



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

उत्तर क्षेत्रीय विद्युत समिति

Northern Regional Power Committee

Dated: 28<sup>th</sup> August, 2025

सेवा में/ To,

संलग्न सूची के अनुसार/ As per list attached

विषय: दूरसंचार, स्काडा और टेलीमेटरी उपसमिति की 28 वीं बैठक।

Subject: 28<sup>th</sup> meeting of Telecommunication, SCADA & Telemetry Sub Committee-reg.

उत्तर क्षेत्रीय विद्युत समिति की दूरसंचार, स्काडा और टेलीमेटरी (टेस्ट) उप-समिति की 28 वीं बैठक दिनांक 23.07.2025 को 11:00 बजे सम्मेलन कक्ष, एन.आर.पी.सी, नई दिल्ली में आयोजित की गई। बैठक में कार्यवृत्त इस पत्र के साथ संलग्न है। यह उत्तर क्षेत्रीय विद्युत समिति की वेबसाइट ([Northern Regional Power Committee](#)) पर भी उपलब्ध हैं।

28<sup>th</sup> meeting of Telecommunication, SCADA & Telemetry (TeST) Sub-committee of NRPC was held on 23.07.2025 at 11:00 am in conference room, NRPC, New Delhi. Minutes of the meeting are enclosed herewith. The same are available on NRPC website at [Northern Regional Power Committee](#).

भवदीय

Signed by Anzum Parwej

Date: 28-08-2025 16:28:18

(अंजुम परवेज)/ (Anzum Parwej)

अधीक्षण अभियंता /Superintending Engineer

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**Minutes of**  
**28<sup>th</sup> Meeting of Telecommunication, SCADA & Telemetry (TeST) Sub- Committee**

**1 Confirmation of Minutes**

- 1.1 27<sup>th</sup> meeting of TeST sub-committee was held on 21.04.2025 and the minutes were issued on 22.05.2025. No comments have been received so far.

- **Decision of the forum:**

Sub-committee confirmed the minutes.

**2 J&K Telemetry Issues (Agenda by NRLDC)**

- 2.1 NRLDC representative highlighted that real-time telemetry data from Jammu & Kashmir remains unavailable at both J&K-SLDC and NRLDC. Representative from POWERGRID informed that earlier there were some funds issues at state-level but recently an amount of ₹25 Cr. (approx.) out of ₹34 Cr. (approx.) has been received by POWERGRID through a Central scheme fund. Pending work of OPGW (35 out of 76) will commence in August 2025 and same has been tied up with TCIL and other associated vendors by POWERGRID. Also, RTUs delivery has started under the ULDC Phase-III project in which 1st lot has been dispatched and 2nd lot is under inspection.
- 2.2 MS-NRPC stressed upon the criticality of real-time telemetry from J&K region and suggested POWERGRID to hold a bilateral meeting with J&K to ensure better coordination, plan and expedite funds utilization, synchronize OPGW and RTU integration activities, and resolve pending issues in a time-bound manner. No representative from J&K was present in the meeting.

- **Decision of the forum:**

POWERGRID to co-ordinate with J&K for expediting installation of OPGW.

**3 Redundant RTU Communication for Main / Backup RLDC (Agenda by NRLDC)**

- 3.1 During 28<sup>th</sup> TeST Meeting, representative from POWERGRID informed the forum that several RTUs/SAS installed at substations do not have sufficient free ports to accommodate the additional communication channels, therefore upgradation of these RTUs/SAS is necessary. It was also deliberated that inter-operability issues such as SDH, MPLS, etc. needs to be taken up gradually and will take time for getting its stability.
- 3.2 IndiGrid expressed concerns about compatibility of legacy equipment with Next Generation Firewalls (NGFWs) and the potential need for hardware upgrades and need to define cost recovery mechanism for TBCB substations.
- 3.3 MS, NRPC stated that inter-operability issues may arise, and planning has to be done accordingly and these things need to be taken care at implementation level.
- 3.4 Indigrid further stated that as per regulations, expenditures under “Change in Law” can be absorbed in tariff if the cost impact is less than 1% of annual transmission charges. Indigrid requested that irrespective of this 1% limit, the additional scope in TBCB projects should be covered under “change in law” as currently there is no provision of “change of scope” under TBCB projects. MS NRPC suggested that regarding cost recovery under Change in Law, respective entities may approach to CERC.
- 3.5 SE, NRPC advised CTUIL to make a consolidated scheme for all TSPs. All TSPs may go differently but the scheme should be commonly prepared by CTUIL. For existing substations, since this is a new requirement, it may be done under ADD-CAP for RTM substations and under change in law for TBCB substations.

3.6 CTUIL mentioned that add-cap proposals do not go to NCT; hence, making schemes related to RTU-level devices does not come under its jurisdiction as only RPC approval is sufficient for it. MS-NRPC conveyed that CTUIL should prepare a consolidated scheme to bring out uniformity in this area.

- **Decision of the forum:**

CTUIL to make a consolidated scheme for all TSPs for redundant RTU Communication for Main / Backup RLDC.

#### **4 Display of DC/Schedule of Generating Stations in SCADA Display (Agenda by NRLDC)**

4.1 Representative from NRLDC apprised the agenda regarding display of DC/Schedule of Generating Stations in SCADA Display and asked states about the present status of integration. After deliberation, the inputs received from states were as follows:

Sl. No.	State	Status	Remarks & Timelines
1	Punjab	Available	Has been taken up with IT team and script-based automation is expected to take another 2-3 weeks.
2	Haryana	Available	SAMAST is getting delayed; "schedule-data" is expected to get integrated within next 2 months.
3	Uttarakhand	Not Available	Integration over secure ICCP is being planned and expected to be completed within 2- 3 months' timeframe.
4	Jammu & Kashmir	Not Available	J&K member was not present in the meeting.

- **Decision of the forum:**

MS, NRPC asked the states to expedite the integration process.

#### **5 Non-availability of Real-Time data from PTCUL (Agenda by NRLDC)**

5.1 NRLDC representative apprised regarding the non-availability of telemetry data from PTCUL stations. They emphasized the urgent need for integration of RTUs at SLDCs to ensure reliable real-time data availability.

5.2 Representative from PTCUL stated that the project for RTU and OPGW installation is still pending due to non-availability of funds, and they are pursuing funding through PSDF and exploring alternative funding options.

5.3 MS, NRPC, expressed serious concern over the prolonged delay, and stated that PTCUL must not remain dependent on PSDF, and advised that the project should be executed using internal resources. And, further suggested PTCUL to identify locations with where OPGW is already laid but RTUs/SAS are not installed, the integration work may be taken up under the ULDC Phase-III scheme being executed by M/s GE Vernova under consultancy contract with POWERGRID.

- **Decision of the forum:**

PTCUL to explore other options also for installation of RTU & OPGW installation and expedite the integration process.

#### **6 Non-Reliable Telemetry from RRVPN Sub-stations (Agenda by NRLDC)**

6.1 NRLDC apprised issue regarding non-availability of reliable data from RRVPNL stations and RRVPN was requested to share update for RTU/SAS upgradation.

6.2 Representative from RRVPNL informed the forum that bidding for the 22 SAS stations is currently in progress and work related to replacement of 132 obsolete RTUs is expected to be completed by August 2025.

6.3 Member Secretary, NRPC, emphasized the need for strict adherence to timelines, given the long-standing nature of the issue.

- **Decision of the forum:**

All states to expedite the integration process keeping adequate cyber security measures.

## **7 Non-availability of Telemetry from HVPNL Sub-stations (Agenda by NRLDC)**

7.1 Representative from NRLDC informed about non-availability of telemetry data from HVPNL stations and requested concerned to expedite the process for integration of RTUs at SLDCs.

7.2 HVPNL informed the forum that telemetry issues for most of the affected sub-stations have been resolved, and the remaining issues are expected to be rectified within one-month timeframe by follow-up with field staff. Some stations have SAS-related issues which are being taken up with SAS engineers.

