



भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

उत्तर क्षेत्रीय विद्युत समिति

Northern Regional Power Committee

Dated: 23-12-2024

सेवा में/ To,

संलग्न सूची के अनुसार/ As per list attached

विषय: दूरसंचार, स्काडा और टेलीमेट्री उपसमिति की 26 वीं बैठक।

**Subject: 26<sup>th</sup> meeting of Telecommunication, SCADA & Telemetry Sub Committee-reg.**

उत्तर क्षेत्रीय विद्युत समिति की दूरसंचार, स्काडा और टेलीमेट्री (टेस्ट) उप-समिति की 26 वीं बैठक दिनांक 19.11.2024 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।

26<sup>th</sup> meeting of Telecommunication, SCADA & Telemetry (TeST) Sub-committee of NRPC was held on 19.11.2024 at 11:00 am in conference room, New Delhi. Minutes of the meeting are enclosed herewith. The same are available on NRPC website at [Northern Regional Power Committee](#).

भवदीय

Yours faithfully,

(अंजुम परवेज)/ (Anzum Parwej)

अधीक्षण अभियंता /Superintending Engineer

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## **Minutes of 26<sup>th</sup> Meeting of Telecommunication, SCADA & Telemetry (TeST) Sub-Committee**

26<sup>th</sup> Meeting of Telecommunication, SCADA & Telemetry (TeST) Sub-Committee was held on 19.11.2024 at 11:00 am at NRPC conference hall under the Chairmanship of Member Secretary, NRPC. List of participants is attached at Annexure-I. Minutes of the meeting are given as under:

### **I. Confirmation of Minutes**

#### **1. Confirmation of Minutes**

1.1 25<sup>th</sup> meeting of TeST sub-committee was held on 25.06.2024 and the minutes of the meeting was issued on 25.07.2024. No comments have been received so far.

#### **Decision of the forum:**

- Sub-committee confirmed the minutes.

### **II. Telecommunication and Telemetry issues**

#### **2. Utilization of OPGW on 400kV D/c Samba (PG) – Jalandhar (PG) line (owned by M/s Indigrd) for ISTS communication purpose (Agenda by CTU)**

2.1. EE, NRPC apprised the agenda before the forum. CTUIL stated that in the similar manner as agreed in 50<sup>th</sup> WRPC meeting Indigrd might share fibers for ULDC data communication purpose. However, Indigrd stated that they are yet to confirm the availability of healthy fibers by testing them.

2.2. Grid-India stated that this issue is prolonged from long time; it was already agreed in the special meeting held in NRPC on 22.12.2023 that Indigrd will share the fibers and enquired why Indigrd has not yet tested fibers' healthiness.

2.3. Indigrd stated that he is agreeing in-principle with the proposal but also raised concern of commercial obligation of utilization of fibers for ULDC communication and cost involved for FOTE installation at both Samba and Jalandhar end.

2.4. MS, NRPC stated that Indigrd should adhere with the decision taken in the special meeting and approach CERC for any commercial implication, if any.

#### **Decision of the forum**

After detailed deliberations following was concluded:

- Indigrd shall share six nos. of dark fibers for ULDC data communication purpose and maintain healthiness of the same as well. Indigrd may approach CERC for commercial implication, if any.
- FOTE at both end at Samba and Jalandhar to be installed by POWERGRID under ULDC and scheme for the same shall be prepared by CTUIL.
- Indigrd may update on the matter in the next NRPC meeting.

### **3. OPGW installation on existing 765kV Fatehpur-Varanasi S/c & 765kV Fatehpur-Sasaram S/c Lines which are proposed to be LILLOed at New Prayagraj (ISTS) S/s (Agenda by CTU)**

3.1. CTUIL apprised the agenda of OPGW installation on existing 765kV Fatehpur-Varanasi S/c & 765kV Fatehpur-Sasaram S/c Lines before the forum.

#### **Decision of the forum**

After detailed deliberation in the forum, following was concluded:

- Scheme was approved in principle by the forum and CTU was requested to put up the agenda in the next NRPC meeting for approval.
- Implementing agency shall strive to match the time frame with the new scheme for LILLO portion.
- POWERGRID to provide the FOTE requirement within one week to CTUIL so that scheme might be updated according to it.
- There is new requirement of 48 Fiber OPGW in line with DoT letter to MoP, same needs to be taken care while proposing final scheme in NRPC meeting.

