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## NORTH EASTERN REGIONAL POWER COMMITTEE

**AGENDA FOR 33<sup>RD</sup> NETeST MEETING TO BE HELD ON 24.04.2026 (FRIDAY) AT 10:00 HRS**

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

#### **1.1. Confirmation of Minutes of 32<sup>nd</sup> Meeting of NETeST Sub-Committee of NERPC**

The minutes of 32<sup>nd</sup> meeting of NETeST Sub-committee held on 29.08.2025 at NERPC Conference Hall, Shillong were circulated vide letter No. NERPC/NETeST/2025/2268-2307 24<sup>th</sup> September, 2025.

The following comments have been received from NERLDC via e-mail dated 26/09/2025:

1. The Annexure B2.2 (i) under Agenda 2.2 is not available in the minutes.
2. The Annexure 2.7.3(a) under Agenda 2.7 is not available in the minutes.
3. The necessary deliberations under Agenda 3.9: The detailed status of each state was discussed in the meeting and same was provided as inputs.
4. The necessary deliberations under Agenda 3.28: The detailed status of each ISGS generator was discussed in the meeting and same was provided as inputs.

***Subsequently, Annexure- B 2.2(i) and Annexure 2.7.3(a) have been uploaded in website.***

***The status updates in Sl. No. 3 & 4 as mentioned above have been included in the agenda for 33<sup>rd</sup> NETeST and shall be further deliberated.***

***The Sub-committee may confirm the minutes of 32<sup>nd</sup> NETeST meeting of NERPC along with the above amendment.***

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

### **AGENDA FROM NERPC**

#### **2.1. 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. The data format for communication audit is attached as Annexure B 2.1.

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

<b>Sl No.</b>	<b>State/Utility</b>	<b>Name of sub station</b>
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
10	NHPC	Loktak
11	NEEPCO	Kathaguri

The data from all the NER states and PGCIL has been received via e-mails. Data from NHPC and NEEPCO is still awaited.

The communication audits in respect of SLDC Meghalaya and 132kV NEHU substation have been completed on 28<sup>th</sup> November 2025 and the audit reports have been shared over e-mail dated 23/02/2026.

***Members may deliberate.***

## **2.2. 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:

- (i) ISTS Communication System including ISGS
- (ii) Intra-state Communication System being utilized for ISTS Communication
- (iii) ICCP links between Main & Backup RLDCs, Main & Backup SLDCs & Main & Backup NLDCs.
- (iv) Inter-regional AGC links

- (v) 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 attached at Annexure-B 2.2
  - 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 32<sup>nd</sup> NETeST meeting**, NERLDC presented a draft list of critical communication elements which impacts the NER grid during outage (the list of important FOTE and OPGW links is attached as **Annexure B 2.2 (i)**). 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.

***Members may deliberate.***

### 2.3. Guidelines on Availability of Communication system-NERPC

CERC vide order dated 19.01.2024 had approved the “Guidelines on Availability of Communication System” (Annexure-B.2.3) 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 30<sup>th</sup> 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 10<sup>th</sup> February-2025.

**In 31<sup>st</sup> 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 32<sup>nd</sup> NETeST meeting**, it was informed that the uniform format for Communication Availability was approved in 16<sup>th</sup> NPC meeting. The forum agreed to adopt the finalized format as approved in 16<sup>th</sup> 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.

***Members may discuss.***

#### **2.4. Finalization of a common Detailed Project Report (DPR) for the 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 31<sup>st</sup> 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.

DoP, Arunachal Pradesh, SLDC Mizoram and SLDC Tripura have sent the requisite nominations. Nominations from the remaining states are awaited.

***Members may deliberate.***

## **2.5. 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:

<b>S.No.</b>	<b>Sectoral CERT</b>	<b>Nodal Organization</b>
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 31<sup>st</sup> 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.

**Members may discuss.**

## 2.6. Cyber Security Testing of Power Sector Equipment at Central Power Research Institute (CPRI): NERPC

Central Power Research Institute (CPRI), Bengaluru, via letter No. 01/04/CPRI/SGRL/2025-26 dated 18th September 2025, has apprised NERPC regarding the operationalization of its Cyber Security Testing Laboratory. CPRI is currently the only Government Testing Laboratory in the Indian power sector equipped for this purpose.

As per the Ministry of Power (MoP) Order No: 12/34/2020-T&R (dated 24th December 2021 & August 2025), cyber security testing is mandatory for both indigenous and imported equipment prior to deployment in the power grid.

### **Key Highlights of CPRI's Facilities:**

- **Accreditation:** The test facilities are accredited as per ISO/IEC 17025:2017.
- **Standards Covered:** The lab performs communication protocol and security conformance testing as per IEC 60870-5-101, IEC 60870-5-104, IEC 60870-5-7, IEC 62351 series, and IEC 61850.
- **Equipment Covered:** The testing applies to products such as RTUs, FRTUs, Intelligent Electronic Devices (IEDs), Numerical Protection Relays, Bay Control/Protection Units, Gateways, and Transformer Tap Controllers.
- **Testing Methodology:** Testing must be conducted on actual supply lot samples that are intended for field deployment.

Given the national importance of safeguarding the Critical Information Infrastructure (CII) of the power sector from cyber threats, CPRI has recommended that all regional utilities ensure their devices undergo these mandatory tests.

**Members may discuss.**

## **2.7. 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, including the formal agreement from Mizoram, 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.

A special meeting shall be convened by the NERPC Secretariat with all concerned stakeholders to finalize the detailed mechanism and commercial modalities for the project including execution of the AMC.

In view of this POWERGRID-GA&C and ULDC may provide the tentative total cost of each state including AMC which needs to pay through RTM.

***Members may discuss.***

## **AGENDA FROM NERLDC**

## **2.8. Status of Construction of Backup SLDC in NER states: NERLDC**

As deliberated in 86th Meeting of the TESG of PSDF held on 22nd October 2024, TESG has communicated the NER States that civil construction for setting of infrastructure for backup control centres at NER SLDCs is not being funded through PSDF as per the laid guidelines. Hence, all NER state has to arrange necessary fund for construction of backup SLDC on their own resources. The status of construction of backup SLDCs in tabulated, states may provide the updated status:

<b>Sl. No.</b>	<b>Name of state</b>	<b>Status of construction of Back up SLDC as per 30th RPC meeting</b>	<b>Status of construction of Back up SLDC as per 33rd NETeST Meeting</b>
1	Arunachal Pradesh	The matter could not be included in the budget estimate for FY 2025-26 due to uncertainty over PSDF funding of SCADA for Back up SLDC. After clarification, the matter will be incorporated in the revised Estimate.	
2	Assam	Assam informed that land has been identified in Samaguri, and a Detailed Project Report (DPR) with an estimated cost of around ₹8.5 crore has been submitted to the Government of Assam for fund approval. The Power Department had raised certain queries, which have been duly addressed by AEGCL. The Department will review the responses, and upon satisfaction, will forward the proposal to the Standing Finance Committee of the Government of Assam, chaired by the Chief Secretary (Power)	
3	Manipur	Location identified at 400kV Thoubal SS. Space required for accommodating UPS and Battery.	
4	Meghalaya	Meghalaya informed that the tender will be floated by December 2025	
5	Mizoram	Budget allocation and administrative approval done, waiting for expenditure sanction. Expected by this FY.	
6	Nagaland	Space ready at New Kohima S/S (New Secretariat).	
7	Tripura	Board approval awaited. TSECL requested to include replica of control centre screen to corporate office in the scope of the work.	

It is requested to all the states to provide the periodic updates and show a substantial progress before the pre-bid stage of tendering as it will be difficult to make provision for SCADA/EMS equipment for Backup SLDC afterwards.

**Members may update.**

## **2.9. Re-modelling of ICCP architecture of NER-SLDCs to minimise downtime and enable automatic switchover between NER-SLDC–NERLDC Shillong and NER-SLDC–NERLDC Guwahati: NERLDC**

NERLDC is presently operating with Main-1 and Main-2 control centre establishments. In order to enhance the reliability of both Main-1 and Main-2, NERLDC has already completed parallel reporting from most of the central sector stations to both control centres. However, since each state is presently operating through a single SLDC, parallel reporting from the SLDCs to both NERLDC Shillong and NERLDC Guwahati is not feasible under the existing arrangement.

At present, switchover of ICCP connectivity from NER-SLDC–NERLDC Shillong to NER-SLDC–NERLDC Guwahati is carried out manually at the respective control centres. This results in interruption of data exchange and also requires the physical availability of manpower at the concerned control centres for carrying out the switchover.

In order to address this issue, a new ICCP architecture is proposed to be deployed at the NER-SLDCs, which will enable automatic switchover of connectivity from NER-SLDC–NERLDC Shillong to NER-SLDC–NERLDC Guwahati in the event of any disruption in the NER-SLDC–NERLDC Shillong link. This proposed arrangement will significantly improve the availability and reliability of data exchange between NERLDC and the NER-SLDCs, with only a minimal disruption of about 10–20 seconds during switchover. The detailed implementation scheme is enclosed at **Annexure-B 2.9**.

It is also pertinent to mention that NERLDC has already implemented this architecture at SLDC Arunachal Pradesh, and the same has been functioning successfully since 14.11.2025 without any operational issues.

NERLDC shall provide all necessary assistance for adoption and implementation of the proposed architecture.

***Members may discuss.***

## **2.10. Restoration and Planning of ER–NER Redundant Communication Path via Bongaigaon–Binaguri-1 OPGW Link: NERLDC**

In reference to a series of communications issued by NERLDC vide letters and emails attached as **Annexure-B 2.10**, regarding restoration and utilization of the Bongaigaon–Binaguri-1 OPGW link for the ER–NER corridor. At present the traffic of NER region is running on the Salakati–Alipurduar route and the redundant path needs to be established for ER-NER corridor. As brought out in earlier correspondence, the Bongaigaon–Binaguri-1 OPGW link is owned and operated by POWERTEL and more than 225 km long and requires repeaters/SDH/FOTE for establishing redundant link for ER-NER corridor for reliable operation.

In the 9th CPM held on 16th March 2026, POWERGRID informed that redundant path through Binaguri – Bongaigaon link at STM-16 will be established by first week of April as some link configurations works are still pending.

***POWEGRID-ULDC is requested to update on the matter.***

***Members may discuss.***

## **2.11. Planning for OPGW connectivity of 220 kV Agomoni S/s AEGCL: NERLDC**

As per the minutes of the 1st meeting of North Eastern Regional Power Committee (Transmission Planning) / 2nd meeting of North Eastern Region Standing Committee on Transmission (NERSCT) held on 18th November 2019, LILO of both circuits of 220 kV Alipurduar–Bongaigaon D/C line at Agomoni (AEGCL – New) was agreed for implementation.

It is observed that the said LILO is being implemented over the existing ER–NER inter-regional link comprising 220 kV Alipurduar–Salakati line, which is presently carrying critical communication services in addition to power transmission.

In this regard, the matter was deliberated in the 9th CPM Meeting held on 16th March 2026, wherein NERLDC requested CTU to ensure that Fibre Sharing Guidelines are strictly adhered to during implementation of the LILO. CTU informed that POWERGRID is required to provide the fibre details of the 220 kV Alipurduar–Salakati main line as per the fibre sharing format already circulated by CTU.

Further, it was suggested that a detailed agenda may be submitted by AEGCL so that a separate meeting can be convened to deliberate on the sharing of main line OPGW in the LILO section in line with CEA fibre sharing guidelines. CTU also suggested that an alternate communication path for the 220 kV Alipurduar–Salakati link may be established at the earliest by POWERGRID. This will facilitate execution of OPGW-related works in the LILO section and ensure commissioning of the LILO at Agomoni Substation within the timeline provided by AEGCL.

CTUIL, AEGCL and POWERGRID are requested to provide an update on the progress of the above activities.

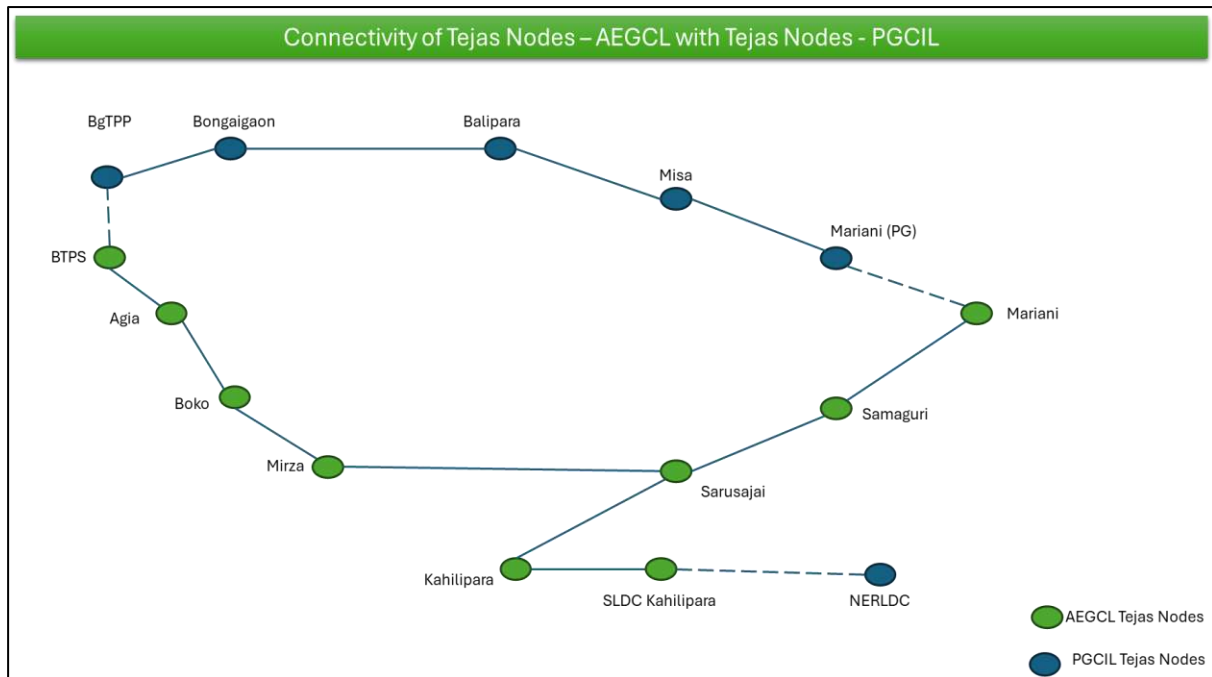
***Members may discuss.***

## **2.12. Connectivity of Tejas network developed by AEGCL and POWERGRID-ULDC to enhance the reliability of NER communication network: NERLDC**

NERLDC has observed that AEGCL has deployed a Tejas SDH based network in 32 locations of Assam. Further, ULDC-POWERGRID has also commissioned Tejas SDH in multiple ISTS/ISGS nodes within Assam. The connectivity of such nodes will enhance the reliability of Assam state network and in turn NER communication network. For example:

1. BgTPP (NTPC) to BTPS (AEGCL) connectivity.
2. NERLDC Guwahati to SLDC Assam connectivity.
3. Mariani (PG) to Mariani (AEGCL) connectivity.

Forum is requested to discussed the matter further.



**Members may discuss.**

### 2.13. Cyber Security Concerns in ADMS Architecture across NER States and Implementation of Mitigation Measures: NERLDC

It is observed that the ADMS architecture, attached as **Annexure-B 2.13**, implemented across all NER States follows a similar communication setup. As discussed in the 9th CSCF Meeting dated 25.03.2026 and subsequent interaction with SLDC Mizoram and OEM, certain cybersecurity concerns have been identified.

#### **Existing Architecture:**

ADMS at SLDC Mizoram is connected through a BSNL lease line with a modem having one static public IP interface and one private IP interface. The public IP interface is connected to the ADMS Router-cum-Firewall, enabling external connectivity.

#### **Observations:**

It has been observed that there is no provision for geo-fencing or IOC blocking at the modem level, and the current practice of blocking IOCs at the ADMS router is not sufficient as malicious traffic continues to reach the system. Further, remote stations are connected through GPRS SIMs with dynamic IP allocation, which restricts implementation of IP whitelisting. Additionally,

system analysis has indicated that multiple public IPs are communicating with the ADMS servers over ports 80 and 443; while VPN communication is configured over port 443, the presence of traffic over port 80 is not in line with the intended architecture and remains unexplained.

***Risk:***

Since ADMS controls remote station equipment including circuit breakers, such vulnerabilities may lead to a major cybersecurity incident. As similar architecture exists across all NER States, the risk is system-wide.

***Recommendations:***

- a. Deployment of Next Generation Firewall (NGFW) at communication entry point for geo-fencing and threat filtering.
- b. Use of M2M SIM cards with static IPs at remote stations to enable secure whitelisting.

***Members may discuss.***

**2.14. VAPT cyber security audit of SCADA/EMS system of SLDCs: NERLDC**

During the review in the 9th CSCF Meeting dated 25.03.2026, it has been noted that Vulnerability Assessment and Penetration Testing (VAPT) of OT systems for FY 2025-26 is yet to be completed in all SLDCs except Assam SLDC. As per the provisions of the Information Technology Rules / Cyber Security guidelines applicable to power sector entities (IT Rules 2018 and subsequent directions), periodic VAPT is a mandatory requirement for critical infrastructure systems.

A letter from Office of CISO-NERLDC was also written to all SLDCs vide reference NERLDC/Cyber Security/CSCF/01 dated 06.04.2026, attached as

**Annexure-B 2.14.**

Non-completion of VAPT for the current financial year may therefore be treated as non-compliance of the applicable cyber security requirements.

All SLDCs are requested to expedite the completion of VAPT for both IT and OT systems and submit the status/compliance report at the earliest.

***Members may discuss.***

## AGENDA FROM POWERGRID

### 2.15. Supply and Installation of VoIP Communication System for NER SLDCs: PGCIL

Submission of Remote Site Details and readiness and requirement of Backup Control Centres of Assam, Arunachal Pradesh, Mizoram, Tripura, and Manipur for the VoIP Communication System Project:

Sl.No	Description	Remarks
1	Brief on the package	The scheme " <b>Supply and Installation of VoIP Communication System including Phones, Voice Recorder, etc., for Grid Operation for all Five Regions (NR, NER, SR, WR, ER) at NLDC, RLDCs, and SLDCs</b> " has been approved in <b>27th NCT dated 24.02.2025</b> and the <b>CTU OM dated 24.02.2025</b> issued for implementation of the scheme on <b>RTM basis to POWERGRID</b> . The broad scope of the scheme includes supply and installation of VoIP phones and PoE switches at local and remote stations, along with establishing main and backup control centres for NLDC, RLDCs, SLDCs, and the International Exchange to create an integrated communication network across the country.
2	Scope	The broad scope for NER region includes: <ul style="list-style-type: none"><li>• 2 (Main + Backup) Control Centres for NERLDC,</li><li>• 2 (Main + Backup) Control Centres each for the SLDCs of Assam, Arunachal Pradesh, Mizoram, Tripura, Manipur, Nagaland, and Meghalaya.</li><li>• Supply and installation of approximately 900 VoIP phones and PoE switches across remote locations associated with these control centres.</li></ul>

**Current Status:**

- Kick off meeting was held on 19.01.2026 and all the Constituents were asked to share the information regarding the Address/location of SLDCs (Main & Backup), availability of space and the address of the Substations where VoIP phones are to be installed.
- Letters in this regard have also been sent to all constituents on 20.01.2026 and 06.03.2026.
- M/s Orange has completed surveys at the Main and Backup NERLDC and the main SLDC control centres excluding Assam Main Control centre.
- Survey completed at Nagaland and Meghalaya back up SLDC.

**Requirement:**

A. Details of status and requirement of back up SLDC's at:

- Assam.
- Arunachal Pradesh.
- Mizoram.
- Tripura.
- Manipur along with their addresses.

B. Further, M/s Orange reported for non-confirmation of space in Assam main control centre, Guwahati.

**Proposal:**

The concerned state utilities are requested to expedite submission of complete remote site details, including Backup control centre locations, to facilitate timely implementation of the project by M/s Orange.

In case, the Backup SLDC is not ready or will not be ready in another 6 months, the VoIP system of Backup SLDC can be descope as there is failover redundancy available at NER RLDC level and another level of failover at NLDC level. Also, if the Substation addresses are not provided, then the BoQ for the substation shall be accordingly descope.

***Members may deliberate.***

## **2.16. Formation of a core team for streamlining of UNMS: PGCIL**

As per CERC Regulations 2017, UNMS has been commissioned and is under usage from Dec 2023. However, it is observed that issues are being faced for integration of other TSP equipment viz. equipment installed under TBCB etc. Several follow ups are being made by NERTS POWERGRID, however, very less response is being received. As channel availability calculation will encompass all central sector links, integration of equipment under POWERGRID, other central sector utility and TSP will be of utmost importance. For streamlining of the same, a team may be formed comprising of members of POWERGRID, Grid India, CTU, other central sector utility, TSP to follow up and ensure integration in UNMS.

***Members may deliberate.***

## **AGENDA FROM ASSAM**

### **2.17. Non-Availability of Telemetry data pertaining to 132kV Chapakhowa GSS, AEGCL constructed under NERPSIP scheme and other issues related to communications links established under NERPSIP scheme: ASSAM**

#### ***Issue 1:***

The Real Time Telemetry data of 132kV Chapakhowa Sub-station has not been reporting at SLDC, Assam since 25.12.2024 due to Fibre break of 132kV Rupai-Chapakhowa OPGW Link constructed by POWERGRID under NERPSIP scheme. The 132kV Rupai-Chapakhowa OPGW Link also acts as a redundant path for Arunachal Pradesh transmission system. Several communications have already been taken up by AEGCL Field offices and HQ, SLDC-Assam with NERPSIP, POWERGRID for restoration of the faulty 132kV Rupai-Chapakhowa OPGW link, but till date, the issue has not been resolved. In this regard, an email was received from the DGM, NERPSIP, POWERGRID, Dibrugarh stating that the 132kV Rupai-Chapakhowa OPGW link will be established by the end of January, 2026, but thereafter, no intimation has been received from NERPSIP, POWERGRID regarding any action taken for restoration of the link. Moreover, the 132kV Rupai-Chapakhowa OPGW link

is very much essential for proper working of the Special Protection scheme implemented for reliable power supply to Arunachal Pradesh from Assam through the Roing-Chapakhowa D/C line. But, due non-healthiness of the 132kV Rupai-Chapakhowa OPGW link, the SPS is not properly working presently leading to situations causing unwanted trippings of 33kV feeders instead of 132kV Chapakhowa-Roing D/C line along with 20MVAR Bus Reactor at Roing GSS and furthermore, this may lead to cascading tripping of other transmission lines resulting in total blackout at Rupai GSS, Margherita GSS and Chapakhowa GSS of AEGCL along with some other Sub-stations of Arunachal Pradesh.

**Issue 2:**

The FOTEs were provided at Sub-stations of AEGCL in Assam for overall OPGW connectivity with SLDC-Assam under NERPSIP scheme. But, the implementation of overall optical network connectivity under NERPSIP scheme has not been completed as on date and AEGCL has not received any information regarding handing over of the facilities to AEGCL along with associated AMC, if applicable. It is further to inform that there is no update on the status on installation and commissioning of 48V DC Battery Bank along with Chargers under NERPSIP scheme at the Sub-stations of AEGCL.

**Members may deliberate.**

**2.18. High cost of Firewalls quoted by M/S GE Vernova T&D as compared to previous agreed rates: Assam**

**Background:**

The SCADA system utilizes two sets of firewalls-*Internal and External*. The set of internal firewalls had been replaced in FY 2023-24 at a price of Rs. 23 Lakhs. The price was agreed upon after deliberation in the NERPC forum.

License of the set of external firewalls used in SCADA will expire on 26th March 2026. The product has already reached End-Of-Life and hence its license

cannot be extended any further. So, a new set of external firewalls have to be procured.

**AMC Status:**

Meanwhile, the AMC of the SCADA system has been extended (from 12.11.2025 to 11.11.2026) beyond the scope of the initial AMC.

Despite several meetings at NERPC and SLDC with M/S GE Vernova T&D India Ltd (AMC provider for SCADA at SLDC), support for End-Of-Life devices could not be included in the scope of this extended AMC.

**Financial Offer Received:**

A financial offer was requested from M/S GE Vernova T&D India Ltd. and the same has been obtained.

The price quoted by M/S GE Vernova T&D India Ltd is Rs. 44,37,000.00 for supply, installation and commissioning two no of firewalls excluding GST. *Considering GST at 18%, the total price would be Rs. 52,35,660.00.*

**Issue for Forum's Consideration:**

Two firewalls were procured from M/S GE Vernova T&D India Ltd. in December 2023 at a price of ₹23.00 Lakhs. Budget provisions for the procurement of two external firewalls in FY 2025-26 were accordingly made on the basis of this established price point.

However, the price now quoted by M/S GE Vernova T&D India Ltd. is nearly double the previously agreed and paid price, which is a matter of significant concern.

**The forum is hereby requested to deliberate on the matter and intervene appropriately so that the procurement can be concluded at a fair and reasonable price.**

***Members may deliberate.***

## **AGENDA FROM MEGHALAYA**

### **2.19. High cost of Firewalls quoted by M/S GE Vernova T&D as compared to previous agreed rates: Meghalaya**

SLDC Meghalaya had received the information from GE Vernova that the License for the Check Point 5400 firewall had expired in March 2026 ,it may be noted that the Check Point 5400 firewall had reached End of Support (EOSL) on December 2025.SLDC Meghalaya had been in correspondence with GE Vernova regarding this matter and it was mentioned that an upgrade/change of the hardware was also required.On enquiry from another constituent state it was found out that the rates offered from GE GE Vernova for new replacement of the firewall was quiet high .Since the existing Check Point 5400 firewall is the external F/W and the architecture is the same for all NER constuitents .Meghalaya would like to request the forum to negotiate on the price for all the constituent states together .

Considering the cyber security significance of this External Firewall for the SCADA-EMS (OT System) at SLDC and to counter the cybersecurity risks,including exposure to new vulnerabilities,chances of service disruption due to unpatched threats , this matter may be taken up with GE Vernova for uniformity in price for all the constituents and thereby reduce the financial implications for the states.

***Members may deliberate.***

### **2.20. AMC for Metering and AMR Component of SAMAST — Cost Submitted by M/s Genus Power Infrastructure Ltd. Exceeds Original Tender's Own ATS Figures Despite Revised and Reduced Scope of Work: Meghalaya**

***Subject:***

M/s Genus Power Infrastructure Ltd. was awarded the contract for supply, installation, and commissioning of the Metering and AMR infrastructure for the SAMAST project across all seven NER States under two LOAs issued by NERPC (2020 and 2021). With the warranty period now concluded, the

Annual Maintenance Contract (AMC) for this component is required to be put in place.

NERPC has been pursuing this AMC over the past several months on behalf of all NER States. Despite extensive engagement — including a special meeting in September 2025, issuance of a revised and rationalised scope of work in October 2025, a further meeting in January 2026, and additional relaxations agreed in February 2026 — the final offer submitted by M/s Genus on 06.04.2026 has not reduced in line with the revised scope. Instead, it is priced higher than what was permissible even under the original tender's own ATS provisions.

**Core Issue:**

The original SAMAST tender contained an explicit ceiling on post-implementation support cost:

"The price quoted under Comprehensive ATS for 3 years should not exceed 75% of the project implementation cost under this tender."

This 75% ceiling was the reference point. The revised scope of work issued in October 2025 was specifically intended to rationalise the AMC scope further — meaning the expected AMC cost under the revised scope should have been lower than even that 75% ceiling.

Instead, the offer submitted by M/s Genus on 06.04.2026 exceeds the original tender's ATS figures in every NER State — as if the revised scope and the months of negotiation never happened.

State wise comparison (In crores):

The green-shaded columns show the maximum ATS cost permissible under the original tender (75% cap). The red-shaded columns show what M/s Genus has actually submitted. All figures inclusive of tax where stated.

Sl No	NER State	Meters (Nos)	DCU (Nos)	Ind. Eth Switch (Nos)	Project Impl. Cost (₹ Cr, excl. Tax)	Project Impl. Cost (₹ Cr, incl. 18%)	Original Tender ATS 3yr Cap (₹ Cr, excl. Tax)	Original Tender ATS 3yr Cap (₹ Cr, incl. Tax)	Genus New Offer AMC 5yr (₹ Cr, incl. Tax)	Genus New Offer AMC 3yr (₹ Cr, incl. Tax)
1	Meghalaya	225	47	79	2.68	3.16	2.01	2.37	4.73	2.84

SI No	NER State	Meters (Nos)	DCU (Nos)	Ind. Eth Switch (Nos)	Project Impl. Cost (₹ Cr, excl. Tax)	Project Impl. Cost (₹ Cr, incl. 18%)	Original Tender ATS 3yr Cap (₹ Cr, excl. Tax)	Original Tender ATS 3yr Cap (₹ Cr, incl. Tax)	Genus New Offer AMC 5yr (₹ Cr, incl. Tax)	Genus New Offer AMC 3yr (₹ Cr, incl. Tax)
2	Assam	560	100	216	4.18	4.93	3.14	3.70	7.39	4.43
3	Arunachal Pradesh	55	12	5	4.25	5.02	3.19	3.76	7.53	4.52
4	Manipur	475	94	94	6.47	7.63	4.85	5.73	11.45	6.87
5	Mizoram	223	96	12	5.14	6.07	3.86	4.55	9.10	5.46
6	Nagaland	128	24	10	4.64	5.48	3.48	4.11	8.22	4.93
7	Tripura	261	39	30	5.34	6.30	4.01	4.73	9.45	5.67
	<b>TOTAL</b>	<b>1927</b>	<b>412</b>	<b>446</b>	<b>32.70</b>	<b>38.59</b>	<b>—</b>	<b>28.94</b>	<b>57.88</b>	<b>34.73</b>

Key observation: The Genus 3-year AMC offer of ₹34.73 Crore (total, all States, incl. tax) is higher than the original tender's own permissible ATS ceiling of ₹28.94 Crore — an excess of ₹5.79 Crore. In Meghalaya, the 3-year offer alone (₹2.84 Cr) exceeds the entire project implementation cost (₹2.68 Cr excl. tax / ₹3.16 Cr incl. tax). The revised scope was issued to bring costs down — the submission has instead gone up.

**Note:** To put the Genus offer in perspective — the cost submitted by M/s Genus for a 5 -year AMC is comparable to the cost of procuring and deploying an entirely new SAMAST infrastructure at each SLDC. In reality, the meters, DCUs, and servers are already installed, commissioned, and largely stable. Metering hardware of this nature does not require intensive intervention — the day-to-day requirement is essentially periodic preventive maintenance, with corrective support only when needed. It was precisely for this reason that the original tender's 75% ATS ceiling was set as a ceiling, and thereafter the revised scope of work was issued — both steps taken specifically to rationalise the AMC cost to a level that is affordable and justifiable, so that NER State utilities can process the AMC award through their internal approval mechanisms without requiring extraordinary financial sanction or high-level justification. The offer submitted by M/s Genus defeats this purpose entirely.

**Other points noted in the offer:**

- All-or-Nothing Condition: Genus has conditioned their pricing on the LOA being awarded by all seven States simultaneously. If even one State is unable to award within the same timeframe, the offer lapses for all States.
- Scope Restricted to Original LOA Equipment Only: Any work beyond the equipment supplied under the original LOAs — including new meter integration or additional software support — has been excluded and will be charged separately.
- Offer Not Aligned with Revised Scope: The offer submitted on 06.04.2026 is based on the original LOA terms, not the revised scope of work issued on 09.10.2025 and 18.02.2026.

***Placed before the forum for discussion.***

***Members may deliberate.***

## **AGENDA FROM GENUS**

### **2.21. Long outstanding payments pending across states: GENUS**

#### **1. Pending payments**

Support Required for long outstanding pending payment.				
SL No	State	Pending Payment ( In Lakhs)	Ageing	Support Required from NERPC
1	Manipur	82.51	Payment pending for over 13 months now	PSDF had released the funds; however, the amount was returned due to non-payment by MSPCL within the deadline of 31st March. Request NERPC's support in pursuing PSDF for re-release of the funds.
1	Mizoram	57.44	Payment pending for over 20 months now	Requisition has been submitted to PSDF. Request NERPC's support in expediting the release of funds.

5	Tripura	117.19	Payment pending for over 20 months now	Requisition has been submitted to PSDF. Request NERPC's support in expediting the release of funds.
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**2. Finalization of AMC Order**

We have submitted our offer for all seven states to NERPC and request your favorable consideration for the same and the issuance of the LOA at the earliest.

It may kindly be noted that the prices offered are our most competitive and are based on the assumption that LOAs will be awarded for all seven states. The offer shall not remain valid if the LOA is not awarded for even one state, as per the state-wise pricing submitted.

***Members may deliberate.***

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

#### **3.1. Usage of POWERTEL OPGW in view of the order of Hon'ble CERC against petition no. 494/MP/2020. (Agenda 2.4 of 32nd NETeST Meeting): NERLDC**

During the 32nd NETeST Meeting, it was decided to utilise the following OPGW links at the earliest:

1. **400 kV Silchar – Imphal line:** The matter would be taken up with POWERTEL at the earliest.
2. **400 kV Balipara–Bongaigaon Lines 3 & 4-** The matter has already been taken up with POWERTEL and is in progress.
3. **132 kV Kumarghat–Aizawl line-** There is high loss in this link. PGCIL will submit detailed loss report (OTDR) within 15 days.

***POWERGRID-ULDC may update the status of each OPGW link.***

#### **3.2. Optimised utilisation of OPGW & FOTE across the NER considering the assets that are being commissioned under NERPSIP, Comprehensive T&D, State-owned projects, TBCBs and ULDCs: (Agenda 2.5 of 32nd NETeST Meeting): NERLDC**

With the recent commissioning of numerous links under various State and Central projects, the communication infrastructure of the NER Grid has witnessed significant development. However, the optimal utilization of the infrastructure is essential to derive its full benefits. As per direction of 32nd NETeST, a letters from office of CGM (Logistics), NERLDC was written to POWERGRID-ULDC, POWERGRID-NERPSIP and CTDS-AP to carry out necessary connectivity of networks, attached as **Annexure-C 3.2 (i)** and **Annexure-C 3.2 (ii)**. The details as per 32nd NETeST are tabulated below:

<b>Sl. No.</b>	<b>Name of link/node</b>	<b>Deliberation as per 32nd NETeST Meeting</b>
1.	BNC-HVDC → Balipara → Rangia → Bongaigoan → Alipurduar	PGCIL informed that fibre connectivity from HVDC BNC to Rangia is healthy, whereas the link from Rangia to Alipurduar is experiencing high losses. Rectification work is in progress and may take some time. PGCIL has been advised to submit the loss report within a week.
2.	Tinsukia →Kathalguri → Namsai →Tezu - - -> Roing - - -> Pasighat → Along → Basar →Daporizo →Ziro	NERLDC informed that inter-patching at Kathalguri is pending, along with OPGW connectivity between Namsai–Tezu and SDH connectivity between Roing–Pasighat. CTDS and POWERGRID agreed to jointly complete the required connections.
3.	Kameng → Khupi → Tenga → Balipara	NERLDC apprised that inter-patching is pending from Balipara to Kameng which will enable a ring communication for Kameng.
4.	Inter-patching between FOTE of ULDC and NERPSIP-Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura	Letter with reference NERLDC/Communication/Oct'25/8422 dated 23.10.2025.

***POWERGRID-ULDC, POWERGRID-NERPSIP and POWERGRID-CTDS are requested to update the status.***

### **3.3. Establishing Communication Link between 400 kV New Kohima and 220 kV Zhadima via 220 kV Zhadima–New Kohima Line – Restoration of Connectivity in View of Link Failure: (Agenda 2.6 of 32nd NETeST Meeting): NERLDC**

The communication link between **400 kV New Kohima** and **400 kV Imphal** has remained **non-functional since June 2024**. Restoration efforts by **Aparva (TSP)** have been hindered due to prevailing **law and order issues in Manipur**, resulting in a prolonged outage and communication blackout at New Kohima.

However, there exists an alternative opportunity to restore connectivity through the **OPGW laid on the 220 kV Zhadima–New Kohima transmission line**, which is being executed by the **Department of Power (DoP), Nagaland**.

- A **Fibcom FOTE** is installed at **220 kV Zhadima**.
- An **ABB FOTE** is available at **400 kV New Kohima**.

A direct fiber patch between these FOTEs using the available OPGW on the Zhadima–New Kohima line can restore essential communication for New Kohima until the primary route via Imphal is re-established.

**In the 32nd NETeST Meeting**, DoP-Nagaland informed that approach cabling work is in progress from New Kohima (Aparva, KMTL) to Zhadima (DoP-N) and is expected to be completed by November-2025. The forum further advised PGCIL and KMTL to provide hardware support at Zhadima and New Kohima respectively, if required.

***DoP-Nagaland is requested to provide the status of completion status of 220 kV Zhadima – New Kohima line.***

### **3.4. Request to integrate data of Panyor and Pare in Chimpu S/s RTU (Agenda 3.6 of 32nd NETeST Meeting): NERLDC**

NERLDC observed that the data (MW, MVAR, CB, and isolators) for Panyor and Pare bays at Chimpu S/s is not being reported. Upon further analysis, it has come to NERLDC's attention that MFTs and CMRs for the mentioned bays are

yet to be installed. Since the above-mentioned lines are connected to ISGSs, monitoring of the same is imperative from Chimpu end also.

NERLDC requested DoP, Arunachal Pradesh to carry out the following actions to enable data reporting for the mentioned bays via email dated 17th February 2025 and reminder mail on 11th March 2025, 16th April 2025, 08th May 2025, 05th August 2025, 18th March 2026 and 02nd April 2026 attached as

**Annexure-C 3.4:**

**1. Installation of MFTs:**

- MFTs need to be installed for both bays.
- Appropriate CT and PT connections must be completed.
- MFTs should then be integrated with the Chimpu RTU.

**2. Installation of CMRs:**

- CMRs need to be installed for both bays.
- CB and isolator status should be integrated with the Chimpu RTU.

In the 32nd NETeST Meeting, DoP-Arunachal Pradesh informed the forum that the wiring issue has been pending due to manpower issues. The forum advised DoP-Arunachal Pradesh to expedite the matter and resolve the issue within a month on priority basis.

***DOP-Arunachal Pradesh is requested to update the status.***

**3.5. Dual Connectivity between Main-1 & Main-2 NERLDC and SLDCs (Agenda 3.9 of 32nd NETeST Meeting)**

NERLDC currently operates under the Main-1 and Main-2 concept, with its establishments located in Shillong and Guwahati. This structure enhances operational efficiency and ensures redundancy in case of failures. To strengthen grid reliability and communication resilience, a dual independent physical connectivity path between NERLDC and State Load Despatch Centres (SLDCs) is crucial.

In case of last mile connectivity all SLDCs should ensure that the minimum two physical OPGW/underground/ADSS fiber is available between SLDC and the last mile sub-station.