7.3 Representative from NRLDC pointed out that data related issues of several 400kV stations have been resolved; but same is pending for many 220kV stations (around 13 in nos.) which are important for drawl calculations.

7.4 Member Secretary, NRPC, asked NRLDC to share the updated list of non-reporting substations with HVPNL for swift action. A hard copy of the updated list was handed over to the HVPNL representative at the end of the meeting for immediate reference and follow-up.

- **Decision of the forum:**

HVPNL to resolve telemetry issues in co-ordination with NRLDC.

## **8 Communication channel redundancy/ Telemetry Issues to NRLDC(Agenda by NRLDC)**

8.1 NRLDC apprised that there are Communication channel redundancy/ Telemetry Issues to NRLDC in various stations of NR where RTUs are still reporting to NRLDC on single channel.

8.2 Representatives from various entities provided updates on the status of the RTUs and following are still pending:

Sl. No.	Name of RTU	Owner	Remarks/Updates
1	KISHANGANGA	NHPC	Issue of changeover which leads to “hang” state. Being taken up with BHEL and expected to be resolved within a week.
2	PARBATI-2	NHPC	Parbati-Koldam section of around 68 kms. to be done in hilly terrain on live-line conditions. Basic issue being faced is identification of vendors for which independent competitive bidding needs to be done before filing expenditure in CERC. To be completed by Indigrid by Jan’26.
3	PARBATI-3	NHPC	Basic issue being faced is identification of vendors for which independent competitive

Sl. No.	Name of RTU	Owner	Remarks/Updates
			bidding needs to be done before filing expenditure in CERC. To be completed by Indigrid by Jan'26.
4	SALAL	NHPC	Creation of "communication loop" being faced. Can be issue related to Fibre to Ethernet Converter. Will be checked and rectified by NHPC with the help of POWERGRID.
5	URI-2	NHPC	Restored.
6	Budhil	IPP	Had been informed to GreenCO.
7	AD Hydro	AD Hydro	Restored.
8	Bhiwadi HVDC	POWERGRID	Second gateway Faulty for which upgradation required through M/s Siemens (Germany) as the same is a proprietary system. Matter has been escalated at senior management level for price negotiations by POWERGRID.
9	Chamba	POWERGRID	Communication Equipment issue
10	Lucknow 400	POWERGRID	Both channels reporting but data is not correct. Matter has been reported internally by POWERGRID to CGM of sub-station. Will be restored within 1 month as visit of Gateway engineer is required.
11	Raibareilly	POWERGRID	Restored.
12	Fatehabad	POWERGRID	Rectified.
13	Jhajjar	IPP	Gateway of NTPC not configured. Communication engineer of POWERGRID will visit site next week.
14	Kankroli	POWERGRID	Main gateway Faulty and it will take 3-4 months to get restored.
15	Shree Cement	Shree Cement	Standby link/Gateway faulty.
16	Chamera 3	NHPC	Due to some faulty adaptor which will be rectified within a week.

- **Decision of the forum:**

Entities to resolve the issues at the earliest.

## 9 Requirement for additional VOIP SIP Numbers (Agenda by NRLDC)

9.1 Representative from NRLDC informed about the configuration issue in integrating the SIP number via the SLDC Rajasthan Orange server. POWERGRID representative informed the forum that a visit of M/s Orange personnel to NRLDC will be scheduled shortly to explore through RRVN or NLDC Orange Exchange and resolve configuration issues.

9.2 POWERGRID further informed that tender for new VOIP scheme has been floated after taking approval from NCT.

9.3 Member Secretary, NRPC, advised POWERGRID to explore all possibilities, including configuration resolution or additional license procurement, to ensure seamless VoIP communication.

- **Decision of the forum:**

POWERGRID to resolve configuration issues at the earliest.

## **10 Use of trusted products from trusted sources for procurement of IT equipment and services in power sector (Agenda by NRLDC)**

10.1 NRLDC representative apprised about office memorandum with ref. F. No. 1/45/2021/IT&CS (P-258739) dated 05-Jun-2025 issued by Ministry of Power for usage of Trusted Products from Trusted Sources for procurement of IT equipment and services in power sector.

10.2 Forum requested NRLDC to provide updates on the formation of the Coordination Cell, designating nodal officers, and any related coordination with MoP/CERT-GO, with the SLDCs.

- **Decision of the forum:**

NRLDC to provide updates on the formation of the Coordination Cell, designating nodal officers, and any related coordination with MoP/CERT-GO, with the SLDCs.

## **11 Compliance of Workforce Adequacy Guidelines by States/UTs**

11.1 NRLDC apprised members of the “Workforce Adequacy Guidelines for Load Despatch Centres” circulated by Ministry of Power, GoI on 30-Oct-2024 for compliance by States/UTs.

11.2 MS, NRPC asked SLDCs of the current status of compliance. Updates were given by SLDCs as mentioned below.

- **Punjab SLDC:** Matter put up for Board meeting scheduled in next month.
- **Haryana SLDC:** Proposal has been given to Admin-dept.
- **Uttarakhand SLDC:** Committee was formed for it which has given report after visiting UP, HP and Delhi SLDCs. Expected to be done soon.
- **Rajasthan SLDC:** Expected to be done soon in near future.
- **UPSLDC:** Approval pending from Board of Directors.

11.3 Member Secretary, NRPC, asked all SLDCs to submit the details within 3 months.

- **Decision of the forum:**

SLDCs to submit details within 3 months.

## **12 Network Operation Centre (NOC) at SLDCs (Agenda by NRLDC)**

12.1 Matter was deliberated, and it was informed by NRLDC that draft model DPR has been submitted by CERT-GO secretariat with CSIRT-Power on 07-Jul-2025 for analysis before sharing it with SLDCs.

12.2 SLDCs shared concerns related to non-indigenous solutions being offered by various prospective bidders/OEMs which are under discussion with them.

12.3 MS-NRPC mentioned that the SOC/NOC solution needs to be indigenous, and it will be beneficial if model DPR prepared by CERT-GO secretariat contains technical specifications of an Indigenous solution.

- **Decision of the forum:**

Forum noted the information.



### **13 Replacement of obsolete communication equipment installed in various Substations of Northern Region to rectify and make operational the SPS-NR Scheme for Mundra-Mahendragarh Transmission System (Agenda by ATIL)**

- 13.1 ATIL requested forum to approve replacement of communication system for Mundra-Mahendragarh HVDC Transmission System under add cap as useful life of these FOTE has been completed as per CERC tariff regulation.
- 13.2 CTU stated that details (RTM/TBCB) may be provided of how the scheme was conceptualized originally, so that agenda can be examined.
- 13.3 MS, NRPC asked about the cost recovery mechanism of original scheme of SPS, based on that, decision can be taken by the forum. She further suggested that the possibility of including it under O&M may also be explored. She also requested ATIL to provide reasons for the obsolescence of these communication equipment. ATIL stated that they will provide all the details to the Forum.

- **Decision of the forum:**

ATIL to provide documents providing cost recovery mechanism of original SPS scheme and also details regarding the communication equipment to be replaced.

### **14 Non- Installation of OPGW on LILO Portion of 400kV Koldam-Ludhiana Line at Ropar by M/S Indigrid (agenda by PSTCL)**

- 14.1 Representative from NRPC apprised the forum of the agenda. PSTCL informed that OPGW has been laid by Indigrid/Parbati Koldam Transmission Company Limited (PrKTCL) on the 400kV Koldam–Ludhiana line. However, the LILO portion at Ropar does not have OPGW. In the 57th NRPC meeting, it was decided that Indigrid may lay the OPGW on the LILO portion, with the cost to be borne by PSTCL, subject to mutual agreement.
- 14.2 Indigrid stated that it was informed about the LILO portion only after the completion of the main line. It further clarified that the scope awarded by CTU included only the main line. PSTCL referred to the PG–Jalandhar line case, where POWERGRID had laid OPGW on the LILO portion as well, and requested Indigrid to do the same.
- 14.3 IndiGrid expressed its difficulty in implementing the scope through PrKTCL as in order to claim the cost associated with such installation of OPGW approval from NCT is required for claiming it as a part of tariff before CERC.
- 14.4 MS NRPC suggested that based on the decision under this TeST Meeting, PrKTCL can implement such scope under any existing award wherein the installation of OPGW is presently going on. IndiGrid stated that installation of OPGW is going on in Parbati Koldam section of Transmission Lines and PrKTCL can include the scope of PSTCL as a part of contract it is awarding for Parbati Koldam section. The cost associated towards the scope required for PSTCL will be borne by PSTCL. PrKTCL will discount the cost associated with PSTCL scope while claiming tariff before CERC. At the same time PSTCL is required to release the amount claimed by PrKTCL for such installation of OPGW on PSTCL scope in advance.
- 14.5 Both IndiGrid (PrKTCL) and PSTCL agreed for the same.