### **4. Dual reporting (2+2) of ISTS stations to Main RLDC and Backup RLDC (Agenda by CTU)**

4.1. DGM, CTUIL, presented the agenda, explaining the necessity of upgrading RLDC SAS Gateways/RTUs to meet the 2+2 channel requirements. This also includes associated FOTE upgrades. CTUIL highlighted that cost estimates have been obtained from various TSPs such as POWERGRID, Adani, Sterlite, Indigrd, and Aparava. However, these cost estimates vary across TSPs, and the granular nature of SAS upgrade costs further complicates the comparison.

4.2. CTUIL expressed concern over the lack of sub-station-wise cost inputs from POWERGRID despite multiple follow-ups over an extended period. CTU Engineering representatives clarified that, as CTU typically does not form element-level schemes, SAS upgrades for RTM sub-stations could be carried out under *Add Cap*, while upgrades for TBCB sub-stations may fall under the *Change in Law* provision.

4.3. EE, NRPC, noted that a similar issue regarding firewall installations in sub-stations was deliberated during the 15<sup>th</sup> NPC meeting held on 14<sup>th</sup> November 2024. The proposed cost booking mechanism for that agenda suggested using *Add Cap* for RTM sub-stations and *Change in Law* for TBCB sub-stations. Since CTU's proposal aligns with this mechanism, he opined to await the NPC's decision on firewall installations before proceeding with the current agenda.

#### **Decisions of the Forum**

After thorough deliberations, the forum concluded the following steps:

- NRPC will issue a formal letter to POWERGRID requesting the expedited submission of cost and BoQ details for SAS/RTU upgrades.
- A dedicated meeting involving the NRPC Secretariat, NRLDC, CTUIL, and POWERGRID will be convened to resolve pending issues related to cost finalization and scheme implementation.

- The 2+2 scheme implementation will follow a mechanism similar to the firewall installation process, the final decision of which is pending in the NPC meeting.
- NRLDC will convene a meeting with the participation of CTUIL, NRPC, and IPPs/ CGSs to discuss specific requirements and related concerns.
- At present, renewable energy generators are exempted from the 2+2 channel requirement due to the absence of backup control centers for Renewable Energy Management Centers (REMCs).

## **5. Status of schemes approved in various NCT (Agenda by CTU)**

- 5.1. CTUIL stated that for Cat-B schemes as per MoM guideline of ISTS communication planning, there is no monitoring mechanism. Therefore, they have started to put up this agenda in the CPM meetings of CTUIL.
- 5.2. Forum suggested that this monitoring could be held under the NRPC level. CGM/ Grid-India suggested that two more columns namely implementation schedule and constraints faced may be introduced in the status table.
- 5.3. For NLDC connectivity scheme POWERGRID stated that in the first week of December this would be implemented. POWERGRID further stated that they shall provide status of schemes to CTUIL within a week along with copy to NRPC.
- 5.4. Adani stated that they shall commission 1 no. of link within 2 months. CTU stated that after completion of link, CTUIL may be informed along with copy to NRPC.
- 5.5. Indigrd and Secura were not present at this agenda item so their views could not be recorded.

## **6. J&K Telemetry Issues (Agenda by NRLDC)**

- 6.1. Representative from NRLDC informed about the non-availability of telemetry data from J&K stations and requested concerned to expedite the process for integration of RTUs at SLDCs. Representatives from J&K were not available in the meeting.
- 6.2. Member Secretary NRPC expressed serious concern regarding non-availability of data.

### **Decisions of the Forum**

- A dedicated meeting might be held between NRPC Secretariat, NRLDC, and J&K to discuss the issues pertaining to J&K.

## **7. Redundant RTU Communication for Main / Backup RLDC (Agenda by NRLDC)**

- 7.1. Same as agenda no. 4.

