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भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

उत्तर क्षेत्रीय विद्युत समिति

Northern Regional Power Committee

सेवा में / To,

संलग्न सूची के अनुसार/As per list attached

**विषय: दूरसंचार, स्काडा और टेलीमेट्री उप समिति की 23 वीं बैठक - बैठक के कार्यवृत्त ।****Subject: 23<sup>rd</sup> meeting of Telecommunication, SCADA & Telemetry Sub Committee- Minutes of the meeting-reg.**

उत्तर क्षेत्रीय विद्युत समिति की दूरसंचार, स्काडा और टेलीमेट्री (टेस्ट) उप-समिति की 23 वीं बैठक दिनांक 21.09.2023 को 11:00 बजे से विडियो कॉन्फ्रेंसिंग के माध्यम से आयोजित की गई। बैठक में कार्यवृत्त इस पत्र के साथ संलग्न है। यह उत्तर क्षेत्रीय विद्युत समिति की वेबसाइट (<http://164.100.60.165>) पर भी उपलब्ध है।

23<sup>rd</sup> meeting of Telecommunication, SCADA & Telemetry (TeST) Sub-committee of NRPC was held on 21.09.2023 at 11:00 am video conferencing. Minutes of the meeting are enclosed herewith. The same are available on NRPC website (<http://164.100.60.165>).

अनुलग्नक-यथोपरि।

Encl.: As above.

(अंजुम परवेज)

(Anzum Parwej)

अधीक्षण अभियंता

Superintending Engineer

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**Minutes of 23<sup>rd</sup> Meeting of Telecommunication, SCADA & Telemetry (TeST)  
Sub-Committee**

23<sup>rd</sup> Meeting of Telecommunication, SCADA & Telemetry (TeST) Sub-Committee was held on 21.09.2023 at 11:00 am via video conferencing under the chairmanship of Member Secretary, NRPC. Minutes of the meeting are given as under:

**1. Confirmation of Minutes**

- 1.1. NRPC informed that 22<sup>nd</sup> meeting of TeST sub-committee was held on 24.05.2023 and the minutes were issued on 28.06.2023 and no comments have been received till date.

**Decision of the forum:**

Sub-committee confirmed the minutes.

**2. Hot Line Speech Communication System for Northern Region (Agenda by CTU)**

- 2.1. NRPC informed that in the 67<sup>th</sup> NRPC meeting, extension of AMC of Hot Line Speech Communication System (VOIP based PABX system) implemented by POWERGRID in all five regions was approved for 2 years. NRPC also advised CTU to plan upgradation of existing Hot line speech communication/ implementation of new EPABX system timely.
- 2.2. CTU stated that they are already working for the planning of Hot Line Speech communication as advised by NRPC. However, it is understood that during the execution of the said project, RPCs approval was sought from all regions and cost of the project was booked in the ongoing Communication System packages of the respective regions. As per CERC tariff regulation, the useful life of the communication system is up to 15 years. In this regard, CTU requested POWERGRID to provide the revised depreciation order for the Hot Line Speech communication system, so that they can go for the planning and approval for new VOIP communication system.
- 2.3. POWERGRID stated that they shall file the petition in CERC for revised useful life of the system in 2024. POWERGRID further stated that present contractor/OEM is not agreeing for maintaining the system further. Moreover, NRLDC stated that due to urgency of project, CTU shall not hold the work of planning and approval. CTU confirmed that planning & approval process shall be continued but award of project shall be done after the order of CERC on the same.

**Decision of the forum**

MS, NRPC advised CTU to take up the planning and approval process parallelly as POWERGRID shall file petition to CERC in 2024. It was deliberated that as the AMC extension has been approved by POWERGRID for 2 years,

meanwhile CERC order will be pursued during this time. CTU also requested that POWERGRID shall provide a copy of petition for which POWERGRID agreed.

### **3. Standard Operating Procedure for VOIP connectivity proposed by the TSPs/ GenCos (Agenda by CTU)**

- 3.1. NRPC informed that a meeting was held under the Chairmanship of Member Secretary (NRPC) on 06.07.2023 among NRPC, CEA, NRLDC/Grid India, CTU, POWERGRID, M/s Indigrid & M/s Sterlite, wherein CTU was advised to prepare a draft SOP for providing the VOIP connectivity to control centres of TSPs/ GenCos etc. and put up for deliberations in the upcoming TeST meeting.
- 3.2. Draft SOP prepared by CTU was deliberated in the meeting. CTU stated that interim connectivity has already been granted to M/s Indigrid & Sterlite as per their applications and discussions held during the meeting convened by NRPC on 06.07.2023. However, the final connectivity shall be granted after the approval of SOP.
- 3.3. During deliberations NRLDC stated a minor change in the draft SOP as under:  
“The respective RLDC (Grid-India) shall coordinate for such connectivity and POWERGRID shall ensure proper functioning after configuration of VOIP channel into the RLDC VOIP exchange.”
- 3.4. This was agreed during the meeting and CTU further requested NRLDC to provide any other comments/ suggestions to CTU with a copy to NRPC & POWERGRID.