- **Decision of the forum:**

PrKTCL will install OPGW on the LILO portion of the 400 kV Koldam–Ludhiana transmission line at Ropar and cost of the work to be borne by PSTCL.

### **15 Regarding MoU for ULDC Phase-III scheme (Agenda by BBMB)**

- 15.1 BBMB apprised that its observations on the draft MoU for ULDC Phase-III, sent on 25.11.2024, were not incorporated by POWERGRID and requested inclusion.
- 15.2 POWERGRID clarified that BBMB's observation pertained to AMC extension and further stated that the decision to extend AMC primarily rests with the constituents, as they bear the associated cost, and POWERGRID has only limited role in this matter.
- 15.3 POWERGRID further added that it cannot include such clauses in the MoU as it does not charge consultancy fees; inclusion may cause audit issues.
- 15.4 BBMB asked for an email clarification to which POWERGRID agreed.

- **Decision of the forum:**

POWERGRID to provide email clarification to BBMB.

### **16 Regarding information in respect of ULDC Phase-III scheme (Agenda by BBMB)**

- 16.1 POWERGRID apprised the forum that ULDC Phase-III scheme's detailed engineering has been completed up to approx. 90% and balance approvals for design documents will be completed shortly. NRLDC and RRVNLC Control Centre's hardware FAT has been completed. Functional FAT (Software), subsequently performance FAT is scheduled to start in the 2<sup>nd</sup> week of August, with participation from all constituents, and is expected to be completed within two weeks. Parallel Operations is planned to commence from January 2025.
- 16.2 POWERGRID requested all constituents to ensure readiness of main and backup control centers as materials will be dispatched once FAT has been completed, tentative delivery schedule is middle of Sept' 2025. Constituents also enquired about the make, model, technical specifications of equipment/software, and the percentage of Make in India (MII) content. POWERGRID stated that all design documents/ approvals have been shared on One-drive link and make/model are mentioned in approved documents for all items, however required details shall be provided subsequently.
- 16.3 Constituents also enquired about buyback provision, POWERGRID mentioned that under the GE's contract (ULDC Phase-III implementing agency) buyback provision has been mentioned. Further, list of equipment to be taken back by vendor is also attached, however as confirmed by POWERGRID / GE, any state is required any specific equipment then they may intimate to GE, so that that particular equipment may not be collected by GE.

- **Decision of the forum:**

All Constituents may expedite the control centre readiness, UPS/Battery bank room readiness with proper trenches for cable laying. Also, constituents may finalize the list of equipment for buy back of items.

### **17 Regarding storage of Logs of URTDSM System (Agenda by BBMB)**

- 17.1 POWERGRID informed that approval regarding increasing the storage has already been obtained by POWERGRID in 54th TCC/ 79th NRPC meeting held on 30.05.2025 and therefore, it will take time for implementation.

17.2 POWERGRID informed that after approval in NERPC, they will award the works. POWERGRID also stated that these are common issues in all states and also in audit para. NRPC approval or POWERGRID letter may be intimated to Audit agency that works for storage of logs is being taken up, however sufficient time is required for approval, tendering process and implementation.

- **Decision of the forum:**

Already approved in 54<sup>th</sup> TCC/79<sup>th</sup> NRPC meeting.

### **18 Replacement of S-900 RTU's of ULDC-Phase-I Scheme and Integration of 61850 compliant Numerical Relays with HMI Servers for providing functionality of Event Logger (Agenda by BBMB)**

18.1 BBMB apprised the agenda of Replacement of S-900 RTU's of ULDC-Phase-I Scheme and Integration of 61850 compliant Numerical Relays with HMI Servers. BBMB mentioned that BBMB officers/officials along with M/s Synergy authorized representative carried out a site visit to Dhulkot substation on 28.01.2025. During the visit, it was found out that the various details of Node addresses and CID files were required to be submitted to the firm by BBMB.

18.2 The same were submitted to the quarter concerned and intimated to PGCIL vide this office email dated 04.03.2025 and requested to expedite the work of integration at BBMB Dhulkote substation.

18.3 Some observations were raised by M/s Synergy vide email dated 19.05.2025 to which Deputy Director/P&T Cell, BBMB, Chandigarh clarified vide email dated 22.05.2025. POWERGRID has not provided any input to the observations yet.

18.4 POWERGRID stated that M/s Synergy has still mentioned that files are still missing and they could not be able to integrate without support of OEMs (relay), they need credential to get the files from OEMs. POWERGRID also mentioned that these works were awarded to M/s Synergy in 2018 and since then required files were not provided by BBMB protection team even after several reminders, all works under the said contract has been completed in 2021. Now M/s Synergy have to redeploy teams at all BBMB sites for integration. POWERGRID further mentioned that this matter may be handled contractually as it is a long pending issue.

- **Decision of the forum:**

POWERGRID to resolve this long pending issue at the earliest

### **19 Poor telemetry data availability of interstate PowerGrid/NTPC Substations (Agenda by UPSLDC)**

19.1 POWERGRID stated that there is some discrepancy in the data shared by UPSLDC.

19.2 NRLDC stated that UPSLDC may have calculated data from drawal point resulting in difference with data calculated by NRLDC. Overall availability for all stations except Tanda is more than 95%. UPSLDC may have calculated availability at any particular instant.

19.3 UPSLDC also stated that they are facing issues while data validation with POWERGRID for SEM SCADA mismatch.

19.4 It was decided that UPSLDC may take input from NRLDC for one month and verify.

- **Decision of the forum:**

UPSLDC to verify data based on inputs provided by NRLDC.

## **20 SCADA/EMS Upgradation ULDC Phase-III Project (Agenda by UPSLDC)**

20.1 NRPC apprised agenda regarding training venue in ULDC Phase-III project.

20.2 POWERGRID stated that it is difficult to arrange training in Manesar due to constraints by GE. POWERGRID stated that it is exploring other options for trainings at NRLDC/ SLDC control centres.

- **Decision of the forum:**

POWERGRID to explore more options for training venue in ULDC Phase-III project.

## **21 Pending AMC Extension from Siemens – SCADA Phase-II (Agenda by UPSLDC)**

21.1 POWERGRID informed that technical and administrative approval has been accorded by POWERGRID higher management, however as per procurement policy/procedure, any single tender/PAC item need to be rerouted through committee for rate finalization even states have provided in-principle approval. Since approval falls under the powers of CMD, POWERGRID, therefore some time is required for award of the contract, tentative in Aug' 2025.

- **Decision of the forum:**

POWERGRID to expedite the AMC contract extension process.

## **22 Submission of report for Communication Audit of Substations (Agenda by NRPC)**

22.1 Representative from NRPC apprised that RPC Secretariat, vide Letter No. CEA-GO-17-14(16)/1/2024-NRPC dated 02.06.2025, had requested all Transmission Service Providers (TSPs) and Generation Companies (GENCOs) to submit the healthiness report of their respective communication infrastructure. However, reports have not been received from most of the entities.

22.2 MS, NRPC stated that all the substations are required to submit the healthiness report for regulatory compliance.

- **Decision of the forum:**

TSPs and GENCOs to provide healthiness report of their communication infrastructure to NRPC Secretariat.