## 8. Redundant Communication from Sub-stations/Generating Stations (Agenda by NRLDC)

S.No.	Link	Discussion in 26 <sup>th</sup> TeST Meeting
1.	Redundant communication for Alusteng, Drass, Kargil, Khalasti, Leh	<p>CTU informed that redundant communication link for Drass Kargil, Khalasti and Leh can be established through JKPTCL link of Alusteng – Ziankote-Wagoora PG and requested JKPTCL to share 3 pair of fibres for ULDC purpose. They further informed that two nos. of STM16 FOTE will be required at Alusteng and Ziankote JKPTCL sub-stations and both FOTE will be connected to POWERGRID sub-stations at both directions.</p> <p>Forum approved 2 nos. of STM16 FOTE along with associated SFPs for Alusteng and Ziankote stations and POWERGRID will take up with JKPTCL for establishment of connectivity by taking 3 pairs of fibers for ULDC purpose.</p>
2.	Redundant communication for Narora (NAPP) (NPCIL)	<p>CTU informed that redundant link can be commissioned after commissioning of OPGW link on NAPPS – Simbhauli and further utilizing UP links till Modipuram.</p> <p>UP informed that OPGW is not available in NAPPS - Simbhauli. However, it can be planned after taking consent from UPPTCL. It was discussed that UPPTCL shall share confirmation to CTUIL within 15 days.</p> <p>CTU was requested to put up the agenda in forthcoming NRPC meeting after receiving consent from UP.</p>
3.	Redundant Communication for Pithoragarh (PG) Sitarganj (PG) stations	<p>CTU informed that redundant link can be commissioned through PTCUL and requested PTCUL to share 3 pair for ULDC purpose.</p> <p>PTCUL informed that tender for OPGW is going to be floated, and technical approval is in process. However, they will confirm availability after confirmation from higher management and requested to give request letter to PTCUL higher management.</p> <p>CTU agreed to give request letter and after consent for PTCUL higher management, they will put the agenda in NRPC meeting for approval.</p>
4.	Redundant communication for Saharanpur (PG) S/s	<p>POWERGRID informed that for establishment of redundant communication of Saharanpur sub-station, no separate transmission line is available; however, connectivity can be established by providing OPGW on second peak of 400kV Saharanpur-Roorkee/Baghpat line. i.e., OPGW shall be laid from Saharanpur Gantry to LILO point (Tower no. 59) of 400kV Roorkee/Baghpat line. Total 15.8 Kms of OPGW shall be laid along with one (01) STM16 communication equipment at Saharanpur S/S.</p> <p>Forum agreed for the same and requested CTUIL to put the proposal in NRPC Meeting for approval.</p>

## 9. Display of DC/Schedule of Generating Stations in SCADA Display (Agenda by NRLDC)

9.1. GRID-INDIA apprised the issue of display of DC/Schedule of Generating Stations in SCADA Display before the forum.

9.2. After discussion timelines shared by states is as below:

S.No.	State	Status	Timelines
1	Punjab	Available	Script Automation shall be done in months' time.
2	Haryana	Available	They will integrate schedule through SAMAST within 2 months.
3	Uttarakhand	Not Available	Integration work is in process, considering Cyber security requirement procurement of firewall is in process will be done in 3 months' time .
4	Jammu & Kashmir	Not Available	J&K Representatives were not available

## 10. Non-availability of Real-Time data from PTCUL (Agenda by NRLDC)

10.1. NRLDC representatives raised concerns 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.

10.2. PTCUL representatives explained that a revised DPR for the required integration has been prepared. However, the approval process is delayed due to funding constraints from the PSDF. They clarified that the project could only move forward if PSDF funding is secured.

10.3. Member Secretary, NRPC, expressed serious concern over the lack of telemetry data, highlighting its critical importance for efficient grid operation and real-time decision-making. He assured the forum that NRPC would write a DO letter to PTCUL's Managing Director, urging swift action. Furthermore, he encouraged PTCUL to escalate the matter within their management and consider executing the project using State Funds if PSDF funding is unavailable.

10.4. PTCUL agreed to the suggestion and confirmed that they would resubmit the proposal for approval by their management.

### Decisions of the Forum

- Member Secretary, NRPC, will issue a DO letter to the Managing Director of PTCUL, emphasizing the urgency of making real-time telemetry data available and requesting immediate action to expedite the process.
- Considering the funding challenges from PSDF, PTCUL was advised to explore alternative funding mechanisms, including utilizing State PSDF or their own funds, to ensure the timely execution of the project.



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

- 11.1. Issue regarding non-availability of reliable data from RRVPNL stations was discussed and they were requested to share update for RTU/SAS upgradation.
- 11.2. Representative from RRVPNL informed that there was delay in tendering due to some approval. However, they confirmed that tendering for RTU/SAS upgradation would be carried out by December 2024.

### **12. Integration of PMUs at 220kV of RE Pooling Station (Agenda by NRLDC)**

- 12.1. Representative from NRLDC informed about delay in commissioning of the PMUs at 220kV Pooling Stations and requested POWERGRID to expedite the installation considering Grid -Operation and Monitoring requirements.
- 12.2. POWERGRID informed that there were some delays in installation due to finalization of feeder and change in BOQ of CT/PT cables. They further informed that issue is resolved and installation activity is in progress and installation is likely to be completed by 31<sup>st</sup> December 2024.