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

CTU suggested MS, NRPC that this SOP needs to be finalized for all regions as TSPs in other regions may also come up with such requirements. MS, NRPC agreed for the same and stated that NRPC shall take up this action through NPC and after suitable approval, CTU will be informed.

### **4. Redundant communication for Fatehgarh-I (Adani) (Agenda by CTU)**

- 4.1. NRPC informed that redundant communication for Fatehgarh-I (Adani) was discussed in the 22<sup>nd</sup> TesT meeting of NRPC, wherein forum requested CTU to submit the agenda with complete scheme details.
- 4.2. CTU explained the scheme that using 6.5 kms of OPGW, one additional redundant path can be created for Fatehgarh-I. FOTE are not required as per input of Adani & POWERGRID. POWERGRID suggested that line name may be modified as Fatehgarh-I – Fatehgarh-II after LILO. CTU agreed that during final scheme line name may be modified. M/s Adani stated that they have no objection in installing 6.5 kms of OPGW, if it is awarded to them. NRLDC was also of the view that additional redundancy shall be useful using this OPGW.

## Proposed Fiber Connectivity of Fatehgarh-I (Adani)

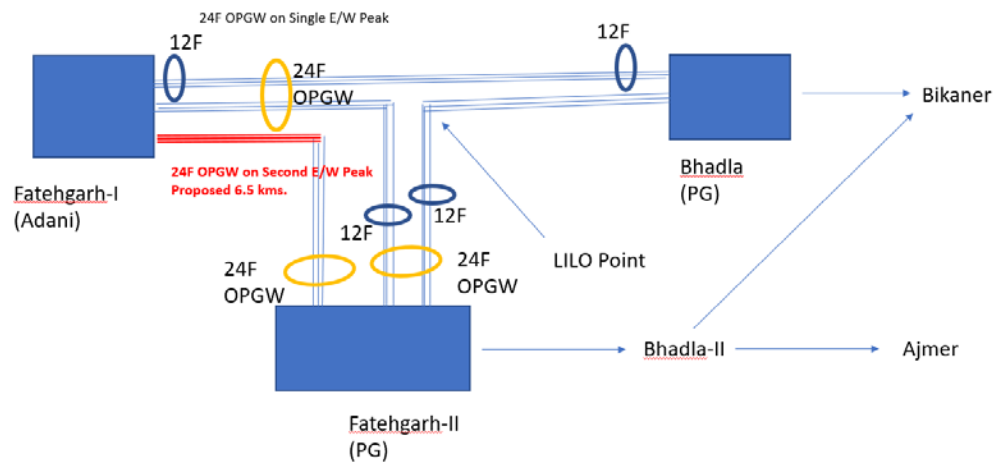


Figure-1

- 4.3. MS, NRPC asked CTU for the approval procedure for this. CTU stated that as per MOP guidelines dated 09.03.2022 for ISTS communication planning, Category-B communication schemes of ISTS deliberated and evolved by CTU shall be put up to the respective RPCs for their views. RPC will provide their views in 45 days, thereafter scheme shall be put up in NCT by CTU for approval.
- 4.4. On this MS, NRPC suggested that this agenda shall be put up in the upcoming 69<sup>th</sup> NRPC for review. Further, MS, NRPC also stated that in future all schemes evolved by CTU shall be put up in the upcoming NRPC board meetings as NRPC board meeting is held every month. He further advised that since TeST meetings are held quarterly, so only operational agendas shall be deliberated in such meetings.

### Decision of the forum

CTU agreed to provide the agenda in the 69<sup>th</sup> NRPC.

## 5. Redundant communication for Alusteng, Drass, Kargil, Khalasti, Leh (Agenda by CTU)

- 5.1. CTU stated that to provide redundant communication for Alusteng, Drass, Kargil, Khalasti, Leh, additional fibre can be utilized from the existing 24F OPGW. Further, FOTE installed under Substation packages will be used. This will also require fibre sharing from J&K PDD and two nos. FOTE at Zainakote & Wagoora.
- 5.2. POWERGRID informed that 3 pairs of fibres are required from J&K PDD links on Alusteng – Zainakote & Zainakote – Wagoora. J&K stated that they need approval for the same.

### **Decision of the forum**

MS, NRPC stated that a physical meeting is planned with J&K PDD in month of October and requested CTU to join the same for finalization of sharing of fibre.

### **6. Redundant communication for Narora (NAPP) (NPCIL) (Agenda by CTU)**

- 6.1. CTU stated that to provide redundant communication to Narora (NAPP), OPGW can be installed over NAPP – Simbhauli link of 88 kms.
- 6.2. NRLDC asked whether data can be reached to ISTC from Simbhauli.
- 6.3. POWERGRID clarified that they shall require fibre sharing on UP network also to create redundant path.
- 6.4. CTU asked POWERGRID and UPPTCL to share details of all concerned links where suitable nos. of fibre pairs (at least 2 pair) can be shared.