ULDC-NERTS and SLDCs are requested to ensure the dual independent physical path between SLDC and Main-1 & Main-2 NERLDC.

NERLDC has submitted the preliminary map of each SLDC in 31st NETeST Meeting which is attached as **Annexure-C 3.5**.

In 32nd NETeST Meeting, the forum advised all the states/SLDCs to devise their respective plans for dual connectivity between SLDCs and their last mile connectivity and subsequently to NERLDC and share the plan at the earliest.

The proposed plan by NERLDC for each SLDC is tabulated:

<b><i>Name of State</i></b>	<b><i>Status as per 32nd NETeST</i></b>	<b><i>Deliberation in 33rd NETeST</i></b>
Arunachal Pradesh	Already achieved as SLDC Arunachal Pradesh is established in 132 kV Chimpu S/s which is in-turn connected with multiple stations such as Pare, Nirjuli, Lekhi etc.	
Assam	The multiple paths will be achieved once the connectivity of NERLDC Guwahati with Kahilipara S/s, via UFGO is completed under reliable communication scheme.	
Manipur	MSPCL – representative not available	

Meghalaya	<p>Already achieved as SLDC Meghalaya is established in 132 kV NEHU S/s which is further connected with multiple stations such as Mawlai, umtru etc.</p>	
Mizoram	<p>NERLDC informed that currently SLDC Mizoram is only connected with 132 kV Zuangtui S/s, which does not satisfy the redundancy.</p> <p>Forum suggested to SLDC Mizoram to establish a new connection between SLDC Mizoram and 132 kV Lungmual S/s or SLDC Mizoram and 132 kV Aizawl (PG) S/s via ADSS or city-fibre cable at the earliest.</p> <p>NERLDC requested SLDC Mizoram to submit the plan at the earliest.</p>	
Nagaland	<p>DoP, Nagaland informed the scheme has been recently sanctioned by 24th Meeting of the Monitoring Committee of PSDF. LoA has been</p>	

	<p>placed and work is under progress under which SLDC Nagaland will be directly connected to 220 kV Dimapur (PG) S/s.</p> <p>SLDC Nagaland also informed that currently SLDC Nagaland is connected with 132 kV Nagarjan S/s hence the dual connectivity will be achieved.</p>	
Tripura	<p>SLDC Tripura informed that SLDC Tripura is connected with 132 kV SM Nagar (TPTL) as well as 132 kV RC Nagar (NEEPCO)</p>	

***Members may update.***

### **3.6. Re-configuring RTUs of POWERGRID owned stations for reporting to NERLDC Guwahati (as per Agenda 3.11 of 32nd NETesT): NERLDC**

With help of PGCIL-NERTS and PGCIL-ULDC eleven (12) stations out of sixteen (16) stations are reporting parallelly to NERLDC Shillong and NERLDC Guwahati.

POWERGRID-NERTS was requested to extend further support to configure rest four (04) stations to enable them to report to NERLDC Shillong and NERLDC Guwahati. The status is tabulated below:

<b>Sl. No.</b>	<b>Sub-station</b>	<b>Status as per 236th OCC meeting</b>
1	Misa	Target: August 2026

2	Mokokchung	Target: End of May 2026
3	Roing	Target: End of May 2026
4	Tezu	Target: End of May 2026

***POWERGRID is requested to update the status.***

### **3.7. Discussion on operational issues and punch points for UNMS of NER (as per Agenda 3.31 of 32nd NETeST): NERLDC**

In view of the meeting held on 16th July 2024 between Grid-India, POWERGRID & CTUIL, letters addressed to ULDC-POWERGRID by NERLDC and NERPC meeting held on 18th December 2024. Following operational issues and punch points are yet to be resolved by ULDC-POWERGRID:

#### **A. Partially closed points**

Following points are partially closed by ULDC-POWERGRID:

#### **1. Integration of NMS of NERPSIP and Comprehensive T&D-Arunachal Pradesh with U-NMS System – State-wise Progress (As per 9th CPM held on 16th March 2026):**

- Arunachal Pradesh: Delivery is received and commissioning of Arunachal Pradesh-NMS is yet to be done.
- Manipur: Installation and commissioning work is completed, and integration works of same NMS with UNMS will be completed by March end.
- Nagaland: Only integration of Nagaland-NMS with UNMS part is pending. However, ULDC informed that New Kohima – Mokokchung path is yet to be completed as SFP supply is pending, which is required to complete NMS path.
- Meghalaya: Installation and commissioning work is completed and integration works will be completed by March end.
- Mizoram: NERPSIP-NMS is yet to be commissioned and NMS shall be integrated with UNMS after commissioning of NERPSIP-NMS

**2. Integration of Fiber Optic Terminal Equipment (FOTE) for Various TSPs and ULDC (MUML, Aparva, and Indigrid) – Incomplete SNMP Integration and Configuration Updates (As per 9th CPM held on 16th March 2026):**

In the 9th CPM held on 16th March 2026 NERLDC stated that TSPs are not attending the meeting on regular basis and requested to take up with all other TSPs for completion of the work at the earliest.

- Indigrid: Several nodes have been partially integrated and are visible in the U-NMS system. However, these nodes are currently not communicating over the SNMP protocol, which is necessary for full operational integration and status monitoring within U-NMS. The support from Indigrid is required.
- Aparva (KMTL): Integration remains pending due to the absence of a required gateway IP configuration, which is to be provided by the vendor ABB. This has caused long-standing delays in completing integration of critical nodes like New Kohima, Imphal, and Mariani. The support from Aparva (KMTL) is required.
- Sterlite node: Tejas devices commissioned by Sterlite at 220 kV Nangalbibra and 400 kV Bongaigaon

***B. Points yet to be addressed***

**1. 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. In a special triparty meeting held between NERLDC, POWERGRID and M/s Sterlite (OEM) on 16th March 2026, OEM informed that work is in progress however following information is required:

1. End devices list with substation details with Technology (RTU, PMU, VOIP, TWFL, ICCP and ETC.)
2. Required details intermediate dropping services with VCG port detail from OEM to identify service path E2E.

## **2. Supply of 2 x 6 kVA UPS System across NER SLDCs and NERPC:**

Presently, the U-NMS System delivered at NER SLDCs & NERPC are on raw power supply in absence of healthy UPS System at NER SLDCs & NERPC. So, it was decided that 2 x 6 kVA UPS Systems would be procured and delivered/commissioned at respective sites.

In 32nd NETeST meeting, POWERGRID informed that UPS would be deployed by Jan'26.

### **C. New operational issue discovered:**

#### **1. Mismatch in Status of Links in U-NMS for ABB devices under NERPSIP-Assam:**

NERLDC observed discrepancies between the actual status of link availability and the status displayed in the U-NMS system for ABB devices deployed under NERPSIP-Assam. These inconsistencies are misleading and undermine the reliability and utility of the U-NMS system.

The issue discovered during the investigation of Chapakhowa Node, the OPGW connectivity of Chapakhowa with Rupai is down but still the node is showing up in the UNMS. The snap is attached for reference.

NERLDC requests to complete integration of NMS of ABB with U-NMS.

#### **2. Discrepancies in the UNMS regarding Fibcom services**

NERLDC observed the following discrepancies in the UNMS regarding Fibcom services that are impacting operational clarity:

- a. **Inaccurate Routing Visualization:** Following the recent re-routing via the Balipara - Bongaigaon path, several services—such as the Guwahati-Delhi ICCP (VLAN 1006)—continue to display their previous configurations rather than the active path.

**Incorrect Service Status:** The UNMS is reporting services as "UP" despite active outages. For instance, both the Guwahati-Delhi ICCP (VLAN 1006) and Guwahati-Kolkata ICCP (VLAN 938) currently show as "UP" in the system, even though they are down due to the Bongaigaon - Balipara issue.

***Members may deliberate.***

### **3.8. Missing link OPGW in 132 kV Karong-Kohima line (as per Agenda 3.14 of 32nd NETesTMoM): NERLDC**

NERPSIP-Manipur has laid OPGW from Karong (in Manipur) up to Mao (the border of Manipur and Nagaland). However, there is currently no project planned to extend the OPGW from Mao to Kohima, which is necessary to complete the link from Karong to Kohima. This line is an ISTS connection between the two states. The OPGW connectivity will enhance the reliability and redundancy of the power systems in both Manipur and Nagaland, as well as for the entire North Eastern Region (NER).

As per MOM of 32nd CMETS-NER, DoP, Nagaland has agreed to install OPGW and associated equipment in the Nagaland portion of 132 kV Kohima (Nagaland) – Karong line i.e in the Mao to Kohima portion. (Please refer to Points 2.9 and 2.10 of MOM of 32nd CMETS-NER).

**In 29th NETeST Meeting** DOP Nagaland has been requested to prepare a DPR to be submitted to PSDF under State Reliable Communication Scheme or any other suitable scheme for 100% funding from PSDF.

**In 30th NETeST Meeting**, DOP-Nagaland informed that they shall update the status of DPR via e-mail to NERPC.

**In 31st NETeST Meeting**, DOP-Nagaland apprised the forum that they will submit a separate DPR for Mao-Kohima link for PSDF funding as the same was not included in the State Reliable Communication Scheme for Nagaland which has been recently approved by PSDF.

**In 32nd NETeST Meeting**, DOP-Nagaland informed that they are in process to submit a separate DPR for Mao-Kohima link for PSDF funding. The proposed link connection is shown below:

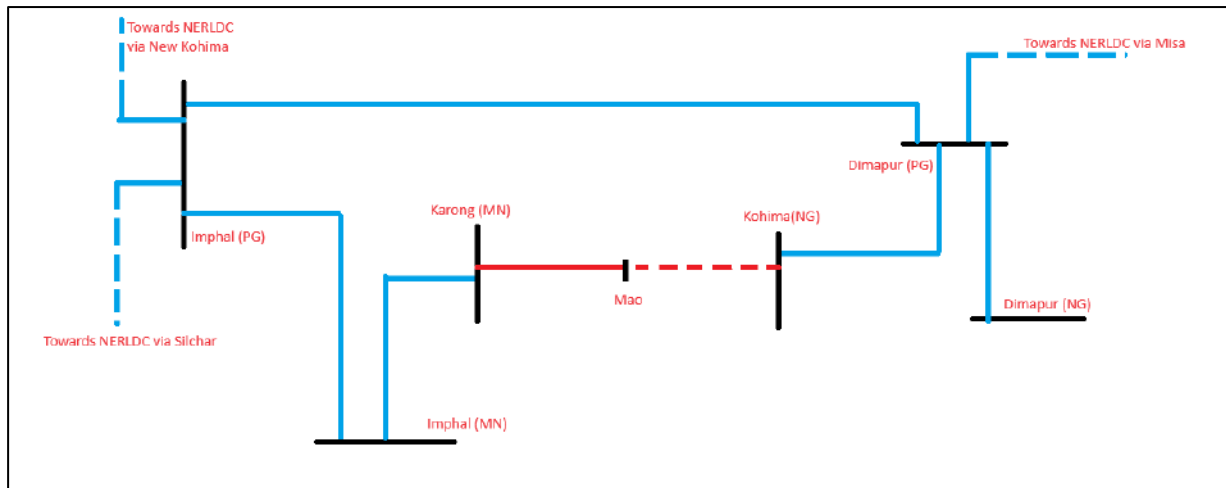


Figure 1: Connectivity Depicting Karong-Kohima

***DoP-Nagaland may update the status.***

### **3.9. Feeble condition of State-Estimator of NERLDC SCADA system due to low availability of Real-time Telemetry. (as per Agenda 3.1 of 32nd NETeST MoM): NERLDC**

*As per IEGC 33.2, “SLDCs, RLDCs and NLDC shall utilize network estimation tool integrated in their EMS and SCADA systems for the real time operational planning study. All users shall make available at all times real time error free operational data for the successful execution of network analysis using EMS/SCADA. Failure to make available such data shall be immediately reported to the concerned SLDC, the concerned RLDC and NLDC along with a firm timeline for restoration. The performance of online network estimation tools at SLDC and RLDC shall be reviewed in the monthly operational meeting of RPC. Any telemetry related issues impacting the online network estimation tool shall be monitored by RPC for their early resolution.”*

It is to report that the real-time telemetry availability for states such as Tripura, Mizoram, Manipur, and others is currently in the range of 30-60%. This low availability is significantly impacting the accuracy of state estimation, which relies heavily on the status of Circuit Breakers (CBs), Isolators, and Analog values to ensure reliable estimates. It is highlighted that the feeble state estimation is a direct consequence of the inadequate real-time telemetry

data. The states are therefore strongly urged to prioritize the integrity of their Remote Terminal Units (RTUs) and communication systems to enhance the availability and quality of real-time telemetry data. This improvement is crucial for achieving accurate state estimation and ensuring the stability and reliability of the power system in the region.

In 32nd NETeST Meeting, Member Secretary, NERPC advised all the states to aspire for 95% minimum telemetry availability.

The present status of NER-states is attached as **Annexure-C 3.9**.

***All states are requested to update the progress and status.***

**3.10. Adherence to CERC order dated 04th August 2023 for petition 197/MP/2020 (Arunachal Pradesh), 201/MP/2020 (TPTL), 263/MP/2020 (DoP, Nagaland) and 556/MP/2020 (PE&D, Mizoram). (as per Agenda 3.18 of 32nd NETeST MoM): NERLDC**

NERLDC would like to draw the forum's attention to the adherence by states to the CERC order dated 04th August 2023, concerning petition 197/MP/2020 (Arunachal Pradesh), 201/MP/2020 (TPTL), 263/MP/2020 (Department of Power, Nagaland), and 556/MP/2020 (Power & Electricity Department, Mizoram).

**In 29th NETeST Meeting**, NERLDC informed that only PE&D, Mizoram has been submitting the monthly progress report while DOP-Arunachal Pradesh, DOP-Nagaland and TPTL (Tripura) has not yet submitted the monthly progress report to NERPC and NERLDC. MS NERPC has further emphasized the need to adhere to CERC order strictly and comply accordingly.

However, DOP-Arunachal Pradesh, DOP-Nagaland and TPTL (Tripura) are yet to submit the progress report.

**In the 30th NETeST Meeting**, the forum decided that DOP-Arunachal Pradesh, DOP-Nagaland and TPTL (Tripura) shall update the status via e-mail to NERPC.

**In 32nd NETeST Meeting**, forum advised Tripura and DoP-Ar. Pradesh to comply with CERC order in the above petitions and submit the monthly progress report in timely manner.

NERLDC also sent the reminder mail to Tripura and DoP-Ar. Pradesh on 23rd March 2026, attached as **Annexure-C 3.10 (i) & Annexure-C 3.10 (ii)**. However, NERLDC is yet to receive the report from Tripura and DoP-Ar. Pradesh.

***Arunachal Pradesh and Tripura may update.***

### **3.11. Status of State reliable communication scheme (Agenda 3.20 of 32nd NETeST Meeting): NERLDC**

In the 26<sup>th</sup> Monitoring Committee meeting of PSDF held in the December 2025, it was decided by the committee that NER States will be funded 90% from PSDF instead of earlier 100% funding and rest 10% funding will be funder from state owned sources. In this regard NERLDC requests each state to kindly update on the status of submission of DPR to PSDF.

<b><i>Name of State</i></b>	<b><i>Status as per 32nd NETeST</i></b>
Arunachal Pradesh	DoP-Arunachal Pradesh informed that the proposals are already covered in Comprehensive Scheme (CTDS) so they would not submit DPR for PSDF funding.
Assam	DPR submitted to PSDF and under review of TESSG Committee.
Manipur	MSPCL – representative not available
Meghalaya	DPR submitted to PSDF and under review of TESSG Committee.

Mizoram	Mizoram apprised that the DPR would be submitted to PSDF in the first week of September-2025.
Nagaland	DoP, Nagaland informed the scheme has been recently sanctioned by 24th Meeting of the Monitoring Committee of PSDF.
Tripura	Tripura apprised the forum that the DPR would be submitted to PSDF by September-2025.

***Members may update.***

### **3.12. Implementation of Guwahati Islanding Scheme (Agenda 3.21 of 32nd NETeST Meeting): NERLDC**

In 27th NETeST Meeting, AEGCL informed that Detailed Project Report (DPR) for the Guwahati Islanding Scheme has been formally submitted to the Power System Development Fund (PSDF) for review and consideration. SLDC, Assam also informed that DPR for the communication part shall be submitted shortly. In 28th NETeST Meeting, AEGCL informed that DPR for the communication part would be submitted by 3rd week of May'24.

In 29th NETeST Meeting, AEGCL informed that the revised DPR has been submitted to PSDF on 06th July 2024.

In the 30th NETeST Meeting, the forum decided that AEGCL/SLDC, Assam shall update the status via e-mail to NERPC.

In the 31st NETeST Meeting, AEGCL/SLDC Assam informed that response from PSDF is still awaited. Status may be updated.

In the 32nd NETeST meeting, it was informed that monitoring committee has approved the funding of Guwahati Islanding Scheme.

***Assam may update.***

### **3.13. Non-availability of real-time data pertaining to POWERGRID-owned bays installed at AEGCL-owned stations (Agenda 3.22 of 32nd NETeST Meeting): NERLDC**

It has been observed that the real-time data of POWERGRID-owned bays installed at AEGCL stations are not reporting to NERLDC. These bays have been identified as follows:

- a) Silchar bays installed at Srikona station isolator data since 28th Nov - 2022.
- b) Silchar bays installed at Hailakandi.
- c) 132 kV BNC HVDC bays at Pavoi S/s.

All these bays are ISTS elements, thus data availability is important for real-time drawl calculation and monitoring of ISTS element. Thus, POWERGRID is requested to update the status as per the table below:

<b>Sl. No.</b>	<b>Name of Bay</b>	<b>Latest status (as per 32nd NETeST Meeting)</b>
1.	Silchar bays installed at Srikona station	The forum advised Assam to resolve the issues for Silchar bays installed at Srikona and Hailakandi substation at the earliest.
2.	Silchar bays installed at Hailakandi.	

***Members may update.***

### **3.14. Restoration of OPGW owned by Manipur (Agenda 3.22 of 32nd NETeST Meeting): NERLDC**

It has been noticed that seven stations i.e., 132 kV Chandel, 132 kV Churachandpur, 132 kV Hundung, 132 kV Kakching, and 132 kV Kongba of Manipur are not reporting due to outage of 132 kV Churachandpur –

Ningthoukhong OPGW link. It was reported that there is a break in the Optical Ground Wire (OPGW) approximately eight (08) Kilometers from the 132 kV Ningthoukhong Substation. However, the rectification work could not be undertaken as the subjected OPGW installation was done by POWERGRID-ULDC under NER-FO. Incomplete Handing over documents (absence of signatures by POWERGRID executives) was furnished by POWERGRID to SLDC, Manipur on 06th April 2021. SLDC Manipur has requested ULDC-POWERGRID to sign the documents on 11th December 2023. SLDC Manipur has conveyed that proper documentation is essential for addressing the issue. The forum requested POWERGRID furnish complete handing over document. During 28th NETeST Meeting, POWERGRID-ULDC informed that in a meeting with Managing Director, MSPCL, Manipur had requested POWERGRID to complete the entire task. However, the financial aspects of the work were not discussed with MSPCL. Member Secretary, NERPC advised POWERGRID and MSPCL to discuss the issue bilaterally.

During 29th NETeST Meeting, ULDC-NERTS informed that all necessary documents has been handed over to SLDC, Manipur in April 2024. However, Manipur has requested ULDC-NERTS to complete this work. ULDC-NERTS assured the forum to complete the work within three months after having discussion internally.

In the 30th NETeST Meeting, the forum decided that POWERGRID-ULDC and MSPCL shall update the status via e-mail to NERPC.

In the 31st NETeST Meeting, POWERGRID-ULDC informed that matter has been taken up internally by MSPCL for restoration of the OPGW link.

In the 32nd NETeST meeting, NERLDC apprised the forum that official letter in connection to the matter has been sent to MD, MSPCL.

***Members may update.***

**3.15. Status of Fiber-Optic works under different projects (Agenda 3.25 of 32nd NETeST Meeting): NERLDC**

S. No.	Link name	Utilities which may respond	As per 32nd NETeST
<b>I. Fiber Optic Expansion Projects</b>			
<b>Central Sector</b>			
2	400kV Bongaigaon (PG) - 220kV Salakati - 220kV BTPS	POWERGRID- NERTS	The original vendor M/s TCIL has agreed to restart the work. Expected to be completed by December-2025.
3	400kV Mirza (Azara) - Byrnihat (Killing)		The original vendor M/s TCIL has agreed to restart the work. Expected to be completed by December-2025.
4	400kV Silchar - Palatana		The original vendor M/s TCIL has agreed to restart the work. Expected to be completed by December-2025.

***Members may update.***

### **3.16. Status and details of Fiber-Optic projects approved in 17th TCC/RPC meeting (Agenda 3.26 of 32nd NETeST Meeting): NERLDC**

**A. Additional Communication Scheme:** Status may be provided

**Action: POWERGRID-ULDC may update the status.**

**B. Reliable Communication Scheme:**

- a. Replacement of existing fibre: Status may be provided
- b. Fibre on new lines: Status may be provided

**Action: POWERGRID-ULDC may update the status.**

### **3.17. Integration of Dikshi HEP real time data and pending Voice communication (Agenda 3.27 of 32nd NETeST Meeting): NERLDC**

As per 23rd NETeST meeting, DoP-Arunachal Pradesh informed that PLCC panel at Khupi for the erstwhile 132kV Balipara – Khupi will be shifted to Tenga and one (1) out of the two (2) new panels at Tenga will be shifted to Khupi. Thereafter, PLCC for 132kV Balipara-Tenga and 132kV Tenga-Khupi shall be operational. It was assured that the above works along with data reporting to respective SCADA system shall be completed by Aug'22

During 25th NETeST meeting, DoP, Arunachal Pradesh informed that Devi Energies Pvt. Ltd. has purchased PLCC panel for locations Dikhsi, Khupi and Balipara, which are delivered at sites but these PLCC panels are not compatible with PLCC panels present in Khupi and Balipara. Therefore, integration is held up at sites. The forum requested DoP, Arunachal Pradesh to resolve the matter bilaterally with M/s Devi Energies.

During 29th NETeST Meeting, DOP-Arunachal Pradesh informed that Dikshi HEP is now connected to a dedicated leased line from July'24 onwards and they are in the process of connecting the VOIP phone.

In the 32nd NETeST meeting, Forum advised DoP, Arunachal Pradesh to expedite the matter at the earliest.

**DoP-AP, is requested to update the status.**

### 3.18. Automatic Generation Control (AGC) in Indian Grid (Agenda 3.28 of 32nd NETeST Meeting): NERLDC

The status is tabulated below:

<b>Station Name</b>	<b>Status as per 31st NETeST Meeting</b>	<b>Status as per 32nd NETeST Meeting</b>
AGBPP (Kathalguri)	NEEPCO mentioned that AGC cannot be implemented in STG as it is only slave to GTG. NEEPCO raised the concerned regarding the ramping UP/down for the gas/steam. MS NERPC informed to follow as per discussion with Member Technical CERC and keep the AGC system ready	NEEPCO once again mentioned that AGC cannot be implemented in STG as it is only slave to GTG. NEEPCO raised the concerned regarding the ramping UP/down for the gas/steam. Forum requested NEEPCO to approach the CERC for necessary exemption.
Doyang	Order placed for one unit and will be upgraded during 40days shutdown. After completion of one-unit, subsequent unit will be executed.	The SCADA and DCS of remaining two units will be carried out during lean hydro period i.e., Nov'25 – Dec'25. After which AGC commissioning will be carried.
Khandong Stage	NEEPCO yet to decide whether to implement AGC or not as the system rating has been revised to 23MW.	Implementation is under progress along with Stage-1 units.
Khandong	Under progress	Implementation is under progress along with Stage-1 units.

<b>Station Name</b>	<b>Status as per 31st NETeST Meeting</b>	<b>Status as per 32nd NETeST Meeting</b>
Kameng	Quotation not yet received from vendor.	M/s BHEL has not provided the quotation till date. NEEPCO is trying to acquire the quotation at the earliest.
Ranganadi (Panyor)	Quotation not yet received from vendor.	Quotation is received and further discussions are going with Vendor for the implementation.
Pare	Upgradation of DCS required. Quotation received from vendor.	Implementation work will start during lean hydro period.
RC Nagar	NEEPCO mentioned that due to gas shortage 1 module is always in off condition. For rest module, same shall be followed as per discussion with member technical CERC	NEEPCO mentioned that due to gas shortage 1 module is always in off condition. Forum requested NEEPCO to approach the CERC for necessary exemption.
Palatana	OTPC raised the concerned regarding the ramping UP/down for the gas/steam. MS NERPC informed to follow as per discussion with Member Technical CERC and keep the AGC system ready.	OTPC was not present. However, forum requested OTPC to approach the CERC for necessary exemption.

**Members may update.**

### **3.19. Feasibility to connect Lekhi Substation over Fiber-Optic Network (Agenda 3.30 of 32nd NETeST Meeting): NERLDC**

**During 25th NETeST Meeting**, POWERGRID informed the forum that SDH equipment has been diverted from Monarchak and the same shall be installed by 15th June, 2023. POWERGRID requested DoP, Arunachal Pradesh to provide space for installation & they have agreed to provide the same. POWERGRID also informed that due to DCPS issue, presently they were using DC convertor. DoP, Arunachal Pradesh agreed to look into the matter.

**During 26th NETeST Meeting**, POWERGRID-ULDC informed the forum that new SDH is proposed under NER Reliable communication scheme. Currently the DC converter of Lekhi S/s is not working due to which Lekhi PDH is not powered up and thus not reporting to SLDC Arunachal Pradesh over fiber network. DoP-AP is requested to update on the status for providing space DCPS. POWERGRID is requested to update on the status for installation of the DCPS.

**During 27th NETeST Meeting**, DoP-AP informed that space for installation of DCPS will be provided. DC converter of Lekhi is not working due to which Lekhi is not connected over OPGW network. POWERGRID-ULDC is requested to restore the DC converter as an interim measure till the new SDH and DCPS are installed.

**During 28th NETeST Meeting**, POWERGRID informed that they had taken up the matter with vendor M/s Tejas for the supply of DC converter. The work shall be included under the NER reliable communication scheme.

**During 29th NETeST Meeting**, DOP-Arunachal Pradesh informed that the new control room will be ready by December 2024, so the necessary work can be completed by ULDC-NERTS after commissioning of new control room.

**In the 30th NETeST Meeting**, the forum decided that POWERGRID-ULDC shall update the status via e-mail to NERPC.

**In the 31st NETeST Meeting**, POWERGRID-ULDC apprised the forum that the FOTE system is now connected with new battery bank, however relocation to new control room is pending. The matter could not be deliberated as DOP-Arunachal Pradesh representative was absent.

**In 32nd NETeST meeting**, DOP- Arunachal Pradesh informed that work for new control room is almost complete, hence POWERGRID-ULDC can start the work.

***Status may be updated.***

### **3.20. State-wise SAMAST Status: PwC**

Manipur SAMAST Status, Mizoram SAMAST Status, Tripura SAMAST Status and AMC Status: State-Wise is attached at **Annexure C 3.20**.

***Members may update.***

<b>REGIONAL COMMUNICATION AUDIT REPORT</b>			
<b>General Information:</b>			
1	Substation Name		
2	SS Voltage level		
3	Date of commissioning of the substation	XX.XX.XXXX	
4	Region & State / Auditee	/	
5	Audit Date		
6	Name of the Utility which owns the SS		
<b>Details of Audit Team Members :</b>			
SL	Name	Designation	Organization
1			
2			
3			
4			
<b>Attached Documents, if any</b>			
SL	Name of the document	Original / Signed / Copy	
1			
2			
3			
4			
5			
6			
7			

<b>8</b>		
<b>9</b>		
<b>10</b>		
<b>11</b>		
<b>12</b>		
<b>13</b>		
<b>14</b>		
<b>15</b>		
<b>16</b>		
<b>17</b>		

**Communication Channels and Equipments Audit Format**

**(A) List of channels in usage for data (64 kbps, 104, PMU, VC, 101) / Voice / Protection circuits / others:**

<b>Sl</b>	<b>Description (64 kbps, 104, PMU, VC, 101) / Voice / Protection circuits / Others)</b>	<b>Source</b>	<b>Destination</b>	<b>Channel Routing</b>	<b>Ownership details of terminal equipment / Links</b>
1					
2					
3					
4					
5					
6					
7					
8					

**(B) List of terminal communication equipments:**

<b>Sl</b>	<b>Name of Station</b>	<b>Equipment Type (SDH / PDH / Radio / VSAT / EPABX)</b>	<b>Make / Model</b>	<b>Ownership</b>
1				
2				
3				
4				
5				
6				
7				
8				

(C) Communication System Details:

**I. SDH Equipment**

(1) Card Details:

Slot No	IP Address & Path / Direction Name	Card Details	Place a ✓ mark if on usage, else Write as "Spare"	Whether Card is healthy / Faulty ? (H / F)	Cards Redundancy available (Yes / No)	Power Supply Card / Optical Card (Yes / No)	MSP configured? (Yes / No)	Action Plan for faulty cards	Other Information, if any
1									
2									
3									
And so on									

(2) Whether equipment is time synchronized : Yes / No

<b>If Yes, how is it being done?</b>

(3) Failures during last Fin. year / since last Audit :

Particulars	Number of failures of Card / Power Supply	Reason for failures	Measures taken for rectification
Card		(i) (ii) (iii)	(i) (ii) (iii)
Power Supply		(i) (ii) (iii)	(i) (ii) (iii)

(4) Configuration of the Node:

Name of Equipment	Number of Nodes	Number of directions	Name of Directions	Number of links down, with details	Details of corrective action, if any, taken
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**(5) Preventive maintenance schedule and its compliance:**

Date of Last Preventive maintenance	Maintenance carried out as per schedule? (Yes / No)	Whether all the defects have been attended? (Yes / No) Give details

**II. PDH Equipment**

**(1) Card Details :**

Slot No	IP Address	Card Details	Place a ✓ mark if on usage, else Write as "Spare"	Whether Card is healthy / Faulty ? (H / F)	Cards Redundancy available (Yes / No)	Power Supply Card / Optical Card (Yes / No)	MSP configured? (Yes / No)	Action Plan for faulty cards	Other Information, if any
1									
2									
3									
And so on									

**(2) Whether equipment is time synchronized : Yes / No**

<b>If Yes, how is it being done?</b>

**(3) Failures during last Fin. year / since last Audit :**

Particulars	Number of failures of Card / Power Supply	Reason for failures	Measures taken for rectification
Card		(i) (ii)	(i) (ii)

		<b>(iii)</b>	<b>(iii)</b>
<b>Power Supply</b>		<b>(i)</b> <b>(ii)</b> <b>(iii)</b>	<b>(i)</b> <b>(ii)</b> <b>(iii)</b>

**(4) Configuration of the Node:**

Name of Equipment	Number of Nodes	Number of directions	Name of Directions	Number of links down, with details	Details of corrective action, if any, taken

**(5) Preventive maintenance schedule and its compliance:**

Date of Last Preventive maintenance	Maintenance carried out as per schedule? (Yes / No)	Whether all the defects have been attended? (Yes / No) Give details

**III. OPGW / Optical Fibre Details**

Number of Directions	Name of Direction	No. of Pairs	No. of Fibers used	No. of spare & healthy Fibers	Unarmoured cable laid within PVC/Hume duct pipe?	Fibre Count in OPGW? Whether matching with Approach cable to FODP?	Overall Optical Fibre Path Attenuation (dB/km)	Power Received	Conformation to Compliance of CEA Standards

**IV. Healthiness of Auxiliary System:**

**(1) Details of 2 independent Power Sources :**



**VIII. Radio Communication Details:**

Number of Equipments	Make and Model	Status on Healthiness	Last preventive maintenance		Details of defects, if any, attended	Status of Availability of Spares	Conformation to Compliance of CEA Standards
			Schedule	Actual			

**IX. Data Retention** : (i) **Earliest Date of availability of data:** \_\_\_\_\_  
(ii) **Historical data availability** : \_\_\_\_\_ days.

**X. Control Command Delay** : (i) **Time delay in seconds from Control Centre for SCADA** : \_\_\_\_\_ Seconds  
(ii) **Time delay in seconds from Control Centre for WAMS** : \_\_\_\_\_ Seconds

**XI. Wide Band Network** : (i) **Absolute channel delay in protection applications** : \_\_\_\_\_ ms  
(ii) **Channel delay asymmetry in protection applications** : \_\_\_\_\_ ms  
(iii) **Switching Time delay to alternate path/route during failure of one path** : \_\_\_\_\_ ms

**XII. Any other information** :

**Audit Team Member**  
NERPC

**Audit Team Member**  
NERLDC

**Audit Team Member**  
PGCIL (Internal / External)

**Audit Team Member**  
State (Internal / External)

## Communication Audit Checklist (Annexure-II)

S.No	Check list points	Expected	Actual	Reference
1	Whether OPGW is terminated properly. Down lead shall be fixed property in sufficient locations. Metallic part shall be connected to earth mat riser.	Yes		
2	Distinct approach cable shall be laid 1 Protection & Communication 2 Fibers for commercial applications Item no 1 cable shall be terminated in communication room FODP One number FODP panel shall be available in communication room			
3	Fiber Identification shall be done in FODP properly			
4	Whether End to end tests were carried out during installation and records are available (both Optical Power Source/receiver testand OTDR Test results			
5	Whether patch chords 1 Cross labelled (source/ receive) 2 Tx – Rx Marking 3 Mechanical protection is provided for patch chords laid between panels			
6	Whether separate room for communication is available with following:- 1 Air conditioning with standby A/C Unit 2 AC Distribution board with ELCB 3 Single point earthing bar which shall be connected to substation Earth mat			
7	Two sets of 48 V ( Positive Earthed) DC System shall be available with 1 Common DC Distribution board/ Panels with incoming MCB, coupler MCB , out doing MCB setc 2. Minimum 200 Ah ( 2 sets of battery) VRLA batteries are preferred to keep chargers and battery in communication room. 3. Battery Charger shall be Thyristorised/SMPS			
8	Battery Charger alarms /measurements shall be made available to SAS ( if available) It can be achieved through MOD bus or connecting analogue/ digital signals to Common BCU of SAS. If such system is not available major			

## Communication Audit Checklist (Annexure-II)

	alarms shall b alarmed in common substation annunciator			
9	2 nos of substation Data ( From RTU or SAS Gateway)shall route in different roots to Main and Standby Load Dispatch centres			
10	Kindly assure proper protection is available for AC Distribution ( ELCB, MCB, Backup fuse ),			
11	Aux Transformer neutral Earthing shall be connected to Stations earth mat ( Aux Transformers shall be installed in yard earth mat area only)			
12	Whether DG sets with AMF panels are provided for Aux AC Supply			
13	Whether 2 nos 11 kV ( or 33kV) supplies are available for Each station aux Transformer			

**Final Standard Operating Procedure (SoP) for Communication System  
Outage Planning**

1. As per the following CEA and CERC Regulations, the Communication Outage for the Region shall be carried out by RPC Secretariat:

a) Regulation 7.3 of Central Electricity Regulatory Commission (Communication System for inter-State transmission of electricity) Regulations, 2017 stipulates as below:

*Quote:*

*7.3 Role of National Power Committee (NPC) and Regional Power Committee (RPC):*

.....  
*(iv) 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*

b) Regulation 10 Central Electricity Authority (Technical Standards for Communication System in Power System Operations) Regulations, 2020 notified on 27.02.2020 envisages as below:

*Quote:*

*10. Outage Planning: Monthly outage shall be planned and got approved by the owner of communication equipment in the concerned regional power committee, as per detailed procedure finalized by the respective regional power committee.*

*Unquote*

2. A Communication System Outage Planning Sub-Group/ TeST Sub Committee shall be formed in each region constituting the members from all the entities connected to ISTS including all CGS, ISGS, REGs/SPPDs/SPDs, STUs, SLDCs etc., of the respective Region, RLDC/Grid-India, PGCIL, CTUIL, Private Transmission licensees in respective region & RPC secretariat. The sub-group/ Sub Committee may co-opt any other member from any organization for facilitating the activities of the sub-group/ Sub Committee.

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

- (i) ISTS Communication System including ISGS
- (ii) Intra-state Communication System being utilized for ISTS Communication
- (iii) ICCP links between Main & Backup RLDCs, Main & Backup SLDCs & Main & Backup NLDCs.
- (iv) Inter-regional AGC links.

- (v) Any other system agreed by the sub-group.
4. Communication Equipment/link within the scope of the Procedure would include :
- (i) Optic Fibre links
  - (ii) Any other link being used for ISTS communication
  - (iii) ICCP links between Main & Backup RLDCs, Main & Backup SLDCs & Main & Backup NLDC
  - (iv) VC links between LDCs
  - (v) Inter-regional AGC links
  - (vi) SPS Links
  - (vii) Tele-Protection
  - (viii) AMR
  - (ix) PMU
  - (x) SDH & PDH
  - (xi) DCPC
  - (xii) RTU & its CMU cards
  - (xiii) DTPCs
  - (xiv) Battery Banks and Charging Equipment
  - (xv) EPABX
  - (xvi) Any other equipment/link agreed by the sub-group
5. A Web Portal named as “Communication System Outage Planning Portal” shall be developed by respective RLDCs. Log-in credentials shall be provided to all the ISTS connected entities/concerned entities.
6. Entities/Users/Owners shall add their communication links and the equipment to the Web Portal as soon as they are commissioned. The same has to be furnished to RPC Secretariat /RLDCs.
7. Entities/Users/Owners of the communication equipment shall upload the outage proposals of communication links and the equipment (in the prescribed format only) to be availed during subsequent month by 7<sup>th</sup>/8<sup>th</sup> of every month in the Web Portal.
8. RPC Secretariat consolidates the list of outage proposals received from various Entities/Users/Owners of the communication links and equipment by downloading from the Web portal and circulate the same among all the respective region entities by 15<sup>th</sup> of every month. Communication outages affecting other regions would be coordinated by respective RLDC through NLDC.
9. 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.
10. The approved outages of Communication links and equipment in the CSOP meeting shall be published in the RPC website and respective RPCs Communication Outage Portal within 3 days from the date of CSOP meeting.

11. Outage of the approved communication links and equipment shall be availed by the respective owner /entities after confirming the same with RLDC on D-3 basis.
12. 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.
13. Entities/Users/Owners shall take the code from the respective RLDC before availing the planned outage of the communication links & equipment and before restoration of the same.
14. Entities/Users/Owners of the communication links and equipment shall submit the deviation report for the approved outages (approved dates & approved period) availed during the previous month and the report on planned / forced / other outage of communication links / equipment by 10<sup>th</sup> of the month to RPC Secretariat as per the format at **Annexure-I** .
15. In the monthly CSOP meetings, communication links and equipment whose outage duration (Planned / Forced / Others) more than 48 hours for the last 12 months of rolling period shall be deliberated for the measures to be taken in future for the better outage management. The date deviations and non-availing the outages that were approved in the previous CSOP meetings shall also be deliberated in the CSOP meetings.