### **13. Connectivity of 765kV transmission line from LPGCL to SLDC (Agenda for LPGCL, Lalitpur)**

- 13.1. LPGCL informed the forum that the 765 kV double circuit transmission line from LPGCL to Fatehabad has been in charged condition since 2016. The line includes a repeater station at Pariksha, which connects to the 765 kV Fatehabad (Agra) Sub-station via COMMTEL FOTE equipment installed by LPGCL. While testing and commissioning have been completed, communication has not been established due to damage to fiber communication at multiple locations. Despite repeated communications with UPPTCL, no action has been taken to resolve the issue. Currently, telemetry data is being maintained using GPS.
- 13.2. The representative from UPPTCL stated that the concerned personnel were not present in the meeting and hence could not provide updates on the matter.
- 13.3. They reiterated that multiple communications have been sent to UPPTCL regarding the matter, but no action has been taken.

#### **Decisions of the Forum**

- LPGCL was requested to provide NRPC, copies of all communications sent to UPPTCL regarding the fiber communication issue. Based on the documents provided by LPGCL, NRPC will write a formal letter to UPPTCL to address the pending work on the damaged fiber communication.

### **14. Regarding non availability of Ethernet port at Bhakra Left Bank Power House (Agenda by BBMB)**

- 14.1. BBMB informed the forum that during the process of reporting pending RTUs directly to the Backup Control Centre, it was observed that no spare Ethernet ports are available at Bhakra Left Bank Power House.
- 14.2. POWERGRID representative clarified that the existing Fibrehome equipment does not support additional card installations, and replacement is necessary. He

stated that replacement of Fibrehome equipment is also a separate agenda item in this meeting. If BBMB requires replacement, it would need to be done through a separate procurement process. BBMB acknowledged the need for replacement to enable reporting of RTUs to multiple control centers.

14.3. BBMB requested POWERGRID to undertake the replacement of Fibrehome equipment in line with the process for other communication equipment and OPGW laying under the ULDC Scheme. POWERGRID agreed, subject to forum approval, to carry out the replacement of the required communication equipment.

14.4. EE, NRPC, stated that if BBMB and POWERGRID mutually agree, the replacement could be carried out bilaterally. However, POWERGRID emphasized that the scheme requires NRPC Board approval under the ULDC Scheme and suggested that BBMB include the agenda in the upcoming NRPC meeting.

#### **Decisions of the Forum**

- POWERGRID and BBMB may proceed bilaterally with the replacement of Fibrehome equipment, subject to mutual agreement.
- For the replacement to be considered under the ULDC Scheme, NRPC Board approval is required. BBMB was advised to present this agenda in the upcoming NRPC meeting for formal approval.

### **III. Issues related to Unified Load Dispatch & Communication scheme of NR**

#### **15. Replacement of End-of-Life internal firewall of SCADA system and renewal of subscription of external firewall & Antivirus (Agenda by UPSLDC)**

- 15.1. POWERGRID informed that in the last meeting, they have committed of awarding contract in October for replacement of end-of-life internal firewall, subscription of external firewall and antivirus. However, M/s SIEMENS had some testing issues. Now, it has given their written consent to POWERGRID for awarding the contract with offered product.
- 15.2. POWERGRID further stated that it will award contract for replacement of End-of-Life internal firewall of SCADA system and renewal of subscription of external firewall & Antivirus within a month.

#### **16. Extension of ULDC Phase-II AMC with M/S Siemens (Agenda by UPSLDC)**

- 16.1. POWERGRID informed that SIEMENS has quoted almost 29 times for extension of AMC for one year considering LoA price. Even after considering labour index, quotation is almost 14-15 times. Since the quotation is very high, it is very difficult to justify the cost and take approval of higher management.
- 16.2. POWERGRID informed that SIEMENS is ready for technical discussion. SIEMENS has mentioned that they are not getting back-end support for third party equipment.
- 16.3. MS, NRPC enquired if there is option of some other vendor who can take up the AMC till the replacement of SCADA. POWERGRID replied that being a proprietary system and SIEMENS source code, no other vendor is able to carry out the AMC. POWERGRID further informed that AMC of Himachal Pradesh is ending in December and other SLDCs/NRLDC will expire in March end. POWERGRID further mentioned that they have requested SIEMENS not to withdraw teams from HP SLDC as discussions between POWERGRID/NRLDC and SIEMENS are going on.
- 16.4. MS, NRPC stated that states will also have issue in payment afterwards. HPSLDC stated that it will have issue in approval of such higher amount from their administration and regulatory commission.
- 16.5. EE, NRPC enquired about the options available. POWERGRID stated that they will take up with higher management and with SIEMENS Germany team. POWERGRID stated that further negotiations may be done but SIEMENS has stated that there is not much scope of lowering financial quote. Cost cutting options may also be explored.
- 16.6. HP enquired about the AMC after contract ending in December. POWERGRID stated that they shall ensure that team will not be withdrawn. They also informed that subsequent meeting with Siemens and Constituents is planned in coming week.