### **Decision of the forum**

MS, NRPC requested CTU that a letter can be sent to UPPTCL for the same. POWERGRID and UPPTCL agreed for the same. MS, NRPC stated that after getting details, scheme shall be submitted by CTU in the October NRPC meeting.

### **7. Redundant communication for Sewa-II (Agenda by CTU)**

- 7.1. CTU explained that for Sewa-II redundant communication, 2 kms of UGFO cable installation is required.
- 7.2. NRLDC stated that since requirement of UGFO being small along with SFPs only, the scheme can be taken up in the O&M by POWERGRID.

### **Decision of the forum**

POWERGRID agreed to take the UGFO installation in O&M.

### **8. Redundant Communication for Chamera-III (NHPC) & Budhil (GreenCo) (Agenda by CTU)**

- 8.1. CTU explained the scheme that using two nos. of FOTE and fibre sharing (3 pairs) between Budhil–Lahal & Lahal–Chamera PS, a redundant communication path can be created for Budhil & Chamera-III.
- 8.2. However, confirmation for the fibre sharing is still not received from the HPPTCL. HPPTCL representative stated that they require their management approval for the same. MS, NRPC suggested CTU to write a letter to HPPTCL for their consent for fibre sharing.
- 8.3. Further NRLDC stated POWERGRID to confirm whether a new FOTE is required at Budhil or the existing FOTE can be used for this redundancy. POWERGRID agreed that the existing FOTE can be utilized for this purpose. CTU finally stated that instead of 2 new FOTE only 1 FOTE is sufficient and confirmation on sharing of fibre from HPPTCL is required to finalize the scheme.

**9. Dual reporting of RTU, PMU, VOIP, AGC etc. applications on dual channel to RLDC and Back up RLDC (Agenda by CTU)**

- 9.1. POWERGRID stated that they have submitted the data to CTU except NR & NER and for the same they are arranging shortly.

**Decision of the forum**

MS, NRPC asked when POWERGRID would share the remaining data; POWERGRID stated that they shall share the same within a week.

**10.Connectivity of STU node on fibre in view of AMR (Agenda by CTU)**

- 10.1. CTU explained the agenda where STU stations AMR data is not receiving on fibre, the list of such stations is provided by Grid-India. PSTCL stated that their all stations are planned to be connected on fibre under reliable scheme being implemented by them.

- 10.2. CTU further enquired different stations of UPPTCL, HPPTCL, HVPNL etc.

**Decision of the forum**

MS, NRPC requested all state utilities to send their data as per the Annexure-II of the agenda directly to CTU with a copy to NRPC at the earliest.

**11.Additional FOTE at AGC locations (Agenda by CTU)**

- 11.1. As per the MOM of 22<sup>nd</sup> TeSTmeeting of NRPC, POWERGRID has to provide details of existing FOTE and requirement of additional ports/cards/FOTE at AGC locations and NRLDC to provide updated list of AGC to POWERGRID for the same.

- 11.2. In response to this POWERGRID provided list of AGC locations vide which 20 additional FOTE were required. However, during deliberations, NRLDC stated that for stations which are on single fibre connectivity additional FOTE will not provide any benefit. Further, there is card level redundancy and fibre level redundancy therefore no additional FOTE are required. Card level redundancy will suffice the requirement. Thus, the AGC function can be made operational with the existing FOTE itself at these locations and no additional FOTE is required, POWERGRID agreed for the same.

- 11.3. CTU stated that as the user of AGC functionalities agreed for no additional FOTE at the said locations so the scheme can be annulled.

- 11.4. POWERGRID stated that cards details have been provided to CTU for AGC function at these locations. They further stated that these cards cannot be procured under O&M and shall be included in the FOTE scheme under TeST agenda item 13. CTU agreed for the same.



## 12. Additional equipment at in view of resource disjoint and critical locations (Agenda by CTU)

- 12.1. NRLDC stated that these FOTE are required for the system requirement. No comments from any other utilities. POWERGRID informed that additional Ethernet cards required for AGC, Resource Disjoint, Dual redundancy can also be clubbed under this scheme. Further, quantity of FOTE required was corrected to 12 nos. instead of 13.
- 12.2. On this MS, NRPC suggested that this agenda shall be put up in the upcoming 69<sup>th</sup> NRPC for review.
- 12.3. CTU agreed to provide the agenda in the 69<sup>th</sup> NRPC.