## **23 Conducting of physical audit of substations (Agenda by NRPC)**

23.1 Representative from NRPC apprised that as per the SOP of Communication Audit of Substation, audit shall be conducted in two phases:

Phase I – Scrutiny of reports, documents, and other relevant information.

Phase II – Physical verification of selected nodes

23.2 NRPC Secretariat, vide Letter No. CEA-GO-17-14(16)/1/2024-NRPC dated 02.06.2025, has already requested all Transmission Service Providers (TSPs) and Generation Companies (GENCOs) to submit the healthiness report of their communication infrastructure.

23.3 However, the required data has not been received from several substations. Accordingly, NRLDC may propose a list of substations for Phase-II physical audit, considering the

past year's communication system performance and other relevant operational parameters.

23.4 Member Secretary (MS), NRPC, suggested that convening a meeting of the Communication System Audit Sub-Group to finalize the list of sub-stations to be taken up for audit.

- **Decision of the forum:**

NRPC Secretariat to convene a meeting with Communication System Audit Sub-Group to finalize the list of sub-stations to be taken up for audit.

## **24 Communication Outage Planning (Agenda by NRPC)**

24.1 Representative from NRPC apprised that NRPC Secretariat is planning to commence monthly communication outage planning from the month of September 2025, in accordance with the approved Standard Operating Procedure (SOP) for communication outage planning.

24.2 All utilities are requested to provide details of the following communication links/equipment available at their respective sub-stations. It is mentioned that CTU has already provided OPGW Links for ISTS in Northern Region.

24.3 NRLDC stated that equipment details can be given by POWERGRID through U-NMS.

24.4 POWERGRID agreed. POWERGRID was requested to provide equipment details so that outage planning can be started.

24.5 MS, NRPC stated that a database is required to be made in order to start the communication outage planning.

- **Decision of the forum:**

POWERGRID to provide equipment details through U-NMS. NRPC Secretariat to start outage planning once the database of OPGW links and equipment is prepared.

## **AA1 Fiber Sharing on JKPTCL network to provide redundant communication for Alusteng, Drass, Kargil, Khalasti, Leh (Agenda by CTUIL)**

AA.1.1 CTUIL apprised the agenda to the forum that presently Alusteng, Drass, Kargil, Khalasti, Leh stations are connected on radial path with ISTS Communication Network. This agenda was deliberated in 23rd TeST and 26th TeST meeting and it was decided that redundant communication to these substations may be established through sharing of fibers on following JKPTCL links:

Alusteng (PG) - Zainakote (JKPTCL)

Zainakote (JKPTCL) - Wagoora (PG) (ISTS Node)

AA.1.2 CTU has written a letter dated 08.11.2023 to JKPTCL for sharing of fibers. After issuance of CEA fiber sharing guidelines, CTU has again written a letter dated 09.04.2025 to JKPTCL for sharing of fibers on JKPTCL links. JKPTCL response is awaited regarding sharing of fibers.

AA.1.3 It was noted that JKPTCL was not present in meeting.

AA.1.4 MS, NRPC stated that NRPC Secretariat shall also communicate with JKPTCL in this regard. CTU was also advised for further follow up with JKPTCL.

- **Decision of the forum:**

CTU to follow up with JKPTCL.

## **AA 2 Fiber Sharing on PTCUL network to provide redundant communication for Pithoragarh (PG) and Sitarganj (PG) stations (Agenda by CTUIL)**

AA.2.1 CTU apprised the agenda to the forum that presently Pithoragarh (PG) and Sitarganj (PG) stations are connected on radial path with ISTS Communication Network. This agenda was deliberated in 23<sup>rd</sup> TeST and 26<sup>th</sup> TeST meeting and it was decided that redundant communication to these substations may be established through sharing of fibers on following PTCUL links:

A. Links /Paths where fibre Sharing is required for Pithoragarh(PG):

- a. Pithoragarh(PG)–Pithoragarh(PTCUL)
- b. Pithoragarh(PTCUL)–Almora(PTCUL)
- c. Almora(PTCUL)-Bhawoli(PTCUL)
- d. Bhawoli(PTCUL)-Haldwani(PTCUL)
- e. Haldwani(220kV)(PTCUL)Kamalwaganj(PTCUL)
- f. 220kVKamalwaganj(PTCUL)-Pantnagar(PTCUL)
- g. Pantnagar(400kV)(PTCUL)-Kashipur(PTCUL)

B. Links/Paths where fibre Sharing is required for Sitarganj (PG):

- a. Sitarganj(PG) - Sitarganj(PTCUL)
- b. Sitarganj(PTCUL) - Kiccha(PTCUL)
- c. Kiccha(PTCUL) - Rudrapur(PTCUL)
- d. Rudrapur (PTCUL) - Pantnagar (PTCUL)
- e. Pantnagar (PTCUL) – Kashipur (PTCUL)

AA.2.2 CTU has written a letter dated 08.11.2023 to PTCUL for sharing of fibers. After the issuance of CEA fiber sharing guidelines, CTU has again written a letter dated 09.04.2025 to PTCUL for sharing of fibers on PTCUL links. PTCUL response is awaited regarding sharing of fibers.

AA.2.3 PTCUL stated that they can provide bandwidth as per the requirement of ISTS Communication. MS, NRPC stated that as per guidelines issued by CEA for sharing of fibers, fibers are to be shared for Grid operation purpose. Sharing of bandwidth may also cause cyber security issues. MS, NRPC asked PTCUL to expedite the issue with their higher management and come up with solution before the next TeST meeting.

- **Decision of the forum:**

PTCUL to share fibers for Grid operation purpose as per CEA fiber sharing guidelines.

## **AA3. Inputs from TSPs regarding fiber database (Agenda by CTUIL)**

AA.3.1 CTU apprised the agenda to the forum that CEA has published “Comprehensive guidelines for the usage and sharing of fiber cores of Optical Ground Wire (OPGW)/ Under Ground Fiber Optic (UGFO) Cable for power system applications” in March’25. As per Para 7 of this guidelines-

AA.3.2 CTU for ISTS/ STUs for InSTS shall be responsible for monitoring the utilization of OPGW fibers and ensuring compliance with the established conditions. CTU/STU shall maintain a comprehensive database that clearly segregates:

- a. Total number of OPGW fiber cores
- b. Number of cores utilized for grid applications
- c. Spare cores reserved for grid applications
- d. Number of fiber cores already being shared for grid applications

- e. Number of cores leased on a commercial basis

AA.3.3 To prepare this comprehensive database, Forum requested all the TSPs to provide the details as requested by CTU in the format attached at Annexure-I.

- **Decision of the forum:**

All the TSPs to provide details requested by CTU for comprehensive database preparation.

#### **AA4. Inputs for existing PMU Database (Agenda by CTUIL)**

AA.4.1 CTU apprised the agenda to the forum that CEA has issued “Guidelines on Unified Philosophy for Placement of Phasor Measurement Unit (PMU) in Indian Grid w.e.f. 19.03.2025 and per these guidelines, PMUs are to place at one end of the transmission lines. As per MoM of meeting held dated 13.03.2025 (part of this Unified Philosophy for Placement of Phasor Measurement Unit (PMU) in Indian Grid) para 10. Stated:

AA.4.2 CTUIL shall clearly mention the requirement of PMUs at a Substation in line with these Guidelines by duly factoring in the availability of the PMUs at the existing stations and that under bidding transmission schemes & under-construction transmission schemes.

AA.4.3 CTU also stated that to provide these inputs related to PMU in the RFP documents and reply to bidders queries database for All India PMU placement details to be provided by RLDC/NLDC to CTUIL so that RFP documents may be furnished accordingly.

AA.4.4 Forum requested Grid India to provide All India PMU placement details to CTU. Grid India confirmed to provide the details to CTU and also requested CTU to send a mail in this regard to NLDC with copy to all RLDCs. CTU agreed for the same.

- **Decision of the forum:**

Grid India to provide All India PMU placement details to CTU.

#### **AA5 Nomination of nodal officers for coordination with NMT of UNMS (Agenda by CTUIL)**

AA.5.1 CTU stated that during the 27th TeST meeting held on 21.04.2025, Forum requested all constituents to nominate a nodal officer for coordination with NMT of UNMS. Details of nodal officers is not yet received.