#### **Decision of the forum**

- POWERGRID will continue to work towards solution. POWERGRID will strive that the AMC team is not withdrawn from sites.

## **17.Regarding Timeline of ULDC Phase-III Scheme (Agenda by BBMB)**

17.1. POWERGRID informed that contract was awarded in July'2024. It is currently going on as per schedule and delivery of equipment shall commence from May'2025. POWERGRID further informed that they are expecting parallel operation from Sept/Oct'2025 for 3 months as per L2 schedule.

## **18.Regarding AMC extension of ULDC Phase-II Scheme (Agenda by BBMB)**

- As per agenda 16

## **19. Non-displaying of Dynamic Values on SLDC Haryana Website (Agenda by HVPNL)**

19.1. HVPNL apprised the agenda and stated that SIEMENS is not replying nor rectifying the issue. HVPNL further stated that there must be some cost cutting in the payment. POWERGRID stated that a meeting may be held with SIEMENS to discuss the issue.

## **20.Issues with procurement of Replacement of Internal Firewalls (Agenda by HVPNL)**

- As per agenda 15

## **21.AMC extension for ULDC Phase-II (Agenda by HVPNL)**

- As per agenda 16

## **22. End Of Life of Internal Firewalls, subscription of External Firewall and Anti-Virus installed in SCADA/EMS system under ULDC Phase-II Scheme (Agenda by HPSLDC)**

- As per agenda 15

## **23.Extension of Annual Maintenance Contract (AMC) of existing SCADA/EMS system installed under ULDC Phase-II Scheme (Agenda by HPSLDC)**

- As per agenda 16

## **24.Replacement of Fibrehome make Communication Equipment (Agenda by POWERGRID)**

24.1. POWERGRID informed that Fibrehome equipment were installed in microwave replacement scheme in 2010 for integration of network. These equipment have technical limitations and maintenance cost is also high. Therefore, they need replacement/closure. Since all nodes are inter-connected, only last mile nodes can be closed.

24.2. EE, NRPC enquired about the life of the equipment. POWERGRID stated that originally, it was 15 years, so accelerated depreciation can be done after approval in NRPC board. POWERGRID also informed that it has done replacement in maximum sites in other upgradation schemes. POWERGRID stated that states need to inform if they are planning for upgradation of equipment or they require

AMC extension. POWERGRID is not in requirement of AMC of Fibrehome equipment for its sub-stations.

- 24.3. UPPTCL mentioned that it has Fibrehome equipment at 49 locations, at some stations other FOTE equipment are also available. There are 16 stations where only Fibrehome equipment is present. They have made proposal for replacement of Fibrehome equipment at all 49 locations and it is pending from management.
- 24.4. POWERGRID stated that AMC of fibrehome is available till April'2025. It should be replaced before that. POWERGRID stated that all the constituents might confirm through mail - name and number of equipment to be included in AMC. POWERGRID shall also provide the list of the nodes; if AMC is not required then it will not consider those equipment in AMC.
- 24.5. Uttarakhand stated that it can replace equipment but has not planned yet. POWERGRID stated that Uttarakhand has 3 equipment (Rishikesh old SLDC, Haridwar ALDC and Sitarganj 132).
- 24.6. POWERGRID asked PSTCL to update the timeline of their replacement status. Accordingly, POWERGRID will plan for AMC extension if required,
- 24.7. POWERGRID stated that for RVPNL, POWERGRID is installing new communication equipment of Tejas make which will create parallel route of Fibrehome equipment and likely all equipment will be installed by April/May'2025 but fibrehome make PDH shall be in service.

#### **Decision of forum**

- Constituents to inform POWERGRID about the requirement of AMC and timeline of replacement of equipment if already planned.

#### **25. Replacement of Coriant make FOTE at Alstung, Drass, Kargil, Khalsti, Leh & Kala-Amb (Agenda by POWERGRID)**

- 25.1. POWERGRID informed the forum about the status of six Coriant make FOTE installed at Alstung, Drass, Kargil, Khalsti, Leh, and 400kV Kala-Amb sub-stations under NR-II. These sub-stations, originally under the ownership of J&K, were later handed over to POWERGRID by the Ministry of Power (MoP). The cost recovery for these sub-stations is being handled under the RTM mode.
- 25.2. POWERGRID highlighted that the useful life of the FOTE equipment has nearly been completed, as per CERC's new tariff regulations (2024–29), which specify a lifespan of 7 years for these assets. Due to difficulties in obtaining AMC services and spares for these aging equipment, replacement has become essential.
- 25.3. CTUIL requested POWERGRID to provide detailed information about the sub-station packages, including RTM declaration and commissioning dates and a complete list of FOTE that need replacement, along with the associated cost estimates for new equipment.
- 25.4. CTUIL further advised POWERGRID to file a petition with CERC for a revised tariff to account for the completion of the FOTE's useful life. However, it was noted that the FOTE at the Kala-Amb sub-station cannot be replaced under CERC's tariff useful life clause, as Kala-Amb was constructed under the TBCB mode.