## 13. Equipment at Backup SLDCs & Backup NRLDC (Agenda by CTU)

- 13.1. NRLDC stated that these FOTE are required for the system. No comments from any other utilities. Further, quantity updated to 11 nos. instead of 10 after adding FOTE at Modipuram as suggested by POWERGRID.
- 13.2. Revised list is given below:

Table-3

Sr No.	Name	Backup CC location	FOTE
1	Backup NRLDC	Guwahati	2
2	SLDC, RRVPNL (Jaipur)	Sub-LDC Bhilwara	1
3	SLDC, HVPNL (Panipat)	HW, Shakti BhawanPanchkula	1
4	SLDC, BBMB (Chandigarh)	SLDC, Patiala, Punjab	0
5	SLDC, DTL ( New Delhi )	400kV Bamnauli (ALDC Bldg)	2
6	SLDC, HPSEBL (Shimla)	Sub-LDC Hamirpur	1
7	SLDC J&K PDD (Jammu)	Backup SLDC Srinagar	2
8	SLDC Lucknow (UPPTCL)	SLDC Modipuram (UPPTCL)	1
9	SLDC PSTCL (Patiala)	SLDC, BBMB (Chandigarh)	0
10	SLDC PTCUL (Dehradun)	Kashipur	1
		<b>Total</b>	<b>11</b>

- 13.3. On this MS, NRPC suggested that this agenda shall be put up in the upcoming 69<sup>th</sup> NRPC for review.

CTU agreed to provide the agenda in the 69<sup>th</sup> NRPC.

## 14. Redundant communication for Saharanpur (PG) (Agenda by CTU)

- 14.1. CTU explained that two nos. of FOTE at Shamli and Muradnagar and 1 pair of fibre on sharing basis was agreed on UPPTCL links Saharanpur (PG)-Devband (UP)-Saharanpur (UP)-Nanauta (UP)-Shamli (UP) -Muradnagar (UP) – Dadri (PG) in the 4<sup>th</sup> CPM of northern region.

- 14.2. POWERGRID stated that due to NMS issues, FOTE of intermediate STU links cannot be managed and availability not confirmed. Therefore, 5 nos. of FOTE at Sahararnpur (PG), Devband (UP), Sahararnpur (UP), Nanauta (UP), Shamli (UP) shall be required for visibility in NMS. Further, POWERGRID requested one more pair of fibre as provision in ISTS communication system for MSP.
- 14.3. MS, NRPC requested CTU to write a letter to UPPTCL for fibre sharing for Saharanpur along with Narora connectivity.

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

- 15.1. Representative from NRLDC explained about the issue of non-availability of Data from J&K stations. He further explained that the issue is being discussed in many TeST /NRPC meetings, where representative from J&K and POWERGRID informed that many communication links has been commissioned. However, data reporting is yet to start due to disconnection of CT/PT cables at site / other integration issues of the RTU. In 68<sup>th</sup> NRPC meeting held on 18<sup>th</sup> Aug 2023, it was informed that they are taking with OEM for rectification of the issue. He further informed that till date there is no improvement in this regard and requested J&K to expedite the integration issues.

#### Decision of the forum

Member Secretary, NRPC also showed concerned about non-availability of data and informed that a special meeting will be convened in the month of October to discuss issues specific to Jammu & Kashmir.

### 16. Communication plan for channel redundancy to NRLDC (Agenda by NRLDC)

- 16.1. Representative from NRLDC explained about requirement of redundant communication channels from generating stations and sub-stations. Issues was discussed in detail and after discussion following status was shared with the forum.

S.N O.	Name of RTU	Comments	Timeline	
1	KISHANGANGA	NHPC	One Month	Data is reporting on single channel through newly commissioned OPGW link on Kishanganga-Wagoora link. However , there is some issue in second port of RTU and they have taken up with OEM for rectification of the issue.

2	PARBATI-2	NHPC		<p>Representative from NHPC informed that data is reporting from primary channel through lease line. However redundant path could not be commissioned due to non-commissioning of OPGW link on Parbati2 – Parbati3 &amp; Parbati3 – Parbati Pooling and requested POWERGRID to expedite the commissioning of the link.</p> <p>Representative from POWERGRID informed that the ownership of above Transmission lines lies with PKTCL/Indigrid and the consent is being repeatedly denied for PTW to POWERGRID since the commencement of the project.</p> <p><b>Member Secretary confirmed that they will convene a special meeting in October 23 with members from POWERGRID, CTU, Indigrid and NRLDC to discuss the issue.</b></p>
3	PARBATI-3	NHPC		
4	KARCHAM WANGTOO	IPP		
6	AD Hydro	AD Hydro		
7	Bhiwadi HVDC	POWERGRID		<p>Representative from POWERGRID informed that replacement has already been made and they have taken by replacement / upgradation of SAS and it is likely to be completed within 6 months.</p>

## 17. Telemetry issue from NTPC Singrauli (Agenda by NRLDC)

17.1. Representative from NRLDC informed about telemetry issues from Old RTU of Singrauli and requested NTPC to shift the remaining data to newly commissioned SAS bays. The issue could not be discussed since representative from NTPC was not available in the meeting.

### Decision of the forum

Member Secretary NRPC informed that a special meeting will be convened to discuss this issue separately with NTPC.

