9435097009	
4	Ranjan Gunnami	AGM	SLDC, Assam	ranjangunnami@aegcl.co.in	9706524432	
5.	Devajyoti Patowary	DGM	AEGCL, Assam	devajyoti.patowary@aegcl.co.in	9435591968	
6.	ARUP SARMAH	AGM	AEGCL	agmcommunication1a@aegcl.co.in	9707854367	
7	Geji Yingo	JE	Ar.P SLDC	nilogeji@gmail.com	9436200050	
8.	Ome Moyong	JE	Ar.Pr. SLDC	Omeofficework123@gmail.com	9233599384	
9.	DAVID J LYNGDOH	ACE	MePTCL	acett.meptcl@meghalaya.gov.in		
10.	M. K. Ube	EE	SLDC Meghalaya	ee.sm.sldc@meghalaya.gov.in	9774602486	
11	J. Iakai	AEE	SLDC, Meghalaya	iakaiyomon@gmail.com	9402133552	
12.	P. TIAKABA YIMCHUNGER	J.G	SLDC NAGALAND	TIABUENGER@GMAIL.COM	8974020151	
13	VIPIN KUMAR AZAD	AE	SLDC Mizoram	sldc-division@mizoram.gov.in	7085205665	
14	YARUIHOR HUNGYO	MANAGER(IT)	SLDC Manipur	ruihungyo@gmail.com	8729819944	Yaruihor Hungyo

List of Participants in 35th NETeST meeting held on 09.10.2026 at Hotel Radisson Blu, Guwahati

S.No	Name	Designation	Organization	Email-Id	Contact No.	Signature
15.	ATUL KUMAR	Deputy Manager	Resonia	atulkumar@resonia.in	7531069088	
16	BARUN KUMAR	MANAGER.	RESONIA	barun.kumar@resonia.com	6202668845	
17.	ARNAB PRATIM DAS	Exec. Director	PwC	ARNAB.PRATIM.DAS@pwc.com	9830087816	
18	Pradeep lama	Senior Associate	PwC	pradeep.lama@pwc.com	9667659039	
19	Pooteek Aman	Asst. Manager	KMTL	pooteek.aman@gmail.com	9024663370	P. Aman
20	Gunjan Raikwar	Asst. Manager	Indigrid	gunjan.raikwar@indigrid.com	6261062382	
21	Agnibha Dasgupta	Business Analyst	GreenNova	agnibha.dasgupta1@gmail.com	9051763210	
22	MANDYAM DINESH SAI	ENGINEER	CTUIL	dineshsai@powergrid.in	8136856343	
23	Vipul Anand	Asst. Manager	POWERGRID	vipulanand@powergrid.in	8319977302	
24	KAMLESH BAISHYA	Dy. Manager	POWERGRID	kamlesh156@yahoo.in	7859723132	
25	GAURAV BHATTACHARJEE	Dy. Manager	NERLDC/GRID-INDIA	bhattacharjee.gaurav@grid-india.in	9402304210	
26	PALASH JYOTI BORAH	CHIEF MANAGER	NERLDC/GRID-INDIA	palash14.india@grid-india.in	8761093397	
27	SAKAL DEEP	DY. MANAGER	NERLDC/GRID-INDIA	skldeep@grid-india.in	9774528218	
28	Saugato Mondal	GM	"	saugato@grid-india.in	9433041055	
29	Biswajit Sahu	CGM	NERLDC	biswajit@grid-india.in	9435409539	
30	SOMARA LAKRA	(CGMC I/C)	NERLDC	[illegible]@grid-india.in	9910953370	
31.	A. De	Dy. Director	NERPC			
32.	Ashim Goswami	AD	NERPC			
33.	Shampa Sen	DGM	SLDC Tripura, TPTL	shampasen@rediffmail.com	9436120263	