\*\*\*





## List of Important FOTE as per requirement of NERLDC

Sl. No.	Station/SLDC/RLDC Name	Location-Owner	FOTE-OEM	OWNERSHIP	CONNECTED TOWARDS
1	Bongaigaon	PGCIL	ECI	PG	BONGAIGOAN (AS)
					SALAKATI
			FIBCOM	PG	NTPC-BgTPP
					SALAKATI
2	BTPS	AGECL	ECI	AEGCL	Bongaigaon
					AGIA
3	Agja	AGECL	ECI	AEGCL	BTPS
					Boko
4	Boko	AGECL	ECI	AEGCL	Mirza
					Agja
5	Mirza	AGECL	ECI	AEGCL	Sarusajai
					Boko
6	Sarusajai	AGECL	ECI	AEGCL	SLDC-Kahilipara
					Samaguri
					Mirza
7	SLDC-Kahilipara	AGECL	ECI	AEGCL	Sarusajai
					Umtru
					ABB-SLDC-Kahilipara
			Fibcom-SLDC-Kahilipara		
			Fibcom	PGCIL	Backup-NERLDC
ABB	AEGCL	Kamakhaya			
8	Guwahati NERLDC	NERLDC	FIBCOM	PGCIL	SLDC-Kahilipara
					Tejas
			9	Samaguri	AGECL
Mariani(AS)					
Sarusajai					
10	Mariani (AS)	AGECL	ECI	AGECL	Lakwa
					Mariani (PGCIL)
					Mariani -ABB
11	Maraini (PGCIL)	PGCIL	ECI	PGCIL	Mariani (AS)
					Mariani - Fibcom
			Mariani - ABB_KMTL		
			Fibcom		Kathalguri
			ABB		Mokokchung-PG
12	Kathalguri	NEEPCO	Fibcom	PGCIL	Mariani - Fibcom
					Tejas
			Kathalguri_Tejas_PG		
13	MISA	PGCIL	ECI	PGCIL	Mariani - Fibcom
					Samaguri - ECI
					Misa- Fibcom
					Khleihriat-ECI
					Kopili-ECI
			Misa-ECI(ComTel)		
			Dimapur(PG)-ECI		
			Balipara-ECI		
			Fibcom		Misa-EC
			Dimapur-Fibcom		
Misa-Tejas					
Balipara-Fibcom					
ECI					Misa-ECI
					Balipara-Fibcom
					Balipara-ABB

14	Balipara	PGCIL		PGCIL	Balipara(AEGCL)-ECI	
			Fibcom		Gohpur(AEGCL)-ECI	
			ABB		Balipara-ECI	
15	BNC_HVDC	PGCIL	Fibcom	PGCIL	Misa-Fibcom	
					BNC_HVDC-Fibcom	
					Sonabil(AEGCL)-ABB	
					Gohpur(AEGCL)-ABB	
16	Ranganadi	NEEPCO	Fibcom	PGCIL	Balipara-Fibcom	
					ECI	AP_SLDC-Fibcom
					Ranganadi-Fibcom	
					Rangia-Fibcom	
					BNC_HVDC-Fibcom	
17	Ziro	PGCIL	Fibcom	PGCIL	Ziro-Fibcom	
						Ranganadi(PGCIL)-ECI
						Pare_Sterlite-ECI
18	Pare	NEEPCO	ECI	PGCIL	AP_SLDC-ECI	
			ECI		STERLITE	
					North Lakhimpur_Sterlite-ECI	
19	Nirjuli	PGCIL	ECI	PGCIL	Nirjuli_Sterlite-ECI	
					Gohpur(AEGCL)-ECI	
					Nirjuli_Sterlite-ECI	
					AP_SLDC-ECI	
20	SLDC_AP	AP	ECI	PGCIL	PARE_Sterlite-ECI	
					Nirjuli_PGCIL-ECI	
					Pare_PGCIL-ECI	
					Lekhi-ECI	
					SLDC_AP-Fibcom	
21	Gohpur_AEGCL	ASSAM	ECI	AEGCL	AP_SLDC-ECI	
			ABB		AP_SLDC-Tejas	
22	Sonabil_AEGCL	ASSAM	ABB	AEGCL	BNC_HVDC-Fibcom	
						Ranganadi_ECI
						Nirjuli_PGCIL-ECI
23	Salakati	PGCIL	ECI	PGCIL	Balipara(PGCIL)_ECI	
					Gohpur_NERPSIP	
			Fibcom		North Lakhimpur-ABB	
					Balipara-ABB	
24	Kamakhya	ASSAM	ABB	AEGCL	Balipara-ABB	
						Tezpur-ABB
						Kahilipara_SLDC-ABB
25	Sishugram	ASSAM	ABB	AEGCL	Kahilipara_SLDC-ECI	
						Salakati-Fibcom
26	Amingaon	ASSAM	ABB	AEGCL	Bongaigaon_PGCIL-ECI	
						Salakati-Fibcom
						Bongaigaon-Fibcom
						Salakati-ComTel
27	Umtru	MEGHALAYA	ECI	MEPTCL	Salakati-ECI	
						Paltan Bazar-ABB
						Sishugram-ABB
					Kamalpurn-ABB	
					Rangia-ABB	
					Kahilipara_SLDC-ECI	
					UmiamStg3-ECI	

28	Umiam Stg3	MEGHALAYA	ECI	MEPTCL	Umtru-ECI
					UmiamStg1-ECI
					UmiamStg3-GE
29	Umiam Stg1	MEGHALAYA	ECI	MEPTCL	UmiamStg3-ECI
					NEHU_SLDC-ECI
30	NEHU_SLDC	MEGHALAYA	ECI	MEPTCL	UmiamStg1-ECI
					PGCIL_Shillong-ECI
					NEHU_SLDC-Fibcom
			Fibcom	MEPTCL	NEHU_SLDC-Tejas
					NEHU_SLDC-ECI
					Neighrims-Fibcom
31	Khleihriat	PGCIL	ECI	PGCIL	NERLDC_Shillong-Fibcom
					PGCIL_Shillong-ECI
					Khleihriat_PG-Tejas
					Badarpur_PG-ECI
					Khleihriat_PG-Fibcom
			Khandong_PG-ECI		
			Misa_PG-ECI		
			Fibcom		Khleihriat_PG-Tejas
					Khleihriat_State-Fibcom
					NERLDC_Shillong-Fibcom
					Haflong_PG-Fibcom
					Badarpur_PG-Fibcom
			Tejas		Khleihriat_PG-ECI
					Khleihriat_PG-ECI
					Khleihriat_PG-Fibcom
Khleihriat_PG-ECI					
Khleihriat_PG-Fibcom					
32	Khandong	NEEPCO	ECI	PGCIL	Khleihriat_PG-ECI
33	Kopili	NEEPCO	ECI		Kopili_PG-ECI
					Khandong_PG-ECI
34	Badarpur	PGCIL	ECI_Upgrade	PGCIL	Misa_PG-ECI
					Khleihriat_PG-ECI
					Kumarghat_PG-ECI
					Badarpur_PG-Fibcom
					Badarpur_PG-ECI
			ECI		Badarpur_PG-ECI Upgrade
					Badarpur_PG-Fibcom
					Kolasib_Mizoram-ECI
					Silchar_PG-ECI
					Jiribam_PG-ECI
			Fibcom		AEGCL_Badarpur-ECI
					Khleihriat_PG-Fibcom
					Kumarghat_PG-Fibcom
					Aizwal_PG-Fibcom
					Jiribam_PG-Fibcom
35	Silchar	PGCIL	Fibcom	PGCIL	Silchar_PG-Fibcom
					Silchar_PG-ECI
					Silchar_PG-Fibcom
			ECI		Silchar_ECI-ComTel
					Metriat_PG-ECI
					Srikona_AEGCL-ECI
			Comtel_ECI		Badarpur_PG-ECI
					Silchar_PG-ECI
					Misa_PG-ComTel
			Fibcom		Jiribam_PG-ECI
					Silchar_PG-Fibcom
					Badarpur_PG-Fibcom

36	Jiribam	PGCIL	Fibcom	PGCIL	Jiribam_AS-Fibcom
			ECI		Imphal_PG-Fibcom
37	Imphal	PGCIL	Fibcom	PGCIL	Loktak_NHPC-Fibcom
			ECI		Jiribam_PG-Fibcom
38	Loktak	NHPC	Fibcom	PGCIL	Pailapool_AS-ECI
					Badarpur_PG-ECI
39	Dimapur	PGCIL	Fibcom	PGCIL	Imphal_PG-ABB
			ECI		Imphal_SLDC-Fibcom
40	Doyang	NEEPCO	Fibcom	PGCIL	Imphal_PG-ECI
					Loktak_NHPC-Fibcom
41	Palatana	OTPC	Fibcom	PGCIL	Imphal_PG-Fibcom
					Kohima_Nagaland-ECI
42	SM Nagar(TS)	TRIPURA	Fibcom	PGCIL	Imphal_PG-Fibcom
			ECI		Ningthoukhong-Fibcom
43	Agartala_SLDC	TRIPURA	Fibcom	PGCIL	Rengpang-Fibcom
			ECI		Jiribam_PG-Fibcom
44	RCNagar_AGTCCPP	NEEPCO	Fibcom	PGCIL	Kohima_Nagaland-Fibcom
			ECI		Nagarjan-Fibcom
45	Kumarghat	PGCIL	Fibcom	PGCIL	Dimapur_PG-ECI
			ECI		Misa-Fibcom
46	Aizwal	PGCIL	Fibcom	PGCIL	Doyang-Fibcom
					Dimapur_PG-Fibcom
					Misa_PG-ECI
					Kohima_Nagaland-ECI
					Dimapur_PG-Fibcom
					Sanis-Fibcom
					Mokokchung_Naga-Fibcom
					Udaipur_TS-Fibcom
					SMNagar_TS-Fibcom
					SMNagar_Sterlite-GE
					Budhjungnagar)TS-Fibcom
					Palatana-Fibcom
					Agartala_79Tilla-Fibcom
					SMNagar_TS-Fibcom
					Agartala_SLDC-ECI
					RCNagar-Fibcom
					Baramura-Fibcom
					Agartala_79Tilla-Fibcom
					RCNagar_PG-ECI
					Rokhia-ECI
					Mohanpur-ECI
					Agartala_79Tilla-Fibcom
					RCNagar_PG-ECI
					Kumarghat-Fibcom
					PK Bari_TS-Fibcom
					RC_Nagar_Indigrid-GE
					RCNagar-Fibcom
					Agartala_SLDC-ECI
					Kumarghat_PG-ECI
					RCNagar-Fibcom
					Kumarghat_PG-ECI
					PKBari_TS-Fibcom
					Badarpur-Fibcom
					PK Bari_TS-ECI
					RCNagar_PG-ECI
					Kumarghat-Fibcom
					Badarpur-ECI Upgrade
					Melriat_PG-Fibcom
					Aizwal_PG-ECI
					Badarpur_PG-Fibcom
					Zembawak-Fibcom

			ECI		Aizwal_PG-Fibcom
					Kolasib_Mizoram-ECI
					Melriat_PG-ECI
					Melriat_PG-ECI
					Shimmui-Fibcom
					Aizwal_PG-Fibcom
					Silchar_PG-Fibcom
					Zembawak-Fibcom
					Aizwal_PG-ECI
					Melriat_PG-Fibcom
					Silchar_PG-ECI
47	Melriat	PGCIL	Fibcom	PGCIL	
			ECI		

### List of Important OPGW

Sl. No.	Name of OPGW Link	Ownership
1	Bongaigoan (PG) - Bongaigoan (AS)	PGCIL
2	Bongaigoan (PG) - Salakati (PG)	PGCIL
3	Bongaigoan (PG) - NTPC BgTPP	PGCIL
4	Doyang(NEEPCO) - Mokachung(state)	PGCIL
5	Doyang - Dimapur	PGCIL
6	Doyang - Sains	Nagaland
7	Mokakchung( PG) - Mokakchiung(State)	PGCIL
8	Mokakchung(PG) - Mariani(PG)	PGCIL
9	Dimapur SLDC - Nagarjun	PGCIL
10	Dimapur SLDC - Dimapur(PG)	PGCIL
11	Dimapur - Doyang	PGCIL
12	Dimapur - Kohima	PGCIL
13	Dimapur - Misa	PGCIL
14	Wokha- Kohima	Nagaland
15	Kohima - Wokha	Nagaland
16	Kohima - Dimapur(PG)	PGCIL
17	Kohima - Imphal(PG)	PGCIL
18	Imphal - Imphal SLDC	PGCIL
19	Imphal - Jiribam(PG)	PGCIL
20	Imphal - Loktak	PGCIL
21	132kV Yurembam(Imphal) - Yaingangpokpi	MSPCL
22	Yaingangpok - Hundung	MSPCL
23	Yaingangpok - Kongba	MSPCL
24	Kongba - Thoubal	MSPCL
25	Thoubal - Kakching	MSPCL
26	Loktak(NHPC) - Imphal(PG)	PGCIL
27	Loktak(NHPC) - Rengpang	MSPCL
28	Loktak(NHPC) - Ningthoukhomg	MSPCL
29	Loktak - Jiribam(PG)	PGCIL
30	Misa - Balipara	PGCIL
31	Misa(PG) - Mariani(PG)	PGCIL
32	Mariani - Kathalguri	PGCIL
33	Mariani(PG) - Mariani AEGCL	PGCIL
34	Mariani(PG) - New Kohima (KMTL)	Aparva
35	New Kohima (KMTL) - Imphal (PG)	Aparva
36	Balipara - Gohpur	PGCIL
37	Balipara - Sonabil	AEGCL
38	Balipara - BNC(HVDC)	PGCIL
39	Mirza - Sarusajai	AEGCL
40	Mirza - Boko	AEGCL
41	Agia - Boko	AEGCL

42	Agia - BTPS	AEGCL
43	Agia - Mendipathar	AEGCL
44	Rangia - BNC_HVDC	PGCIL
45	BNC(HVDC) - Balipara	PGCIL
46	BNC_HVDC - Rangia	PGCIL
47	BNC_HVDC - Ranganadi	PGCIL
48	BNC_HVDC - Itanagar_SLDC	PGCIL
49	Bongaigaon (AS) - Rangia	AEGCL
50	Salakati - Bongaigaon	PGCIL
51	Ranganadi - Ziro	PGCIL
52	Ranganadi - BNC_HVDC	PGCIL
53	Ranganadi - Gohpur	PGCIL
54	Ranganadi - Parey	PGCIL
55	Itanagar - BNC_HVDC	PGCIL
56	Itanagar - Arunachal_Itanagar(SLDC)	PGCIL
57	Arunachal_Itanagar(SLDC) - Nirjuli	PGCIL
58	Palatana(OTPC) -SM Nagar(TR)	PGCIL
59	SM Nagar(TR) - Agartala_79Tilla	PGCIL
60	Agartala_79Tilla - RC Nagar	PGCIL
61	SM Nagar(TR) - SM Nagar(ST)	PGCIL
62	SM Nagar(ST) - PK Bari(ST)	PGCIL
63	PK Bari(ST) - PK Bari(TR)	PGCIL
64	PK Bari(TR) - RC Nagar	PGCIL
65	RC Nagar - Kumarghat	PGCIL
66	PK Bari(TR) - Kumarghat	PGCIL
67	Kumarghat - Badarpur	PGCIL
68	Badarpur - Khleihriat(PG)	PGCIL
69	Badarpur - Jiribam	PGCIL
70	Badarpur - Silchar	PGCIL
71	Badarpur - Aizwal	PGCIL
72	Khleihriat(PG) - Khleihriat (ME)	PGCIL
73	Khleihriat(PG) - Khandong	PGCIL
74	Khleihriat(ME) - Neighrims	PGCIL
75	Neighrims - NEHU	PGCIL
76	Khandong - Kopili	PGCIL
77	Kopili - Misa	PGCIL
78	Aizwal - Melriat	PGCIL
79	Melriat - Silchar	PGCIL
80	Aizwal - Kolasib	PGCIL
81	Badarpur - Kolasib	PGCIL
81	Haflong(PG) - Umrangshu	PGCIL
81	Umrangshu - Khandong	PGCIL
82	Pare - SLDC_Itanagar	PGCIL

**GUIDELINES**  
**ON**  
**AVAILABILITY OF COMMUNICATION SYSTEMS**

*Prepared in Compliance*

*To*

*Central Electricity Regulatory Commission*

*(Communication System for inter-State transmission of electricity)*

*Regulations, 2017*

January 2024

## **GUIDELINES ON AVAILABILITY OF COMMUNICATION SYSTEM**

### **1. INTRODUCTION:**

1.1 As per Regulation 7.3 of the Central Electricity Regulatory Commission (Communication System for inter-State transmission of Electricity), Regulations, 2017, National Power Committee (NPC) has been entrusted to prepare Guidelines on Availability of Communication System in consultation with RPCs, RLDCs, CTU and other stakeholders. Accordingly, these Guidelines have been prepared for determining Availability of Communication System.

1.2 The relevant provisions in the Central Electricity Authority (Technical Standards for Connectivity to the Grid), Regulations, 2007, CEA (Technical Standards for Communication System in Power System Operations) Regulations, 2020 and CERC (Indian Electricity Grid Code) Regulations, 2023 in respect of Communication System are as follows:

1.2.1 **Regulation 6(3) of the CEA (Technical Standards for Connectivity to the Grid)** stipulates that *'the requester and user shall provide necessary facilities for voice and data communication and transfer of online operational data, such as voltage, frequency, line flows and status of breaker and isolator position and other parameters as prescribed by the appropriate load dispatch centre.'*

1.2.2 **Regulation 5(1) of the CEA (Technical Standards for Communication System in Power System Operations) Regulations, 2020** stipulates that user shall be capable of transmitting all operational data as required by appropriate control centre.

1.2.3 **Regulation 11 of the Indian Electricity Grid Code (IEGC) 2023 stipulates as follows:**

*"11. DATA AND COMMUNICATION FACILITIES (1) Reliable speech and data communication systems shall be provided to facilitate necessary communication, data exchange, supervision and control of the grid by the NLDC, RLDC and SLDC in accordance with the CERC (Communication System for inter-State Transmission of Electricity) Regulations, 2017 and the CEA Technical Standards for Communication.*

*(2) The associated communication system to facilitate data flow up to appropriate data collection point on CTU system including inter-operability requirements shall also be established by the concerned user as specified by CTU in the Connectivity Agreement.*

*(3) All users, STU and participating entities in case of cross-border trade shall provide, in coordination with CTU, the required facilities at their respective ends as specified in the connectivity agreement. The communication system along with data links provided for speech and real time data communication shall be monitored in real time by all users, CTU, STU, SLDC and RLDC to ensure high reliability of the communication links.”*

## **2. DEFINITION:**

2.1 Words and expressions used in these guidelines shall have the same meaning assigned in the Electricity Act, Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulation ,2007, CEA (Technical Standards for Communication System in Power System Operation) Regulations, 2020, CERC (Communication System for Inter-State transmission of Electricity), Regulations, 2017 and Indian Electricity Grid Code Regulations, 2023 and amendments thereof.

2.2 Other words have been explained as per the context in these Guidelines.

## **3. SCOPE AND APPLICABILITY:**

3.1 As per Regulation 5 (i) of the CERC (Communication System for inter-State transmission of Electricity), Regulations, 2017, *“These regulations shall apply to the communication infrastructure to be used for data communication and tele -protection for the power system at National, Regional and inter-State level and shall also include the power system at the State level till appropriate regulation on Communication is framed by the respective State Electricity Regulatory Commissions.”*

3.2 Accordingly, these guidelines shall be applicable to the CTU for the Communication System Infrastructure of inter-State Transmission System. The guidelines shall also be applicable to STU for the Communication System Infrastructure of intra-State Transmission System, till appropriate regulation on Communication is framed by the respective State Electricity Regulatory Commission.

3.3 The CTU (or STU as the case may be) shall have back to back co-ordination/agreement with transmission licensees, generators, dedicated transmission line owners, bulk consumers and concerned entities for providing power system communication on their network.

### **3.4 Responsibility of CTU and STU:**

- a) CTU (or STU as the case may be) shall be responsible for submission of the details of communication channels including the redundant channels configured for use of voice / data / video exchange, protection, Tele-protection / SPS to respective RLDC (SLDC as the case may be) on monthly basis incorporating the details of new channels configured during previous month. The total number of communication channels (N) is based on the requirement of RLDCs/NLDC and the same would be decided in consultation with respective RPCs/NPC.
- b) CTU (or STU as the case may be) shall be responsible for submission of the performance/availability of configured channels of the previous month to respective RLDCs for verification by RLDCs and onward submission to respective RPC for computation of availability of the communication system for previous month.
- c) CTU (or STU as the case may be) shall submit availability reports of configured channel including the redundant channels in format prescribed by RLDC/RPC, generated from the centralized NMS. The availability report of the call logging facility (with time stamp) may be provided till commissioning of centralized NMS for availability computation.

### **4. TREATMENT OF COMMUNICATION SYSTEM OUTAGES:**

- 4.1 Outage time of communication system elements (i.e. channels) due to acts of God and force majeure events beyond the control of the communication provider shall be considered deemed available. However, onus of satisfying the Member Secretary, RPC that element outage was due to aforesaid events shall rest with the communication provider.
- 4.2 Any outage of duration more than one (01) minute in a time-block shall be considered as not available for the whole time-block. Any outage of duration less than or equal to one (01) minute in a time-block shall be treated as deemed available provided such outages are not more than ten (10) times in a day.

Illustration: If a channel is out for a duration less than or equal to one (01) minute in a time-block, and such outages are more than ten (10) times in a day, all the time-blocks with such outages shall be treated as not available.

4.3 All other outages not covered under 4.1 and 4.2 shall be considered as not available during the whole block for the computation of channel availability.

**5. METHODOLOGY FOR COMPUTATION OF AVAILABILITY OF COMMUNICATION SYSTEM:**

5.1 Availability of Communication System ( $A_{CS}$ ) shall be calculated as under:

$$A_{CS} = \frac{\sum_{i=1}^N A_i}{N}$$

Where -  $N$  is total number of communication channels as specified in 3.4(a) above.  
 -  $A_i$  is Availability of  $i^{th}$  Channel which shall be calculated as given in 5.2 below.

5.2 Availability of  $i^{th}$  Channel ( $A_i$ ) shall be arrived as under:

$$A_i = \frac{B_T - B_{Ni}}{B_T} \times 100$$

Where  $B_T$  is Total number of time-blocks in a month

$B_{Ni}$  is the total number of time-blocks, in which  $i^{th}$  channel was not available after considering deemed availability status of 4.1 & 4.2 above.

$$B_{Ni} = B_{ANi} - B_{Gi} - B_{LTTi}$$

Where-  $B_{ANi}$  is absolute number of time-blocks in which the  $i^{th}$  channel was 'not available' on account of any reason.

-  $B_{Gi}$  is Number of time-blocks out of  $B_{ANi}$ , in which  $i^{th}$  channel was 'not available' on account of act of God as specified in 4.1 above.

-  $B_{LTTi}$  is Number of time-blocks out of  $B_{ANi}$ , in which  $i^{th}$  channel was 'not available' for a duration less than or equal to one (01) minute in a time-block and not more than ten (10) times in a day as specified in 4.2 above.

**Illustrations:**

**Case1:** If there are 2880 time-blocks ( $B_T$ ) in a month, and a particular channel is not available for a total of 70 time-blocks; and out of this, the above mentioned channel was not available for 20 ( $B_{Gi}$ ) time-blocks due to act of God, six (06) time-blocks for less than one (01) minute ( $B_{LTTi}$ ), then  $B_{ANi}=70$ ,  $B_{LTTi}=06$ ,  $B_{Ni} = 70-20-06 = 44$ , and  $A_i = (2880-44)/2880 = 98.47\%$

**Case 2:** If there are 2880 time-blocks ( $B_T$ ) in a month, and a particular channel is not available for a total of 70 time-blocks; and out of this, the above mentioned channel was not

available for 20 ( $B_{Gi}$ ) time-blocks due to act of God, 11 time-blocks for less than 1 minute, then  $B_{ANi}=70$ ,  $B_{LTTi} = 0$ ,  $B_{Ni}=70-20-0=50$ , and  $A_i = (2880-50)/2880 = 98.26\%$ .

## **6. Revision of these Guidelines**

6.1 As and when required, these Guidelines shall be reviewed and revised by NPC with the approval of the Commission.

\*\*\*

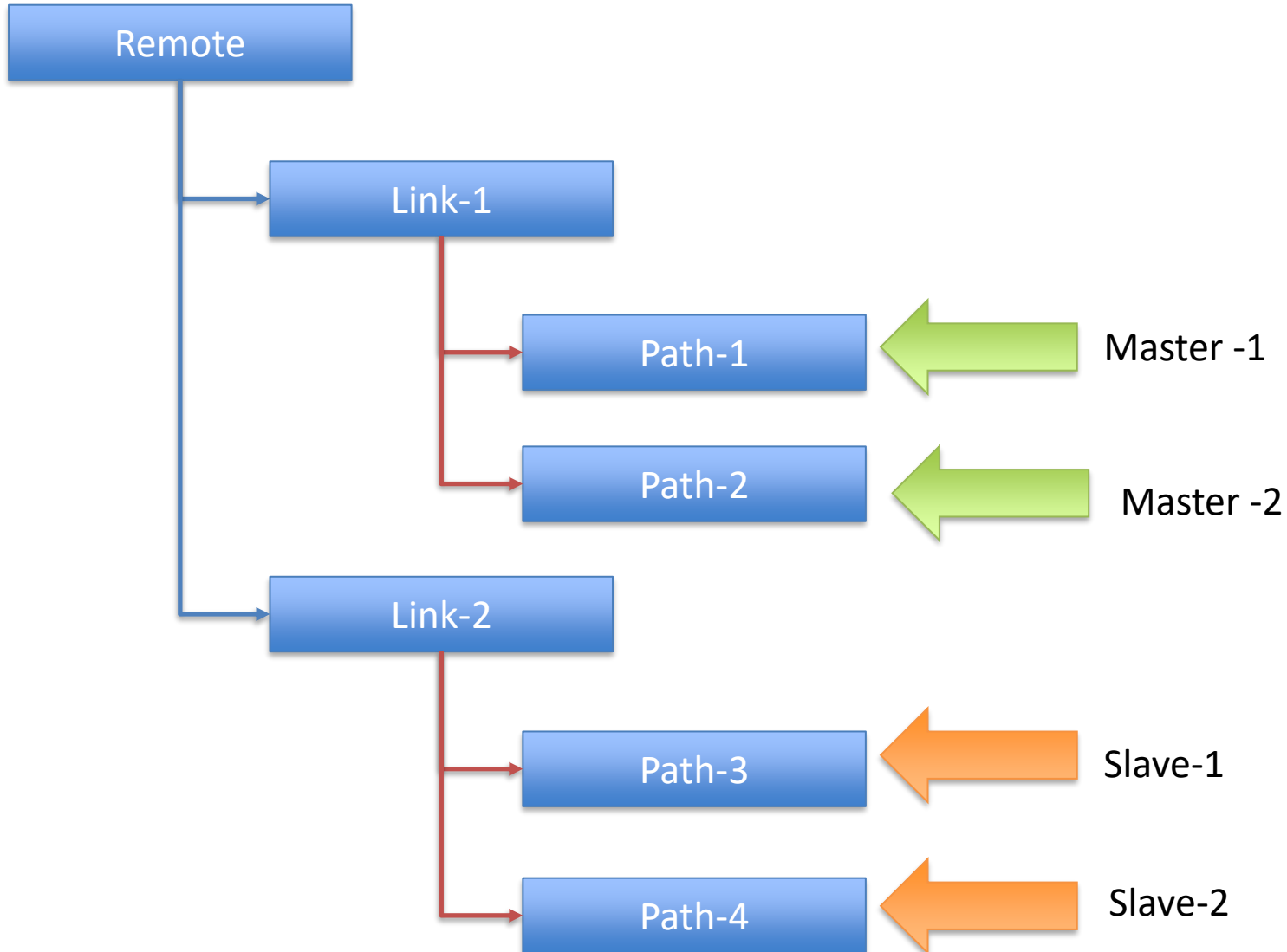
# GE ICCP Link & Path Configuration

Dual Direction vs Single Direction Association

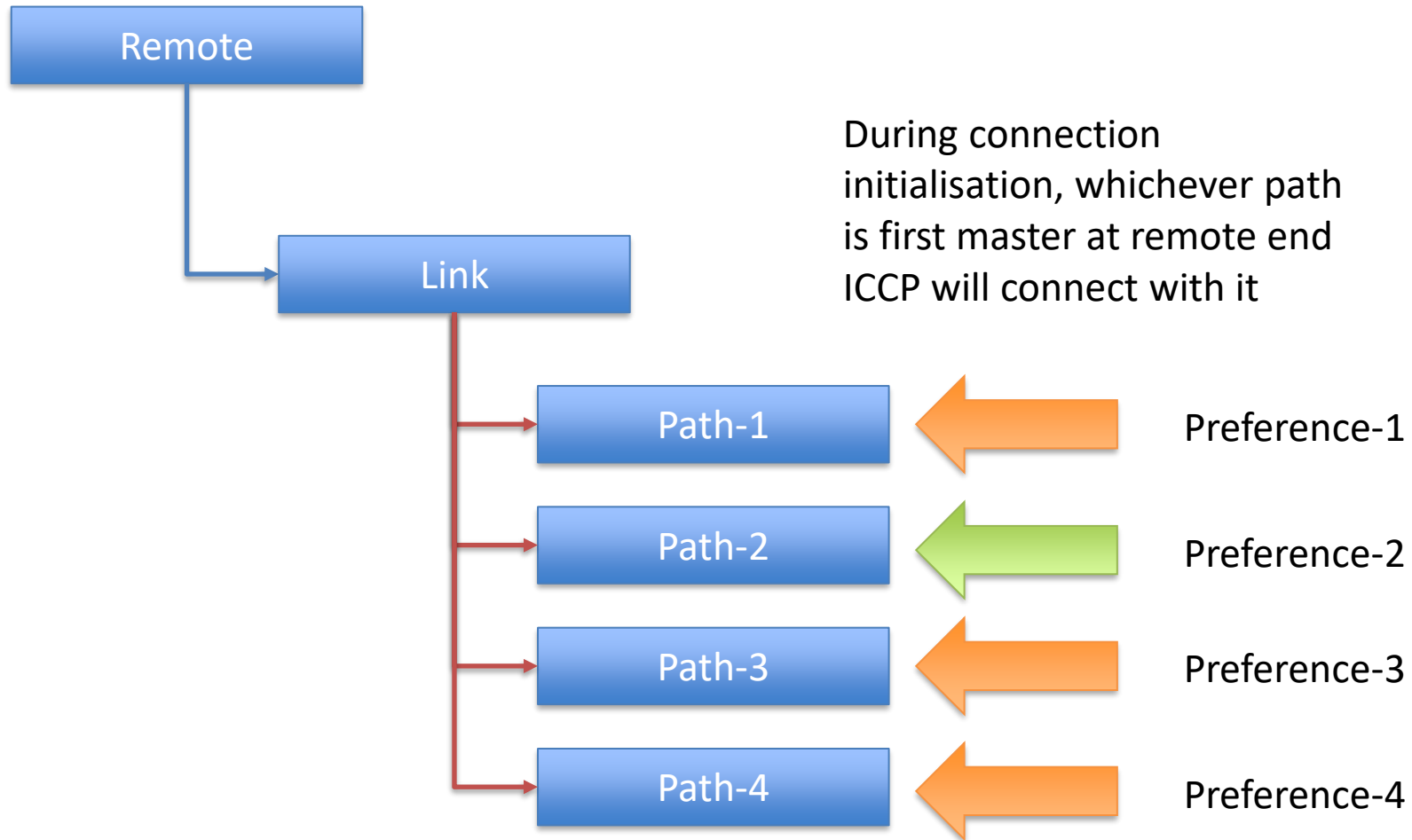
# Introduction to ICCP

- ICCP (TASE.2 / IEC 60870-6-503) is used for real-time data exchange between Control Centre.
- GE Hierarchy: Remote → Link → Path
- Remote – Name Field specifying the name of Remote Control Centre
  - Link – It's a Logical connection: If remote CC has more than one servers then this is defined.
    - Path – TCP/IP communication path (end servers)
- Type of Associations –
  - Single direction: Data is exchanged from Master to Client or vice versa
  - Dual direction: Both ends exchange data and there is no master. Only one end initiate the connection.

# GE configuration for Single Direction Association



# GE configuration for Dual Direction Association



# Existing ICCP Configuration

The screenshot displays the NEAPIC2 configuration interface for ICCP links. At the top, the 'Remote' configuration for 'NERLDC' is shown with details like 'Index: 2', 'Type: ICCPLINK', and 'In Service' checked. Below this, the 'Link' configuration for 'NERLDC\_M' (Index: 3) is highlighted with a green box. It shows 'Retry Timeout: 10' and 'In Service' checked. Underneath, the 'Path' configuration for 'SLICCP\_1' (Index: 3) is visible, with 'Registered' and 'In Service' checked. It includes settings for 'Master', 'Single Direction Association', 'Non-Secure Fallback Allowed', 'Remote AR Name' (NESLIC1\_AR), 'Local' (1), 'LOCAL\_AR\_NAME', and 'Domain Name' (ARUNCH). Below this, the 'Path' configuration for 'SLICCP\_2' (Index: 4) is also shown with similar settings. At the bottom, the 'Link' configuration for 'NERLDC\_B' (Index: 4) is highlighted with a green box, showing 'Retry Timeout: 10' and 'In Service' checked. Below it, the 'Path' configuration for 'DLICCP\_2' (Index: 6) is visible with 'Registered' and 'In Service' checked, including settings for 'Master', 'Single Direction Association', 'Non-Secure Fallback Allowed', 'Remote AR Name' (NEDLIC2\_AR), 'Local' (1), 'LOCAL\_AR\_NAME', and 'Domain Name' (ARUNCH). The interface includes various toolbars and a status bar at the bottom showing '(COMM@NEAPIC2:60)'. The text 'Shillong' and 'Guwahati' are overlaid on the right side of the image, with blue arrows pointing from the highlighted link configurations to the text 'Two different Links'.

Ideal for single direction path,  
but why GE configured for dual direction at  
the time of project implementation??

With this configuration manual switching was  
required

Shillong

Two different Links

Guwahati

# Existing ICCP Configuration in Online

The screenshot displays a network management interface with the following components:

- Status of Topology:** A green header bar with navigation arrows and a menu containing "Link Application", "-- Details --", and "Overview". A dropdown menu shows "NENAAD".
- Remote:** A section for "NERLDC" with ID "1", date "1996-08", and a "Parameters" button. Below it, a status bar shows "Ope - Service - Cur" with indicators for "IN", "IN", and "UP".
- LinkApplication:** A section for "ICCP LINK" with ID "1", "Protocol:" label, and "Status: UP" with a "Parameters" button.
- Link:** A section for "NERLDC\_M" with ID "2", "Service Ope: IN", "Cur: IN", and "Connection: UP".
- Path:** Two path sections:
  - SLICCP\_1 (ID 2):** "Service Ope: IN", "Cur: IN", "TCPIP Master", "Con: DOWN", "NAGALD \*", "Security: SSL", "Encryption: SSL", and a "Setting Changed..." button.
  - SLICCP\_2 (ID 3):** "Service Ope: IN", "Cur: IN", "TCPIP Master", "Con: UP", "NAGALD \*", "Security: SSL", "Encryption: SSL", and a "Setting Changed..." button. A "Query" button is also present.
- Link:** A section for "NERLDC\_B" with ID "3", "Service Ope: IN", "Cur: IN", and "Connection: DOWN".
- Path:** Two path sections:
  - DLICCP\_1 (ID 4):** "Service Ope: IN", "Cur: IN", "TCPIP Master", "Con: DOWN", "NAGALD\*", "Security: SSL", "Encryption: SSL", and a "Setting Changed..." button.
  - DLICCP\_2 (ID 5):** "Service Ope: IN", "Cur: IN", "TCPIP Master", "Con: DOWN", "NAGALD\*", "Security: SSL", "Encryption: SSL", and a "Setting Changed..." button.

Only works if remote at Guwahati is kept down. During the transition, we manually UP remote from Guwahati And manually DOWN remote from Shillong.

If remote is kept UP in Shillong and Guwahati, the connection fluctuates and data also fluctuates at NERLDC. Whereas in SLDC it completely stops reporting.

**\*: NAGALAND snap taken as new settings already implemented in Arunachal**

# New ICCP Configuration

Topology Select Remote ID:  Network Communications Hierarchy

First Record

Remote:  Index: 2 Type: ICCPLINK In Service:

Descr: REMOTE To NERLDC

Remote Domain:  Version: 1996-08

Bilateral Table ID: 1.0 Max Scan Rate: 2

Statistic On/Off:  When Assoc. lost  Periodic

Log Error in Create Data Sets:  Application log  OAGLOG

Max Transfer Sets: 999

Flow Control Disabled: Client  Server

Allow Dropping Hung Associations:  Allow Supplemental Data Types with ICCP 1996-08:

Link:  Index: 3 In Service:

Path:  Index: 3 Registered:  In Service:

Master:  Single Direction Association:  Non-Secure Fallback Allowed:

Remote AR Name:  / Local: 1 LOCAL\_AR\_NAME

Domain Name:

Path:  Index: 4 Registered:  In Service:

Master:  Single Direction Association:  Non-Secure Fallback Allowed:

Remote AR Name:  / Local: 1 LOCAL\_AR\_NAME

Domain Name:

Path:  Index: 5 Registered:  In Service:

Master:  Single Direction Association:  Non-Secure Fallback Allowed:

Remote AR Name:  / Local: 1 LOCAL\_AR\_NAME

Domain Name:

Path:  Index: 6 Registered:  In Service:

Master:  Single Direction Association:  Non-Secure Fallback Allowed:

Remote AR Name:  / Local: 1 LOCAL\_AR\_NAME

Domain Name:

Ideal for dual direction path,  
Now this helps in automatic  
switching between GHY and SHL IC

One link



Shillong ICCP-1

Shillong ICCP-2

Guwahati ICCP-1

Guwahati ICCP-2

# New ICCP Configuration in Online

## Status of Topology



Link Application --Details-- Overview



NEAPAD

Remote		Link Application	
<b>NERLDC</b>	1996 - 08	<b>ICCP LINK</b>	Protocol:
1	>>>	1	
Ope - Service - Cur		Connection	
IN	IN	UP	Parameters

Link			
<b>NERLDC_M</b>	2	Service Ope: IN	Cur: IN Connection: UP

Path			
<b>SLICCP_1</b>	2	Service Ope: IN	Cur: IN NESLIC1_AR
		TCP/IP Master	Con: DOWN ARUNCH
		Security: Authentication: SSL	Encryption: SSL
			Setting Changed...