## **18.Redundant communication to NRLDC (Agenda by NRLDC)**

- 18.1. Representative from NRLDC informed that redundant communication link to NRLDC via Tughlakabad – RK Puram was approved in 19<sup>th</sup> TeST Meeting. However, till date link is yet to be commissioned and requested POWERGRID to expedite the commissioning of aforementioned link considering criticality of this redundant link for un-interrupted real time monitoring, voice connectivity etc. After this connectivity, robust fiber connectivity shall be established along with existing optical paths for NLDC, NRLDC and all their back up RLDCs System for grid operation.
- 18.2. Representative from POWERGRID informed that OPGW cable is already available from R K Puram- NRLDC-Tughlakabad and last mile connectivity to NRLDC is pending since road crossing in front of NRLDC main gate is pending. He further informed that earlier authorities have denied permission for digging due to G-20. Now, It is expected that POWERGRID will get required permission by 30<sup>th</sup> Sep 2023 and confirmed that the link will be commissioned by 15<sup>th</sup> Oct 2023.

## **19.EOL/EOS for firewalls supplied under URTDSM Project (Agenda by NRLDC)**

- 19.1. Representative from NRLDC informed that Unified Real Time Dynamic State Measurement (URTDSM) project was implemented by POWERGRID through 70% PSDF grant and 30% equity. Defect liability Period was completed in Dec 2019 and thereafter AMC for six years started from January 2020.
- 19.2. As per information received from M/s GE, System Integrator through which AMC of URTDSM is being executed; OEM of Internal & External Firewall & Firewall Management devices has declared End of Life/ end of Support of firewall versions supplied under URTDSM project and same needs to be replaced with newer version to continue subscriptions/ patches etc.
- 19.3. He informed that replacement of these firewalls is critical considering Cyber Security concerns and requested POWERGRID to take-up for immediate action.
- 19.4. Representative from POWERGRID confirmed that they have already taken up with System Integrator M/s GE for replacement and informed that it will be replaced by 31<sup>st</sup> October 2023.

### **Decision of the forum**

Member Secretary NRPC also expressed concern and requested POWERGRID to ensure that timely action is taken and he further asked POWERGRID to inform to NRPC after replacement of necessary devices.

## **20.PMU integration of RRVPNL stations supplied under STNAMS (Agenda by NRLDC)**

- 20.1. Representative from NRLDC informed that issue of integration of STNAMS PDC with Rajasthan SLDC ULDC PDC is pending since long and requested Rajasthan SLDC and RRVPN to take immediate action for better visibility of

PMU data of Rajasthan area as it is very important from grid operation point of view considering recent events in Renewable pocket.

- 20.2. Representative from Rajasthan SLDC informed that they have taken up with security consultant and audit report has been shared with NCIIPC for consent. However, they are ready for integration of PMUs with SLDC PDC but there is some commercial issue between GE and RRVNL.
- 20.3. Representative from NRLDC informed that as per information received from RRVPN, STNAMS and Rajasthan, PDC integration is in their contract scope and there is no commercial implication.

**Decision of the forum**

After detailed discussion it was decided that Rajasthan SLDC will convene meeting next week comprising of members from Rajasthan SLDC, RRVPNL, NRLDC and GE to discuss the issue and expedite integration of the same.

**21. Calculation of actual drawal by states based on SLDC end SCADA data (Agenda by NRLDC)**

- 21.1. Representative from NRLDC informed that all SLDCs shall maintain and monitor their own drawal calculation (alternate calculation) based on the SLDC drawal points. SLDC shall compare its own calculated value of real-time drawal from the grid with drawal computed by RLDC based on ISTS end data to ensure correct assessment of drawal in real time. Corrective measures shall be taken whenever any anomaly is detected between the two drawal computations. He further requested all to take necessary actions in this regard.
- 21.2. Members from Punjab, Haryana and HPPTCL informed that they have made drawal calculation based on state telemetry points and also shared the same with NRLDC and monitoring the same for differences. However, they are still monitoring NRLDC calculation as primary due to intermittent state data points and non-availability of telemetry at some of the locations.
- 21.3. Representative from NRLDC requested concerned to take up the issue of telemetry with their STUs and improve availability of data, so that they can rely on state calculations.

**Decision of the forum**

Members ensured that they will further take up for improvement of telemetry and start using their calculations as primary calculation for drawl monitoring.

**22. Redundant communication to NRLDC (Agenda by NRLDC)**

- 22.1. Representative from NRLDC informed that status of above redundant links may please be shared and requested CTU to expedite the same. After detailed discussion following points were informed.