AA.5.2 Forum requested all the constituents including RLDC/SLDCs/TSPs/Gencos to nominate nodal officer for coordination with NMT and send details of nodal officers to CTU before next TeST meeting.

AA.5.3 During the deliberations, ATIL raised issue regarding the accountability for configuration of channels in communication equipment as configuration right are with TSPs and also with NMT using UNMS.

AA.5.4 CTU replied that they shall take up this issue in upcoming Communication Planning Meeting (CPM) of Northern Region and will try to figure out the solution.

- **Decision of the forum:**

All the constituents including RLDC/SLDCs/TSPs/Gencos to nominate nodal officer for coordination with NMT and send details of nodal officers to CTU.

#### **AA6 Status of schemes approved in various NCT (Agenda by CTUIL)**

AA.6.1 CTU stated that during 26th NRPC TeST meeting it was decided that monitoring of various ISTS Communication schemes approved in NCT shall be done under NRPC level.

AA.6.2 Details of the communication schemes approved in NCT was provided in the TeST Agenda. Inputs received from POWERGRID is attached at Annexure-II. Other TSPs to provide status to CTU and NRPC for update.

### **AA7 Unified Real Time Dynamic State Measurement (URTDSTM) project phase-II (Agenda by POWERGRID)**

AA.7.1 POWERGRID informed regarding the preparation of DPR for URTDSTM Phase-II in line with 13<sup>th</sup> NPC meeting, including additional PMUs and replacement of existing control centres at SLDCs/RLDCs/NLDC and then revision of DPR in line with deliberation under 15<sup>th</sup> NPC for implementation of URTDSTM phase-II only for the ISTS portion (NLDC, RLDCs, Central Sector) in view of non-extension of PSDF. Revised cost estimate comes to Rs. 1122 Cr for ISTS portion comprising of 07 nos. of control centres and 1070 PMUs.

AA.7.2 During the 16th NPC meeting, it was decided to share the proposal with all RPCs and Grid-India. Accordingly, the revised DPR for URTDSTM Phase-II (for the ISTS portion), which was discussed in the meeting, is to be further deliberated.

AA.7.3 POWERGRID mentioned that project cost shall be shared by all the constituents as per the ISTS sharing mechanism of CERC tariff regulation.

AA.7.4 MS, NRPC suggested exploring further cost optimization, including the possibility of using a single PDC, as the revised cost remains very high even after excluding state locations from the scope, and considering that the system will require another upgrade in 7–8 years.

AA.7.5 NRLDC mentioned that in case of single PDC at NRLDC and consoles at SLDCs, reporting of PMU data will be delayed at SLDCs for their sub-stations over ICCP protocol, further conflict of data reporting pattern / boundary marking for Centre/State stations in line with grid code, states also required data reporting for real time monitoring of grid condition and ensuring the grid stability.

AA.7.6 RRVPNL and UPPTCL mentioned the importance of PMU data and stated that they have a practice of data validation and data reporting for PMUs before charging of new sites of more than 50MW.

- **Decision of the forum:**

MS, NRPC mentioned that in view of requirement, proposal may be agreed technically, however issues raised by NRLDC and higher cost, cost estimate for WAMS System under URTDSTM phase-II may first be prepared for Northern Region to check exact cost implications between common PDC for entire Northern Region vis-à-vis PDC at respective State SLDCs. Accordingly, agenda will be put up for upcoming NRPC meeting.

### **AA8 Communication Audit checklist points may be deliberated by the sub-committee (Agenda by POWERGRID)**

AA.8.1 POWERGRID appraised the Standard Operating Procedure (SOP) for Communication Audit of Substations as issued by NPC in accordance with the Central Electricity Regulatory Commission (Communication System for Inter-State Transmission of Electricity) Regulations, 2017 and further requested for review and deliberation of forum on certain provisions of audit checklist regarding earthing of OPGW with earth mat riser at termination, distinct approach cables for protection and communication, separate communication room, configuration of Battery Charger alarms / measurements with SAS etc.



AA.8.2 NRPC representative stated that checklist may be reviewed in communication audit sub-group and may further be deliberated in next TeST Sub-Committee Meeting. MS, NRPC stated that it may then be submitted to NPC for further review and finalization.

- **Decision of the forum:**

To be reviewed in communication audit sub group

**AA9 Review the requirement of NGFW in various Substation packages as per CTU standard technical specifications (Agenda by POWERGRID)**

AA.9.1 POWERGRID apprised that it is facing certain challenges in the deployment of NGFW. There is only one make presently which is being offered primarily due to no. of ports requirement and the requirement of Ethernet ports. Also the NGFW, which includes IPS, requires connectivity with the Internet for updates or connection to a Centralized management server.

AA.9.2 MS NRPC suggested POWERGRID to discuss requirement with CSIRT-Power (CEA) in this regard as they are the appropriate authority related to cyber security in Power Sector.

- **Decision of the forum:**

POWERGRID to discuss requirement with CSIRT-Power (CEA)

**AA10 Operational Issues in OPGW Network – Longer outages in UPPTCL owned OPGW links (outage in Muzaffarnagar 400kV – Nara 220KV and Modipuram – Charla link) (Agenda by POWERGRID)**

AA.10.1 POWERGRID apprised that this agenda was discussed in 27th TeST sub-committee meeting and UPPTCL had committed to restore the communication links within 1 month, however both the links were not restored till the 28th TeST meeting, so POWERGRID again raised the issue.

AA.10.2 POWERGRID again informed that due to longer outage of UPPTCL's Two (02) OPGW links, namely, Muzaffarnagar 400kV – Nara 220KV and Modipuram – Charla, critical services related to Modipuram backup SLDC are out / intermittent for more than 2 years, resulting in Backup SLDC, Modipuram working on single route and centre sector connectivity for Inter-Regional links are also disturbed since then.

AA.10.3 POWERGRID further mentioned regarding the commissioning of redundant communication equipment as approved in 19th NCT at all SLDCs / backup SLDCs, which could not achieve the actual redundancy of communication network, without restoration of optical links.

AA.10.4 UPPTCL mentioned that Muzaffarnagar 400kV – Nara 220KV has been rectified recently, however with respect to rectification of Modipuram – Charla link, UPPTCL is facing AMC challenges due to expiry of the contract. They are under finalization of new AMC contract and likely to be placed within next 15 days, subsequently we will rectify the link within one month.

- **Decision of the forum:**

UPPTCL to rectify the OPGW link i.e. Modipuram – Charla within one month and intimate to POWERGRID for restoration of services. POWERGRID will take up restoration of services after rectification of OPGW links.

## **AA11 Issues being faced by NMT Team at UNMS Control Centre (Agenda by POWERGRID)**

AA.11.1 Subject agenda raised by UNMS team during 27th TeST meeting regarding integration of balance Network Elements (15-20%) and challenges to get the updated / current data or status of NEs pending for integration with UNMS, due to inadequate support from States/PPs/ISTS. Accordingly, during 27th TeST, it was deliberated for nomination of nodal officers from all the constituents to help, coordinate and resolve the issue.

AA.11.2 Representative from POWERGRID / UNMS team again mentioned regarding the inadequate support and requested all States/PPs/ISTS licensees to share details of nodal officers for day-to-day coordination and integration. Further, requested for escalation matrix for ISTS nodes for intimation and resolution of outage issues.

AA.11.3 NMT team has also raised issues w.r.t upgradation of software version of existing ECI NMS / Nodes (at DTL) due to lack spares, power supply issue at Kashipur, PTCUL and integration of JKPTCL communication system.

AA.11.4 Representatives of DTL & JKPTCL were not present in the meeting and representative of PTCUL mentioned for arrangement of uninterrupted power supply within 03 months for UNMS system at Kashipur.

AA.11.5 CTUIL informed that they are examining the case for upgradation of equipment where bandwidth is being choked specially in STM-4 routes. System generated report from UNMS system is attached where B.W. utilization over 75%.