## **Decisions of the Forum**

- POWERGRID will provide CTUIL with detailed information on the RTM declaration, commissioning dates, and cost estimates for replacing the FOTE equipment.
- POWERGRID was advised to file a petition with CERC to seek approval for a revised tariff for the sub-stations under RTM mode, considering the completion of the FOTE's useful life.
- Replacement of FOTE at Kala-Amb sub-station cannot be included under the useful life clause, as the sub-station falls under the TBCB mode.

### **26. Delay in Payment for ULDC Consultancy Works (Agenda by POWERGRID)**

- 26.1. POWERGRID apprised that approximately ₹1.25 crore is pending from constituents for ULDC consultancy works. POWERGRID requested all constituents to process the outstanding payments in a time-bound manner.
- 26.2. POWERGRID stated that audit teams regularly point out these pending payments, and despite repeated letters, emails, and follow-ups, old payments remain unresolved, although new payments are being cleared. They further stated that management is considering withdrawing support teams due to these delays.
- 26.3. Himachal Pradesh (HP) informed that they are unable to reconcile the pending payment of ₹7,28,957.
- 26.4. POWERGRID stated that Punjab had informed them about management changes delaying payments but assured that the payment has now been processed and will be credited within a week.
- 26.5. Rajasthan informed that they are paying ULDC bills regularly. POWERGRID agreed but highlighted that minor pending amounts still need to be processed.
- 26.6. POWERGRID informed that UPPTCL has pending payments of ₹17 lakhs from 2018–2020, related to AMC of OPGW and communication equipment after GST implementation. POWERGRID stated that letters regarding the pending payments were written, and they agreed to share details with UPPTCL. UPPTCL assured that the issue would be resolved at the earliest.
- 26.7. SE, SCADA (PTCUL) agreed to look into the pending payment issue and resolve it at the earliest. POWERGRID highlighted that they had deployed their engineers multiple times and clarified the issues raised by PTCUL, but the payment process remains pending.
- 26.8. Representatives from J&K were not available in the meeting.
- 26.9. MS, NRPC requested all members to address the pending payment issues and resolve them promptly.

## **IV. Other Agenda**

### **27. Implementation of U-NMS Project (Agenda by NRLDC)**

- 27.1. NRLDC informed that many network equipment have yet to be integrated with the U-NMS and requested POWERGRID/CTUIL to take necessary action for integration on a priority basis.
- 27.2. POWERGRID representative informed that approximately 1054 out of 1300 pieces of equipment have been integrated with U-NMS. They also shared the status of the pending network equipment.
- 27.3. Regarding Haryana, POWERGRID informed that integration of approximately 100 Keymile equipment could not be completed due to lack of support from Keymile. Haryana informed that these network equipment are being replaced, after which they will be integrated with U-NMS.
- 27.4. POWERGRID stated that many equipment supplied by ABB/GE in Himachal Pradesh are yet to be integrated. Technical issues have been resolved, and the integration of pending equipment will be completed within a month.
- 27.5. Regarding Uttar Pradesh, integration of ABB make PMUs is pending due to the non-availability of a support contract with the OEM. UP informed that they are in the process of awarding the contract for support services, and integration is expected to be completed within two months.
- 27.6. POWERGRID mentioned that integration of equipment supplied under TBCB and RE generator equipment is also pending. They requested CTUIL to coordinate with stakeholders. CTUIL confirmed they would convene a special meeting to expedite integration.

### **28. Ticketing/Complain portal provided under UNMS (Agenda by NRLDC)**

- 28.1. Representative from NRLDC requested CTUIL to share the update regarding preparation of web-based ticketing portal. Further, it was also informed that present complain portal in U-NMS is not full-fledged ticketing portal and requested CTUIL/POWERGRID for necessary modifications, so that it can be utilized fully.
- 28.2. CTUIL informed that as discussed/approved in 15<sup>th</sup> NPC Meeting provision of Web Based Outage Portal for communication system and ticketing portal has been kept under National U-NMS and can be commissioned along national U-NMS only.
- 28.3. NRLDC requested POWERGRID that in the meantime existing functionality given in U-NMS can be modified, so that it can be utilized for ticketing purpose. POWERGRID/CTU confirmed to explore possibility of the same.