S. No.	Link	Discussion in 23 <sup>rd</sup> TeST Meeting
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1.	Redundant communication for Fatehgarh PS (Adani)	Already discussed in Agenda 5
2.	Redundant communication for Samba (PG)	Separate meeting shall be convened by NRPC with Indigrid for redundant communication on Samba-Jalandhar OPGW link. Further. PKTCL lines of Indigrid needs to be discussed for OPGW installation.
3.	Redundant communication for Dulhasti (NHPC)	POWERGRID informed that feasibility of installation of OPGW is not available as tower strengthening is not possible. However, they will explore possibility of installing OPGW on second peak of other circuit of Kishenpur-Dulhasti during LILO of Kishenpur-Dulhasti at Kishtwar.
4.	Redundant communication for Alusteng, Drass, Kargil, Khalasti, Leh	Already discussed in Agenda 6
5.	Redundant communication for Narora (NAPP) (NPCIL)	Already discussed in Agenda 7
6.	Redundant communication for Sewa-II	Already discussed in Agenda 8
7.	Redundant Communication for Chamera-III (NHPC) & Budhil	Already discussed in Agenda 9
8.	Redundant Communication for Pithoragarh (PG) Sitarganj (PG) stations	<p>CTU informed that redundant link can be commissioned through PTCUL and PTCUL to share 3 pairs 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 for approval.</p>
9.	Redundant communication for Saharanpur (PG) S/s	Already discussed in Agenda 15

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

- 23.1. Representative from NRLDC informed that as per information received from POWERGRID U-NMS is in final commissioning stage and requested POWERGRID to update status of integration of NMS and Network Equipment in Northern Region.
- 23.2. POWERGRID informed that out of 1300 equipment, around 900 equipment has been integrated in U-NMS and he further shared the details of pending integration.
- 23.3. Integration of ABB equipment from UPPTCL: POWERGRID informed due to limitation in ABB NMS they require separate link from individual ABB equipment for its integration in U-NMS and requested UPPTCL to provide the same. UPPTCL informed that they will check and provide within next 15 days.
- 23.4. Regarding integration of Network Equipment from IPPs and TBCB, it was requested that CTU shall convene special meeting with IPPs and other transmission licensees for integration of the same.
- 23.5. Integration of Tejas and Fibcom Equipment from UPPTCL: Representative from UPPTCL informed that Tejas project is under implementation and upon implementation of all equipment, NMS will be commissioned which in turn can be integrated with U-NMS. POWERGRID requested UPPTCL to expedite the commissioning of NMS first so that it can be integrated with U-NMS and as and when new equipment is commissioned, it will be integrated with U-NMS automatically. UPPTCL agreed for the same.
- 23.6. Regarding Fibcom equipment, representative from UPPTCL informed that they will resolve the issue within one month.
- 23.7. Regarding integration of GE make equipment from HPPTCL, POWERGRID requested HPPTCL to provide links for integration of the same. HPPTCL confirmed that they will provide the same in next 15 days.
- 23.8. Regarding integration of Keymile equipment, POWERGRID informed that HVPNL has given test equipment to POWERGRID for development of adapter for integration of Keymile equipment with U-NMS. Upon development of adapter they will take up for integration of equipment with Keymile.

### **24. DECLARATION OF COMMERCIAL OPERATION (DOCO) AND COMMERCIAL OPERATION DATE (COD) of Communication System (Agenda by NRLDC)**

- 24.1. Representative from NRLDC informed that as per IEGC and Detailed draft procedure for certification of communication equipment issued by Grid-India, procedure for certification of Communication system is applicable for following Inter-State and Inter-Regional Communication System.
  - OPGW
  - Communication System
  - Auxiliary Power Supply of Communication System

- 24.2. Certification for links other than ISTS / Inter-regional communication and state sector links shall not come under the purview of these procedure.
- 24.3. Certification of State Sector links shall be taken from respective state for which link is being developed.

**Decision of the forum**

Members noted and agreed for the same.

**25. Non-Availability / Reliability of Telemetry (Agenda by NRLDC)**

- 25.1. Representative from NRLDC informed that list of all 765/400 Sub-stations where telemetry is highly intermittent may please be noted and requested all constituents to please take up for necessary action for resolution of telemetry issues. He further emphasized that reliability of telemetry is essential for smooth monitoring, operation of the grid and proper functioning of EMS applications like State Estimator, RTCA etc.

**Decision of the forum**

Members noted and agreed for the same.

**26. Display of DC/Schedule of Generating Stations in SCADA Display (Agenda by NRLDC)**

- 26.1. Representative from NRLDC informed that it is essential to monitor DC and Schedule for generating stations so that exact margin available from generating Stations is available to System Operator and higher authorities.
- 26.2. He further informed that DC/Schedule of Central Sector Stations and Generating stations from UP and Delhi is available in SCADA and requested others to please take necessary action for integration of DC and Schedule in SCADA.
- 26.3. After detailed discussion it was agreed that considering system requirement all constituents shall give highest priority to integration of DC/ schedule from state generating stations in SCADA. It was agreed that states shall take necessary action and integration shall be completed within one-month time.

**Decision of the forum**

Members agreed to the same.

**27. Regarding upcoming ULDC Ph-III (Agenda by PSTCL)**

- 27.1. PSTCL informed that it is facing space constraint issues such as storage space issue, end of life of some equipment and other issues in ULDC Phase-II and requested POWERGRID to expedite ULDC Ph-III.
- 27.2. POWERGRID acknowledged the concerns being faced in ULDC Ph-II. POWERGRID informed that technical bid evaluation is under progress and tender will be awarded by December 2023.
- 27.3. Member Secretary, NRPC asked to expedite the project.