Sr. No.	Source Node	Source Port	Destination Node	Destination Port	Layer Rate	Utilization (%)
1	Sohawal	STM4-1-2-3	Ballia_400	STM4-1-4-3	STM-4	92.06
2	PG_KURUKSHETRA	STM4-1-3-1	Abdullapur PG	STM4-1-3-1	STM-4	90.08
3	Ballabgarh03	STM16-1-4-3	BHIWADI_SDH-02	STM16-1-2-3	STM-16	92.26
4	KOTPUTLI	STM16-1-2-3	BHIWADI_SDH-02	STM16-1-2-4	STM-16	78.97
5	BAREILLY	XS A:SAMQ o Port 2	SHAHJAHANPUR	XS B:SAMQ oPort 2	STM-4	99.6
6	Jalandhar-PG	STM4-1-2-3	Ludhiana_PG	STM4-1-3-1	STM-4	94.84
7	Kunihar LDC_HP	STM4-1-1-1	Gagal	STM4-1-2-3	STM-4	75
8	Abdullapur PG	STM4-1-1-1	Dehradun PG	STM4-1-3-1	STM-4	90.87
9	BAREILLY_400	STM4-1-1-1	SHAHJAHANPUR	STM4-1-1-1	STM-4	96.03

### **• Decision of the forum:**

All constituents are again requested to nominate nodal officer for day-to-day operational activities, integration of all nodes (pending / upcoming) with UNMS and providing escalation matrix for intimation and resolution of outage issues.

## **AA12 Frequent 48V DC Power Supply issues at State Nodes (Agenda by POWERGRID)**

AA.12.1 Representative from POWERGRID informed regarding the integrated nature of ULDC communication network involving Centre Sector as well as State Constituent's transmission lines/sub-stations and challenges in maintaining the communication network

due to frequent failure of input power supply/48V DC Power Supply at intermediate critical nodes.

AA.12.2 List of critical nodes is as below-

Sr. No.	Sub-station Name	Services/Links affected
1	220kV Okhla DTL	NRLDC/NLDC Network (2 directions affected)
2	220kV Vasant Kunj DTL	NRLDC/NLDC Network (2 directions affected)
3	220kV Mehrauli DTL	NRLDC/NLDC Network (4 directions affected)
4	400kV Muzaffarpur UPPTCL	Presently linear due to OPGW outage, however affects Roorkee/ Intra-Regional links
5	220kV Manimajra UT	Three directions affected, impacting HP, BBMB and Punjab data
6	220kV Chittorgarh RVPN	Impacting Rajasthan and CS sector data of RE pockets (affecting 3 OPGW links)

AA.12.3 POWERGRID requested the concerned state constituents to ensure uninterrupted power supply at site to avoid the outage of critical nodes of ULDC network.

AA.12.4 RRVNL and UPPTCL representative mentioned to check the issue and its rectification. However, DTL and UT, Chandigarh representative were not present in the meeting.

- **Decision of the forum:**

All constituents were requested to resolve the issue at the earliest.

### **AA13 Establishment of new SLDC for Chandigarh UT (Agenda by Chandigarh UT)**

AA.13.1 Chandigarh UT team joined the meeting through VC and they informed that formal notification for the establishment of SLDC Chandigarh was issued on 31st January 2025, under Section 31 of the Electricity Act, 2003. During the 50th Forum of Load Dispatchers (FOLD) meeting held on 23.05.2025, UT Chandigarh was asked to coordinate with POWERGRID in SCADA data integration and related infrastructure enhancements. During the meeting, Chandigarh UT was asked to initiate rooftop solar monitoring and this will be the bench mark for rooftop solar monitoring projects.

AA.13.2 Accordingly, Chandigarh UT approached POWERGRID vide letter dated 29.05.2025 and 09.06.2025 to take up the implementation of new SLDC for Chandigarh UT. POWERGRID team visited Chandigarh UT Engineering office on 13.06.2025 and submitted a tentative Cost Estimate, BOQ and options for mode of implementation of the new SLDC for Chandigarh UT (either in RTM route or through consultancy route).

AA.13.3 POWERGRID informed that they are implementing ULDC Phase-III (SCADA upgradation) Project for SLDCs of Northern Region and NRLDC (Grid-India) in unified manner. Based on the survey, tentative cost of the new SLDC for Chandigarh UT may be around Rs. 29.08 Crores (for Supply and Services excluding AMC) based on the ongoing NR ULDC-III awarded cost.

AA.13.4 In response to POWERGRID's options, Chandigarh UT opted to implement the new SLDC project under RTM route in line with other 8 SLDCs of Northern Region, however UT of Chandigarh mentioned that as on date their management has not approved the proposal but they requested POWERGRID for assessment for civil building works. POWERGRID mentioned that they have already provided estimate for SCADA part and tentative drawings/layout has also been shared with UT Chandigarh team for building infra, they may take up with UT Civil wing for construction of new building / renovation of existing building based on layouts, UT can also visit BBMB SLDC which is in same vicinity of UT office.

AA.13.5 NRLDC also mentioned that UT Chandigarh has raised 2-3 letters to them for establishment of SLDC, now POWERGRID has visited their office and submitted estimate for the same, it is requested UT team to expedite the works at the earliest. POWERGRID also reiterates that at present SCADA vendor M/s GE is procuring materials for NRLDC and all SLDCs and FAT is expected very soon in Aug' 2025 and all materials will be delivered in Sept' 2025, therefore requirement may be shared on priority so that POWERGRID can explore options to include the UT Chandigarh SLDC scope in existing ULDC Phase-III Project and SCADA System establishment can be done with NRLDC and all SLDCs of Northern Region.

AA.13.6 MS, NRPC asked about the cost involvement and which states will bear the cost. POWERGRID informed that they are implemented the scheme under RTM mode to all SLDCs and based on the State/Constituents requests, scheme has been approved by NRPC forum and CERC will issue tariff order after implementation of the scheme and DOCO cost, according respective state has to bear the cost for their portion and individual billing will be done by POWERGRID to each States/their partners.

AA.13.7 MS, NRPC mentioned that UT Chandigarh may provide their management's approval to POWERGRID and share copy to NRPC office, so that agenda may be put up in upcoming NRPC board meeting for approval and project implementation. UT official informed that they are expediting the approval.

- **Decision of the forum:**

UT of Chandigarh to provide management's approval to POWERGRID for establishment of new SLDC.

#### **AA14 Frequent outage of AGC links for TANDA NTPC (Agenda by NTPC)**

AA.14.1 POWERGRID informed that AGC of Tanda NTPC is facing frequent outage due to intermittent communication links provided by UPPTCL. No communication equipment belongs to POWERGRID, however on failure of communication link, every time NLDC (Grid-India) is pursuing with POWERGRID for failure of Tanda communication links.

AA.14.2 UPPTCL informed that at present two communication routes are available from Tanda NTPC, one link was down due to damage of OPGW but due to non-availability of AMC team, restoration works was delayed, however AGC links were shifted on alternate route. Some issues are there in Fibcom equipment/ network, however UPPTCL is looking into it for permanent solution. POWERGRID mentioned if sufficient redundant OPGW routes are available then Telemetry data (AGC/RTU/PMU/VOIP, etc) communication links may be configured with proper redundancy, so that any link outage may not reflect on data outage.

- **Decision of the forum:**

UPPTCL to restore AGC links for TANDA at the earliest.

## **AA15 Request for 2 No. Ethernet ports on existing Firewall installed under URTDSM project (Agenda by PTCUL)**

AA.15.1 PTCUL requested to POWERGRID that they need two Ethernet ports on existing firewall of POWERGRID owned PDCs system installed at Dehradun. POWERGRID informed that this issue was deliberated in detail at 27th TeST meeting and it was mentioned by POWERGRID as well as NRLDC that merging of two network, may create network conflicts and may arise cyber security issues. Also, PDC system is being maintained by M/s GE under comprehensive AMC and they would not be allowed any third party integration until it is not mentioned in the contract or system requirement. NRLDC also mentioned that due to cyber security challenges specially in these days, it is preferred to avoid any third party intrusion / integration with any of the existing system which was installed almost 8-9 years back. These issues may arise in upcoming cyber security audit by M/s GE or any third party audit of NCIIPC or any other Govt. audit.