Path			
<b>SLICCP_2</b>	3	Service Ope: IN	Cur: IN NESLIC2_AR
		TCP/IP Master	Con: UP ARUNCH
		Security: Authentication: SSL	Encryption: SSL
			Setting Changed...

Path			
<b>DLICCP_1</b>	4	Service Ope: IN	Cur: IN NEDLIC1_AR
		TCP/IP Master	Con: DOWN ARUNCH
		Security: Authentication: SSL	Encryption: SSL
			Setting Changed...

Path			
<b>DLICCP_2</b>	5	Service Ope: IN	Cur: IN NEDLIC2_AR
		TCP/IP Master	Con: DOWN ARUNCH
		Security: Authentication: SSL	Encryption: SSL
			Setting Changed...

Works if remote is kept UP at both Guwahati & Shillong. During the transition, if Shillong gets down then ICCP will connect with Guwahati and vice versa.

संदर्भ संख्या: एनईआरएलडीसी/एसएल/ओटी/संचार/जनवरी'26/8778

दिनांक: 20/01/2026

प्रति,  
मुख्य महाप्रबंधक (ए.एम. एवं यूएलडीसी)  
उ. पू. क्षे. सं. प्र., पावर ग्रिड कॉरपोरेशन ऑफ इंडिया लिमिटेड  
(पीजीसीआईएल), लापालांग, शिलांग  
पिन कोड: 793006

कृपया ध्यान दें: श्री मनीष तिवारी

विषय: 400 के.वी. बिन्नागुड़ी-बोंगाईगांव लाइन पर उपलब्ध OPGW एवं संचार उपकरणों के उपयोग द्वारा संचार लिंक रेडंडेंसी हेतु अनुरोध

महोदय,

यह पत्र उत्तर-पूर्वी क्षेत्र (उ.पू.क्षे.), पूर्वी क्षेत्र (पू.क्षे.) एवं उत्तरी क्षेत्र (उ.क्षे.) के मध्य आईसीसीपी एवं एजीसी संचार लिंक में बार-बार देखी जा रही अस्थिरता एवं बैंडविड्थ उतार-चढ़ाव के संदर्भ में है, जो सुरक्षित एवं विश्वसनीय ग्रिड संचालन के लिए अत्यंत महत्वपूर्ण हैं। उक्त विषय की जानकारी पूर्व में संलग्न ई-मेल (**अनुलग्नक-1**) के माध्यम से दी जा चुकी है।

उ.पू.क्षे.भा.प्र.के. के संज्ञान में आया है कि वर्तमान में उ.पू.क्षे. से राष्ट्रीय भार प्रेषण केंद्र/ बैक-अप राष्ट्रीय भार प्रेषण केंद्र की ओर जाने वाली समस्त संचार सेवाएँ केवल 220 के.वी. सलकाटी – अलीपुरद्वार कॉरिडोर पर आधारित एकल संचार पथ के माध्यम से संचालित की जा रही हैं, जिससे एक गंभीर *विफलता का बिंदु* की स्थिति उत्पन्न हो रही है। इस कॉरिडोर में किसी भी प्रकार की बाधा की स्थिति में मुख्य एवं सुरक्षा दोनों प्रकार के आईसीसीपी एवं एजीसी लिंक एक साथ प्रभावित हो जाते हैं। इस प्रकार की आकस्मिकता कई अवसरों पर देखी जा चुकी है तथा मई-2025 से समय-समय पर अवगत कराया जाता रहा है।

हालाँकि, संलग्न ईआरपीसी रिपोर्ट (**अनुलग्नक-2**) के अनुसार, पूर्व में 400 के.वी. बोंगाईगांव-बिन्नागुड़ी के माध्यम से एक वैकल्पिक संचार पथ उपलब्ध था, जिसका उपयोग किया जा रहा था। रिपोर्ट में यह भी दर्ज है कि पॉवरटेल द्वारा 400 के.वी. बोंगाईगांव-बिन्नागुड़ी लाइन पर ओपीजीडब्ल्यू बिछाई गई थी तथा उ.पू.क्षे. – पू.क्षे. कॉरिडोर में डेटा साझा करने हेतु छह (06) ऑप्टिकल फाइबर का उपयोग किया जा रहा था। उ.पू.क्षे.भा.प्र.के. द्वारा 32वीं NETeST बैठक में पावरग्रिड से उक्त संसाधनों के उपयोग हेतु अनुरोध किया गया था, जिसके संबंधित कार्यवृत्त (मिनट) **अनुलग्नक-3** के रूप में संलग्न हैं।

केंद्रीय विद्युत विनियामक आयोग संचार विनियम, 2017 के अनुसार, सभी परिचालन संचार सेवाएँ 100% विश्वसनीयता के साथ रेडंडेंट एवं भौतिक रूप से विविध संचार पथों के माध्यम से उपलब्ध होनी चाहिए। वर्तमान एकल-पथ निर्भरता, उक्त विनियमों के अनुरूप नहीं है तथा इससे ग्रिड संचालन अनावश्यक जोखिम के प्रति संवेदनशील हो जाता है।

पंजीकृत कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016

Registered Office: B-9, 1st Floor, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

Website: [www.grid-india.in](http://www.grid-india.in)

GRID CONTROLLER OF INDIA LIMITED

(A Government of India Enterprise)

[Formerly Power System Operation Corporation Limited (POSOCO)]

उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र/ North Eastern Regional Load Despatch Centre

कार्यालय: लोअर नोंगराह, लापलांग, शिलांग- 793006(मेघालय)

Office: Lower Nongrah, Lapalang, Shillong- 793006 (Meghalaya)

CIN:U40105DL2009GOI188682, Website: www.nerldc.in, E-mail: nerldc@grid-india.in, Tel:0364-2537470/427, Fax:03642537486

इस विषय की गंभीरता इस कारण और बढ़ जाती है कि निकट भविष्य में उ.पू.क्षे.भा.प्र.के. गुवाहाटी में बैक-अप उ.क्षे.भा.प्र.के. एवं बैक-अप पू.क्षे.भा.प्र.के. की होस्टिंग प्रस्तावित है, जिससे अंतर-क्षेत्रीय संचार कॉरिडोरों पर विश्वसनीय एवं रेडंडेंट संचार की निर्भरता और अधिक बढ़ जाएगी।

उपरोक्त के दृष्टिगत, पावरग्रिड से अनुरोध है कि कृपया निम्नलिखित बिंदुओं पर आवश्यक कार्रवाई करने का कष्ट करें:

1. बोंगाईगांव-बिन्नागुड़ी कॉरिडोर पर उपलब्ध ओपीजीडब्ल्यू एवं संबंधित संचार उपकरणों के शीघ्र उपयोग / बहाली की प्रक्रिया को त्वरित किया जाए।
2. सलकाटी – अलीपुरद्वार के एकमात्र मार्ग पर निर्भरता समाप्त करते हुए, भौतिक रूप से विविध एवं रेडंडेंट आईसीसीपी एवं एजीसी संचार पथ स्थापित किया जाए।
3. शीघ्र परीक्षण एवं कमीशनिंग हेतु पॉवरटेल तथा संबंधित यूएलडीसी / टेलीकॉम टीमों के साथ समन्वय किया जाए।

100% उपलब्धता की नियामकीय अनिवार्यता तथा आईसीसीपी एवं एजीसी संचार की अत्यधिक संवेदनशीलता को ध्यान में रखते हुए, इस विषय को अत्यावश्यक मानते हुए शीघ्र कार्रवाई करने का कष्ट करें।

धन्यवाद।

भवदीय,



सौगतो मोंडल

महाप्रबंधक (लॉजिस्टिक्स)

उत्तर-पूर्वी क्षेत्रीय भार प्रेषण केंद्र

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड (ग्रिड - इंडिया)

प्रतिलिपि (ई-मेल द्वारा):

1. सदस्य सचिव, NERPC, शिलांग
2. कार्यपालक निदेशक, राष्ट्रीय भार प्रेषण केंद्र, दिल्ली
3. कार्यपालक निदेशक, उ.पू.क्षे.भा.प्र.के.
4. कार्यपालक निदेशक, उ.पू.क्षे.सं. प्र., पावरग्रिड
5. कार्यपालक निदेशक, पू.क्षे. -II, पावरग्रिड
6. मुख्य महाप्रबंधक, लॉजिस्टिक्स, उ.पू.क्षे.भा.प्र.के.

पंजीकृत कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016

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उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र/ North Eastern Regional Load Despatch Centre

कार्यालय: लोअर नोंगराह, लापलांग, शिलांग- 793006(मेघालय)

Office: Lower Nongrah, Lapalang, Shillong- 793006 (Meghalaya)

CIN:U40105DL2009GOI188682, Website: www.nerldc.in, E-mail: nerldc@grid-india.in, Tel:0364-2537470/427, Fax:03642537486

Ref No: NERLDC/SL/OT/Communication/Jan'26/8778

Date: 20/01/2026

To,  
The Chief General Manager (AM & ULDC)  
NERTS, Power Grid Corporation of India Limited (PGCIL),  
Lapalang, Shillong  
Pin Code: 793006  
Kind Attention: Shri Manish Tiwari

To,  
The Chief General Manager (ULDC)  
ER-II, ERTS, Power Grid Corporation of India Limited  
(PGCIL), Street CF-17, Number 240, CF Block (Newtown),  
Action Area 1C, New Town, West Bengal 700107  
Kind Attention: Shri Somanath Nayak

**Subject: Request for utilisation of available OPGW and communication equipment on 400 kV Binaguri–Bongaigaon line for communication link redundancy**

Sir,

This is with reference to the recurring instability and bandwidth fluctuation observed in ICCP and AGC communication links between NER-ER-NR, which are critical for secure and reliable grid operation. The same had been communicated over email attached as (**Annexure-1**).

It has come to the notice of NERLDC that currently all communication services emanating from NER towards NLDC / Backup NLDC are routed through a single communication path over the 220 kV Salakati (PG) – Alipurduar corridor, resulting in a significant single-point-of-failure. Any impairment on this corridor leads to simultaneous impact on both Main and Protection ICCP and AGC links. Same contingency had been observed on multiple occasions, and being communicated time to time since May-2025.

However, as per the attached ERPC report (**Annexure-2**), an alternate path from 400 kV Bongaigaon-Binaguri was available earlier and was being utilised. The attached report also records that POWERTEL had laid OPGW on the 400 kV Bongaigaon–Binaguri line and six (06) optical fibres were being used for data sharing in the NER–ER corridor. NERLDC requested POWERGRID to utilise the same in 32<sup>nd</sup> NETeST meeting, relevant minutes attached as (**Annexure-3**).

The CERC Communication Regulations, 2017 mandate that all operational communication services shall be available with 100% reliability through redundant and physically diverse communication paths. The present single-path dependency is therefore not in line with the regulatory requirement and exposes grid operation to avoidable risk.

The criticality of this issue is further accentuated as NERLDC Guwahati is envisaged to host Backup NERLDC as well as Backup ERLDC in the near future, which will significantly increase dependency on reliable and redundant inter-regional communication corridors.

In view of the above, POWERGRID is requested to kindly:

1. Expedite utilisation / restoration of OPGW and associated communication equipment on the Bongaigaon–Binaguri corridor.

पंजीकृत कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016

Registered Office: B-9, 1st Floor, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

Website: [www.grid-india.in](http://www.grid-india.in)

**GRID CONTROLLER OF INDIA LIMITED**

**(A Government of India Enterprise)**

[Formerly Power System Operation Corporation Limited (POSOCO)]

**उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र/ North Eastern Regional Load Despatch Centre**

कार्यालय: लोअर नोंगराह, लापलांग, शिलांग- 793006(मेघालय)

Office: Lower Nongrah, Lapalang, Shillong- 793006 (Meghalaya)

CIN:U40105DL2009GOI188682, Website: www.nerldc.in, E-mail: nerldc@grid-india.in, Tel:0364-2537470/427, Fax:03642537486

2. Establish a physically diverse and redundant ICCP and AGC communication path, eliminating dependence on the sole Salakati (PG) – Alipurduar route.
3. Coordinate with POWERTEL and concerned ULDC / telecom teams for early testing and commissioning.

Considering the regulatory mandate of 100% availability and the criticality of ICCP and AGC communication, the matter may kindly be treated as urgent.

Thanking you.

Yours sincerely,



Saugato Mondal

General Manager (Logistics)

North Eastern Regional Load Despatch Centre

Grid Controller of India Limited (Grid-India)

Copy To (E-mail):

1. Member Secretary, NERPC Shillong
2. Executive Director, NLDC Delhi
3. Executive Director, NERLDC
4. Executive Director, NERTS, PGCIL
5. Executive Director, ER-II, PGCIL
6. Chief General Manager, Logistics, NERLDC

पंजीकृत कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016

Registered Office: B-9, 1st Floor, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

Website: [www.grid-india.in](http://www.grid-india.in)

# RE: Request for restoration of Bongiangoan-Binaguri -1 OPGW link for ER- NER corridor,

Sakal Deep (सकल दीप)

Tue 23-12-2025 17:21

To:Santanu Rudrapal {सान्तनू रुद्रपाल} <santanu.rudrapal@powergrid.in>;

Cc:Sajan George (सजन जार्ज) <sajan@grid-india.in>; S P Barnwal (एस पी बर्नवाल) <spbarnwal@grid-india.in>; B S Roy (बी एस रॉय) <bsroy@grid-india.in>; Manish Kumar Tiwari {मनीष कुमार तिवारी} <manish.tiwari@powergrid.in>; Saugato Mondal (सौगाता मंडल) <saugato@grid-india.in>; NERLDC SCADA <nerldc.scada@grid-india.in>; Kamlesh Baishya {कमलेश Baishya} <kamlesh156@powergrid.in>; Kaushal Suman {कौशल सुमन} <k.suman@powergrid.in>;

Sir,

We once again request to kindly re-establish the Bongiangoan - Binaguri -1 OPGW link along with appropriate equipment for ER- NER corridor as currently NER is currently connected with single ER (Alipurdwara) node.

Submitted for your kind consideration.

Regards,

Sakal Deep/सकल दीप

North Eastern Regional Load Despatch Centre/उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र

**Grid Controller of India Limited/ ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड**

**(A Government of India Enterprise) / (भारत सरकार का उद्यम)**

---

**From:** Santanu Rudrapal {सान्तनू रुद्रपाल} <santanu.rudrapal@powergrid.in>

**Sent:** 26 May 2025 14:55

**To:** Sakal Deep (सकल दीप) <skldeep@grid-india.in>; Kaushal Suman {कौशल सुमन} <k.suman@powergrid.in>

**Cc:** Amaresh Mallick (अमरेश मल्लिक) <amareshmallick@grid-india.in>; S Usha (एस उषा) <susha@grid-india.in>;

Rajesh Gupta {राजेश गुप्ता} <rajeshgupta@powergrid.in>; Bhaskar Jyoti Gohain {भास्कर ज्योति गोहेन}

<bhaskarjyotigohain@powergrid.in>; S P Barnwal (एस पी बर्नवाल) <spbarnwal@grid-india.in>; B S Roy (बी एस रॉय) <bsroy@grid-india.in>;

Madhusudan Dutt {एम. दत्त} <msdutt@powergrid.in>; Saugato Mondal (सौगाता मंडल) <saugato@grid-india.in>;

NERLDC SCADA <nerldc.scada@grid-india.in>; NLDC SCADA <nldc-scada@grid-india.in>;

Doman Yadav {दोमन यादव} <dyadav@powergrid.in>; Arun Kumar Singh {ए.के. सिंह} <singh\_ak@powergrid.in>;

Anjan Kumar Das {अंजन कुमार दास} <anjandas@powergrid.in>; Navodit Hyanki {नवोदित हयांकी} <navodit@powergrid.in>;

Gottumukkala Sudhakar <gsudhakar@grid-india.in>; Ankur Gulati (अंकुर गुलाटी) <ankurgulati@grid-india.in>;

Kamlesh Baishya {कमलेश Baishya} <kamlesh156@powergrid.in>

**Subject:** Re: Request for restoration of Bongiangoan-Binaguri -1 OPGW link for ER- NER corridor,

\*\*\*\*Warning\*\*\*\*

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Dear Sir,

Matter may kindly be taken up with CTU as CTU is planning schemes for ISTS for approval for implementation.

सादर धन्यवाद/ Best Regards

सांतनु रुद्रपाल / Santanu Rudrapal

उप महाप्रबंधक / Dy. General Manager

एकीकृत भार प्रेषण और संचार / Unified Load Despatch & Communication (ULDC)

पूर्वी क्षेत्र-II, क्षेत्रीय मुख्यालय, कोलकाता/ERTS-II, RHQ-Kolkata,

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड/Power Grid Corporation of India Ltd.

Address: CF-17, Action Area-1C, New Town, Kolkata-700156 (WB)

Mobile: [9434735848](tel:9434735848)

Email: [santanu.rudrapal@powergrid.in](mailto:santanu.rudrapal@powergrid.in)

---

**From:** Sakal Deep (सकल दीप) <[skldeep@grid-india.in](mailto:skldeep@grid-india.in)>

**Sent:** Friday, May 23, 2025 7:25 PM

**To:** Santanu Rudrapal {सान्तनु रुद्रपाल} <[santanu.rudrapal@powergrid.in](mailto:santanu.rudrapal@powergrid.in)>; Kaushal Suman {कौशल सुमन} <[k.suman@powergrid.in](mailto:k.suman@powergrid.in)>

**Cc:** Amaresh Mallick (अमरेश मल्लिक) <[amareshmallick@grid-india.in](mailto:amareshmallick@grid-india.in)>; S Usha (एस उषा) <[susha@grid-india.in](mailto:susha@grid-india.in)>; Rajesh Gupta {राजेश गुप्ता} <[rajeshgupta@powergrid.in](mailto:rajeshgupta@powergrid.in)>; Bhaskar Jyoti Gohain {भास्कर ज्योति गोहेन} <[bhaskarjyotigohain@powergrid.in](mailto:bhaskarjyotigohain@powergrid.in)>; S P Barnwal (एस पी बर्नवाल) <[spbarnwal@grid-india.in](mailto:spbarnwal@grid-india.in)>; B S Roy (बी एस रॉय) <[bsroy@grid-india.in](mailto:bsroy@grid-india.in)>; Madhusudan Dutt {एम. दत्त} <[msdutt@powergrid.in](mailto:msdutt@powergrid.in)>; Saugato Mondal (सौगाता मंडल) <[saugato@grid-india.in](mailto:saugato@grid-india.in)>; NERLDC SCADA <[nerldc.scada@grid-india.in](mailto:nerldc.scada@grid-india.in)>; NLDC SCADA <[nldc-scada@grid-india.in](mailto:nldc-scada@grid-india.in)>; Doman Yadav {दोमन यादव} <[dyadav@powergrid.in](mailto:dyadav@powergrid.in)>; Arun Kumar Singh {ए.के. सिंह} <[singh\\_ak@powergrid.in](mailto:singh_ak@powergrid.in)>; Anjan Kumar Das {अंजन कुमार दास} <[anjandas@powergrid.in](mailto:anjandas@powergrid.in)>; Navodit Hyanki {नवोदित हयांकी} <[navodit@powergrid.in](mailto:navodit@powergrid.in)>; Gottumukkala Sudhakar <[gsudhakar@grid-india.in](mailto:gsudhakar@grid-india.in)>; Ankur Gulati (अंकुर गुलाटी) <[ankurgulati@grid-india.in](mailto:ankurgulati@grid-india.in)>; Kamlesh Baishya {कमलेश Baishya} <[kamlesh156@powergrid.in](mailto:kamlesh156@powergrid.in)>; Kaushal Suman {कौशल सुमन} <[k.suman@powergrid.in](mailto:k.suman@powergrid.in)>

**Subject:** Re: Request for restoration of Bongjiagoan-Binaguri -1 OPGW link for ER- NER corridor,

Sir,

As per your trailing mail, it is mentioned that since OPGW is old, it will be replaced post-NCT approval. Further, you mentioned that as the link length is significant, it requires a repeater/additional SDH for operation. However, the placement of SDH/FOTE/repeater is not approved in the 53rd RPC meeting, as per inputs from PGCIL that the same is not required.

As the NCT meeting is scheduled on 30th May 2025, kindly clarify on an urgent basis why SDH/repeater/FOTEs are not kept for the said link. If SDH/repeater/FOTEs are included in some other scheme, kindly specify the same.

CTU is also requested to look into the matter on an urgent basis.

The relevant minutes of the 53rd ERPC meeting are attached.

Regards,

Sakal Deep (सकल दीप)  
North Eastern Regional Load Despatch Centre  
**Grid Controller of India Limited/ ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड**  
(Formerly known as Power System Operation Corporation Ltd)  
**(A Government of India Enterprise)**

---

**From:** Santanu Rudrapal {सान्तनू रुद्रपाल} <[santanu.rudrapal@powergrid.in](mailto:santanu.rudrapal@powergrid.in)>

**Sent:** 19 May 2025 19:05

**To:** Sakal Deep (सकल दीप)

**Cc:** Amaresh Mallick (अमरेश मल्लिक); S Usha (एस उषा); Rajesh Gupta {राजेश गुप्ता}; Bhaskar Jyoti Gohain {भास्कर ज्योति गोहेन}; S P Barnwal (एस पी बर्नवाल); B S Roy (बी एस रॉय); Madhusudan Dutt {एम. दत्त}; Saugato Mondal (सौगाता मंडल); NERLDC SCADA; NLDC SCADA; Doman Yadav {दोमन यादव}; Arun Kumar Singh {ए.के. सिंह}; Anjan Kumar Das {अंजन कुमार दास}; Navodit Hyanki {नवोदित हयांकी}; Gottumukkala Sudhakar; Ankur Gulati (अंकुर गुलाटी); Kamlesh Baishya {कमलेश Baishya}

**Subject:** Re: Request for restoration of Bongiangoan-Binaguri -1 OPGW link for ER- NER corridor,

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Dear Sir,

Binaguri-Bongaigaon link is more than 225Km long which requires Repeater/additional SDH for operation. Further, link-loss is higher in this old link and accordingly, OPGW laying was proposed by CTU in last 53rd ERPC meeting held on 11.02.2025. Implementation will be taken up as per recommendation & timeline in NCT.

सादर धन्यवाद/ Best Regards

सान्तनु रुद्रपाल / Santanu Rudrapal

उप महाप्रबंधक / Dy. General Manager

एकीकृत भार प्रेषण और संचार / Unified Load Despatch & Communication (ULDC)

पूर्वी क्षेत्र-II, क्षेत्रीय मुख्यालय, कोलकाता/ERTS-II, RHQ-Kolkata,

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड/Power Grid Corporation of India Ltd.

Address: CF-17, Action Area-1C, New Town, Kolkata-700156 (WB)

Mobile: 9434735848

Email: [santanu.rudrapal@powergrid.in](mailto:santanu.rudrapal@powergrid.in)

---

**From:** Sakal Deep (सकल दीप) <[skldeep@grid-india.in](mailto:skldeep@grid-india.in)>

**Sent:** Friday, May 16, 2025 8:32 PM

**To:** Santanu Rudrapal {सान्तनू रुद्रपाल} <[santanu.rudrapal@powergrid.in](mailto:santanu.rudrapal@powergrid.in)>

**Cc:** Amaresh Mallick (अमरेश मल्लिक) <[amareshmallick@grid-india.in](mailto:amareshmallick@grid-india.in)>; S Usha (एस उषा) <[susha@grid-india.in](mailto:susha@grid-india.in)>; Rajesh Gupta {राजेश गुप्ता} <[rajeshgupta@powergrid.in](mailto:rajeshgupta@powergrid.in)>; Bhaskar Jyoti Gohain {भास्कर ज्योति गोहेन} <[bhaskarjyotigohain@powergrid.in](mailto:bhaskarjyotigohain@powergrid.in)>; S P Barnwal (एस पी बर्नवाल) <[spbarnwal@grid-india.in](mailto:spbarnwal@grid-india.in)>; B S Roy (बी एस रॉय) <[bsroy@grid-india.in](mailto:bsroy@grid-india.in)>; Madhusudan Dutt {एम. दत्त} <[msdutt@powergrid.in](mailto:msdutt@powergrid.in)>; Saugato Mondal (सौगाता मंडल) <[saugato@grid-india.in](mailto:saugato@grid-india.in)>; NERLDC SCADA <[nerldc.scada@grid-india.in](mailto:nerldc.scada@grid-india.in)>; NLDC SCADA <[nldc-scada@grid-india.in](mailto:nldc-scada@grid-india.in)>; Doman Yadav {दोमन यादव} <[dyadav@powergrid.in](mailto:dyadav@powergrid.in)>; Arun Kumar Singh {ए.के. सिंह}

<[singh\\_ak@powergrid.in](mailto:singh_ak@powergrid.in)>; Anjan Kumar Das {अंजन कुमार दास} <[anjandas@powergrid.in](mailto:anjandas@powergrid.in)>; Navodit Hyanki {नवोदित हयांकी} <[navodit@powergrid.in](mailto:navodit@powergrid.in)>; Gottumukkala Sudhakar <[gsudhakar@grid-india.in](mailto:gsudhakar@grid-india.in)>; Ankur Gulati (अंकुर गुलाटी) <[ankurgulati@grid-india.in](mailto:ankurgulati@grid-india.in)>; Kamlesh Baishya {कमलेश Baishya} <[kamlesh156@powergrid.in](mailto:kamlesh156@powergrid.in)>  
**Subject:** Re: Request for restoration of Bongiangoan-Binaguri -1 OPGW link for ER- NER corridor,

Dear Sir,

Gentle reminder-1.

We still awaits for your response.

Regards,

Sakal Deep (सकल दीप)

North Eastern Regional Load Despatch Centre

Grid Controller of India Limited/ ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड

(Formerly known as Power System Operation Corporation Ltd)

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---

**From:** Sakal Deep (सकल दीप) <[skldeep@grid-india.in](mailto:skldeep@grid-india.in)>

**Sent:** Monday, May 12, 2025 1:29:21 PM

**To:** Santanu Rudrapal {सान्तनू रुद्रपाल} <[santanu.rudrapal@powergrid.in](mailto:santanu.rudrapal@powergrid.in)>

**Cc:** Amaresh Mallick (अमरेश मल्लिक) <[amareshmallick@grid-india.in](mailto:amareshmallick@grid-india.in)>; S Usha (एस उषा) <[susha@grid-india.in](mailto:susha@grid-india.in)>;

Rajesh Gupta {राजेश गुप्ता} <[rajeshgupta@powergrid.in](mailto:rajeshgupta@powergrid.in)>; Bhaskar Jyoti Gohain {भास्कर ज्योति गोहेन}

<[bhaskarjyotigohain@powergrid.in](mailto:bhaskarjyotigohain@powergrid.in)>; S P Barnwal (एस पी बर्नवाल) <[spbarnwal@grid-india.in](mailto:spbarnwal@grid-india.in)>; B S Roy (बी एस

रॉय) <[bsroy@grid-india.in](mailto:bsroy@grid-india.in)>; Madhusudan Dutt {एम. दत्त} <[msdutt@powergrid.in](mailto:msdutt@powergrid.in)>; Saugato Mondal (सौगाता मंडल)

<[saugato@grid-india.in](mailto:saugato@grid-india.in)>; NERLDC SCADA <[nerldc.scada@grid-india.in](mailto:nerldc.scada@grid-india.in)>; NLDC SCADA <[nldc-scada@grid-india.in](mailto:nldc-scada@grid-india.in)>;

Doman Yadav {दोमन यादव} <[dyadav@powergrid.in](mailto:dyadav@powergrid.in)>; Arun Kumar Singh {ए.के. सिंह}

<[singh\\_ak@powergrid.in](mailto:singh_ak@powergrid.in)>; Anjan Kumar Das {अंजन कुमार दास} <[anjandas@powergrid.in](mailto:anjandas@powergrid.in)>; Navodit Hyanki {नवोदित

हयांकी} <[navodit@powergrid.in](mailto:navodit@powergrid.in)>; Gottumukkala Sudhakar <[gsudhakar@grid-india.in](mailto:gsudhakar@grid-india.in)>; Ankur Gulati (अंकुर गुलाटी)

<[ankurgulati@grid-india.in](mailto:ankurgulati@grid-india.in)>; Kamlesh Baishya {कमलेश Baishya} <[kamlesh156@powergrid.in](mailto:kamlesh156@powergrid.in)>; Bhaskar Jyoti

Gohain {भास्कर ज्योति गोहेन} <[bhaskarjyotigohain@powergrid.in](mailto:bhaskarjyotigohain@powergrid.in)>

**Subject:** Request for restoration of Bongiangoan-Binaguri -1 OPGW link for ER- NER corridor,

Dear Sir,

It has come to the notice of NERLDC that all the services emanating from NER towards NLDC/Backup NLDC are using single path which is Salakati (PG) - Alipurduar. However, as per knowledge of NERLDC, there is one more path from Bongaigaon (PG) to Binaguri - 1, which was also being utilised earlier.

The relevant ERPC report is also attached for your reference, which mentions that POWERTEL laid the OPGW on Bongaigoan - Binaguri -1 and six number of fibres were being used for data sharing in NER - ER corridor.

Hence, it is requested that the status of OPGW connectivity between Bongaigoan - Binaguri be provided.

Further, it is requested to utilise the Bongaigoan - Binaguri - 1 OPGW connectivity by diverting the following services over it:

1. VLAN 2005: NERLDC Shillong to NLDC Delhi
2. VLAN 743: NERLDC Shillong to Backup NLDC Kolkata
3. VLAN 2006: NERLDC Guwahati to NLDC Delhi
4. VLAN 985: NERLDC Guwahati to Backup NLDC Kolkata
5. AGC Link - 2 of NTPC BgTPP up to NLDC Delhi
6. AGC Link - 2 of Kopili up to NLDC Delhi
7. AGC Link - 2 of Loktak up to NLDC Delhi.

Kindly provide the necessary information at earliest.

Regards,

Sakal Deep (सकल दीप)

North Eastern Regional Load Despatch Centre

**Grid Controller of India Limited/ ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड**

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# Report on Strengthening of Inter-regional & Intra-regional OPGW Communication Links for Strengthening of Eastern Region



Suspension assembly



Down lead clamp



OPGW Cable



Optical Distribution Frame (ODF)



Patch Cord



Joint Boxes



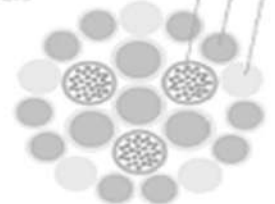
Date: 13<sup>th</sup> November 2019

### Cable Components

- aluminum clad steel wire
- aluminum alloy wire
- aluminum pipe
- stainless steel tube

- aluminum alloy wire
- aluminum pipe
- optical fibers

Prepared by: **NOMINATED COMMITTEE MEMBERS**



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## Preface

With the growth in Eastern Regional Grid of Indian Power system, smart technologies are being rolled out in Indian Power System for monitoring and control like AGC, SPS, Digital protection, WAMS and VoIP etc. For smooth running of these applications, it requires reliable and robust communication backbone. Therefore, in 23<sup>rd</sup> SCADA O & M meeting held on 06<sup>th</sup> March 2019, it was decided to review the communication network to find out its loopholes to strengthen the inter-regional and intra-regional OPGW back bone in Eastern Region. Accordingly committee was formed to contemplate on requirement of additional Inter-regional & Intra-regional OPGW links for strengthening of Eastern Regional OPGW network.

This report is the consensus of the committee for incorporation of additional inter-regional as well as intra-regional OPGW communication links.

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## Executive Summary

Eastern Regional Grid of Indian Power System is consisting of six (06) constituents namely Bihar, Jharkhand, West Bengal, Odisha, DVC and Sikkim. These Regional Constituents including ERLDC are entrusted to ensure judicious, effective and efficient management of the transmission assets within the region and under their control, without losing the focus of national interest as well the safety, security and reliability of the other regional transmission grids, which are interconnected directly or indirectly with the Grid. Hence, for Grid Operational expediency, ISTS OPGW communication network is in place for seamless transfer of real time data, hot line voice communication, video and Power System control signal transfer from geographically dispersed sub-stations/Generating station to SLDCs/RLDCs/NLDC.

India had witnessed two massive grid disturbances on 30<sup>th</sup> & 31<sup>st</sup> July 2012 wherein major parts of Northern, Eastern & North-Eastern Regional affected. Subsequently, it was emphasized to create a back-up control centre at a different location as recommended by Intelligence Bureau. It was also emphasized to implement pan India hot line voice communication covering all generating power plants, sub-stations and control centres.

Many times, it has been felt that our inter-regional corridors are not strong enough and needs to be strengthened. So, in 23<sup>rd</sup> SCADA O & M meeting, POWERGRID came up with a proposal to strengthen the inter-regional OPGW links along with communication equipment on few important lines which are presently not having OPGW. These will also be required for alternate path / redundancy of ER grid, ER-NR, ER-SR, ER-NER and ER-WR corridors. Accordingly ERPC constituted a committee comprising of members from all state utilities, POWERGRID (ULDC), POWERGRID (LD&C), NLDC, ERLDC and ERPC who can ascertain the requirement after considering the route diversity. The scope of the Committee was assessing the requirement of OPGW link along with communication equipment for important ISTS lines in ER grid and also ER to other regions corridors for reliable communication among them. The committee would deliberate, prepare & submit the report within three months for necessary approval at TCC/ERPC.

Scope of the committee includes identification of the requirement of additional Inter-regional & Intra-regional OPGW communication links along with communication equipment for strengthening of Eastern Regional OPGW network.

According committee has deliberated on various OPGW related matter on 1<sup>st</sup> OPGW Provisioning Technical Committee Meeting, held on 14<sup>th</sup> August 2019, and 2<sup>nd</sup> OPGW Provisioning Technical Committee Meeting, held on 24<sup>th</sup> October 2019.

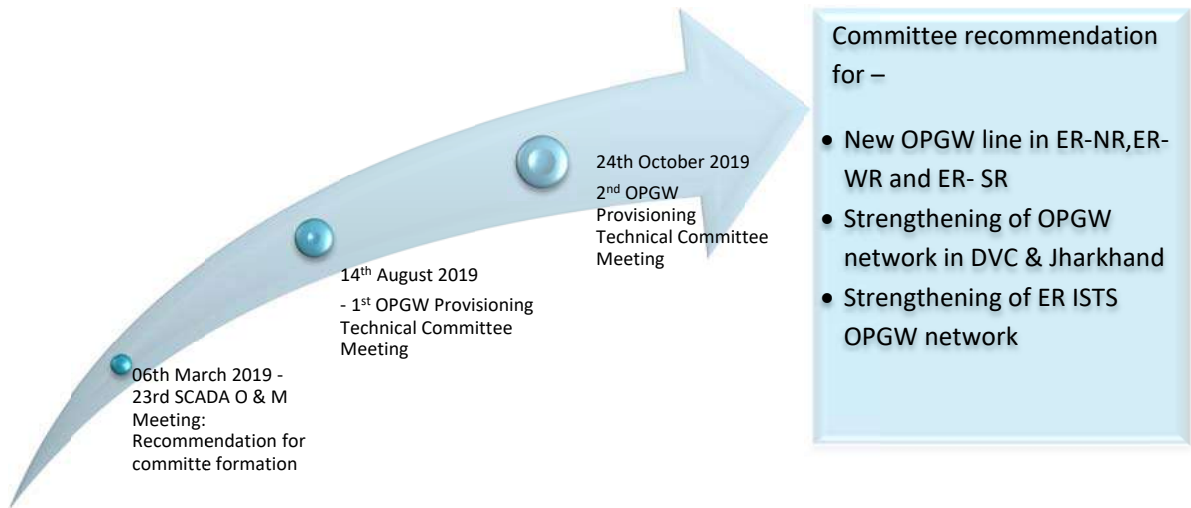


Fig 1: OPGW provisioning technical committee meeting

## 1. Committee Members:

As per deliberation in 23<sup>rd</sup> SCADA O & M Meeting, held on 24<sup>th</sup> August 2019, a committee has been formed comprising members from all state utilities, POWERGRID (ULDC), NLDC, ERLDC and ERPC. The list of nominated committee members is mentioned at Annexure – I.

## 2. Scope of the work:

The committee was constituted for deliberation and planning of following OPGW related matters -

- Assessing the requirement of OPGW link along with communication equipment for important ISTS lines in ER grid and inter-regional corridors for reliable communication among SLDCs to ERLDC, NRLDC, WRLDC, SRLDC, NERLDC and NLDC.

## 3. Major Findings:

There were two (02) numbers of meetings held, 1<sup>st</sup> OPGW provisioning technical committee meeting on 14<sup>th</sup> August 2019 & 2<sup>nd</sup> OPGW provisioning technical committee meeting on 24<sup>th</sup> October 2019, for detailed deliberation of OPGW link related matter of Eastern region so that communication links among SLDCs, ERLDC and NLDC could be strengthened. It was also felt that few nodes in Eastern Regional communication network require redundant path, accordingly committee came up with the following recommendation:-

### A. Requirement of Communication Links between ER and other regions:

- Committee opined that existing OPGW communication links (>15 years old) may not be reliable. All such communication links in Inter-regional corridor shall not be considered for path redundancy which is ageing more than 15 years.
- Since, backup NLDC is located at ERLDC, Kolkata reliable data & voice communication from ER to other Regions is required. Higher bandwidth communication between NLDC and ERLDC is also required for SCADA, WAMS, VOIP and AGC as well in near future. In addition to the above requirement, multisite data and voice communication link between Main and Backup control centres of ERLDC, NLDC and NRLDC is configured through ER- NR corridor which is not protected as of now. Hence, for providing the communications links with adequate bandwidth and path redundancy, the committee decided to envisage the following number of communication links between ER and other regions:
  - i. Three (3) numbers of communication links between ER-NR corridors.
  - ii. Two (2) numbers of communication links between ER-SR, ER-WR and ER-NER corridors each.