**28. Expiration of insurance of Equipment supplied under ULDC Ph-II (Agenda by PSTCL)**

- 28.1. PSTCL informed that insurance of equipment has not been done this year and last year also. POWERGRID informed that some constituents have not done payments due to which it is not possible to renew the insurance.
- 28.2. PSTCL informed that it has made payment of 31 Lakhs and from the pending amount and shall pay the balance amount shortly.
- 28.3. Member Secretary, NRPC asked other constituents to pay their due payments. PSTCL requested that constituents who are paying timely, their insurance can be renewed to expedite the project.
- 28.4. Member Secretary asked to get the insurance done for constituents who have paid and hold for who are not paying timely. POWERGRID agreed to plan in this way.

**29. Regarding Internal firewalls, external firewalls and Antivirus for SCADA EMS system installed under ULDC Ph-II (Agenda by UPSLDC)**

- 29.1. POWERGRID stated that it has made a State level committee for this. After agreement of technical specification, they will start the procurement process.
- 29.2. Member Secretary, NRPC asked POWERGRID to expedite the process.

**30. Regarding Preventive Maintenance of DG Set for UPSLDC Lucknow and Backup SLDC (Agenda by UPSLDC)**

- 30.1. M/s Siemens stated that he shall get it done in next week.

**31. Agenda Regarding Drawl Points of ICTs at Transmission Sub-stations of PGCIL. (Agenda by UPSLDC)**

- 31.1. UPSLDC raised concern regarding considering of state energy drawl through HV side of ICT. It was discussed that HV side of ICT is being considered as per CEA metering regulations only.

**Decision of Forum**

MS, NRPC stated that a separate meeting may be held to discuss this issue in detail.

**32. Regarding expiry of licenses of Fortigate make Internal Firewall (Agenda by BBMB)**

- 32.1. Member Secretary, NRPC asked POWERGRID to expedite the process as discussed in agenda 29.

**33. Regarding component wise bifurcation/ breakup of cost for ULDC Phase-III scheme (Agenda by BBMB)**

- 33.1. BBMB stated that bifurcation/ breakup of cost for ULDC Phase-III scheme has not been received it yet. Other constituents also requested for the bifurcation/ breakup of cost. NRLDC also suggested to provide it to all constituents.

33.2. Member Secretary, NRPC also suggested to send cost bifurcation to all constituents. POWERGRID agreed for the same.

#### **34. Issues being faced by HARYANA SLDC in ULDC Phase-II (Agenda by HVPNL)**

34.1. Non-displaying of Dynamic Values on SLDC Haryana Website: -

M/S Siemens has informed that it has taken expert help and will resolve the matter as soon as possible. He suggested that to resolve the issue reconfiguration of Data Replica Server can be done which will require outage of few days from Haryana end and expert help (time) from Siemens end.

34.2. E-DNA new data points list not updating in e-DNA ChAD manager: -

M/s Siemens informed that E-DNA is third party software and OEM is not supporting them. Issues in the software are not resolvable because it is discontinued by OEM. However, they are maintaining the system as it was delivered. They are not able to add new data points. They may be asked to update the progress and resolve this issue at the earliest.

34.3. Image Backup of servers: -

M/s Siemens informed that issue has been resolved.

34.4. IMM in PDS console not working: -

M/s Siemens informed that it has taken support from its headquarter and will resolve the issue at the earliest. Siemens further added that 1 IMM is already present and in working condition, they are not able to provide additional IMM.

#### **35. Agenda regarding settlement of issue of MW tower (Asset of HVPNL) installed at 400KV S/s, Bawana (Agenda by HVPNL)**

35.1. NRPC informed that issue of MW tower is still pending and asked DTL to update the status. DTL informed that its management is in the process of approval of payment for equivalent scrap value.

35.2. HVPNL stated that vendor is not agreeing for equivalent amount. He is asking for equivalent iron of weight 66.8MT.

35.3. Member Secretary, NRPC suggested that HVPNL should ask the contractor to take the equivalent amount along with interest (as applicable) for scrap and resolve this matter bilaterally. DTL and HVPNL agreed.

#### **36. Unified Real Time Dynamic State Measurement" (URTDSM) project phase-II (Agenda by POWERGRID)**

36.1. POWERGRID informed that till now, PMU quantity requirement is received from NRLDC (for Central Sector portion), UPSLDC, HP and JKPTCL only. Other states in the Northern Region are also requested to expedite confirmation of PMU quantities as per the philosophy finalized by subcommittee for finalization of DPR of URTDSM Project- II.

36.2. MS, NRPC stated that reminder may be given to states for data and if necessary POWERGRID may take up separate meeting with them.

- 36.3. POWERGRID informed that they have received tentative list from NRLDC which needs to be validated by respective states.