AA.15.2 PTCUL further stated that there is no such technical reason, to deny utilization of spare ports. However, POWERGRID clearly mentioned that in view of above cyber security challenges mentioned, they will not allow to utilize any spare Ethernet port in firewall to integrate any third party solution / metering data integration.

AA.15.3 MS, NRPC also emphasizes that due to cyber security challenges, NRLDC and POWERGRID's opinion may be accepted by PTCUL. In case, PTCUL further want any clarification, then they can raise the issue with Cyber Security Wing of MOP i.e. CSIRT-Power office.

- **Decision of the forum:**

PTCUL to clarify cyber security implication of utilization of Ethernet ports of firewalls installed under URTDSM for communication between SAMAST Server & SCADA Server.

## **AA16 Installation of old Tejas Make FOT Equipment in the newly supplied Tejas Make FOTE Panel at Back-Up SLDC, Kashipur (Agenda by PTCUL)**

AA.16.1 POWERGRID informed that they have already agreed on the proposal, however Kashipur S/S team has provided space to its agency M/s DeeJay to install the equipment at one particular place and our team has installed the equipment at that particular space. POWERGRID further informed that after installation of new FOTE equipment, PTCUL now wants to shift the newly installed equipment to some other location which is far from existing equipment and local inter-patching is also required for services redundancy, new equipment need space nearby existing FODP panel, so that POWERGRID can utilize all OPGW directions with 10 mtrs of patch cords.

AA.16.2 POWERGRID further mentioned that to avoid duplicity of works, space may be fixed prior to installation of equipment, however survey will be done to shift the panel or POWERGRID can install new panel in place of existing FOTE panel and both Tejas equipment (existing and new SDH) shall be installed in new FOTE Panel, so that POWERGRID can utilize existing power cables, patch cords and E1 / Ethernet LAN cables for running services. PTCUL has agreed for the same.

## **AA17 Sharing of IPs List for all the field SAS/RTU equipment for integration in the upcoming SCADA/EMS System (Agenda by PTCUL)**

AA.17.1 POWERGRID informed that IP list for NRLDC and all SLDC control centres are being finalized, and shortly same shall be shared with all SLDCs for implementation.

PTCUL and other state SLDCs/STUs may change their RTU IPs as per system requirement. IP list will be shared within one month.

- **Decision of the forum:**

POWERGRID to share approved IPs to all constituents within one month.

#### **AA18 Non-displaying of Dynamic Values on SLDC Haryana Website (ULDC Phase-II) (Agenda by HVPNL)**

AA.18.1 HVPNL informed that SLDC Haryana website application is facing some issues of non-displaying of Dynamic values. They mentioned that although SIEMENS team is working on the issue but POWERGRID is requested to take up with SIEMENS for swift action and resolution. POWERGRID mentioned that as per SIEMENS due to increase of system sizing, these issues are being faced, however SIEMENS team is working hard to resolve the issues, they are also taking L2/L3 support to resolve the issue.

- **Decision of the forum:**

POWERGRID to resolve the issue at the earliest.

#### **AA19 Slow Progress of Database creation (Agenda by HVPNL)**

AA.19.1 HVPNL informed that SCADA upgradation project (ULDC Phase-III) is being implemented by M/s GE, however progress of database creation is very slow and POWERGRID is requested to expedite the project progress.

AA.19.2 POWERGRID informed that as mentioned in ULDC Phase-III project progress, M/s GE has been instructed to expedite project progress including design approval, site issues specially database development for NRLDC and all SLDCs. At present approx. 1550 sub-station database have been prepared out of around 2100 stations, GE has deployed 22 engineers to prepare database for NR and ER Region, so that system performance FAT can be done with full database in Sept' 2025.

- **Decision of the forum:**

POWERGRID to ensure timely database creation.

#### **AA20 Issuance of MoM regarding IP confliction in ULDC Phase-III and IP detail for CFE server for BCC– HVPNL (Agenda by HVPNL)**

AA.20.1 HVPNL informed that meeting for RTU data reporting at main and backup control centers was held wherein representatives from POWERGRID, HPSLDC, HVPNL and GE was present. During the meeting, existing RTU reporting structure of HVPNL and HP-SLDC control centres was deliberated, IP conflict possibilities was also discussed. Changes of existing IP address in field RTUs was also on the agenda by POWERGRID for HVPNL and HPSLDC/HPPTCL stations, however minutes of the meeting are still received by HVPNL. POWERGRID is requested to provide copy of the same, if MOM has been issued otherwise minutes may be issued at the earliest, so that action may be initiated for change of IP addresses at field RTUs. POWERGRID agreed on the same.

- **Decision of the forum:**

POWERGRID to issue MoM.

**List of Participants of 28<sup>th</sup> TeST Sub-Committee Meeting held on 23<sup>rd</sup> July, 2025**

**NRPC**

1. Smt. Rishika Sharan, Member Secretary
2. Sh. Anzum Parwej, Superintending Engineer
3. Sh. Ravi Kant, Executive Engineer (Communication & Services)
4. Smt. Priyanka Patel, Chief Manager, (POWERGRID), NRPC

**CTUIL**

5. Sh. T. P. Verma, Deputy General Manager
6. Sh. Prakhar Pathak, Engineer
7. Sh. Tanay Jaiswal, Engineer

**NRLDC**

8. Sh. Akhil Singhal, Deputy General Manager
9. Sh. Ashok Kumar, General Manager
10. Sh. Narender Singh, Manager
11. Sh. Sumit Kumar, Deputy Manager
12. Sh. Samriddhi Gogoi, Assistant Manager

**INDIGRID**

13. Sh. Lokendra Singh Ranawat, Head Regulatory

**POWERGRID**

14. Sh. Anjan Kr. Das, General Manager
15. Sh. Mohan Kishor. N, Deputy General Manager
16. Sh. Narendra Kumar Meena, Deputy General Manager
17. Sh. Anoop Kumar Verma, Deputy General Manager (UNMS)
18. Sh. Ghanshyam Meena, Manager

**AVVNL**

19. Sh. H. R. Kaler, SE, IT

**BBMB**

20. Sh. Gurpreet Singh, Deputy Director, LD
21. Sh. Charanjeet Bhatiya, Assistant Director, LD

**HPPCL**

22. Sh. Aditya Thakur, Senior Manager

**HPPTCL**

23. Sh. Abhishek Puri, Assistant Engineer

**HVPNL**

24. Smt. Er. Ruchika, Executive Engineer

25. Sh. Er. Anshu Jain, Assistant Engineer

**NHPC LTD.**

26. Sh. Vivek Kumar, Senior Manager

27. Sh. Nandkishor B. , Deputy Manager (E)

**PSTCL**

28. Sh. Er. Saurabh Gupta, Senior Executive Engineer

29. Sh. Er. Mandeep Micky, Senior Executive Engineer

**PTCUL**

30. Sh. Arun Kumar Gupta, Executive Engineer

31. Sh. Pradeep Kumar, Executive Engineer

32. Sh. Er. Hare Ram, Assistant Engineer

**RRVPNL**

33. Sh. Rajiv Sogani, Executive Engineer

**RRVUN**

34. Sh. S. K. Garg, Suprintending Engineer

**UPSLDC**

35. Sh. Ashok Kumar, Executive Engineer

**UPPTCL**

36. Sh. Deepak Gupta, Assistant Engineer



Annexure-I

Sr. No	OPGW line & circuit name	Name of TBCB/RTM Owner of OPGW	Region	Year of Commissioning	Total number of OPGW fiber cores (24/48/96 etc) (a)	Number of cores utilized for grid applications (b)	Spare cores reserved for grid applications (c)	Number of fiber cores already being shared with other entity for grid application.(d)	Name of the grid entity to which fibers shared for grid applications i.e. (d).	Lease period for sharing of fibers i.e.(d) for grid applications	Number of cores leased on a commercial basis (e)	Name of entity to which fibers shared for non-grid applications i.e. (e) on commercial basis	Lease period for sharing of fibers on commercial basis	Out of order/Damaged fibers(f)	Remaining/ unallocated ((A)-(B+C+D+E+F))
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## Annexure-II