- Committee reviewed the status of existing communication links between ER and other regions which are under implementation stage. Accordingly, the Committee has considered the following communication links between ER and other regions as mentioned below:

Sl No	Corridor	Selected lines for laying OPGW	Length (KM)	Remarks
1	ER- NR	765 kV S/C Gaya-Varanasi Line –I	265	
2		400 kV D/C Patna – Balia Line –I	195	
3		400 kV Barh-Gorakhpur Line-I	---	Under implementation, would be completed by October 2020.
4	ER - WR	765 KV S/C Ranchi – Dharamjaygarh Line-1	305	
5		765 KV S/C Jharsugada – Dharamjgarh Line-1	149	
6	ER – SR	765 KV S/C Angul - Srikakulam Line-1		Under implementation, would be completed by October 2020.
7		400 kV D/C Jeypore – Gazuwaka	221	
8	ER-NER	220 kV D/C Alipurduar-Salakati Line	---	Under implementation, would be completed by October 2020.
9		400 kV D/C Binaguri-Bongaigaon Line -1	---	POWERTEL implemented OPGW communication link in 400 kV Binaguri-Bongaigaon Line, So, 6 core could be shared for data sharing in ER-NER corridor.
<b>Total length of OPGW to be installed</b>			<b>1135</b>	

Table 1: OPGW communication link for Inter- Regional corridor in Eastern Region

**A. Requirement of communication links within ER:**

OPGW communication links for few intra-regional stations for facilitating data communication for SCADA, PMU, AGC, VOIP, Digital Protection etc. were discussed, the followings are also recommended:-

- **400 kV D/c Nabinagar (BRBCL) Generating Station – Sasaram:** This has been considered for laying of OPGW communications links for reporting of real time SCADA data to ERLDC BCC over IEC 104 protocol & WAMS data etc.
- **220 kV Daltonganj (JUSNL) – Latehar (JUSNL) LILOed at Daltanganj (PG):** This has been recommended for laying of OPGW communication as suggested by JUSNL. The same would be deleted from the scope if they get necessary funding from PSDF.
- **Howrah (DVC) – Howrah(WB):** Presently, OPGW communication link is not available between Howrah (DVC) to Howrah (WB). So, it is recommended to establish the communication path between these control centres. This will also help

in establishing the OPGW communication links from DVC MCC located at Andul Road to ERLDC BCC at New Delhi.

- **400 kV Farakka-Sagardighi-Subhasgram (400KV Farakka-Sagardighi-I & 400KV Sagardighi-Subhasgram TL):** 400 kV Farakka - Jeerat OPGW communication link was executed in POWERGRID Telecom package which is the main backbone of connectivity to ERLDC from the entire eastern region stations. The link is quite old & losses gradually increased in this link. So, it is recommended to establish the OPGW communication link in the 400KV Farakka-Sagardighi-I & 400KV Sagardighi-Subhasgram TL which is parallel to Farakka-Jeerat line.
- **Farakka-Purnea (400KV Farakka-Purnea under construction TL):** OPGW communication link in Farakka-Purnea link will act as redundant for Farakka-Malda & Malda-Purnea links and will add reliability in the communication network in eastern Region. So, it is recommended to establish the OPGW communication link on this line also.
- **400kV Maithan (PG) – Durgapur (WB) – Sagardighi (WB):** Presently, all real time SCADA & WAMS data and voice communication to ERLDC is through Farakka node. Hence, committee opined that the alternative of Farakka node is also to be planned and implemented, so that any contingency of Farakka node would not lead to any disruption in data & voice communications. Accordingly, it is recommended to establish the OPGW communication links through 400kV Maithan (PG) – Durgapur (WB) – Sagardighi (WB) path as alternate path of Farakka node.

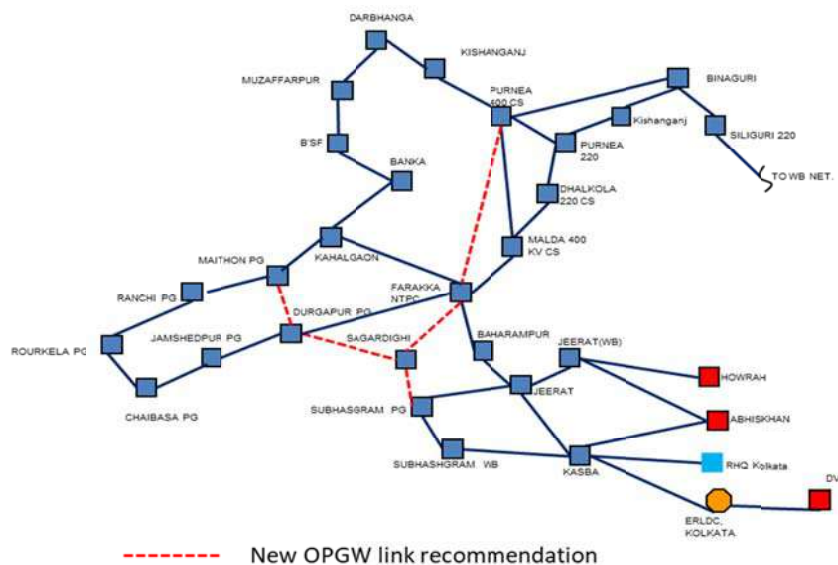


Fig 2: Alternate OPGW link for Farakka node

**B. Laying of OPGW on some transmission lines of DVC control area for making alternate route to KTPS power house along with three sub-stations has been**

reviewed and it is recommended to establish the OPGW communication links as mentioned below:-

Sl. no.	Line	Line Length (KM)	Purpose
1	220 KV KTPS – Giridih (Line # 251, 252 )	101	To provide alternate route of OPGW to KTPS, Jamuria, Ramkanali and Purulia
2	132 KV Jamuria – Ramkanali (Line # 90)	53	
3	132 KV Ramkanali – CTPS (Line # 60)	70	
4	132 KV Purulia – Jamshedpur (Line # 39, 40)	87	
5	132 KV CTPS – Gola (Line # 6,7)	67	To reduce Bandwidth congestion in Ramgarh& CTPS area.
	Total	378	

Table 2: New OPGW link for DVC network

**C. Laying of OPGW on some transmission lines of JUSNL control area for making alternate route through OPTCL & PG ULDC Network has been reviewed and it is recommended to establish the OPGW communication links as mentioned below:-**

Sl. no.	Line	Line Length (KM)	Purpose
1.	220 kv Daltonganj (JUSNL) – Latehar (JUSNL) LILoed at Daltonganj (PG)	90	Alternate path for Daltonganj (PG)
2.	220 kv Jodda (OPTCL)- Ramchandrapur (JH)	130	Alternate route through OPTCL
3.	220 kv Chandil (JH)- Ranchi (PG) (up to LILo point)	90	Alternate route through POWERGRID 400/220 kv Ranchi (Namkom S/s)

Table 3: New OPGW link for JUSNL network

#### 4. Conclusion & Recommendation:

Communication network is the backbone of SCADA system of geographically dispersed Indian Power System, and periodic review and strengthening of OPGW network is essential for fulfilling the growing requirement of reliable wide area communication with requirement of higher bandwidth. Considering the location of Back up of NLDC at ERLDC, which is required to communicate all other regions, it was decided to review the Inter-regional OPGW connectivity with Eastern region and accordingly N-1 redundant communication is proposed. ER-NR corridor is considered to be critical path since this is also used for multisite communication (communication between MCC and

BCC) for ERLDC, NRLDC and NLDC. Accordingly N-2 redundant OPGW communication is recommended. In 2016, during up-gradation of SCADA/EMS system of Eastern Region, Main Control Centre (MCC) and Backup Control Centre (BCC) were implemented and interconnectivity related matter amongst these MCC and BCC of SLDCs and ERLDC in Eastern Region was deliberated and accordingly, additional OPGW links were recommended by the committee.

**Followings are the list of additional OPGW link, which are envisaged by the committee for implementation along with Communication Equipments & DCPS:-**

Sl No	Corridor	Selected lines for laying OPGW	Length (KM)
1	ER- NR	765 kV S/C Gaya-Varanasi Line –I	265
2		400 kV D/C Patna – Balia Line –I	195
3	ER - WR	765 KV S/C Ranchi – Dharamjaygarh Line-1	305
4		765 KV S/C Jharsugada – Dharamjaygarh Line-1	149
5		400 kV D/C Jeypore – Gazuwaka	221
6	ISTS network	400 kV D/c Nabinagar (BRBCL) Generating Station – Sasaram	82
7		400 kV Farakka –Purnea	160
8		400 kV Farakka-Sagardighi-Subhasgram	301
9		400kV Maithan (PG) – Durgapur (WB)	128
10		400KV Durgapur (PG) – Sagardighi (WB)	72
11	DVC network	220 KV KTPS – Giridih ( Line # 251 , 252 )	101
12		132 KV Jamuria – Ramkanali ( Line # 90)	53
13		132 KV Ramkanali – CTPS ( Line # 60)	70
14		132 KV Purulia – Jamshedpur ( Line # 39,40)	87
15		132 KV CTPS – Gola ( Line # 6,7)	67
16		Howrah (DVC) – Howrah(WB)	1
17	JUSNL	220 kV Daltonganj (JUSNL) – Latehar (JUSNL) LILOed at Daltanganj (PG)	90
18		220 kV Jodda (OPTCL)- Ramchandrapur (JH)	130
19		220 kV Chandil (JH)- Ranchi (PG) (up to LILO point)	90

Table 4: List of new OPGW link, recommended by the committee.

All constituents agreed for implementation of the above-mentioned OPGW links in Central Sector (Sl. 1 to 10) by POWERGRID. In addition, DVC also requested POWERGRID to take up the implementation of OPGW links of DVC Sector (Sl. 11 to 16). JUSNL also requested POWERGRID to take up the implementation of OPGW links of JUSNL Sector (Sl. 17 to 19).

:: XX ::

Nomination of committee members for Provision of OPGW along with communication equipments in Important ISTS Lines

<b>S. No</b>	<b>Name of the constituents</b>	<b>Committee Member</b>	<b>Contact Address</b>	<b>Contact Detail</b>
1	ERPC	Sri J. Ganesh Rao, Executive Engineer (Protection & Operation)	ERPC, 14, Golf Club Road, Tollygunge, Kolkata - 700 033	95478 91353 erpcprotection@gmail.com
2	ERLDC, POSOCO	Shri S. P Barnwal, General Manager (SCADA)	ERLDC, POSOCO, 14, Golf Club Road, Tollygunge, Kolkata - 700 033	94330 41812 spbarnwal@posoco.in
3	POWERGRID, ERTS-2, ULDC	Shri Satish Kumar Sahare, Dy. General Manager (ULDC)	POWERGRID, ERTS-2, CF-17, Action Area-1C, New Town, Kolkata - 700 156	94347 40016 uldcer2@powergrid.co.in, satishkumarsahare@powergridindia.com
4	POWERGRID, ERTS-1, ULDC	Shri Rajesh, Senior DGM (AM) & Shri Mithun Choudhury, Manager (ULDC)	POWERGRID, ERTS-1, Near Transformer Repair Works, Board Colony, Shastri Nagar, Patna - 800 023	94318 21127 (1) & 94318 15651 (2) uldcer1@powergrid.co.in, rajeshos@powergridindia.com
5	POWERGRID, Odisha project, ULDC	Shri S. K. Sahu, DGM(ULDC)	POWERGRID, Odisha Projects, Sahid Nagar, Bhubaneswar - 751 007	94330 41822 sksahu@powergridindia.com
6	POWERGRID, LD&C	Shri Manoj Kumar Singh, Chief Manager (LD&C)	POWERGRID, Tower No - I, 5th Floor, Engineers India Limited, R&D Complex, Sector-16, Gurugram - 122 001 (Haryana)	94285 11986 manojksingh@powergridindia.com
7	NLDC, POSOCO	Sri G Sudhakar, Assistant Manager (SL)	NLDC, B-09, Qutub Institutional Area, Katwaria Sarai, New Delhi 110 016	95999 20297 gsudhakar@pososco.in
8	WBSETCL	Shri Biswajit Madhu, Superintend Engineer (Communication)	WBSETCL, Abhikshan Bhawan, Salt Lake Sector-V, Kolkata-700 091	94349 10193 cmnabhikshan@rediffmail.com
9	DVC	Shri A. K. Tiwari, Dy. CE (Communication)	DVC Tower, 9 <sup>TH</sup> Floor, Ultadanga, Kolkata-700 054	94315 09389 ashok.tiwari@dvc.gov.in
10	OPTCL	Sri A.K Pattnaik, CGM(Telecom)	Technical Wing, OPTCL Head Quarters, Janapath, Bhubaneswar – 751 022	94389 07440 cgm.tel@optcl.co.in
11	BSPTCL	Sri Perwez Alam, Electrical Superintend Engineer (ULDC)	BSPTCL, 4th Floor, Vidyut Bhawan, Bailey Road, Patna - 800 001	77638 17765 perwez.bseb@gmail.com uldc.bsptcl@gmail.com a_perwez@rediffmail.com
12	JUSNL	Sri Rimil Topno, Electrical Executive Engineer (ULDC),	Jharkhand Urja Sancharan Nigam Limited, JUSNL Building, Kusai Colony, Doranda, Ranchi - 834002	98357 15518 rimiltopno@gmail.com uldc.jusnl@gmail.com
13	Sikkim	Shri Namgyal Tashi, Executive Engineer(SLDC)	Energy and power department, Sonam Tshering Marg, Gangtok - 737 101	77976 72743 sikkim.sldc@gmail.com



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/2025/2288 - 2307 .

24<sup>th</sup> September 2025

सेवा में / To

**As per list attached**

**विषय: 32 वीं एन.ई.टेस्ट बैठक का कार्यवृत्त**

**Sub: Minutes of 32<sup>nd</sup> NETeST Meeting.**

महोदय/महोदया,

कृपया 29 अगस्त, 2025 को एन.ई.आर.पी.सी कॉन्फ्रेंस हॉल, शिलांग में आयोजित 32 वीं एन.ई.टेस्ट बैठक के कार्यवृत्त को आपकी सूचना एवं आवश्यक कार्रवाई हेतु संलग्न देखें। कार्यवृत्त एन.ई.आर.पी.सी की वेबसाइट: [www.nerpc.gov.in](http://www.nerpc.gov.in) पर भी उपलब्ध है।

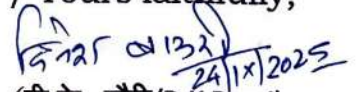
कृपया कोई भी टिप्पणी जल्द से जल्द एन.ई.आर.पी.सी सचिवालय को सूचित करें।

Sir/Madam,

Please find enclosed herewith the minutes of the 32<sup>nd</sup> NETeST Meeting held at NERPC Conference Hall, Shillong on 29<sup>th</sup> August, 2025 for your kind information and necessary action. The minutes is also available on the website of NERPC: [www.nerpc.gov.in](http://www.nerpc.gov.in).

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

भवदीय / Yours faithfully,

  
(डी.के. बौरी/D.K Bauri)

निदेशक / Director

Encl: As above

- The forum advised ULDC-POWERGRID to share the list of important ISTS channels by 10<sup>th</sup> February-2025.

**In 31<sup>st</sup> 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.

The forum noted that PGCIL would share the information as per the uniform format for sharing the requisite data after finalization of the same by NPC.

**Deliberation of the sub-committee:**

It was informed that the uniform format for Communication Availability was approved in 16<sup>th</sup> NPC meeting. The forum agreed to adopt the finalized format as approved in 16<sup>th</sup> 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.

**2.4. Usage of POWERTEL OPGW in view of the order of Hon'ble CERC against petition no. 494/MP/2020 - NERLDC**

As per the Hon'ble CERC order in Petition No. 494/MP/2020, all assets including OPGW regardless of whether commissioned by POWERGRID or POWERTEL, are under the management and control of POWERGRID. Consequently, the ownership of the OPGW in question vests with POWERGRID.

In the 8<sup>th</sup> CTU Planning Meeting (CPM) dtd. 28-07-2025, NERLDC requested POWERGRID to provide communication links for Power System usage over all such OPGW networks previously managed by POWERTEL, including the 400 kV Silchar – Imphal, 400 kV Balipara–Bongaigaon Lines 3 & 4 and the 132 kV Kumarghat–Aizawl line.

Forum may discuss further if any other such fibre needs to be brought in usage for Power System.

***Deliberation of the sub committee:***

PGCIL updated the forum as follows:

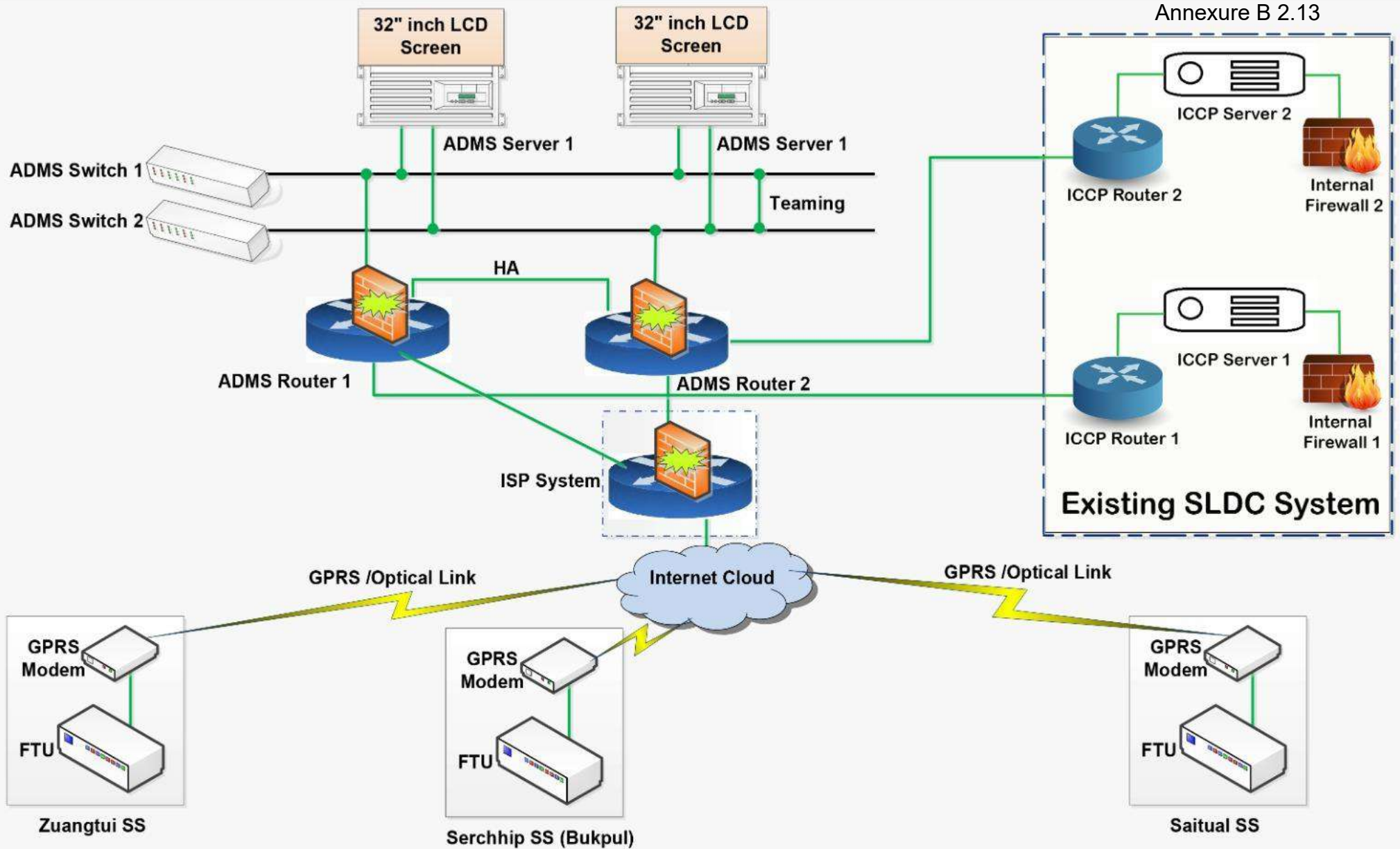
- 1. 400 kV Silchar – Imphal line:** The matter would be taken up with POWERTEL at the earliest.
- 2. 400 kV Balipara–Bongaigaon Lines 3 & 4-** The matter has already been taken up with POWERTEL and is in progress.
- 3. 132 kV Kumarghat–Aizawl line-** There is high loss in this link. PGCIL will submit detailed loss report (OTDR) within 15 days.

NERLDC further apprised the forum that the only communication link between NER and ER is Salakati to Alipurduar. NERLDC requested the forum for exploring fibre/ bandwidth allocation via Binaguri to Siliguri link to establish redundant communication link between NER and ER.

Forum in principle agreed for the proposal of redundant communication link between NER and ER and also advised NERLDC to take the matter to CTU/NLDC being inter-regional issue.

**2.5. Optimised utilisation of OPGW & FOTE across the NER considering the assets that are being commissioned under NERPSIP, Comprehensive T&D, State-owned projects, TBCBs and ULDCs- NERLDC**

With the recent commissioning of numerous links under various State and Central projects, the communication infrastructure of the NER Grid has witnessed significant development. However, **the optimal utilization of the**



**ADMS Control Centre -  
Network Architecture  
Diagram of SLDC Aizawl,  
Mizoram**



NERPC/SE(O)/ADMS/2019/1124 Dated  
04.JUNE.2019

SCALE NTS	SHEET 03
REV. A	NEXT SH. /



ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड  
(भारत सरकार का उद्यम)  
GRID CONTROLLER OF INDIA LIMITED  
(A Government of India Enterprise)

Annexure B 2.14



[formerly Power System Operation Corporation Limited (PSOCO)]

उत्तर पूर्वी क्षेत्रीय भार प्रेषण केन्द्र / North Eastern Regional Load Despatch Centre

कार्यालय : लोवर, लापालांग, शिलांग - 793006

Office : Lower Nongrah, Lapalang, Shillong- 793006

CIN : U40105DL2009GOI188682, Website : www.nerldc.in, E-mail : nerldc@grid-india.in, Tel : 0364-2537470/427, Fax: 03642537486

संदर्भ: एनईआरएलडीसी/साइबर सुरक्षा /सीएससीएफ/ 01

दिनांक/Date: 06.04.2026

सेवा में/To,

संलग्न सूची के अनुसार। As per list attached.

**विषय/ Sub:** Compliance related to participation in GO-NER-CSCF meetings, submission of agenda points, VAPT of IT and OT systems and manpower strengthening at NER SLDCs.

Sir/Madam,

Regulation 53 of IEGC states:

*"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."*

Accordingly, North Eastern Regional Cyber Security Coordination Forum -Grid Operation (GO-NER-CSCF) was formed. As per the procedure for Activities of Cyber Security Coordination Forum, periodic meetings on a quarterly basis are to be conducted to discuss the agenda points related to Cyber Security.

The North-Eastern Regional Load Despatch Centre (NERLDC) has been regularly conducting the meetings of the North Eastern Regional Cyber Security Coordination Forum – Grid Operation (GO-NER-CSCF) since 20<sup>th</sup> February 2024 with the objective of strengthening cyber security preparedness and coordination among the regional stakeholders.

In this regard, certain issues have been observed during recent meetings which require immediate attention and necessary action from all SLDCs in the North-Eastern Region.

1. Mandatory Participation in the Meetings of GO-NER-CSCF:

It has been observed that participation from the SLDCs in the meetings of GO-NER-CSCF is inconsistent. As the forum is intended to facilitate detailed discussions, knowledge sharing and coordinated action on cyber security matters, it is requested that all NER SLDCs ensure mandatory participation of their CISOs and Alt. CISOs in all the meetings (physical and online) of GO-NER-CSCF.

2. Submission of Agenda Points Prior to Meetings:

It has also been observed that the SLDCs need to share their agenda points/issues in advance for

discussion in the CSCF meetings. Submission of agenda items beforehand is essential for structured discussions and effective resolution of issues.

### 3. VAPT of IT and OT Systems for FY 2025-26:

During the review, it has been noted that Vulnerability Assessment and Penetration Testing (VAPT) of OT systems for FY 2025-26 is yet to be completed in all SLDCs except Assam SLDC. As per the provisions of the Information Technology Rules / Cyber Security guidelines applicable to power sector entities (IT Rules 2018 and subsequent directions), periodic VAPT is a mandatory requirement for critical infrastructure systems.

Non-completion of VAPT for the current financial year may therefore be treated as non-compliance of the applicable cyber security requirements.

All SLDCs are requested to expedite the completion of VAPT for both IT and OT systems and submit the status/compliance report at the earliest.

### 4. Onboarding and Usage of Threat Dissemination Portal (TDP):

It has been observed that SLDC Arunachal Pradesh is yet to be onboarded on the Threat Dissemination Portal (TDP). Further, although other SLDCs have already been onboarded on the portal, the level of activity and regular usage is very limited.

Since the portal provides important information regarding emerging cyber threats, Indicators of Compromise (IOCs), vulnerabilities and advisories, all SLDCs are requested to ensure regular login to the TDP portal and take necessary action on the reported IOCs/vulnerabilities/advisories on a continuous basis.

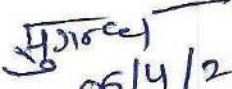
### 5. Manpower Strengthening at SLDCs:

The issue of acute manpower shortage at the SLDCs has also been highlighted in the forum. Adequate manpower is essential for effective grid operation, cyber security monitoring, incident response and compliance with regulatory requirements.

In this regard, SLDCs are requested to take up the matter with their respective management/state utilities for deputation or recruitment of additional manpower, particularly in the areas of Cyber Security.

All SLDCs are requested to take necessary action on the above points and extend their continued cooperation in strengthening the cyber security posture and operational resilience of the power system in the North-Eastern Region. SLDCs are also requested to host the meetings at their location to ensure maximum participation of their officials.

भवदीय / Yours sincerely

  
06/4/2026

**सुगंध प्रसाद बर्णवाल / Sugandh Prasad Barnwal**

मुख्य महाप्रबंधक एवं सी.आई.एस.ओ / Chief General Manager & CISO

उ.पू.क्षे.भा.प्रे.के, ग्रिड- इंडिया / NERLDC, GRID-INDIA

Distribution list:

1. Head of SLDC, Dept. of Power, Govt. of Arunachal Pradesh, Itanagar – 791111
2. CGM (LDC), SLDC Complex, AEGCL, Kahilipara, Guwahati-781019
3. Head of SLDC, MSPCL, Imphal – 795001
4. Head of SLDC, MePTCL, Lumjingshai, Short Round Road, Shillong – 793001
5. Head of SLDC, P&E Dept. Govt. of Mizoram, Aizawl – 796001
6. Head of SLDC, Dept. of Power, Govt. of Nagaland, Dimapur – 797103
7. Head of SLDC, TSECL, Agartala – 799001

**GRID CONTROLLER OF INDIA LIMITED****(A Government of India Enterprise)****[Formerly Power System Operation Corporation Limited (POSOCO)]****उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र/ North Eastern Regional Load Despatch Centre**

Annexure C 3.2 (i)

कार्यालय: लोअर नोंगराह, लापलांग, शिलांग- 793006(मेघालय)

Office: Lower Nongrah, Lapalang, Shillong- 793006 (Meghalaya)

CIN:U40105DL2009GOI188682, Website: www.nerldc.in, E-mail: nerldc@grid-india.in, Tel:0364-2537470/427, Fax:03642537486

Ref: NERLDC/Communication/Oct'25/ ४५२२

Date: 23.10.2025

To,

**Executive Director NERPSIP, Odalbakhra, Kahilipara, Guwahati – 781019**  
**Sr. General Manager (AM/ULDC), Powergrid RHQ, Lapalang, Shillong****Subject:** Request for Interconnection of Commissioned SDH Systems over Existing OPGW Infrastructure to Strengthen Communication Redundancy

Sir,

As discussed in the 32<sup>nd</sup> NETeST meeting agenda 2.5, attached as Annexure-1, I would like to draw your attention to a persistent issue affecting the effective utilisation of commissioned SDH systems and the available OPGW communication backbone across multiple substations in the region. Despite the commissioning of compatible SDH equipment and the availability of functional OPGW links at several strategic locations, the absence of interconnection between these systems has resulted in significant underutilisation of available infrastructure and has limited the development of necessary main and redundant communication paths critical to power system operations.

There are multiple instances where SDH systems under various schemes such as ULDC, and NERPSIP have been installed at the same locations, yet these systems remain non-integrated, resulting in underutilisation of the available OPGW links. The details of the aforementioned locations are attached as Annexure-2.

These SDH systems are located at key nodes in the communication network and are expected to serve as main or redundant links for several central sector generating and grid stations. However, due to the lack of integration between these multiplexers, the infrastructure remains underutilised, and the intended redundancy is not achieved.

The unavailability of alternate communication paths can pose a significant risk to grid operations, particularly for data channels related to ICCP, AGC, SCADA, PMUs, Voice and protection schemes. Moreover, this defeats the purpose of investing in a robust fibre-optic and SDH backbone, as network reliability and operational visibility remain compromised.

It is therefore requested that immediate steps be taken to address this long-standing issue. Interconnection of SDH systems, wherever compatible or interoperable, should be prioritised to ensure the creation of reliable main and redundant communication paths across the network. Coordination between stakeholders under different schemes ULDC and NERPSIP, etc. will be essential in resolving interoperability or administrative issues, if any.

Your kind intervention in this matter is earnestly requested to ensure that the full potential of the region's communication infrastructure is realised for the benefit of grid security and reliability.

Enclosed:

1. Annexure-1: Minutes of 32<sup>nd</sup> NETeST meeting
2. Annexure-2: Details where inter-patching is required.

With Regards,

Saugato Mondal

General Manager (Logistics, NERLDC)

Copy to (via email):

1. MS, NERPC
2. ED, NERTS
3. CGM(I/C), NERLDC

**पंजीकृत कार्यालय: बी-9, प्रथम तल, कुतब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016**

Registered Office: B-9, 1st Floor, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

Website: [www.grid-india.in](http://www.grid-india.in)



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

सुरक्षा में जहाँ  
सुविधा है वहाँ



SPEED POST/FAX

Ph : 0364-2534039

Fax: 0364-2534040

email: nerpc@ymail.com

website: www.nerpc.gov.in

No: NERPC/NETeST/2025/2268 - 2307 .

24<sup>th</sup> September 2025

सेवा में / To

**As per list attached**

**विषय: 32 वीं एन.ई.टेस्ट बैठक का कार्यवृत्त**

**Sub: Minutes of 32<sup>nd</sup> NETeST Meeting.**

महोदय/महोदया,

कृपया 29 अगस्त, 2025 को एन.ई.आर.पी.सी कॉन्फ्रेंस हॉल, शिलांग में आयोजित 32 वीं एन.ई.टेस्ट बैठक के कार्यवृत्त को आपकी सूचना एवं आवश्यक कार्रवाई हेतु संलग्न देखें। कार्यवृत्त एन.ई.आर.पी.सी की वेबसाइट: [www.nerpc.gov.in](http://www.nerpc.gov.in) पर भी उपलब्ध है।

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

Sir/Madam,

Please find enclosed herewith the minutes of the 32nd NETeST Meeting held at NERPC Conference Hall, Shillong on 29th August, 2025 for your kind information and necessary action. The minutes is also available on the website of NERPC: [www.nerpc.gov.in](http://www.nerpc.gov.in).

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

भवदीय / Yours faithfully,

*(Handwritten signature)*  
24/09/2025

(डी.के. बौरी/D.K Bauri)

निदेशक / Director

Encl: As above

In the 8<sup>th</sup> CTU Planning Meeting (CPM) dtd. 28-07-2025, NERLDC requested POWERGRID to provide communication links for Power System usage over all such OPGW networks previously managed by POWERTEL, including the 400 kV Silchar – Imphal, 400 kV Balipara–Bongaigaon Lines 3 & 4 and the 132 kV Kumarghat–Aizawl line.

Forum may discuss further if any other such fibre needs to be brought in usage for Power System.

***Deliberation of the sub committee:***

PGCIL updated the forum as follows:

- 1. 400 kV Silchar – Imphal line:** The matter would be taken up with POWERTEL at the earliest.
- 2. 400 kV Balipara–Bongaigaon Lines 3 & 4-** The matter has already been taken up with POWERTEL and is in progress.
- 3. 132 kV Kumarghat–Aizawl line-** There is high loss in this link. PGCIL will submit detailed loss report (OTDR) within 15 days.

NERLDC further apprised the forum that the only communication link between NER and ER is Salakati to Alipurduar. NERLDC requested the forum for exploring fibre/ bandwidth allocation via Binaguri to Siliguri link to establish redundant communication link between NER and ER.

Forum in principle agreed for the proposal of redundant communication link between NER and ER and also advised NERLDC to take the matter to CTU/NLDC being inter-regional issue.

**2.5. Optimised utilisation of OPGW & FOTE across the NER considering the assets that are being commissioned under NERPSIP, Comprehensive T&D, State-owned projects, TBCBs and ULDCs- NERLDC**

With the recent commissioning of numerous links under various State and Central projects, the communication infrastructure of the NER Grid has witnessed significant development. However, **the optimal utilization of the**

**infrastructure is essential to derive its full benefits.** Few of such examples are outlined below:

Usage of BNC-HVDC → Balipara → Rangia → Bongaigoan → Alipurduar, the OPGW is laid over BNC- Agra HVDC link **however it is still not being utilized for Inter-regional communication link.**

The Connectivity Tinsukia → Kathalguri → Namsai → Tezu - - -> Roing - - -> Pasighat → Along → Basar → Daporizo → Ziro consist of Tejas SDH which are either owned by Comprehensive T&D or ULDC POWERGRID, **however all the Tejas SDHs are not connected till now.**

Kameng → Khupi → Tenga → Balipara OPGW is completed, however this link is not being utilised till now.

Inter-patching requirement at multiple locations of NER to facilitate a redundant communication path between Central Sector Station and NERLDC after commissioning of various assets under NERPSIP-Tripura:

- (a) Gohpur (Assam owned station),
- (b) Rokhia (Tripura owned station),
- (c) Udaipur (Tripura owned station),
- (d) Agartala-79 Tilla (SLDC-Tripura)

**Deliberation of the sub-committee:**

**Regarding the connectivity from HVDC BNC to HVDC Agra,** PGCIL apprised that the fibre connectivity from HVDC BNC to Rangia (repeater station) is healthy. But the fibre connectivity from Rangia (repeater station) to Alipurduar is unhealthy and is reporting high losses. PGCIL further informed that rectification works on the unhealthy portion (Rangia to Alipurduar) is in process and would take some time. PGCIL was advised to share the loss report within a week. **Annexure B 2.5 attached for reference.**

**Regarding the connectivity from Tinsukia to Ziro,** NERLDC apprised that inter-patching is pending at Kathalguri. Moreover, OPGW connection is pending between Namsai and Tezu and also SDH is not connected between Roing and Pasighat.

CTDS and POWERGRID agreed to mutually complete the necessary connections.

**Regarding the connectivity from Kameng to Balipara**, NERLDC apprised that inter-patching is pending from Balipara to Kameng which will enable a ring communication for Kameng.

**MS, NERPC suggested NERLDC** to write a letter to the concerned utilities, highlighting the gaps and possible solutions regarding inter-patching and fibre sharing issues as mentioned above. This would help ensure optimal utilisation of communication infrastructure in NER. NERLDC agreed to take the necessary action.

#### **2.6. Establishing Communication Link between 400 kV New Kohima and 220 kV Zhadima via 220 kV Zhadima–New Kohima Line – Restoration of Connectivity in View of Link Failure-NERLDC**

The communication link between **400 kV New Kohima and 400 kV Imphal** has remained non-functional since June 2024. Restoration efforts by Aparva (TSP) have been hindered due to prevailing law and order issues in Manipur, resulting in a prolonged outage and communication blackout at New Kohima. However, there exists an alternative opportunity to restore connectivity through the OPGW laid on the 220 kV Zhadima–New Kohima transmission line, which is being executed by the Department of Power (DoP), Nagaland.

A Fibcom FOTE is installed at 220 kV Zhadima.

An ABB FOTE is available at 400 kV New Kohima.

A direct fiber patch between these FOTEs using the available OPGW on the Zhadima–New Kohima line can restore essential communication for New Kohima until the primary route via Imphal is re-established.

**ULDC-POWERGRID, Aparva and DoP-Nagaland** are requested to coordinate with the respective vendors (Fibcom and ABB) and execute the necessary inter-patching to restore communication between New Kohima and Zhadima via the aforementioned OPGW route, which will enhance the reliability of New Kohima (Aparva) S/s and in turn for NER. A diagram depicting the connectivity is attaches as **Annexure B 2.6**.

**OPGW & FOTE STATUS NERPPSIP - ASSAM (EHV)**

Sl No	Name of Station	Supply Status	NERPPSIP FOTE		State FOTE		ULDC FOTE		Remarks
			Make and Model	STM Level	ULDC FOTE available	STM level	ULDC FOTE available	STM level	
1	Rangia (Ex)	Y	Hitachi FOX 515H as SDH & FOX 505 as PDH	STM 4	Y (State)		FIBCOM6335	STM4	Interparatching to be done
2	132kV Sonabil	Y		STM 4	Y (State)	STM 1	NA	NA	Interparatching to be done
3	Chapakhowa	Y		STM 4			Tejas	STM-4	Interparatching to be done
4	132kV Gohpur (Ex)	Y		STM 4	Y (State)	STM 4	FIBCOM6335	STM4	Interparatching to be done

**OPGW & FOTE STATUS NERPSIP - Manipur (EHV)**

SI No	Name of Station	NERPSIP FOTE				ULDC FOTE		Remarks
		Supply Status	Make and Model	STM Level	Installation Completed	ULDC FOTE available	STM level	
1	Churachandpur	Y	Tejas	STM4	Y	FIBCOM 6335	STM4	Interpacting to be done.
2	Thoubal	Y (SFP only in Scope)	Tejas	STM4	Y (in existing panel)	FIBCOM 6335	STM4	SFP and fiber to be connected with ULDC-FOTE
3	Kakching	Y	Tejas	STM4	N	FIBCOM 6335	STM4	Interpacting to be done.
4	Jiribam (State)	Y (SFP only in Scope)	Tejas	STM4	N	FIBCOM 6335	STM4	SFP and fiber to be connected with ULDC-FOTE
5	132 kV Rengpang	Y	Tejas	STM4	Y	FIBCOM 6335	STM4	Interpacting to be done.
6	132kV Karong	Y (SFP only in Scope)	Tejas	STM4	Y	FIBCOM 6335	STM4	SFP and fiber to be connected with ULDC-FOTE
7	132 kV Yurembam (Imphal)	Y	Tejas	STM4	Y	FIBCOM 6335	STM16	Interpacting to be done.
8	132 kV Imphal (Powergrid)	Y	Tejas	STM4	Y	FIBCOM 6335	STM16	Interpacting to be done.
9	Ningthoukhong	Y	Tejas	STM4	Y	FIBCOM 6335	STM4	Interpacting to be done.

**OPGW & FOTE STATUS NERPSIP - MEGHALAYA (EHV)**

Sl No	Name of Station	NERPSIP FOTE				ULDC/STATE FOTE		Remarks
		Supply Status	Make and Model	STM Level	Installation Completed	ULDC/STATE FOTE available	STM Level	
1	132 kV Shillong (Mawlai)	Y	Hitachi	STM4	Y	FIBCOM 6335	STM16	Interpackting to be done.
2	NEHU (WB)	Y	Hitachi	STM4	Y	FIBCOM 6335	STM16	Interpackting to be done.
3	132 kV Nangalbira	Y	Hitachi	STM4	Y	Y (state)	E1 patching (as per state request)	Interpackting to be done.
4	220 kV Killing (Bymihat)	Y	Hitachi	STM4	Y	FIBCOM 6335	STM16	Interpackting to be done.
5	MLHEP	Y	Hitachi	STM4		FIBCOM 6335	STM4	Interpackting to be done.
6	Khlerihat (ME)	Y	Hitachi	STM4	Y	FIBCOM 6335	STM16	Interpackting to be done.