### **29. Status of Communication System Outage Planning Portal (Agenda by POWERGRID)**

- 29.1. POWERGRID stated that Communication System Outage Planning Portal would be developed along with national UNMS. POWERGRID stated that portal will be developed based on as per requirements of communication SOPs.

29.2. EE, NRPC opined that POWERGRID should workout the execution timeline for outage portal since execution of national-UNMS will take time in completion. He requested POWERGRID to give small presentation to RLDCs and RPCs on workflow, schema, functionality and timeline of implementation.

29.3. POWERGRID stated that whereas it will be similar to SRLDC's current outage planning process, a presentation would be given in due course.

### **30. Deployment of NMT for NR-UNMS (Agenda by POWERGRID)**

30.1. POWERGRID stated that as per CERC regulation, CTU is nodal agency for supervision of communication system in respect of inter-state communication system and implementation of centralized supervision for quick fault detection and restoration. CTU vide letter dated 28.03.2024 asked POWERGRID to discharge functions of NMT for all Regional & National UNMS as and when the respective system is commissioned.

30.2. POWERGRID informed that accordingly it has deployed 2 (two) nodal persons in Northern Region and additional manpower is being deployed at main & back-up Control Centers to discharge the functions of NMT. The cost for deployment of manpower in Main Control Centre (New Delhi) and Backup Control Centre (Lucknow) shall be booked under O&M expenses of NR-UNMS project and cost shall be recovered through CERC tariff route under Operations and Maintenance head.

- This is for information of all members.

### **31. Replacing of NR Reliable Scheme for Parbati Pooling (Banala) (PG), Parbati-II (NHPC) & Parbati-III(NHPC) by different/Upcoming Package (Agenda by POWERGRID)**

31.1. POWERGRID apprised that in the 72<sup>nd</sup> NRPC meeting, it was decided that Supply and installation of 24 Fibre OPGW & FOTE to provide redundant communication for Parbati Pooling (Banala) (PG), Parbati-II (NHPC) & Parbati-III (NHPC) stations will be implemented under "NR Reliable Scheme".

31.2. However, all works under "NR Reliable Scheme" has been completed and POWERGRID has filed petition mentioning all works has been completed under the scheme. Therefore, POWERGRID informed that the aforementioned works shall be implemented under different running packages.

- Members noted the same.

### **32. Deletion of 5 nos. of HPSEBL links from Fibre Optics Communication System (Additional Requirement) for Northern Region (HPSEBL State Sector OPGW head) (Agenda by POWERGRID).**

32.1. POWERGRID apprised the agenda of deletion of 5 nos. of HPSEBL links from Fibre Optics Communication System (Additional Requirement) for Northern Region (HPSEBL State Sector OPGW head).

32.2. Regarding, Gumma – Jutogh link, POWERGRID informed that it has shut down related issue which is delaying the work and agreement with HP to take up these



works in some other running contract/Packages. HP agreed that POWERGRID can take it up in some other running contract/Packages.

32.3. Regarding Kangoo-Bagga link, scope of the line is to be modified in view of LILO of Kangoo-Bagga T/L.

32.4. In totality, 59 kms of links shall be deleted from Fibre Optics Communication System (Additional Requirement) for Northern Region.

32.5. POWERGRID stated that BBMB requested in a letter to POWERGRID, requesting to delete provision of OPGW and FO end equipment from Jagadhari-Abdullapur PG link in view of 3-4 kms of transmission line shifted to underground cable in HVPNL section (letter enclosed in agenda). POWERGRID further stated that after NRPC, it will take it to CERC for regularization.

32.6. BBMB stated that it will revert back as concerned person is not present in the meeting.

### **33. Challenges in OPGW Network Maintenance (TABLE Agenda by POWERGRID)**

33.1. POWERGRID apprised the agenda before the forum and mentioned that 765kV D/C Sikar-II to Badhla-II transmission line-I and transmission Line-II is at the last stage of construction. As these lines are of more than 225 kms of length and therefore for establishment of OPGW connectivity repeater node has to be created in mid / suitable location of the line so that optical signal can be boosted and transmitted to another end. In this regard, a survey was carried out and it was found that both the lines of 765kV D/C Sikar-II to Badhla-II are overcrossing the 400kV S/C Didwana-Bikaner & 400kV S/C Didwana-Ajmer transmission lines of Adani at approx. 3.7 kms and 2.2 kms respectively from 400kV Didwana GSS of Adani Transmission Ltd. Further, it may also be noted that Didwana GSS (Adani) is not on wideband so with establishment of this repeater node, connectivity for RTU/ SAS, PMU, VoIP, AMR etc. may also be provided for 400kV Didwana GSS (Adani) to SLDC, Jaipur and NRLDC (layout is attached).