**Decision of the forum**

MS, NRPC suggested that POWERGRID may share the list with states and get it validated.

**37.Frequent outage of Telemetry data of Muradnagar-II (Agenda by POWERGRID)**

- 37.1. POWERGRID requested UPPTCL to instruct the concerned group to take up the issue of rectification of RTU/SAS at Muradnagar-II sub-station for reporting of stable and reliable telemetry data at SLDC and NRLDC. POWERGRID also requested NRLDC to help PMSTL for providing timely charging code as pending construction works are being taken up with the help of Administration and in case line is ready for charging then, PMSTL have to charge the line without any delay, (specially in this case as data availability is in the scope of UPPTCL and PMSTL has completed all their works).
- 37.2. NRLDC stated that as per FTC procedure based on IEGC regulations, telemetry data is required for giving charging clearance. NRLDC also requested UPPTCL to resolve telemetry issues.

**Decision of the forum**

MS, NRPC mentioned that this is very critical line and passing through very critical ROW areas and UPPTCL may take up the issue of telemetry data and rectify on priority for timely charging of the line.

**38.Reliable Communication Scheme under Central Sector for Northern Region (Agenda by POWERGRID)**

- 38.1. OPGW installation on 220 kV ADHEP -Nalagarh line:  
MS, NRPC mentioned that NRLDC may look into the issue and shutdown may be issued as required so that works may be completed.
- 38.2. ROW issue in Chandigarh -Panchkula link:  
MS, NRPC mentioned that POWERGRID may take support from PCD division, CEA for resolution of the matter.
- 38.3. Non Availability of PTW for Live line OPGW stringing in 400 kV Parbati Pooling Station to Koldam and Parbati PS-III to Parbati PS-II:  
CTU informed that during Indigrd separate meeting, the agenda may be included. NRPC agreed for the same.

**39.OPGW laying under Establishment of fibre optics communication system (Additional Requirement) under Center Sector (Agenda by POWERGRID)**

- 39.1. CTU informed that during Indigrd separate meeting, the agenda may be included. NRPC agreed for the same.

#### **40.Implementation of U-NMS Project (Database development and input for integration) (Agenda by POWERGRID)**

Covered in agenda 23.

#### **41.Integration of New communication system/ Node/ NMS with UNMS System**

- 41.1. POWERGRID informed that as per bidding documents of UNMS Project, existing communication system (Node/ NMS) has to be integrated with new UNMS system. Existing communication system integration are part of this project and M/s Sterlite is liable to integrate these nodes. The UNMS system is of 7 years of AMC and M/s Sterlite will provide all required support for integration of existing and new communication system. However, integration of future projects communication system with the UNMS shall be the responsibility of upcoming project owners and cost for the same shall be borne by owners.
- 41.2. Therefore, CTU/STU may incorporate the clause of integration of new communication system with existing UNMS system in the Connection agreement (Annexure-III(b)).

#### **42.Delay in Payment for ULDC Services (Agenda by POWERGRID)**

- 42.1. PSTCL informed that they are in final stage of approval and 30 lacs have been credited and hopefully balance 30 lacs will be deposited within 15 days. HPSEBL informed that the cases are under approval and partial amount shall be settled within this months and balance amount shall be pursued with higher management for clearance to POWERGRID. This time some delay happened due to limit issue and in future, we will ensure timely payments for AMC works.
- 42.2. POWERGRID further mentioned that UPPTCL has repeatedly not turned up for payment, neither they are responding nor releasing the pending payments.
- 42.3. MS, NRPC informed that AMC payment to POWERGRID/ AMC vendors shall be ensured in time for smooth execution of AMC. POWERGRID may pursue with each constituent for pending outstanding. For J&K, they are not making payment in other J&K projects as well, POWERGRID may do continuous follow up with them.

#### **43.Regarding funding scheme in the present tender of SCADA upgradation under ULDC Phase-III (Agenda by HPVNL)**

- 43.1. HVPNL informed that financial wing of HVPNL has raised certain observations regarding execution of project via tariff instead of Capex with consultancy. They are of the opinion that project may be carried out through self-financing through consultancy by POWERGRID.
- 43.2. POWERGRID informed that Tender is under evaluation and if HVPNL request is considered, project timeline may be derailed as revised estimation, approval in Board, NRPC, consultancy agreement etc. may take time. It was highlighted that state-wise BOQ and consultancy terms and conditions are different.

43.3. MS, NRPC advised that a separate meeting may be held by HVPNL and POWERGRID to resolve the issue.

**44. Requirement of UNMS console at NRPC (Table Agenda by CTU)**

44.1. CTUIL informed that one number workstation console along with AMC and bandwidth connectivity and its recurring charges for NRPC secretariat has been approved for NR-UNMS project as per the minutes of 15<sup>th</sup> NCT meeting held on 25<sup>th</sup> August 2023. In view of that, CTU stated that it is proposed to consider the same as an amendment to the NR UNMS project.” Agenda may be forwarded to NRPC meeting for further approval of the forum.