**OPGW & FOTE STATUS NERPSIP - MIZORAM (EHV )**

SI No	Name of Station	NERPSIP FOTE			ULDC FOTE		Remarks	
		Supply Status	Make and Model	STM Level	Installation Completed	ULDC FOTE available		STM level
1	Zembawak	Y	Tejas	STM4	Y	FIBCOM 6335	STM4	Interpataching to be done

OPGW & FOTE STATUS NERPSIP - NAGALAND (EHV)										
Sl No	Name of Station	NERPSIP FOTE					ULDC FOTE			Remarks
		Supply Status	Make and Model	STM Level	Installation Completed	ULDC FOTE available	STM level			
1	Mokokchung (NA)	Y	Tejas	STM 4	Y	FIBCOM 6335	STM4	Interpataching to be done		
2	Kohima (WB)	Y	Tejas	STM 4	Y	FIBCOM 6335	STM16	Interpataching to be done		
3	220kV New Kohima (NA)	Y	Tejas	STM 4	Y	FIBCOM 6335	STM4	Interpataching to be done		
4	220kV Mokokchung (PG)	N	Tejas	STM 4	N	FIBCOM 6335	STM4	Interpataching to be done		
5	132kV Wokha	Y	Tejas	STM 4	N	FIBCOM 6335	STM4	Interpataching to be done		

## OPGW &amp; FOTE STATUS NERPSIP - TRIPURA (EHV)

SI No	Name of Link/Station	NERPSIP FOTE				ULDC FOTE		Remarks
		Supply Status	Make and Model	STM Level	Installation Completed	ULDC FOTE available	STM level	
1	132 kV PK Bari (TPTL)	Y	ECI	STM4	Y	FIBCOM 6335	STM16	Interpatatching to be done
2	Kumarghat (PG)	Y	ECI	STM4	Y	FIBCOM6335	STM16	Interpatatching to be done
3	Baramura	Y	ECI	STM4	Y	FIBCOM6335	STM4	Interpatatching to be done
4	132kV 79 Tilla Agartala	Y	ECI	STM4	Y	FIBCOM6335	STM16	Interpatatching to be done
5	Rokhia	Y	ECI	STM4	Y	FIBCOM6335	STM16	Interpatatching to be done
6	Dhalabil	Y	ECI	STM4	Y	FIBCOM6335	STM4	Interpatatching to be done
9	Surajmaninagar	Y (SFP only)	ECI	STM4	N	FIBCOM6335	STM16	Interpatatching to be done
10	Rokhia	Y	ECI	STM4	Y	FIBCOM6335	STM4	Interpatatching to be done
11	132 kV Udaipur	Y	ECI	STM4	Y	FIBCOM6335	STM16	Interpatatching to be done

कार्यालय: लोअर नोंगराह, लापलांग, शिलांग- 793006(मेघालय)

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CIN:U40105DL2009GOI188682, Website: www.nerldc.in, E-mail: nerldc@grid-india.in, Tel:0364-2537470/427, Fax:03642537486

Ref: NERLDC/Communication/Oct'25/6423

Date: 23.10.2025

To,

Executive Director, Comprehensive T&D Scheme Arunchal Pradesh, POWEGRID, Itanagar

Sr. General Manager (AM/ULDC), Powergrid RHQ, Lapalang, Shillong

**Subject:** Optimised utilisation of communication infrastructure and Request for Interconnection of Commissioned SDH Systems over Existing OPGW Infrastructure to Strengthen Communication Redundancy

Sir,

With reference to discussion agenda 2.5 attached an Annexure-1, 32<sup>nd</sup> NETeST meeting held on 29.08.2025, I would like to draw your attention to a persistent issue affecting the effective utilisation of commissioned SDH systems and the available OPGW communication backbone across multiple substations in the region. Despite the commissioning of compatible SDH equipment and the availability of functional OPGW links at several strategic locations, the absence of interconnection between these systems has resulted in significant underutilisation of available infrastructure and has limited the development of necessary main and redundant communication paths critical to power system operations.

There are multiple instances where SDH systems under various schemes such as ULDC and Comprehensive T&D Scheme (CTDS)-Arunachal Pradesh have been installed at the same or interconnected locations, yet these systems remain non-integrated, resulting in underutilisation of the available OPGW links. Details are listed below and for visualisation kindly refer the annexure attached:

Case-1: Connectivity of Tejas Mux supplied under CTDS from Tinuskia (AEGCL) to Ziro (PG)

- **Namsai (PG owned)** – ULDC Tejas SDH and **Tezu (PG owned)** – CTDS Tejas SDH are not interconnected, despite OPGW connectivity being available between the two locations.
- **Roing (PG owned)** – ULDC Tejas SDH and **Pasighat** – CTDS Tejas SDH remain unconnected, even though the communication link is available.
- **Kathalguri (NEEPCO owned)** – Both ULDC Tejas SDH and CTDS Tejas SDH are installed at the same location, but the systems are not interconnected.

Case-2: Utilisation of the Kameng–Khupi–Tenga–Balipara OPGW route

Another important case is the Kameng–Khupi–Tenga–Balipara OPGW route, which is fully operational but remains unutilised due to the lack of interconnection between the CTDS Tejas SDH and ULDC Fibcom SDH systems at Balipara substation. This corridor holds significant potential for providing robust main or redundant connectivity, which is presently unrealised.

पंजीकृत कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016

Registered Office: B-9, 1st Floor, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

Website: [www.grid-india.in](http://www.grid-india.in)

वर्मा

(A Government of India Enterprise)

[Formerly Power System Operation Corporation Limited (POSOCO)]

उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र/ North Eastern Regional Load Despatch Centre

कार्यालय: लोअर नोंगराह, लापलांग, शिलांग- 793006(मेघालय)

Office: Lower Nongrah, Lapalang, Shillong- 793006 (Meghalaya)

CIN:U40105DL2009GOI188682, Website: www.nerldc.in, E-mail: nerldc@grid-india.in, Tel:0364-2537470/427, Fax:03642537486

These SDH systems are located at key nodes in the communication network and are expected to serve as main or redundant links for several central sector generating and grid stations. However, due to the lack of integration between these multiplexers, the infrastructure remains underutilised, and the intended redundancy is not achieved.

The unavailability of alternate communication paths can pose a significant risk to grid operations, particularly for data channels related to ICCP, AGC, SCADA, PMUs, Voice and protection schemes. Moreover, this defeats the purpose of investing in a robust fibre-optic and SDH backbone, as network reliability and operational visibility remain compromised.

It is therefore requested that immediate steps be taken to address this long-standing issue. Interconnection of SDH systems, wherever compatible or interoperable, should be prioritised to ensure the creation of reliable main and redundant communication paths across the network. Coordination between stakeholders under different schemes ULDC and Comprehensive T&D Scheme will be essential in resolving interoperability or administrative issues, if any.

Your kind intervention in this matter is earnestly requested to ensure that the full potential of the region's communication infrastructure is realised for the benefit of grid security and reliability.

With Regards,

Yours Faithfully



Saugato Mondal

General Manager (Logistics, NERLDC)

Copy to (Email):

1. MS, NERPC, Shillong
2. CGM (IC), NERLDC
3. ED, NERTS

पंजीकृत कार्यालय: बी-9, प्रथम तल, कुतुब इंस्टीट्यूशनल एरिया, कटवारिया सराय, नई दिल्ली-110016

Registered Office: B-9, 1st Floor, Qutab Institutional Area, Katwaria Sarai, New Delhi-110016

Website: [www.grid-india.in](http://www.grid-india.in)



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

सुरक्षा के जहाँ  
सुनियाँ हैं वहाँ



SPEED POST/FAX

Ph : 0364-2534039

Fax: 0364-2534040

email: nerpc@ymail.com

website: www.nerpc.gov.in

No: NERPC/NETeST/2025/2268 - 2307 .

24<sup>th</sup> September 2025

सेवा में / To

**As per list attached**

**विषय: 32 वीं एन.ई.टेस्ट बैठक का कार्यवृत्त**

**Sub: Minutes of 32<sup>nd</sup> NETeST Meeting.**

महोदय/महोदया,

कृपया 29 अगस्त, 2025 को एन.ई.आर.पी.सी कॉन्फ्रेंस हॉल, शिलांग में आयोजित 32 वीं एन.ई.टेस्ट बैठक के कार्यवृत्त को आपकी सूचना एवं आवश्यक कार्रवाई हेतु संलग्न देखें। कार्यवृत्त एन.ई.आर.पी.सी की वेबसाइट: [www.nerpc.gov.in](http://www.nerpc.gov.in) पर भी उपलब्ध है।

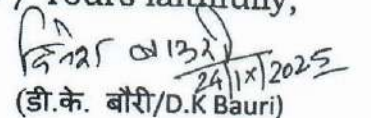
कृपया कोई भी टिप्पणी जल्द से जल्द एन.ई.आर.पी.सी सचिवालय को सूचित करें।

Sir/Madam,

Please find enclosed herewith the minutes of the 32<sup>nd</sup> NETeST Meeting held at NERPC Conference Hall, Shillong on 29<sup>th</sup> August, 2025 for your kind information and necessary action. The minutes is also available on the website of NERPC: [www.nerpc.gov.in](http://www.nerpc.gov.in).

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

भवदीय / Yours faithfully,

  
24/9/2025

(डी.के. बौरी/D.K Bauri)

निदेशक / Director

Encl: As above

In the 8<sup>th</sup> CTU Planning Meeting (CPM) dtd. 28-07-2025, NERLDC requested POWERGRID to provide communication links for Power System usage over all such OPGW networks previously managed by POWERTEL, including the 400 kV Silchar – Imphal, 400 kV Balipara–Bongaigaon Lines 3 & 4 and the 132 kV Kumarghat–Aizawl line.

Forum may discuss further if any other such fibre needs to be brought in usage for Power System.

***Deliberation of the sub committee:***

PGCIL updated the forum as follows:

- 1. 400 kV Silchar – Imphal line:** The matter would be taken up with POWERTEL at the earliest.
- 2. 400 kV Balipara–Bongaigaon Lines 3 & 4-** The matter has already been taken up with POWERTEL and is in progress.
- 3. 132 kV Kumarghat–Aizawl line-** There is high loss in this link. PGCIL will submit detailed loss report (OTDR) within 15 days.

NERLDC further apprised the forum that the only communication link between NER and ER is Salakati to Alipurduar. NERLDC requested the forum for exploring fibre/ bandwidth allocation via Binaguri to Siliguri link to establish redundant communication link between NER and ER.

Forum in principle agreed for the proposal of redundant communication link between NER and ER and also advised NERLDC to take the matter to CTU/NLDC being inter-regional issue.

**2.5. Optimised utilisation of OPGW & FOTE across the NER considering the assets that are being commissioned under NERPSIP, Comprehensive T&D, State-owned projects, TBCBs and ULDCs- NERLDC**

With the recent commissioning of numerous links under various State and Central projects, the communication infrastructure of the NER Grid has witnessed significant development. However, **the optimal utilization of the**

**infrastructure is essential to derive its full benefits.** Few of such examples are outlined below:

Usage of BNC-HVDC → Balipara → Rangia → Bongaigoan → Alipurduar, the OPGW is laid over BNC- Agra HVDC link **however it is still not being utilized for Inter-regional communication link.**

The Connectivity Tinsukia → Kathalguri → Namsai → Tezu - - -> Roing - - -> Pasighat → Along → Basar → Daporizo → Ziro consist of Tejas SDH which are either owned by Comprehensive T&D or ULDC POWERGRID, **however all the Tejas SDHs are not connected till now.**

Kameng → Khupi → Tenga → Balipara OPGW is completed, however this link is not being utilised till now.

Inter-patching requirement at multiple locations of NER to facilitate a redundant communication path between Central Sector Station and NERLDC after commissioning of various assets under NERPSIP-Tripura:

- (a) Gohpur (Assam owned station),
- (b) Rokhia (Tripura owned station),
- (c) Udaipur (Tripura owned station),
- (d) Agartala-79 Tilla (SLDC-Tripura)

**Deliberation of the sub-committee:**

**Regarding the connectivity from HVDC BNC to HVDC Agra,** PGCIL apprised that the fibre connectivity from HVDC BNC to Rangia (repeater station) is healthy. But the fibre connectivity from Rangia (repeater station) to Alipurduar is unhealthy and is reporting high losses. PGCIL further informed that rectification works on the unhealthy portion (Rangia to Alipurduar) is in process and would take some time. PGCIL was advised to share the loss report within a week. **Annexure B 2.5 attached for reference.**

**Regarding the connectivity from Tinsukia to Ziro,** NERLDC apprised that inter-patching is pending at Kathalguri. Moreover, OPGW connection is pending between Namsai and Tezu and also SDH is not connected between Roing and Pasighat.

CTDS and POWERGRID agreed to mutually complete the necessary connections.

**Regarding the connectivity from Kameng to Balipara**, NERLDC apprised that inter-patching is pending from Balipara to Kameng which will enable a ring communication for Kameng.

**MS, NERPC suggested NERLDC** to write a letter to the concerned utilities, highlighting the gaps and possible solutions regarding inter-patching and fibre sharing issues as mentioned above. This would help ensure optimal utilisation of communication infrastructure in NER. NERLDC agreed to take the necessary action.

#### **2.6. Establishing Communication Link between 400 kV New Kohima and 220 kV Zhadima via 220 kV Zhadima–New Kohima Line – Restoration of Connectivity in View of Link Failure-NERLDC**

The communication link between **400 kV New Kohima and 400 kV Imphal** has remained non-functional since June 2024. Restoration efforts by Aparva (TSP) have been hindered due to prevailing law and order issues in Manipur, resulting in a prolonged outage and communication blackout at New Kohima. However, there exists an alternative opportunity to restore connectivity through the OPGW laid on the 220 kV Zhadima–New Kohima transmission line, which is being executed by the Department of Power (DoP), Nagaland.

A Fibcom FOTE is installed at 220 kV Zhadima.

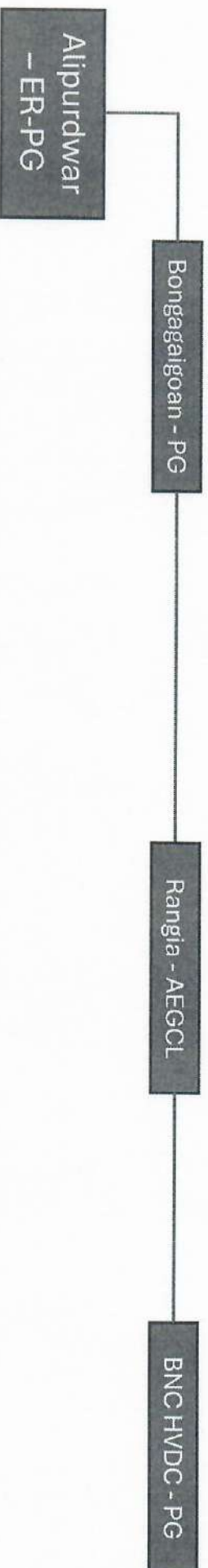
An ABB FOTE is available at 400 kV New Kohima.

A direct fiber patch between these FOTEs using the available OPGW on the Zhadima–New Kohima line can restore essential communication for New Kohima until the primary route via Imphal is re-established.

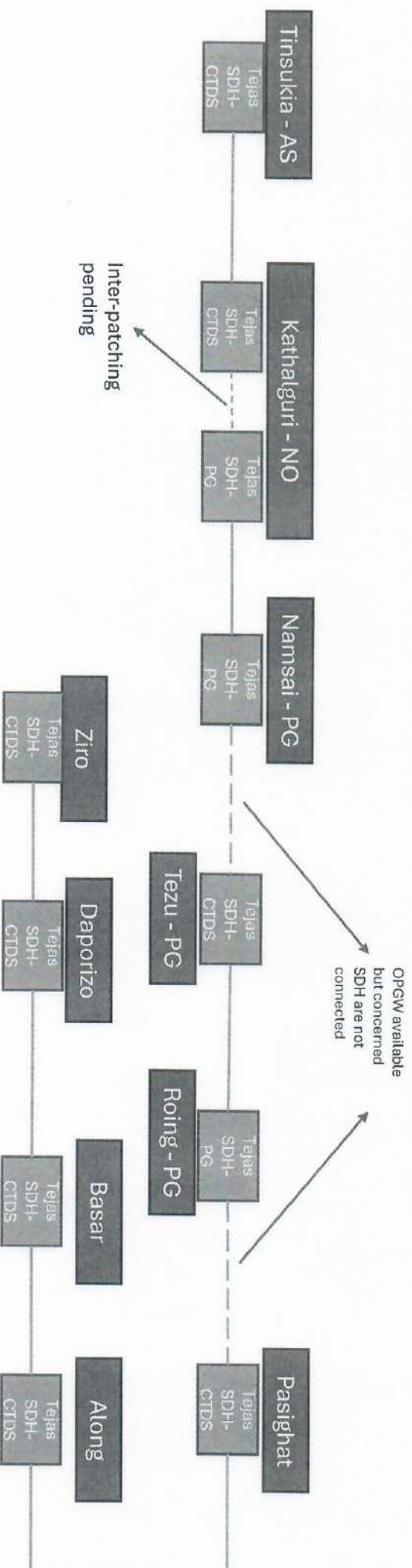
**ULDC-POWERGRID, Aparva and DoP-Nagaland** are requested to coordinate with the respective vendors (Fibcom and ABB) and execute the necessary inter-patching to restore communication between New Kohima and Zhadima via the aforementioned OPGW route, which will enhance the reliability of New Kohima (Aparva) S/s and in turn for NER. A diagram depicting the connectivity is attaches as **Annexure B 2.6**.

# Agenda: 2.5:

## Case 1: Non-utilisation of BNC-Agar HVDC OPGW for Inter-regional Purpose

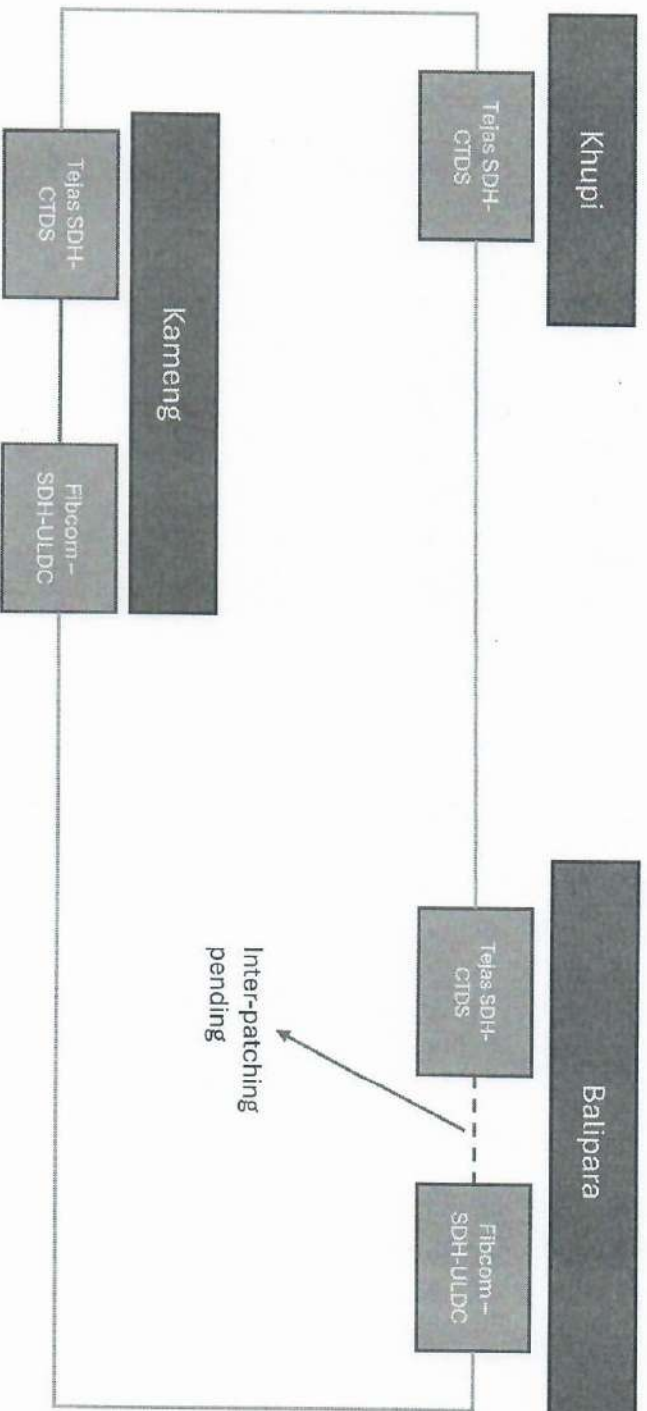


## Case 2: Non-connection of Same make SDH even after availability of OPGW



# Agenda: 2.5:

Case 3: Utilisation of Kameng → Khupi → Tenga → Balipara OPGW



**From:** Subal Das  
**Sent:** 02 April 2026 12:22  
**To:** apsl dc.sd; nicegeyi@gmail.com  
**Cc:** Somara Lakra (सामरा लाकड़ा); S P Barnwal (एस पी बर्नवाल); Saugato Mondal (सौगाता मंडल); Executive Engineer; Assistant Engineer; NERLDC SCADA  
**Subject:** Re: Request to integrate data of Panyor and Pare in Chimpu S/s RTU.

Respected Sir/Ma'am,

Gentle reminder-6

It is kindly requested to update the status of data (MW, MVAR, CB, and isolators) for Panyor and Pare bays at Chimpu S/s and installation status of MFTs and CMRs.

**भवदीय /Regards,**

**सुबल दास/ Subal Das**

**सिस्टम लॉजिस्टिक्स (एस.एल.) / System Logistics (SL)**

**उ.पू.क्षे.भा.प्रे.के. , शिलांग /North Eastern Regional Load Despatch Center, Shillong**

**ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड (ग्रिड-इंडिया)**

***Grid Controller of India Limited (GRID-INDIA)***

Websites : <https://www.nerl dc.in/> | <https://grid-india.in/en/>

---

**From:** Subal Das

**Sent:** Wednesday, March 18, 2026 5:06 PM

**To:** apsl dc.sd; nicegeyi@gmail.com

**Cc:** Somara Lakra (सामरा लाकड़ा); S P Barnwal (एस पी बर्नवाल); Saugato Mondal (सौगाता मंडल); Executive Engineer; Assistant Engineer; NERLDC SCADA

**Subject:** Re: Request to integrate data of Panyor and Pare in Chimpu S/s RTU.

Sir,

For your reference, the PDF of the relevant minutes of the 32nd NETeST meeting (Agenda No. 2.8 of the 31st NETeST) is attached herewith. An early update in this regard will be highly appreciated.

**भवदीय /Regards,**

**सुबल दास/ Subal Das**

सिस्टम लॉजिस्टिक्स (एस.एल.) / System Logistics (SL)

उ.पू.क्षे.भा.प्रे.के. , शिलांग /North Eastern Regional Load Despatch Center, Shillong

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड (ग्रिड-इंडिया)

*Grid Controller of India Limited (GRID-INDIA)*

Websites : <https://www.nerlhc.in/> | <https://grid-india.in/en/>



---

**From:** Subal Das

**Sent:** Wednesday, March 18, 2026 1:07:42 PM

**To:** apslhc.sd; nicegeyi@gmail.com

**Cc:** Somara Lakra (सामरा लाकड़ा); S P Barnwal (एस पी बर्नवाल); Saugato Mondal (सौगाता मंडल); Executive Engineer; Assistant Engineer; NERLDC SCADA

**Subject:** Re: Request to integrate data of Panyor and Pare in Chimpu S/s RTU.

Sir,

Gentle reminder-5.

It is kindly requested to update the status of data (MW, MVAR, CB, and isolators) for Panyor and Pare bays at Chimpu S/s and installation status of MFTs and CMRs.

**भवदीय /Regards,**

सुबल दास/ Subal Das

सिस्टम लॉजिस्टिक्स (एस.एल.) / System Logistics (SL)

उ.पू.क्षे.भा.प्रे.के. , शिलांग /North Eastern Regional Load Despatch Center, Shillong

ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड (ग्रिड-इंडिया)

*Grid Controller of India Limited (GRID-INDIA)*

Websites : <https://www.nerlhc.in/> | <https://grid-india.in/en/>



---

**From:** Sakal Deep (सकल दीप)

**Sent:** Tuesday, August 5, 2025 11:55 AM

**To:** apslhc.sd; nicegeyi@gmail.com

**Cc:** S P Barnwal (एस पी बर्नवाल); Saugato Mondal (सौगाता मंडल); NERLDC SCADA; Executive Engineer; Assistant Engineer

**Subject:** RE: Request to integrate data of Panyor and Pare in Chimpu S/s RTU.

Dear Sir,

Gentle reminder-4.

Regards,

Sakal Deep/सकल दीप

North Eastern Regional Load Despatch Centre/उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र

**Grid Controller of India Limited/ ग्रीड कंट्रोलर ऑफ इंडिया लिमिटेड**

**(A Government of India Enterprise) / (भारत सरकार का उद्यम)**

---

**From:** Paominlal Doungel (पाओमिंलाल डौंगेल) <paominlal@grid-india.in>

**Sent:** 08 May 2025 10:26

**To:** apslcdc.sd <apslcdc.sd@gmail.com>; nicegeyi@gmail.com

**Cc:** S P Barnwal (एस पी बर्नवाल) <spbarnwal@grid-india.in>; Saugato Mondal (सौगाता मंडल) <saugato@grid-india.in>;

NERLDC SCADA <nerldc.scada@grid-india.in>; Executive Engineer <eesldcitaap@gmail.com>; Assistant Engineer

<aesldc2021@gmail.com>; Sakal Deep (सकल दीप) <skldeep@grid-india.in>

**Subject:** Re: Request to integrate data of Panyor and Pare in Chimpu S/s RTU.

Sir,

As per agenda 2.8 of 31st NETeST minutes and agenda 2.12 of 225th OCC meeting (*Snapshot of relevant minutes is attached*), it is kindly requested to update the status.

---

Regards,

Paominlal Doungel,

System Logistics

North Eastern Regional Load Despatch Centre, Shillong

**Grid Controller of India Limited/ ग्रीड कंट्रोलर ऑफ इंडिया लिमिटेड**

(Formerly known as Power System Operation Corporation Ltd)

**(A Government of India Enterprise)**

---

**From:** Sakal Deep (सकल दीप)

**Sent:** 16 April 2025 14:52

**To:** apslcdc.sd <apslcdc.sd@gmail.com>

**Cc:** S P Barnwal (एस पी बर्नवाल) <spbarnwal@grid-india.in>; Saugato Mondal (सौगाता मंडल) <saugato@grid-india.in>;

NERLDC SCADA <nerldc.scada@grid-india.in>; Executive Engineer <eesldcitaap@gmail.com>; Assistant Engineer

<aesldc2021@gmail.com>; nicegeyi@gmail.com

**Subject:** RE: Request to integrate data of Panyor and Pare in Chimpu S/s RTU.

Dear Sir,

Gentle reminder-2.

Regards,

Sakal Deep (सकल दीप)

North Eastern Regional Load Despatch Centre

**Grid Controller of India Limited/ ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड**

(Formerly known as Power System Operation Corporation Ltd)

**(A Government of India Enterprise)**

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**From:** Sakal Deep (सकल दीप)

**Sent:** Tuesday, March 11, 2025 15:33

**To:** apslcdc.sd; [nicegeyi@gmail.com](mailto:nicegeyi@gmail.com)

**Cc:** S P Barnwal (एस पी बर्नवाल); Saugato Mondal (सौगाता मंडल); NERLDC SCADA; Executive Engineer; Assistant Engineer

**Subject:** RE: Request to integrate data of Panyor and Pare in Chimpu S/s RTU.

Dear Sir,

Gentle reminder-1.

Regards,

Sakal Deep (सकल दीप)

North Eastern Regional Load Despatch Centre

**Grid Controller of India Limited/ ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड**

(Formerly known as Power System Operation Corporation Ltd)

**(A Government of India Enterprise)**

---

**From:** Sakal Deep (सकल दीप)

**Sent:** Monday, February 17, 2025 11:07 AM

**To:** apslcdc.sd <[apsldc.sd@gmail.com](mailto:apsldc.sd@gmail.com)>; [nicegeyi@gmail.com](mailto:nicegeyi@gmail.com)

**Cc:** S P Barnwal (एस पी बर्नवाल) <[spbarnwal@grid-india.in](mailto:spbarnwal@grid-india.in)>; Saugato Mondal (सौगाता मंडल) <[saugato@grid-india.in](mailto:saugato@grid-india.in)>; NERLDC SCADA <[nerldc.scada@grid-india.in](mailto:nerldc.scada@grid-india.in)>; Executive Engineer <[eesldcitaap@gmail.com](mailto:eesldcitaap@gmail.com)>; Assistant Engineer <[aesldc2021@gmail.com](mailto:aesldc2021@gmail.com)>

**Subject:** Request to integrate data of Panyor and Pare in Chimpu S/s RTU.

Dear Sir,

It has been observed that the data (MW, MVAR, CB, and isolators) for Panyor and Pare bays at Chimpu S/s is not being reported. Upon further analysis, it has come to our attention that MFTs and CMRs for the mentioned bays are yet to be installed.

Kindly coordinate with M/s GE to carry out the following actions to enable data reporting for the mentioned bays:

**1. Installation of MFTs:**

- MFTs need to be installed for both bays.
- Appropriate CT and PT connections must be completed.
- MFTs should then be integrated with the Chimpu RTU.

**2. Installation of CMRs:**

- CMRs need to be installed for both bays.
- CB and isolator status should be integrated with the Chimpu RTU.

We request you to kindly coordinate with M/s GE for the integration of Panyor and Pare bay data into the Chimpu S/s RTU.

Regards,

Sakal Deep (सकल दीप)

North Eastern Regional Load Despatch Centre

**Grid Controller of India Limited/ ग्रीड कंट्रोलर ऑफ इंडिया लिमिटेड**

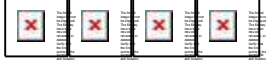
(Formerly known as Power System Operation Corporation Ltd)

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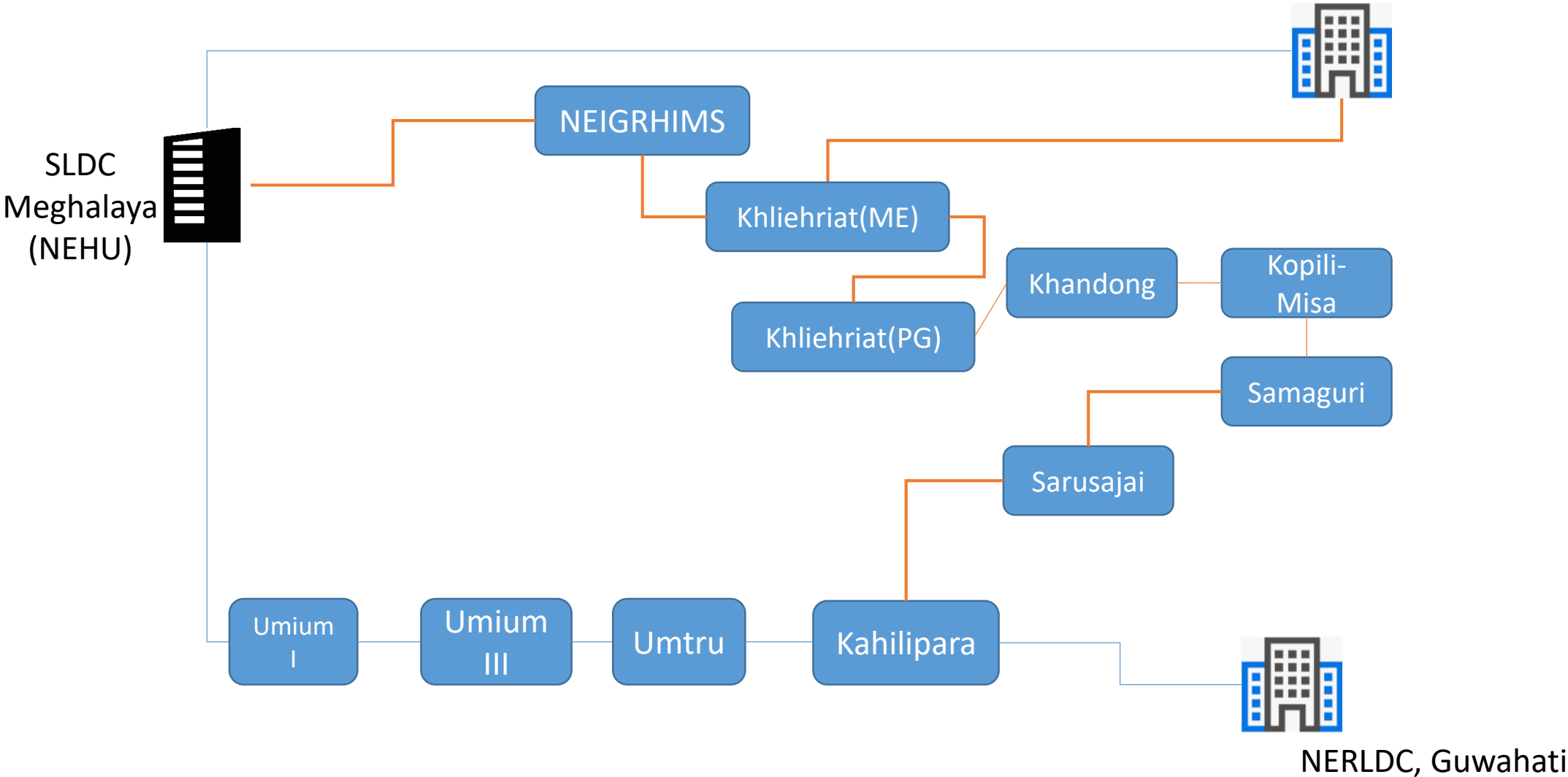


Follow Grid-India on:

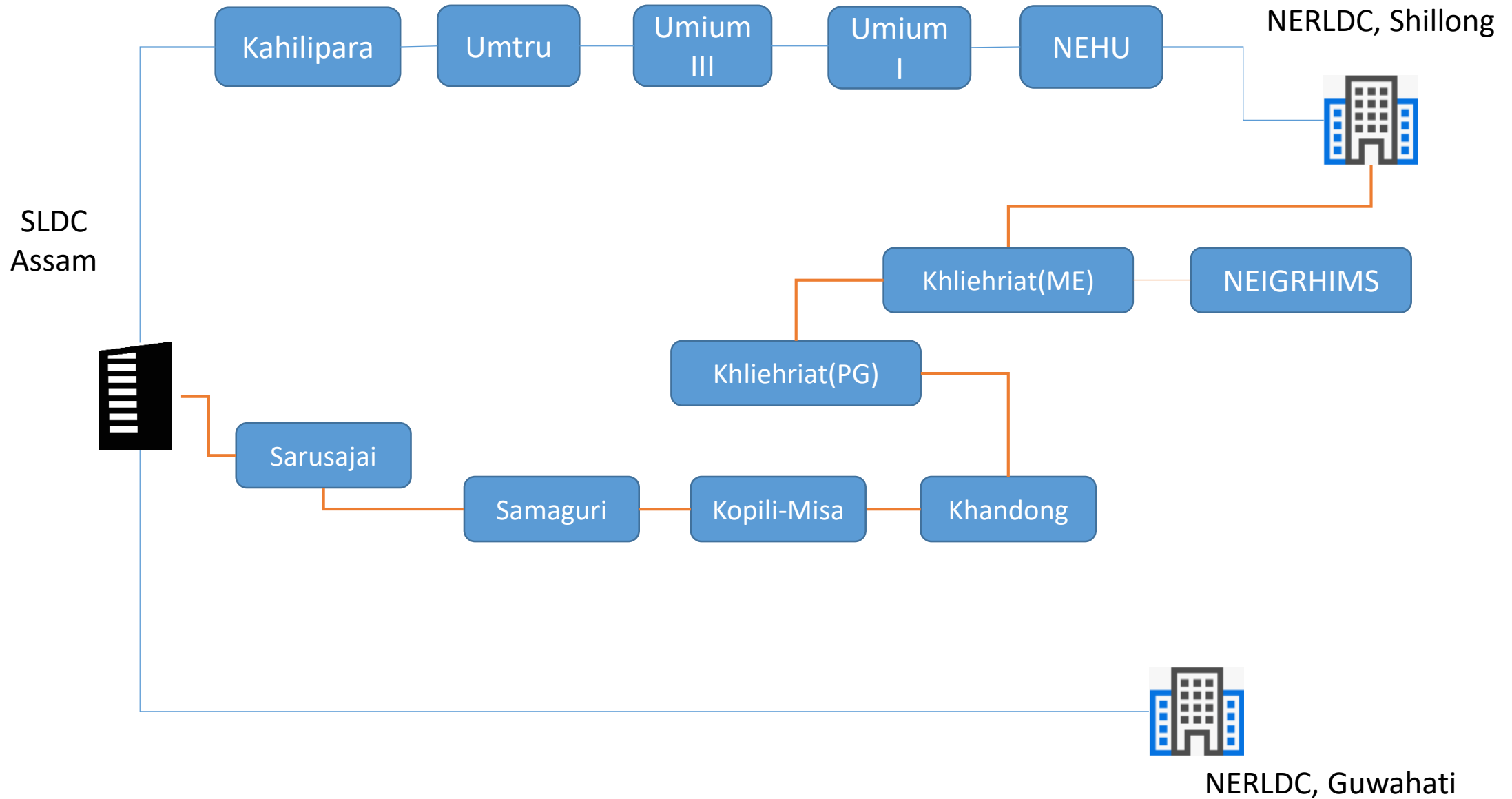


# Connection between NERLDC to SLDC, Meghalaya

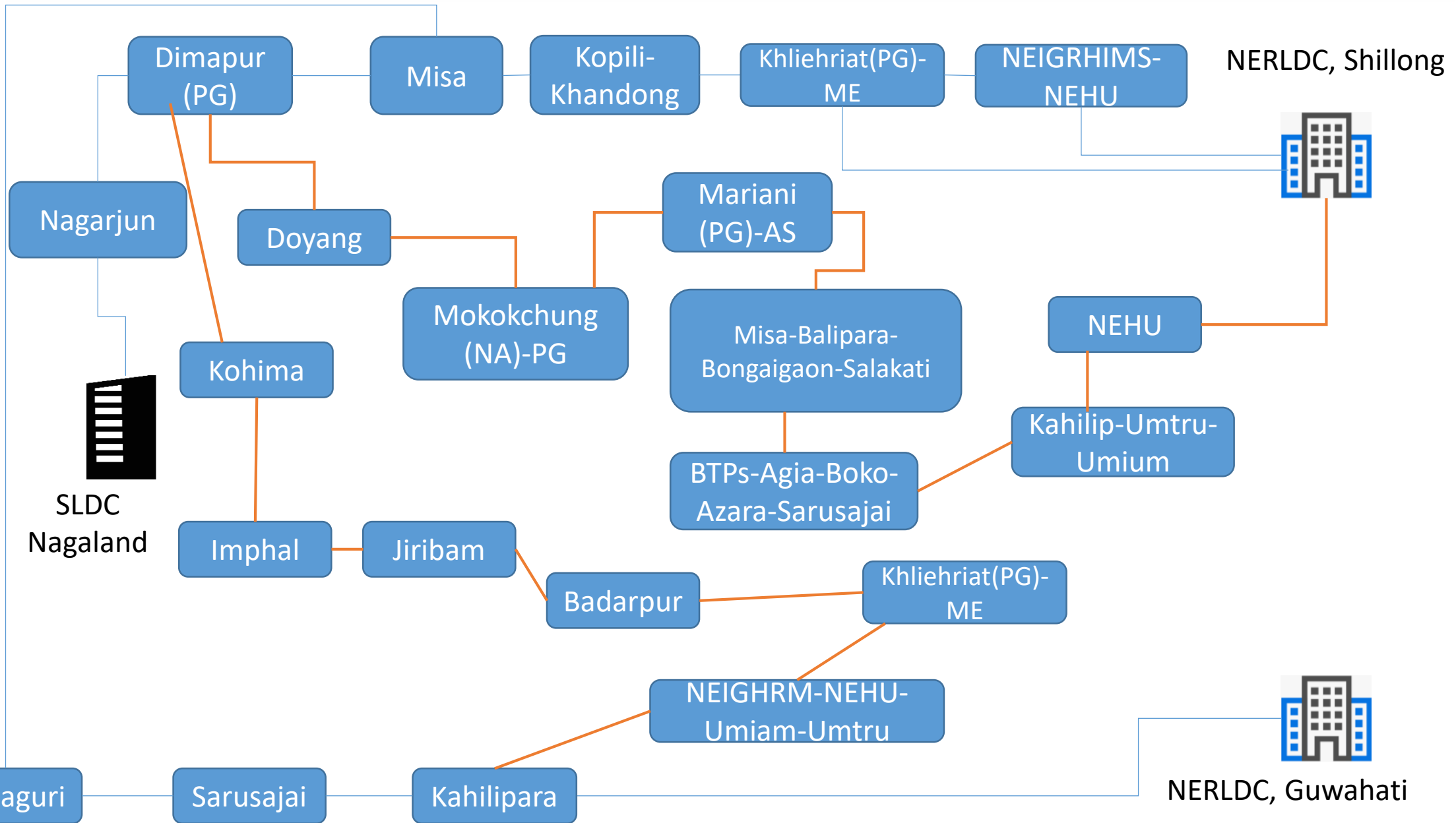
Annexure C 3.5  
NERLDC, Shillong



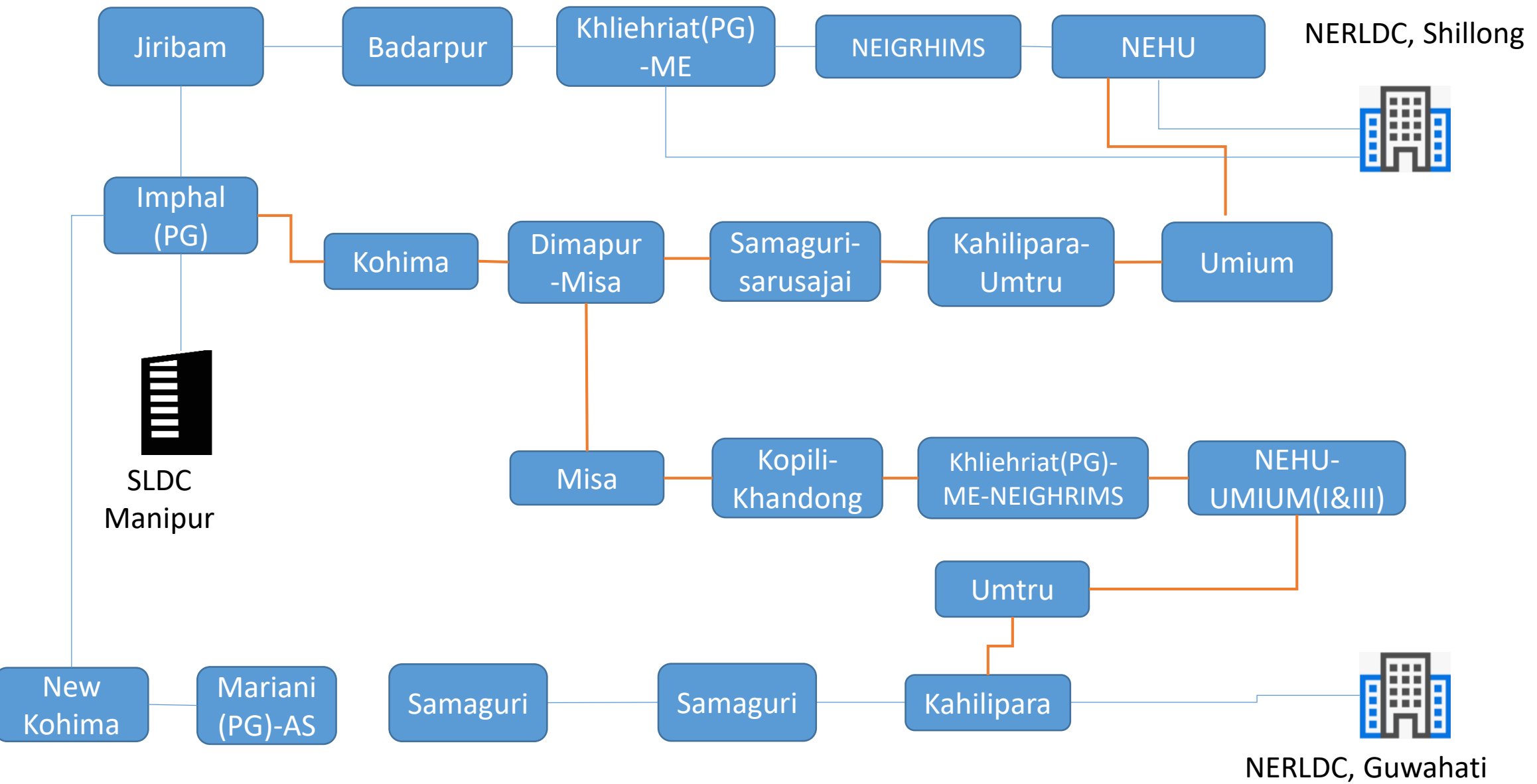
# Connection between NERLDC to SLDC, Assam



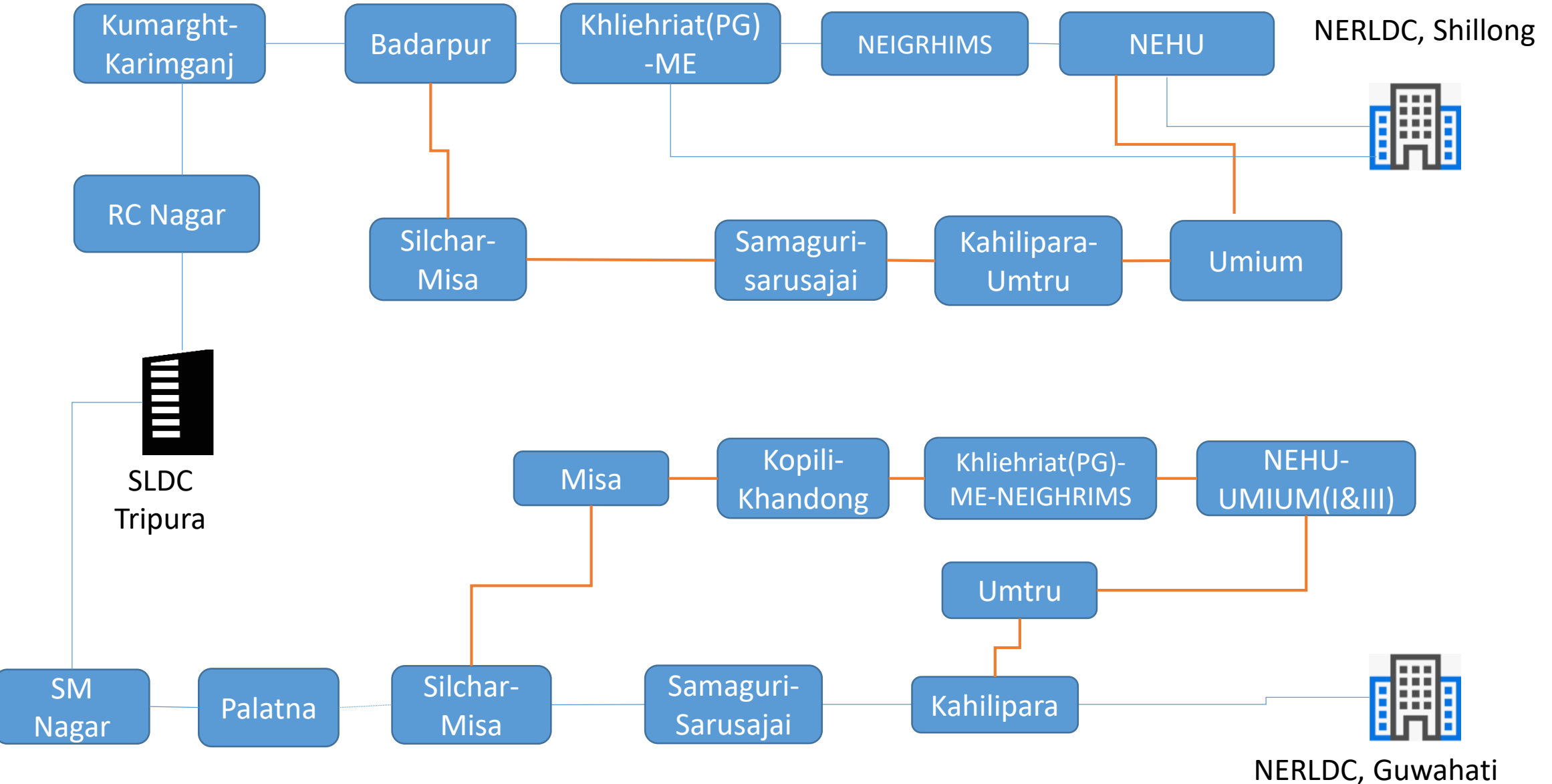
# Connection between NERLDC to SLDC, Nagaland



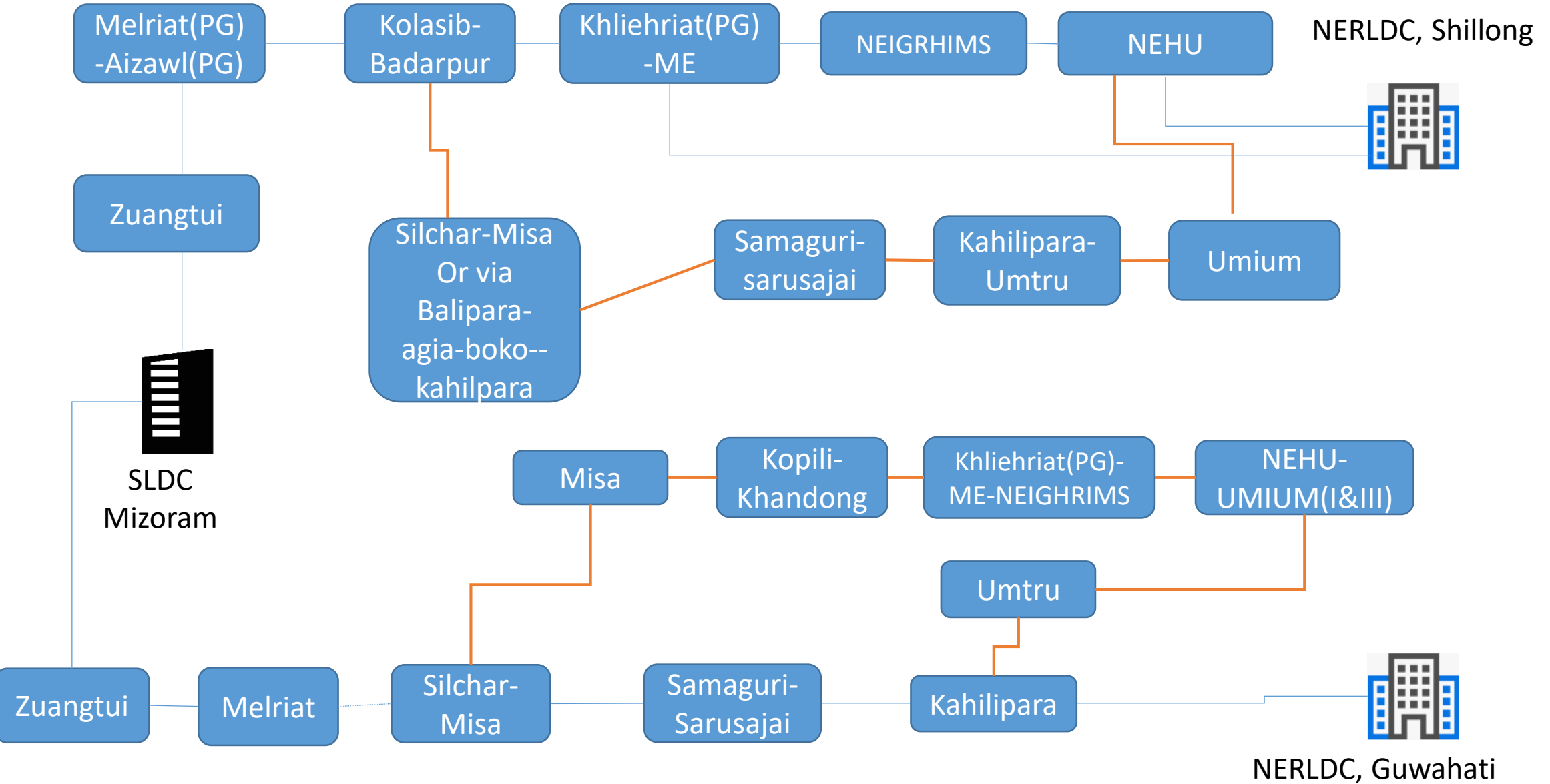
# Connection between NERLDC to SLDC, Manipur



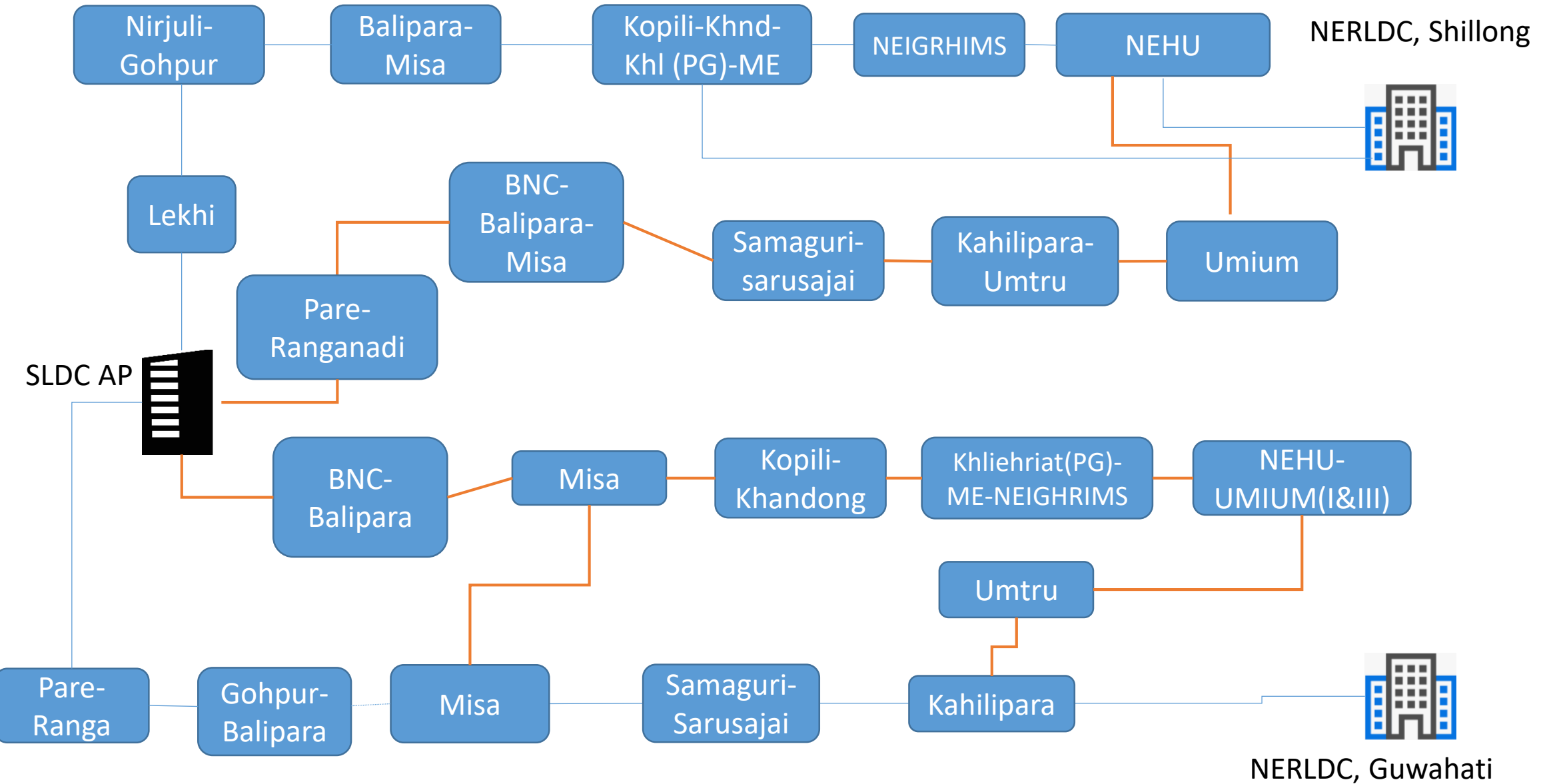
# Connection between NERLDC to SLDC, Tripura



# Connection between NERLDC to SLDC, Mizoram



# Connection between NERLDC to SLDC, Arunachal Pradesh

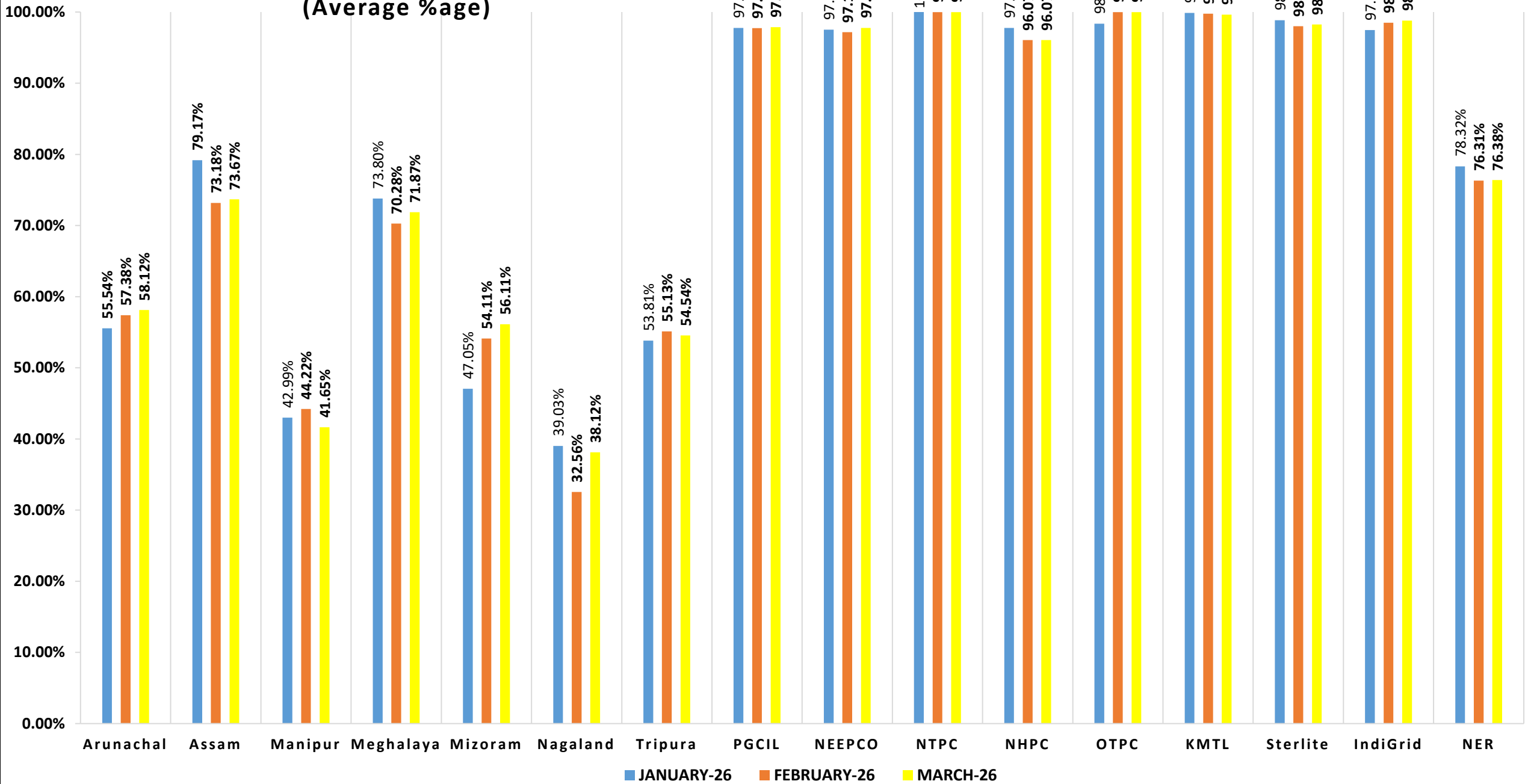


# Telemetry Statistics for the month of March 2026

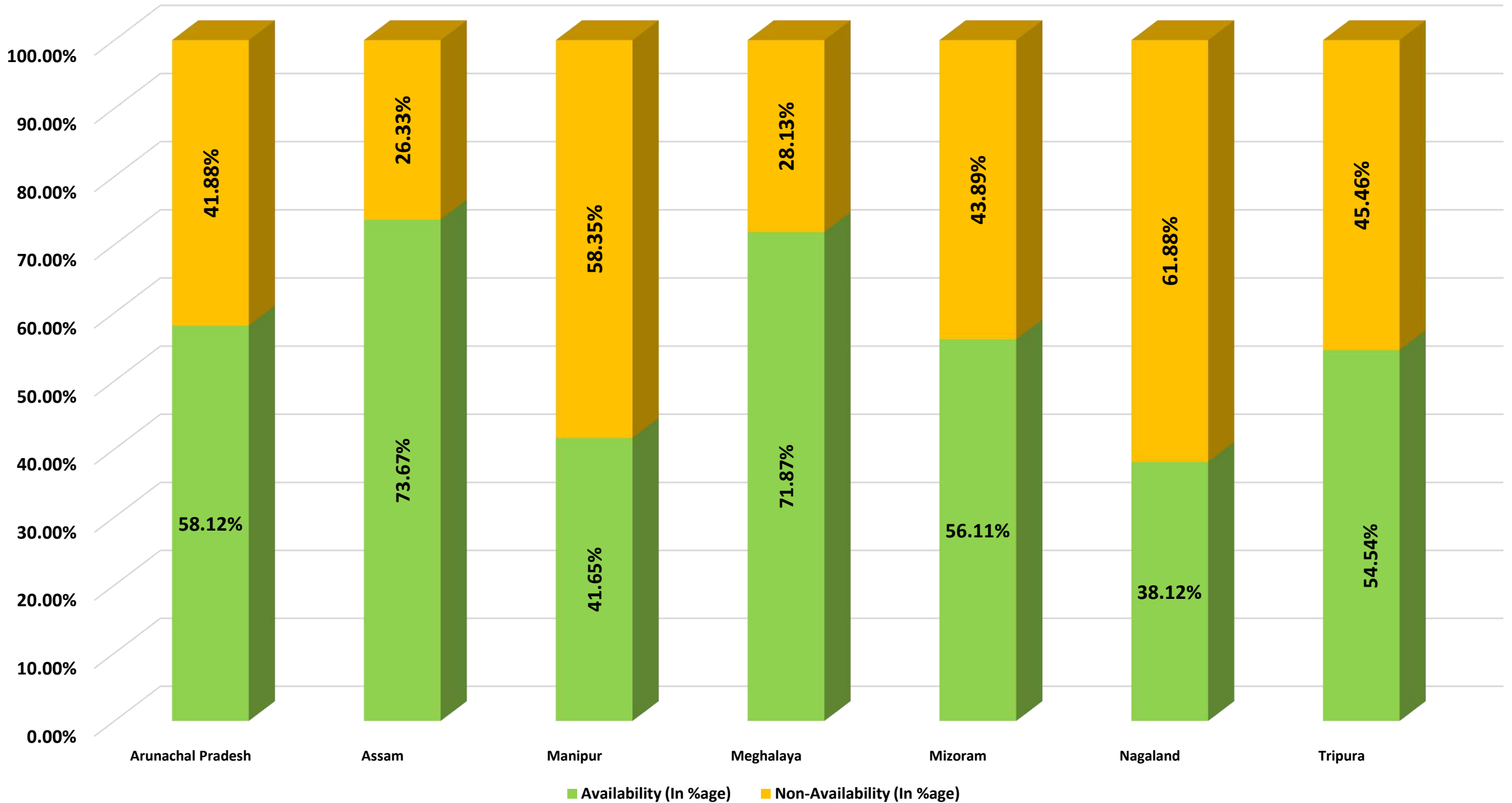
Annexure C 3.9

Sl. No.	Utility	Average Total Percentage	Average Analog Percentage	Average Digital Availability	Average RTU Availability	Target as per 32 <sup>nd</sup> NeTEST MOM
1	PGCIL	97.88	97.84	97.85	99.21	
2	NEEPCO	97.77	95.32	98.84	99.98	
3	NTPC	99.99	99.99	100	100	
4	NHPC	96.07	99.13	95.87	99.84	
5	OTPC	99.99	99.98	99.98	100	
6	KMTL	99.64	99.75	99.79	99.81	
7	Sterlite	98.26	95.12	99.68	99.72	
8	Indigrd	98.79	97.54	98.14	99.99	
9	Arunachal Pradesh	58.12	48.68	62.07	63.18	95
10	Assam	73.67	74.8	72.12	74.32	95
11	Manipur	41.65	46.92	40.43	59.45	95
12	Meghalaya	71.87	84.12	62.67	88.1	95
13	Mizoram	56.11	62.36	47.32	78.32	95
14	Nagaland	38.12	30.3	36.12	38.44	95
15	Tripura	54.54	62.12	51.32	76.32	95

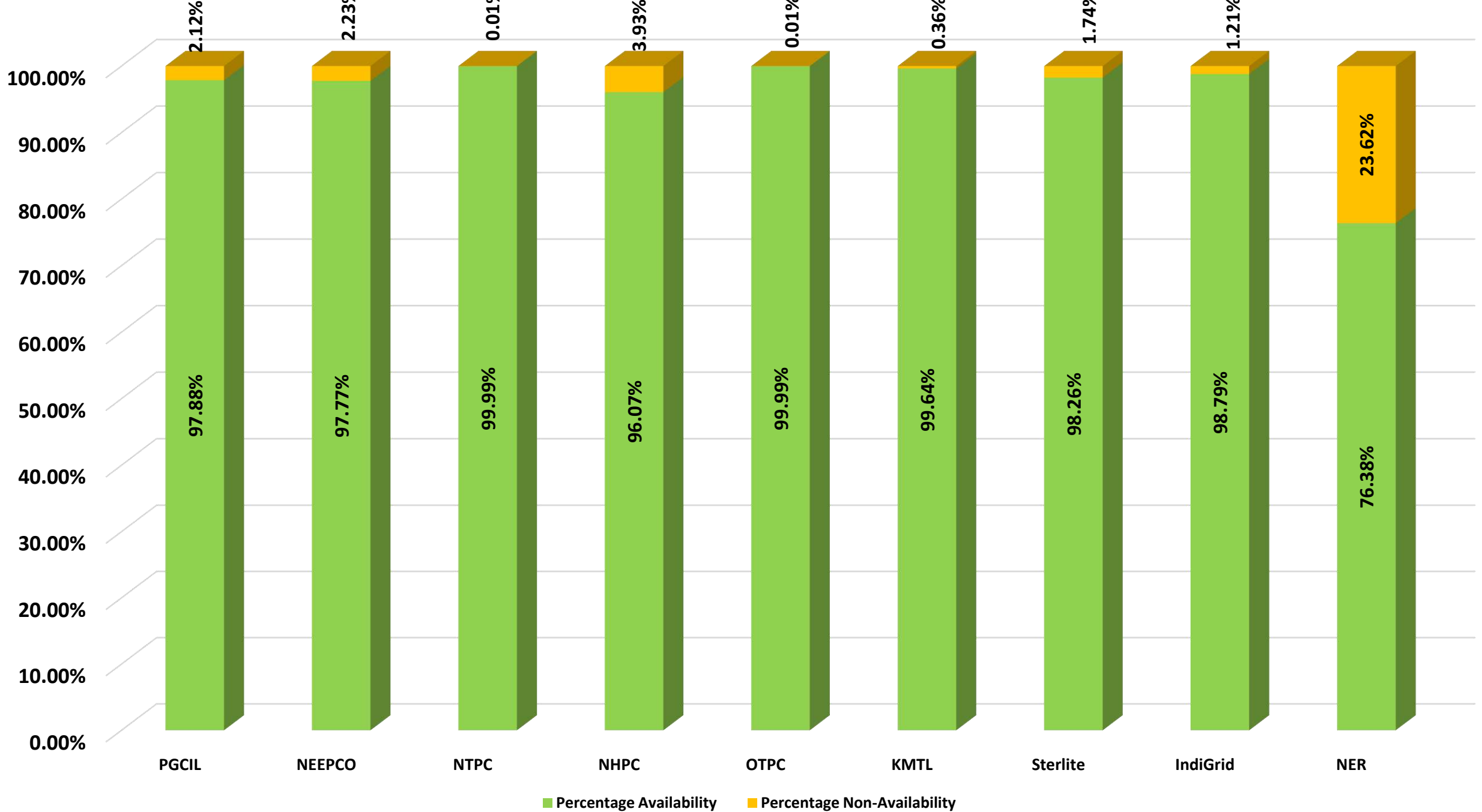
# Comparison of Telemetry Availability Statistics (Average %age)



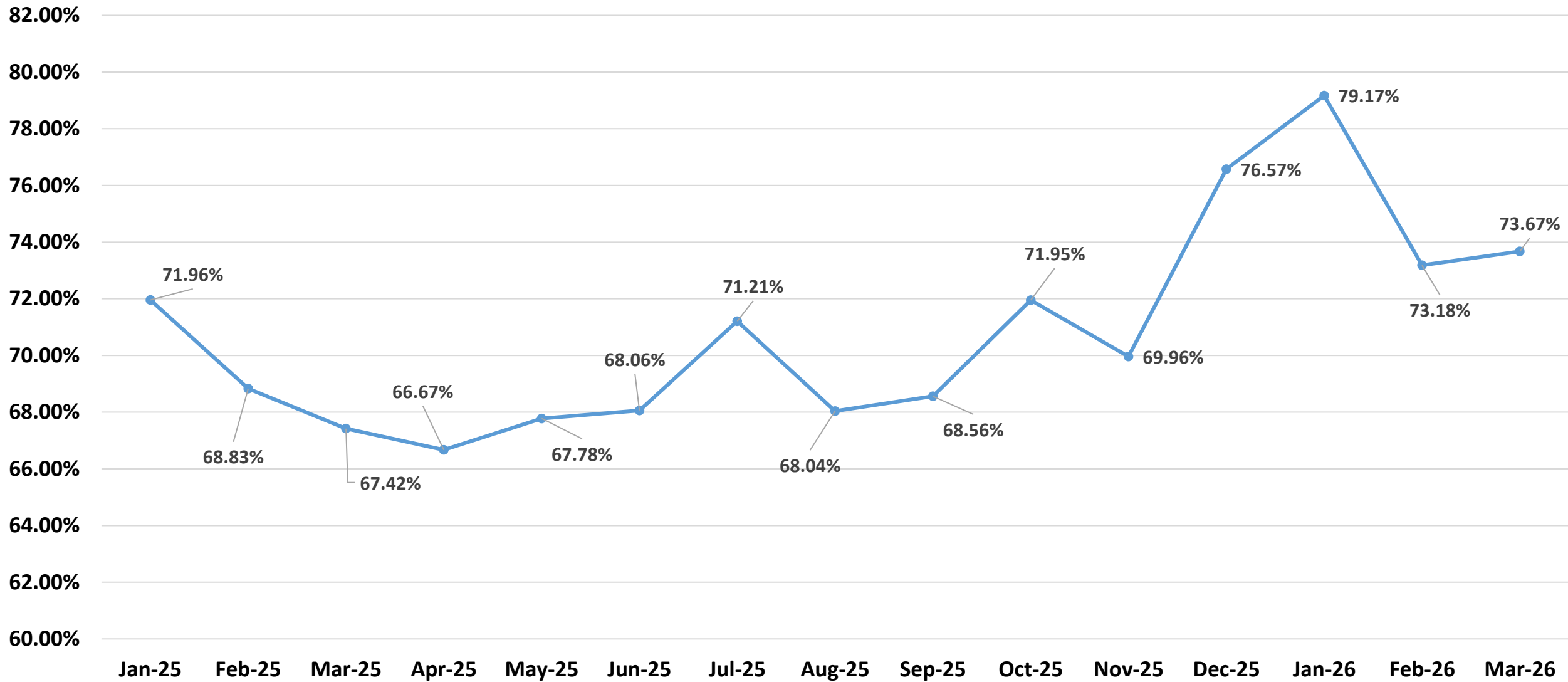
# Telemetry Statistics for NER States(Average availability of data for the month of March '26)



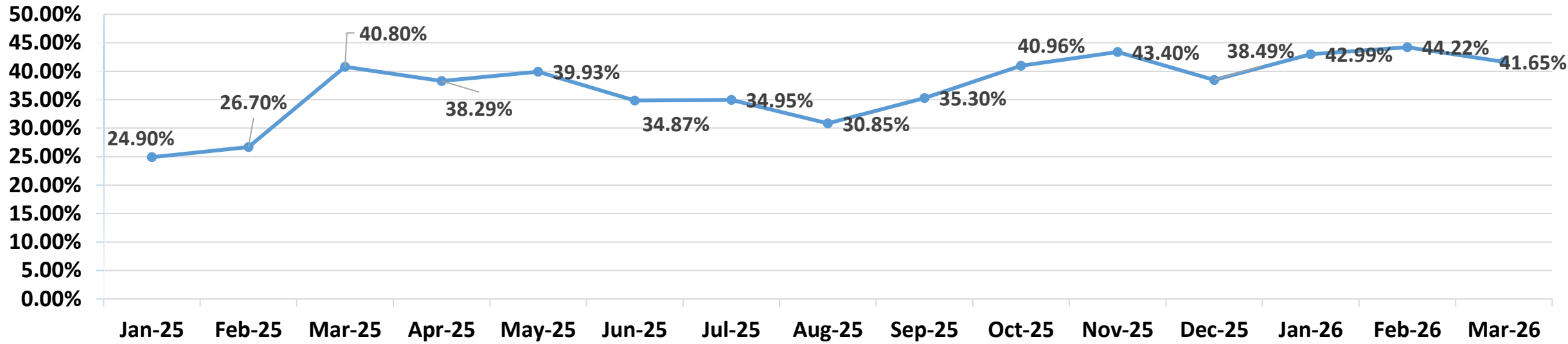
# Telemetry Statistics for Central Sector of NER (Average availability of data for the month of March '26)



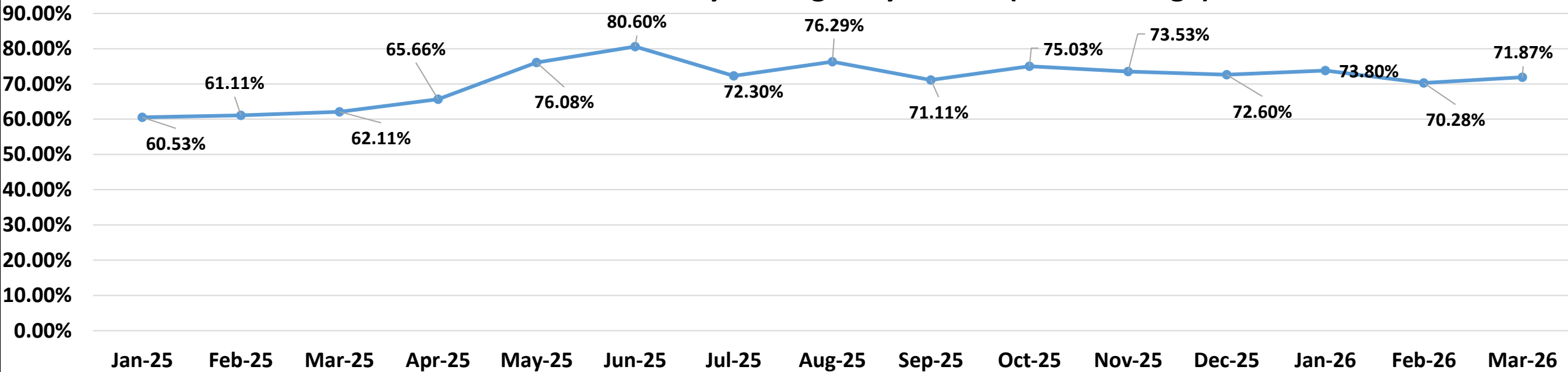
## Real Time Data Availability of Assam State (In Percentage)



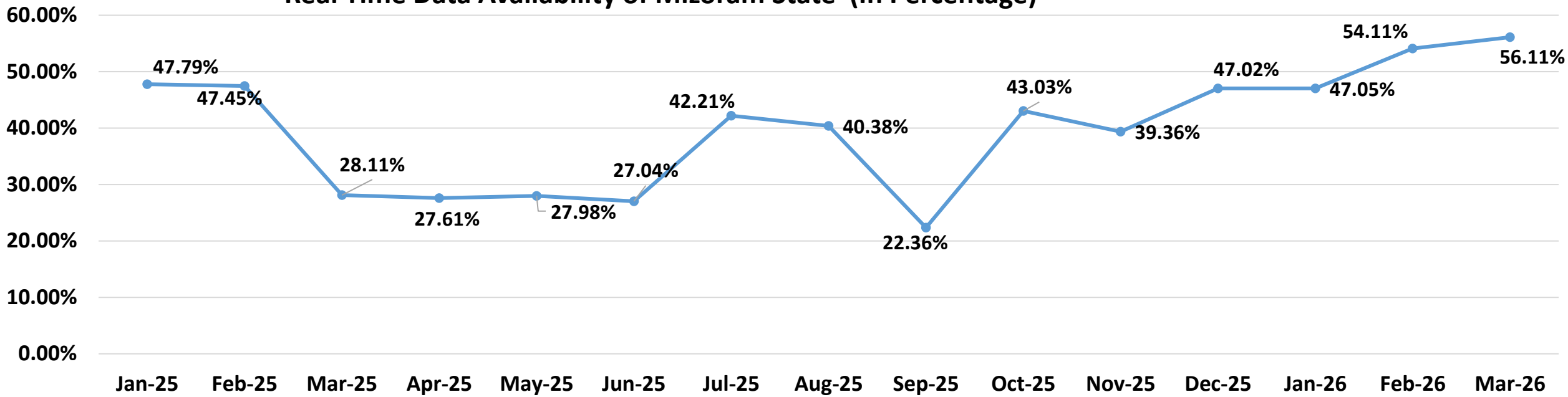
### Real Time Data Availability of Manipur State (In %)