33.2. For establishment of above optical connectivity, OPGW cable need to be laid on 400kV S/C Didwana-Bikaner (approx. 3.7 kms) & 400kV S/C Didwana-Ajmer lines (approx. 2.2 kms). In this regard, an online meeting was also held between POWERGRID and ADANI on dated 13.11.2024. During the said meeting, Adani has opined that as repeater node is being created for transmitting data to NRLDC so that there is no issue in granting permissions, however OPGW shall be laid by POWERGRID and matter shall be informed to NRPC and outage shall be arranged by POWERGRID.

33.3. POWERGRID stated that as per the agenda, it requires space for communication equipment, FODP, 48V DC power supply and RoW from Adani for laying of 48 Fibres on above transmission lines, in totality approx. 6 kms of OPGW on above mentioned Adani transmission lines.

33.4. Adani in-principally agreed for providing space, RoW and power supply. Adani clarified that if there is any need for RoW for laying optical fibre. POWERGRID replied that only consent for laying OPGW is required from Adani end. Adani mentioned that OPGW laying on their portion of the line could be given in live line

condition only. He also mentioned that any cost in this regard shall be taken by POWERGRID. They also mentioned that post execution, Adani will shift their data transfer to SLDC over FOTE network and requested to keep the connectivity provisions in the panel for this. He mentioned that they might also evaluate the possibility for connectivity with our control center at Ahmedabad.

33.5. Adani further requested that no availability loss should be accrued to them for tripping due to this activity.

33.6. NRPC enquired about chances of outage during OPGW installation. POWERGRID stated that since line is 400kV single circuit with horizontal configuration, chances of tripping is minimal. He further stated that during tapping on 765kV line, shut down is required for few hours. POWERGRID also stated that rest of the works would be done in live line OPGW installation. POWERGRID also mentioned that tripping during OPGW laying in projects is being considered as deemed available. He mentioned that they are arranging communication equipment with sufficient capacity/ports which can cater Adani sub-station's grid operation data and voice with Rajasthan SLDC.

Meeting ended with vote of thanks to the Chair.

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**List of Participants of 26<sup>th</sup> TeST Sub-Committee Meeting Dated 19.11.2024**

**NRPC**

1. Sh. V. K. Singh, Member Secretary
2. Sh. Anzum Parwej, Superintending Engineer
3. Sh. Praveen, Executive Engineer (Commercial)
4. Smt. Priyanka Patel, Manager, POWERGRID

**NRLDC**

5. Sh. M.M Hassan, Chief General Manager
6. Sh. Ashok Kumar, General Manager
7. Sh. Ankur Gulati, Deputy General Manager

**POWERGRID**

8. Sh. Narendra Kumar Meena, Deputy General Manager
9. Sh. Harish Kumar, Chief Manager
10. Sh. Ghanshaym Meena, Deputy Manager

**PTCUL**

11. Sh. Padeep Kumar, Executive Engineer
12. Sh. Arun Kumar Gupta, Executive Engineer
13. Sh. Er. Hara Ram, Assistant Engineer

**HPPTCL**

14. Smt. Nikhila Thakur, Senior Executive
15. Sh. Abhishek Puri, Assistant Engineer

**UPSLDC**

16. Sh. Amit Narain, Superintending Engineer
17. Sh. A. K.Verma, Executive Engineer

**RPSCL**

18. Sh. Atul Nigam, General Manager
19. Sh. Kesari Nandan Pandey, Head- Electrical

**CTUIL**

20. Sh. T. P. Verma, Deputy General Manager
21. Sh. Prakhar Pathak, Engineer

**HPSEBL**

22. Sh. Chet Ram Sharma, Senior Executive Engineer

23. Sh. Khoob Ram Sharma, Assistant Executive Engineer

**JDVVNL**

24. Sh. Sunil Choudhary, Executive Engineer

**AVAADA ENERGY**

25. Sh. Pawan Kumar, General Manager

**SLDC, PUNJAB**

26. Smt. Ankit Bedi, Senior Executive Engineer

**LPGCL, LALITPUR**

27. Sh. Abhimanyu Upadhyay, Head- Electrical

**PCD, CEA**

28. Sh. Arjun Agarwal, Assistant Director