S. No.	Name of the Scheme	Implementing Agency	Implementation schedule	FOTE (No.)	OPGW (Km.)	Cost (Cr.)	Constraint Faced	Status update by TSP
	<b>Schemes approved in 27th NCT, awarded through OM Letter dtd. 24.02.2025</b>							
<b>1</b>	OPGW installation on existing 765 kV Fatehpur-Varanasi S/c & 765 kV Fatehpur-Sasaram S/c Lines which are proposed to be LILO at New Prayagraj (ISTS)	POWERGRID	24 months from the date of allocation or with matching timeframe of the transmission project "Interregional (NR-WR) Transmission System strengthening to relieve the loading of 765 kV Vindhyachal-Varanasi D/c line" whichever is earlier	2	120	7.2		<b>Awarded to M/s Advait, Design and BOQ approval in progress</b>
	<b>Schemes approved in 26th NCT, awarded through OM Letter dtd. 30.01.2025</b>							
<b>2</b>	Redundant Communication for Salal (NHPC) station	POWERGRID	18 months from the date of allocation		62	3.41		<b>Awarded to M/s Advait, Design and</b>

								BOQ approval in progress.
	Schemes approved in 22 <sup>nd</sup> NCT, awarded through OM Letter dtd. 02.09.2024							
3	Optical fiber connectivity for NLDC new building August Kranti Marg, New Delhi	POWERGRID	02.03.2026 (Revised in 26th NCT)	3	35	7.2		For Interim arrangement, fibre laid, Equipment and 48V DCPS supplied, however NLDC building is still not ready for installation of Communication equipment and 48V DCPS. For final OFC arrangement, contract has been awarded, ROW charges to CPWD deposited, however site

								inspection by CPWD team is awaited due to Monsoon season.
	<b>Schemes approved in 20<sup>th</sup> NCT, awarded through OM letter dtd. 15.07.2024</b>							
4	Supply and installation of 24 Fibre OPGW on PKTCL lines for providing redundant communication for Parbati Pooling (Banala) (PG) S/s, Parbati-II (NHPC) & Parbati-III (NHPC) stations	PKTCL	18 months from the date of allocation		88.635	5.31		
5	Supply and installation of 24 Fibre OPGW & FOTE to providing redundant communication for Parbati Pooling (Banala) (PG) S/s, Parbati-II (NHPC) & Parbati-III (NHPC) stations	POWERGRID	18 months from the date of allocation (with matching schedule with Scheme 4)	4	0.783	1.24		Work order issued, shall be completed as per the time schedule.
6	Redundant Communication for Chamara-III (NHPC) & Budhil (GreenCo) using 3 pairs of fibers sharing from HPPTCL network.	POWERGRID	18 months from the date of allocation	1	0	0.3		Work order issued, shall be completed as per the time

								schedule.
	<b>Schemes approved in 19<sup>th</sup> NCT, awarded through OM letter dtd. 29.05.2024</b>							
7	OPGW installation on existing 400 kV Kota - Merta line which is LILLOed at Shri Cement & proposed to be LILLOed at 765/400 kV Beawar (ISTS) S/s	POWERGRID	24 months from the date of allocation	3	311	18.5		<b>Work order issued. It will be completed as per the time schedule.</b>
8	Supply and Installation of 12 nos. FOTE and additional ethernet (125 nos.) cards for existing FOTE in view of resource disjoint and critical locations.	POWERGRID	12 months from the date of allocation	12	0	5.2		<b>All works completed except one equipment Power on at DTL, SLDC due to non-availability of 48V DCPS.</b>
9	Supply and Installation of 11 nos. FOTE Equipment at Backup SLDCs in NR & Backup NRLDC.	POWERGRID	12 months from the date of allocation	11	0	3.3		<b>All works completed except Two equipment installation at DTL, Bamnauli control centre due to ongoing</b>

								<b>renovation works.</b>
10	Supply and installation of OPGW on 400kV Fatehgarh I (Adani) - Fatehgarh-II (PG) line (6.5 kms), (Fatehgarh-I (Adani) - Bhadla(PG) line LIL Oed at Fatehgarh-II) as redundant communication for Fatehgarh-I (Adani)	Adani Transmission Ltd.	18 months from the date of allocation	0	6.5	0.325		
11	OPGW installation on 765kV Agra (PG) -Fatehpur (PG)D/c line may be considered as a separate scheme in matching timeframe of Ph-IV (Part-4:3.5GW) scheme	POWERGRID	24 months from the date of allocation	2	335	16.5		<b>Work order issued. It will be completed as per the time schedule.</b>
12	OPGW installation on existing 400 kV Kurukshetra - Malerkotla line. Part-A	NRSSXXXI (B) Transmission Ltd (Sekura)	18 months from the date of allocation		140	9		
13	Communication Equipment (FOTE) installation on existing 400 kV Kurukshetra - Malerkotla line at both ends. Part-B	POWERGRID	18 months from the date of allocation (with matching time frame of OPGW on 400 kV Kurukshetra - Malerkotla	2		0.6		<b>Work order issued. It will be completed as per the time schedule.</b>

			transmission line)					
	<b>Schemes Modified/approved in 16<sup>th</sup> NCT, awarded through OM letter dtd. 03.01.2024</b>							
14	Supply and Installation of OPGW on 400kV Kishenpur-Wagoora line.	POWERGRID	21.11.2026 (Revised in 26th NCT)	2	183	9.15		Work order issued, It will be completed as per the time schedule.
15	Supply and Installation of OPGW on 400kV Agra-Ballabgarh line.	POWERGRID	21.05.2026 (Revised in 26th NCT)	2	181	9.05		OPGW installation works completed for 125 Kms out of 183 Kms. Target by Nov' 2025.
	<b>Schemes approved in 11<sup>th</sup> NCT, awarded through OM letter dtd. 16.02.2023</b>							
16	OPGW installation on existing 400 kV Jalandhar (PG) - Kurukshetra (PG) line which is to be LILOed at 400 kV Dhanansu (PSTCL)	POWERGRID	10.01.2027 (Revised in 26th NCT)	2	229	10.3		Work order issued, It will be completed as per the time schedule
17	Supply and Installation of OPGW on existing 400 kV Koldam-Ludhiana (PG) line which is to be	Indigrid	implementation timeframe of 18 months	2	150	6.7		Work completed.

	LILOed at 400 kV Ropar (PSTCL)							
18	Redundant communication System for Bhinmal (PG) and Kankroli (PG) ISTS stations	POWERGRID	21.05.2026 (Revised in 26th NCT)	8	5	2.55		Work order issued, It will be completed as per the time schedule
19	OPGW installation on 220 kV Anta (NTPC) - Bhilwara Line	POWERGRID	implementation timeframe of 18 months	2	187	9.35		Work completed.
<b>Schemes approved in 9<sup>th</sup> NCT, awarded through OM letter dtd. 15.11.2022</b>								
20	<p>Transmission lines which are to be provided with OPGW alongwith necessary accessories and FOTE are mentioned as under</p> <ul style="list-style-type: none"> <li>• 765kV S/c Jaipur (Phagi) (RVPNL) - Gwalior line (312 km) (Ckt-1 is proposed) (to be LILOed at Dausa)</li> <li>• 400kV D/c Agra - Jaipur (South) (PG) line (254 km) (to be LILOed at Dausa)</li> </ul>	POWERGRID	21.11.2026 (Revised in 26 <sup>th</sup> NCT)		312  254	28.5		<p>OPGW installation works going on</p> <p>142 out of 310 Kms (Phagi-Gwalior line).</p> <p>108 out of 254 Kms (Jaipur south-Agra line).</p> <p>Target by June'2026</p>