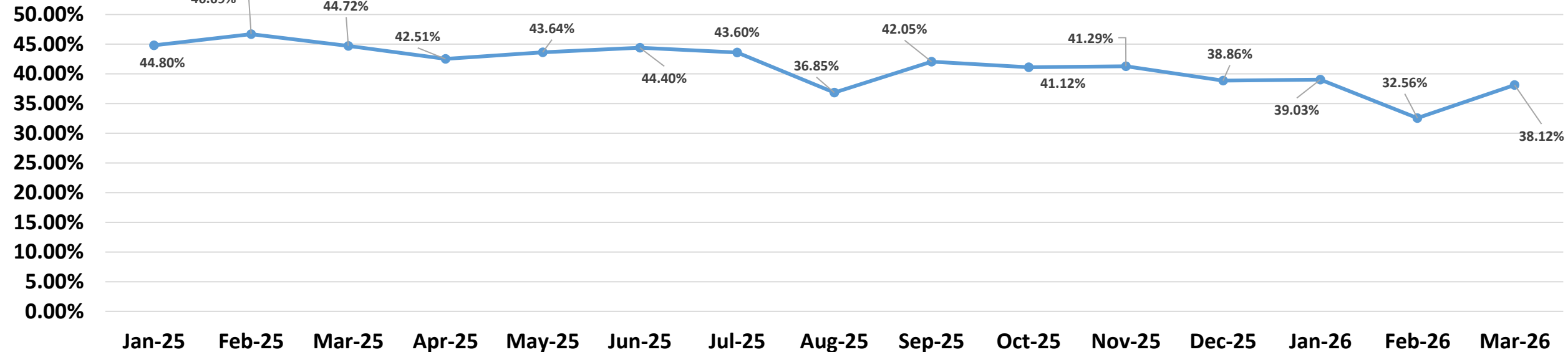
### Real Time Data Availability of Meghalaya State (In Percentage)



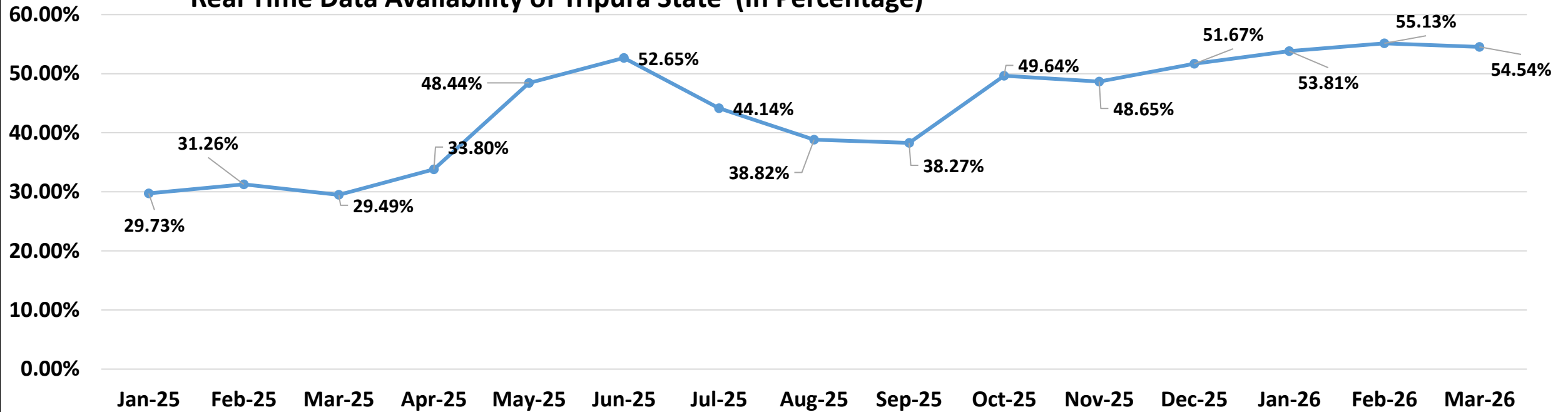
### Real Time Data Availability of Mizoram State (In Percentage)



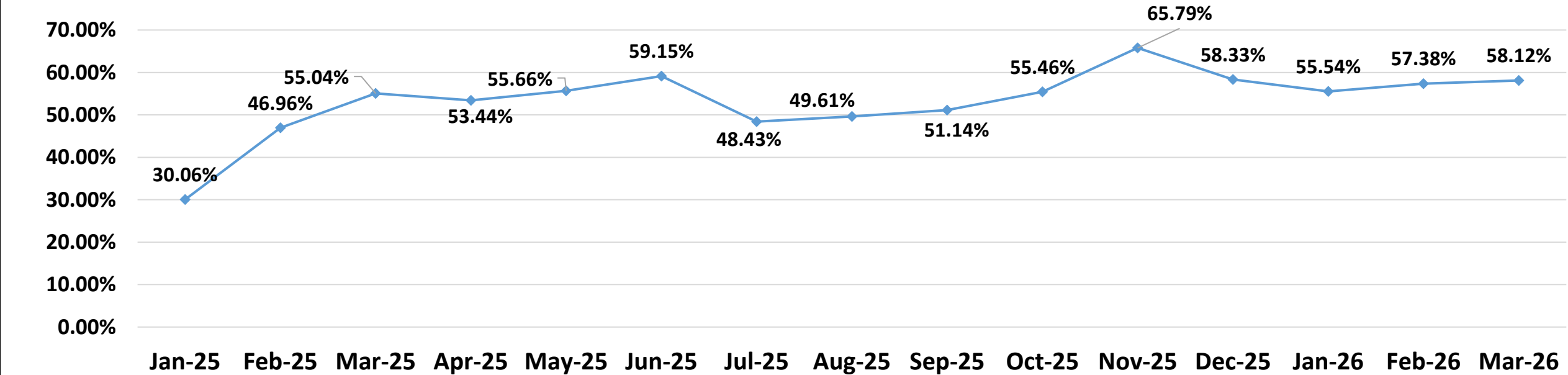
### Real Time Data Availability of Nagaland State (In Percentage)



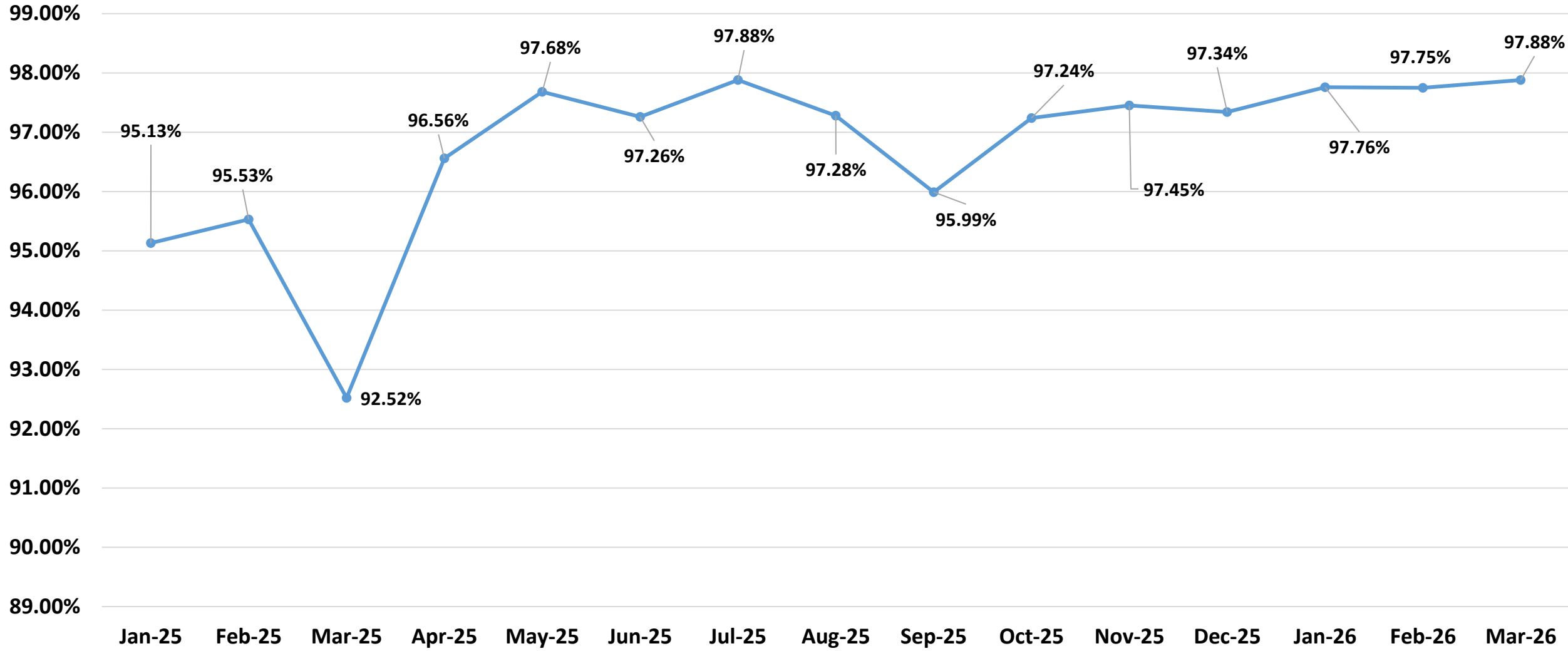
### Real Time Data Availability of Tripura State (In Percentage)



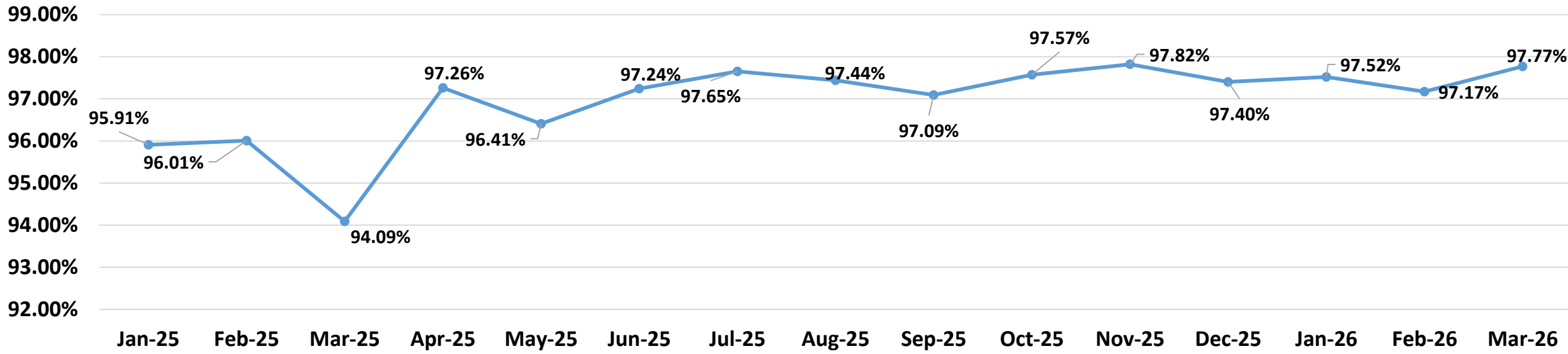
### Real Time Data Availability of Arunachal Pradesh State (In Percentage)



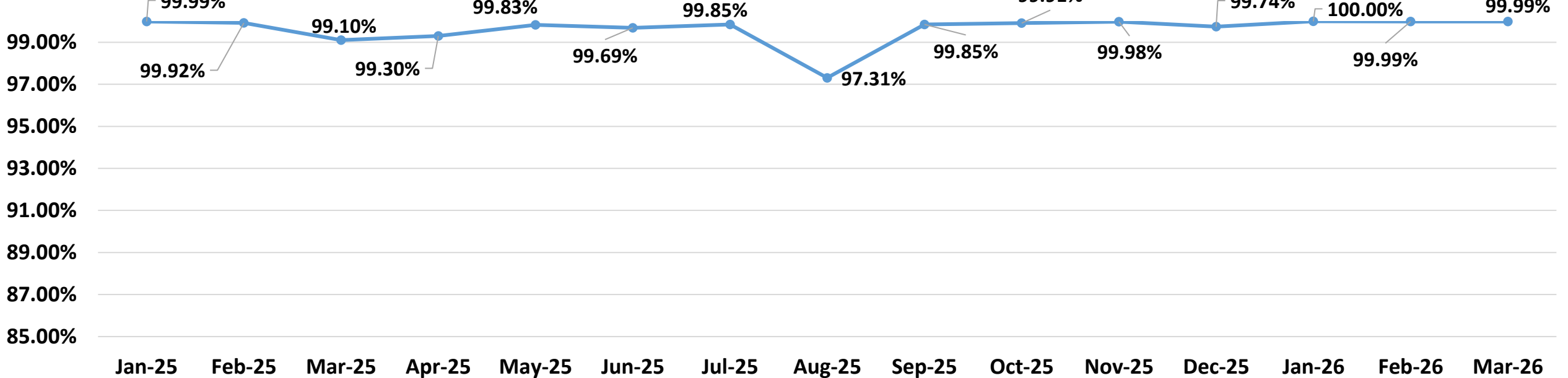
# Real Time Data Availability of PGCIL(In Percentage)



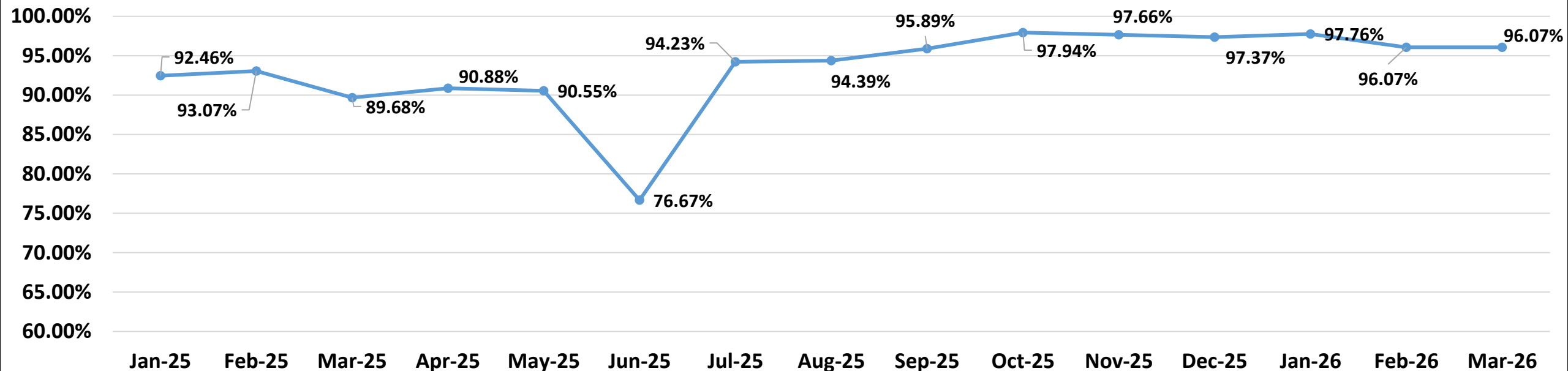
### Real Time Data Availability of NEEPCO (In Percentage)



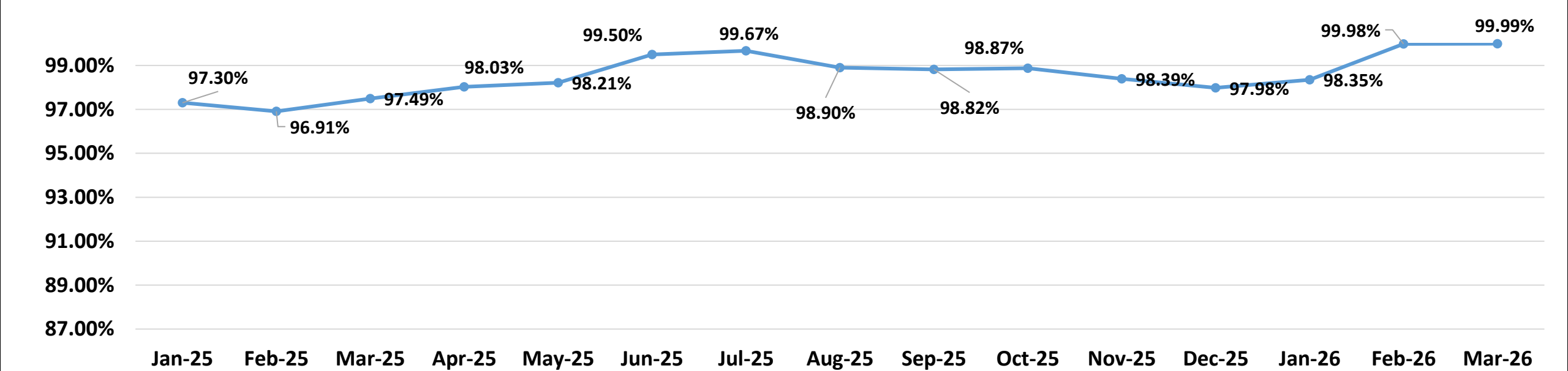
### Real Time Data Availability of NTPC (In Percentage)



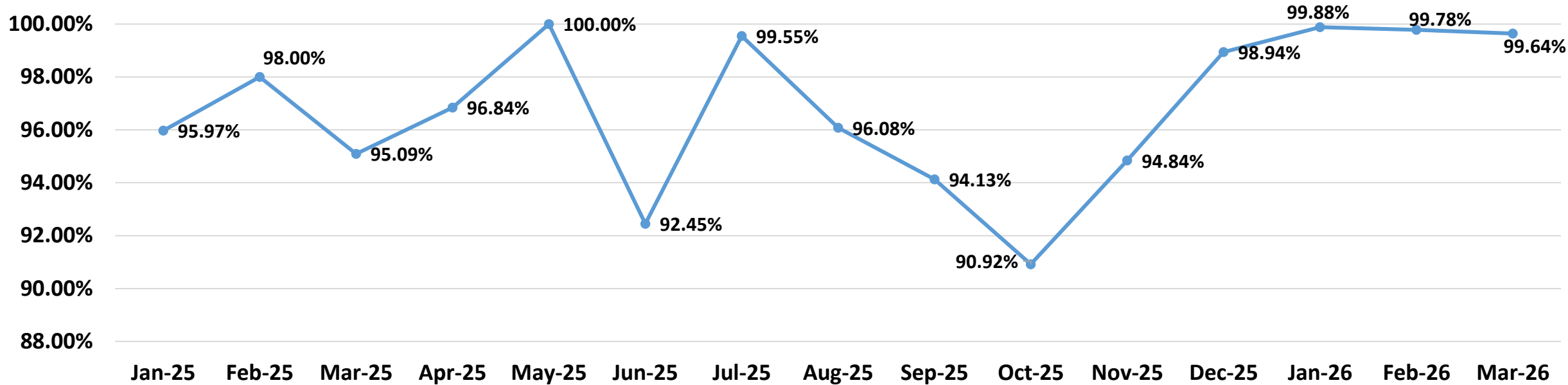
### Real Time Data Availability of NHPC (In Percentage)



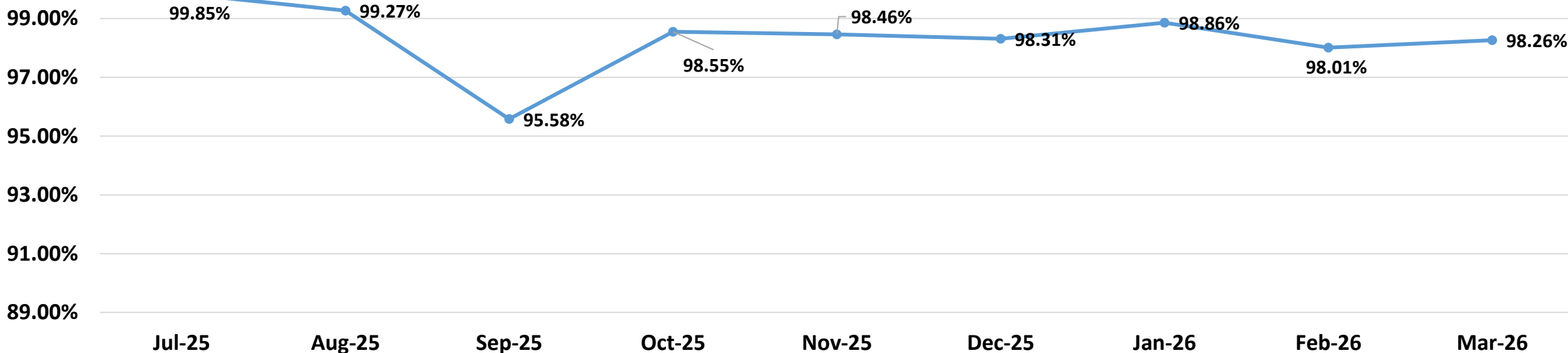
### Real Time Data Availability of OTPC (In Percentage)



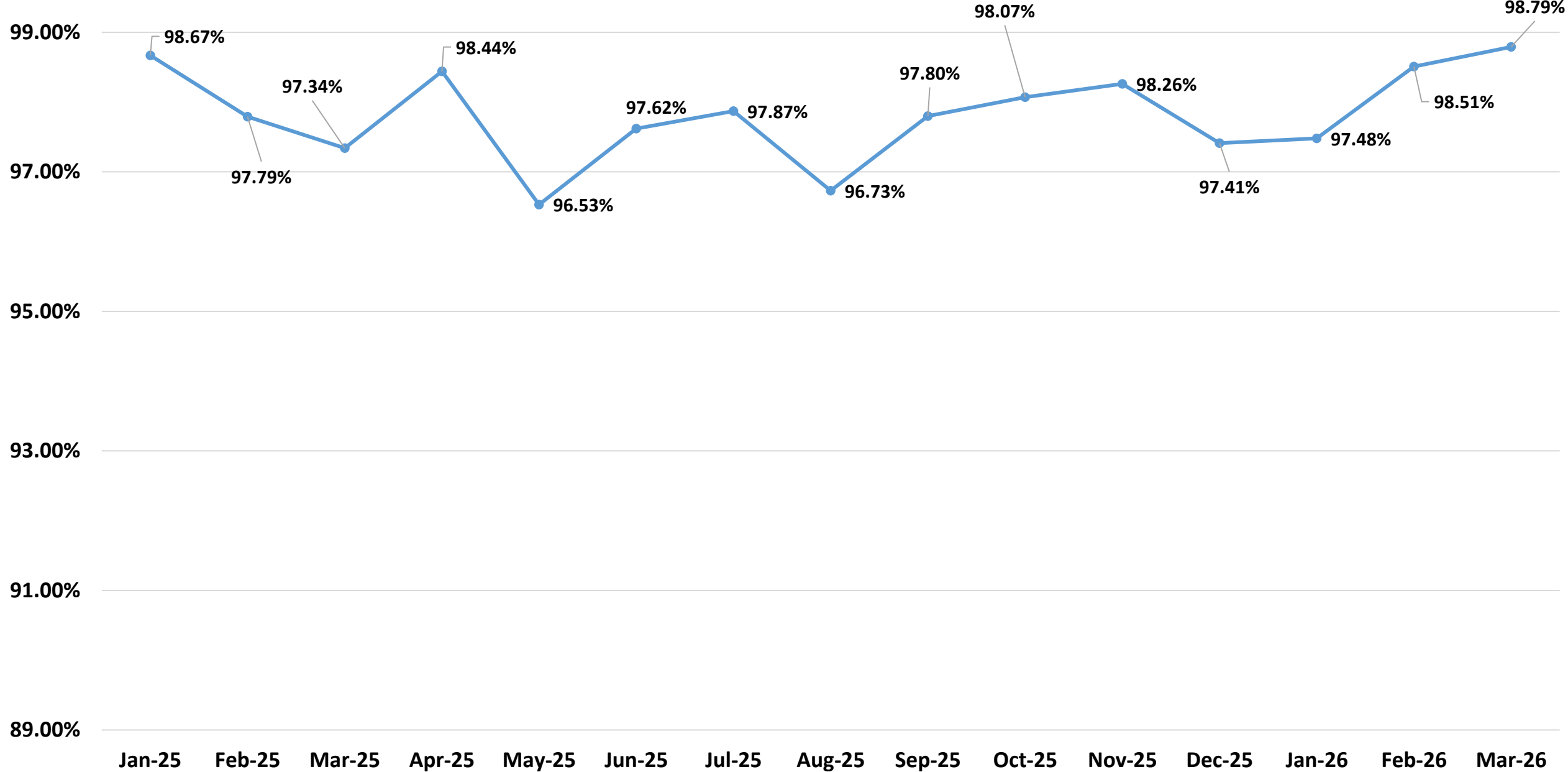
### Real Time Data Availability of KMTL (In Percentage)



### Real Time Data Availability of Sterlite (In Percentage)



# Real Time Data Availability of IndiGrid (In Percentage)



**From:** NERLDC SCADA  
**Sent:** 23 March 2026 13:15  
**To:** apslcdc.sd; aeslcdc2021@gmail.com; se.sopsc  
**Cc:** brieflee.lyngkhoi@gov.in; ms-nerpc@gov.in; nerpc@ymail.com;  
nerpc.communication@gov.in; Somara Lakra (सामरा लाकड़ा); S P Barnwal (एस पी बर्नवाल);  
Saugato Mondal (सौगाता मंडल); dkbauri.cea@gov.in; alik.erpc@gov.in; NERLDC SCADA  
**Subject:** Urgent Compliance of Hon'ble CERC Order – Submission of Monthly Progress Report  
by Arunachal Pradesh  
**Attachments:** CERC Order.pdf; MoM - 29th NETeST.pdf; MoM - 30th NETeST.pdf; MoM - 31th  
NETeST.pdf; MoM - 32nd NETeST.pdf; SLDC Nagaland Report for the month of  
February 2026.pdf

Respected Sir/Ma'am,

This is in reference with respect to order issued by Honourable CERC against *Petition 197/MP/2020 (Arunachal Pradesh)* dated 04/08/2023. Where Hon' CERC directed Department of Power, Govt. of Arunachal Pradesh **to identify one person from their top management as a nodal officer, who shall submit a monthly progress report on the implementation of the communication facilities to the NERPC and NERLDC, till the availability of 100% data to their respective SLDC and NERLDC. (Attached for your reference)**

It is hereby bring to your kind notice regarding non-compliance of Hon' CERC order by **SLDC Arunachal Pradesh (Department of Power, Govt. of Arunachal Pradesh)** as SLDC Arunachal Pradesh has not submitted the monthly progress reports till date since the order.

The same was discussed in 29th NETeST on 05/09/2024, 30th NETeST on 28/01/2025, 31st NETeST on 04/04/2025, 32nd NETeST on 29/08/2025 where it was decided in the forum that DoP, Arunachal Pradesh shall submit the reports as per the order. (MoM attached for your reference).

In this regard, you are requested to kindly identify one nodal officer at your end to provide the status of implementation of the required communication facilities on monthly basis and ensure availability of reliable real-time data at NERLDC at the earliest. A sample report submitted by SLDC Nagaland is submitted for your reference.

The matter may please be treated as URGENT and necessary steps may be taken at the earliest.

भवदीय / Sincerely,

शक्ति मयंक सिंह / Shakti Mayank Singh

सिस्टम लॉजिस्टिक्स (एस.एल.) / System Logistics (SL)

उ.पू.क्षे.भा.प्रे.के., ग्रिड - इंडिया / NERLDC, GRID - INDIA

गुवाहाटी, असम - 781019 / Guwahati, Assam - 781019

(भारत सरकार का उद्यम / A Government of India Enterprise)

Websites : <https://www.nerldc.in/> | <https://grid-india.in/en/>



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**From:** NERLDC SCADA  
**Sent:** 23 March 2026 13:19  
**To:** smpsen; partha.acharya; sod.tsecl@gmail.com  
**Cc:** brieflee.lyngkhai@gov.in; ms-nerpc@gov.in; nerpc@ymail.com;  
nerpc.communication@gov.in; Somara Lakra (सामरा लाकड़ा); S P Barnwal (एस पी बर्नवाल);  
Saugato Mondal (सौगाता मंडल); dkbauri.cea@gov.in; alik.erpc@gov.in; NERLDC SCADA  
**Subject:** Urgent Compliance of Hon'ble CERC Order – Submission of Monthly Progress Report  
by TSECL/TPTL  
**Attachments:** CERC Order.pdf; MoM - 29th NETeST.pdf; MoM - 30th NETeST.pdf; MoM - 31th  
NETeST.pdf; MoM - 32nd NETeST.pdf; SLDC Nagaland Report for the month of  
February 2026.pdf

Respected Sir/Ma'am,

This is in reference with respect to order issued by Honourable CERC against *Petition No. 201/MP/2020 (TPTL) dated 04/08/2023*. Where Hon' CERC directed Tripura State Electricity Corporation Limited **to identify one person from their top management as a nodal officer, who shall submit a monthly progress report on the implementation of the communication facilities to the NERPC and NERLDC, till the availability of 100% data to their respective SLDC and NERLDC. (Attached for your reference)**

It is hereby bring to your kind notice regarding non-compliance of Hon' CERC order by **SLDC Tripura (Tripura State Electricity Corporation Limited)** as TPTL has not submitted the monthly progress reports till date since the order.

The same was discussed in 29th NETeST on 05/09/2024, 30th NETeST on 28/01/2025, 31st NETeST on 04/04/2025, and 32nd NETeST on 29/08/2025 where it was decided in the forum that TPTL (Tripura) shall submit the reports as per the order. (MoM attached for your reference). A reminder mail (given in trailing) was also sent to SLDC Tripura for necessary compliance.

In this regard, you are requested to kindly identify one nodal officer at your end to provide the status of implementation of the required communication facilities on monthly basis and ensure availability of reliable real-time data at NERLDC at the earliest. A sample report submitted by SLDC Nagaland is submitted for your reference.

The matter may please be treated as URGENT and necessary steps may be taken at the earliest.

भवदीय / Sincerely,

शक्ति मयंक सिंह / Shakti Mayank Singh

सिस्टम लॉजिस्टिक्स (एस.एल.) / System Logistics (SL)

उ.पू.क्षे.भा.प्रे.के., ग्रिड - इंडिया / NERLDC, GRID - INDIA

गुवाहाटी, असम - 781019 / Guwahati, Assam - 781019

(भारत सरकार का उद्यम / A Government of India Enterprise)

Websites : <https://www.nerldc.in/> | <https://grid-india.in/en/>



---

**From:** Sakal Deep (सकल दीप)  
**Sent:** 23 March 2026 12:58  
**To:** NERLDC SCADA  
**Subject:** FW: Weekly Report for Telemetry Data Availability of Tripura SLDC

Regards,  
Sakal Deep/सकल दीप  
North Eastern Regional Load Despatch Centre/उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र  
**Grid Controller of India Limited/ ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड**  
**(A Government of India Enterprise) / (भारत सरकार का उद्यम)**

---

**From:** Sakal Deep (सकल दीप)  
**Sent:** 08 December 2025 13:48  
**To:** 'Shampa Sen' <smpsen73@gmail.com>  
**Cc:** S P Barnwal (एस पी बर्नवाल) <spbarnwal@grid-india.in>; ms-nerpc <ms-nerpc@gov.in>; NERLDC SCADA <nerldc.scada@grid-india.in>  
**Subject:** RE: Weekly Report for Telemetry Data Availability of Tripura SLDC

Ma'am/Sir,

It is requested to share the report on monthly basis as per the attached sample.

The same is for the compliance for CERC Order dated 04 August 2023 in Petition No. 201/MP/2020, Tripura.

The matter was also discussed in 3.18 agenda of 32<sup>nd</sup> NETeST meeting.

This is for your information and necessary actions.

Regards,  
Sakal Deep/सकल दीप  
North Eastern Regional Load Despatch Centre/उत्तर पूर्वी क्षेत्रीय भार प्रेषण केंद्र  
**Grid Controller of India Limited/ ग्रिड कंट्रोलर ऑफ इंडिया लिमिटेड**  
**(A Government of India Enterprise) / (भारत सरकार का उद्यम)**

---

**From:** Shampa Sen <smpsen73@gmail.com>  
**Sent:** 08 December 2025 12:06  
**To:** ms-nerpc <ms-nerpc@gov.in>

Cc: S P Barnwal (एस पी बर्नवाल) <[spbarnwal@grid-india.in](mailto:spbarnwal@grid-india.in)>; Sakal Deep (सकल दीप) <[skldeep@grid-india.in](mailto:skldeep@grid-india.in)>

**Subject:** Weekly Report for Telemetry Data Availability of Tripura SLDC

\*\*\*Warning\*\*\*

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.

Dear Sir,

The Telemetry Data Availability Progress Report dated 08th December-2025 of Tripura SLDC is hereby attached with the mail for your reference.

Regards

**Er. Shampa Sen**

**Deputy General Manager (Communication)**

**Tripura Power Transmission Limited.**

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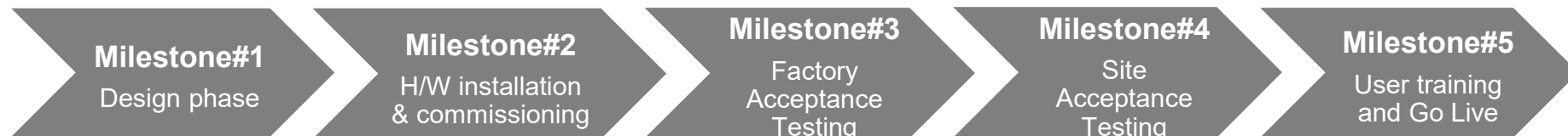
# 33<sup>rd</sup> NETeST Meeting State-wise SAMAST Status

24 April 2026

# *Agenda*

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

## Manipur SAMAST Status



<b>Timelines</b>	<ul style="list-style-type: none"> <li>• Completion of milestone approval received on <b>23 May 2022</b></li> </ul>	<ul style="list-style-type: none"> <li>• Completion of milestone approval received on <b>20 March 2023</b></li> </ul>	<ul style="list-style-type: none"> <li>• Completion of milestone approval received on <b>6 January 2023</b></li> </ul>	<ul style="list-style-type: none"> <li>• SAT of all software modules completed on <b>20 June 2025</b></li> </ul>	<ul style="list-style-type: none"> <li>• Go-live of SAMAST modules completed on <b>30 June 2025</b>.</li> <li>• Warranty support period is going on.</li> </ul>
<b>Invoicing &amp; payment status</b>	<ul style="list-style-type: none"> <li>• Total invoicing INR 5,31,00,000/- (100% of contract value). Payment received INR 4,77,90,000/- (90% of Contract Value)</li> <li>• Milestone #5: <b>Payment pending of INR 53,10,000/-</b>. Aging is <b>100+ days</b></li> </ul>				
<b>Key issues to discuss</b>	<ul style="list-style-type: none"> <li>• <b>Pending Payment of INR 53,10,000/-</b></li> </ul>				

## Mizoram SAMAST Status



<b>Timelines</b>	<ul style="list-style-type: none"> <li>• Completion of milestone approval received on <b>15 March 2022</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• Completion of milestone approval received on <b>24 March 2023</b></li> </ul>	<ul style="list-style-type: none"> <li>• Completion of milestone approval received on <b>9 January 2023</b></li> </ul>	<ul style="list-style-type: none"> <li>• SAT of all software modules completed on <b>14 Feb 2024</b></li> </ul>	<ul style="list-style-type: none"> <li>• Go-live of SAMAST modules completed on <b>19 July 2024</b></li> <li>• Warranty support period completed on <b>19 July 2025</b></li> </ul>
<b>Invoicing &amp; payment status</b>	<ul style="list-style-type: none"> <li>• Total invoicing INR 5,31,00,000/- (100% of contract value). Payment received <b>INR 4,64,36,526/- (~87.45% of Contract Value)</b>.</li> <li>• Milestone #4: Part-payment made. Balance <b>pending INR 13,53,474/- Aging is 602+ days</b>.</li> <li>• Milestone #5: Full payment <b>pending INR 53,10,000/- Aging is 254+ days</b>.</li> <li>• <b>Total payment pending INR 66,63,474/- (~12.55% of Contract value)</b>.</li> </ul>				
<b>Key issues to discuss</b>	<ul style="list-style-type: none"> <li>• <b>Pending Payment of INR 66,63,474/-</b></li> <li>• SLDC to provide project completion letter, and to return Bank Guarantee.</li> </ul>				

## Tripura SAMAST Status



<b>Timelines</b>	<ul style="list-style-type: none"> <li>Completion of milestone approval received on <b>23 May 2022</b></li> </ul>	<ul style="list-style-type: none"> <li>Completion of milestone approval received on <b>04 December 2023</b></li> </ul>	<ul style="list-style-type: none"> <li>Completion of milestone approval received on <b>28 April 2023</b></li> </ul>	<ul style="list-style-type: none"> <li>SAT of all software modules completed on <b>18 June 2024</b></li> </ul>	<ul style="list-style-type: none"> <li>User training was conducted from <b>24-26 June 2024</b></li> <li>Go-live of SAMAST modules completed on <b>29 June 2024</b></li> <li>Warranty support period completed on <b>29 June 2025</b></li> </ul>
<b>Invoicing &amp; payment status</b>	<ul style="list-style-type: none"> <li>Total invoicing INR 5,31,00,000/- (100% of contract value). Payment received INR 4,77,90,000/- (90% of Contract Value)</li> <li>Milestone #5: Payment <b>pending of INR 53,10,000/-</b>. Aging is <b>115+ days</b></li> </ul>				
<b>Key issues to discuss</b>	<ul style="list-style-type: none"> <li><b>Pending Payment of INR 53,10,000/-</b></li> <li>Fund requisition has been submitted to PSDF for remaining 10% payment.</li> <li>SLDC to provide project completion letter, and to return Bank Guarantee.</li> </ul>				

## AMC Status: State-Wise

State	Status
• Assam	3 Years of AMC is going on
• Meghalaya	LOI issued; LOA and Contract Agreement pending
• Arunachal Pradesh	Pending
• Manipur	Pending
• Mizoram	Pending
• Nagaland	Pending
• Tripura	Pending

# Thank you

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