



सत्यमेव जयते

भारत सरकार

Government of India

विद्युत मंत्रालय

Ministry of Power

उत्तर क्षेत्रीय विद्युत समिति

Northern Regional Power Committee

No. उक्षेविस/ प्रचालन/108/04/2022/ 1744-1778

Dated: .02.2023

सेवा में / To,

संलग्न सूची के अनुसार/As per list attached

विषय: दूरसंचार, स्काडा और टेलीमेट्री उप समिति की 21वीं बैठक- बैठक के कार्यवृत्त।

Subject: 21st meeting of Telecommunication, SCADA & Telemetry Sub Committee- Minutes of the meeting-reg.

महोदय / Sir,

उत्तर क्षेत्रीय विद्युत समिति की दूरसंचार, स्काडा और टेलीमेट्री (टेस्ट) उप-समिति की 21वीं बैठक दिनांक 13.12.2022 को 11:00 बजे से विडियो कॉन्फ्रेंसिंग के माध्यम से आयोजित की गई। बैठक में कार्यवृत्त इस पत्र क साथ संलग्न है। यह उत्तर क्षेत्रीय विद्युत समिति की वेबसाइट (<http://164.100.60.165>) पर भी उपलब्ध हैं।

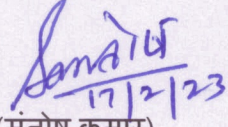
21st meeting of Telecommunication, SCADA & Telemetry (TeST) Sub-committee of NRPC was held on 13.12.2022 at 11:00 am video conferencing. Minutes of the meeting are enclosed herewith. The same are available on NRPC website (<http://164.100.60.165>).

अनुलग्नक-यथोपरि।

Encl.: As above.

भवदीय

Yours faithfully


17/12/23
(संतोष कुमार)

(Santosh Kumar)

अधीक्षण अभियंता

Superintending Engineer

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**Minutes
of
21st Meeting of Telecommunication, SCADA & Telemetry (TeST) Sub- Committee**

21st Meeting of Telecommunication, SCADA & Telemetry (TeST) Sub-Committee was held on 13.12.2022 at 11:00 am via video conferencing under the chairmanship of Member Secretary, NRPC. Minutes of the meeting are given as under:

I. Confirmation of Minute

1. Confirmation of Minutes

- 1.1. EE(C), NRPC informed that 20th meeting of TeST sub-committee was held on 09.09.2022 and the minutes were issued vide NRPC letter no. NRPC/OPR/108/04/2022/10595-10629 dated 09.11.2022.
- 1.2. Following amendments requested by HVPNL in the minutes of 20thTeST meeting, were discussed and agreed in the meeting:

Agenda Point	Minutes of 20 th TeST meeting	Amendment accepted
17.4 Issue regarding functionality of IMM: Transfer failed	M/s Siemens informed that workaround solution is already provided to HVPNL team and the same has been working satisfactorily. HVPNL stated that they are monitoring the solution and will revert back on any issue	M/s Siemens informed that due to older version of IMM, issue couldn't be resolved permanently. However, to prevent this error frequently, a workaround solution and a write up will be provided to HVPNL.
17.6. Image Backup of servers	Siemens informed that site team is saving the backups in HDD/NAS. There are multiple issues reported with tape drives; hence External HDD is being used	M/s Siemens in the meeting informed that they will start taking image backup and also planning to install Acronis for online Backup of some of the servers.
17.7. IMM in PDS	M/s Siemens informed	M/s Siemens stated that

console not working	that although there were some issues with IMM such as sluggish performance, alas it's working. IMM have been improved a lot and its working at HVPNL and other SLDCs.	they would install another IMM in the operator console instead of the IMM in the PDS machine.
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II. Telecommunication and Telemetry issues

2. Issue regarding Non-Availability of Shutdown on 220kV ADHEPL – Phozal& 220kV Phozal - Nalagarh line for aviation Globule removal to carry out the OPGW stringing work on 220KV ADHEPL-Nalagarh link under Reliable Communication Scheme (Agenda by Powergrid)

- 2.1. Representative of Powergrid informed that M/s HPPTCL is not providing shutdown on 220kV ADHEPL – Phozal& 220kV Phozal - Nalagarh line for aviation Globule removal to carry out the OPGW stringing work on 220KV ADHEPL-Nalagarh link under Reliable Communication Scheme.
- 2.2. POWERGRID informed that due to non-availability of shutdown, repeatedly OPGW teams/gangs become idle which creates huge financial implication. HPSLDC has again denied permission. He stated that they are continuously following up with concerned authorities but they are not getting work permits even after approvals in OCC meetings. He further mentioned that these two are only pending links in this package. He requested Member Secretary, NRPC to intervene in the matter as project commissioning was almost delayed for one year.
- 2.3. MS, NRPC, asked to HPPTCL to update the status or any comments on issues being raised by POWERGRID.
- 2.4. HPPTCL informed that due to generation and demand, continuous shutdown was not possible, however they will try to arrange the permit as requested by POWERGRID.
- 2.5. Representative of CTU also requested HPPTCL to arrange work permits to complete the OPGW works as it is the responsibility of owner of the line to arrange permits.
- 2.6. Representative of NRPC mentioned that for reliability of telemetry data, OPGW is required and shutdown/work permits may be planned for completion of works.

- 2.7. MS, NRPC mentioned that issuance of work permit in time shall be ensured for completion of OPGW works. This agenda is continuously raised in every meeting. HPPTCL and AD-Hydro may plan the outage in coordination with POWERGRID in upcoming OCC meeting to complete the works in time.
- 2.8. Representative of HPPTCL mentioned that they will update their higher management on the issue.

3. Issues in OPGW laying in HPSEBL (Agenda by Powergrid)

- 3.1. Representative of Powergrid informed that this agenda was discussed in various meetings of TeST sub-committee. OPGW strengthening work could not be started in 66kV Gumma-Jutog link due non-availability shutdown. OPGW strengthening work stopped on 66kV Kumaran-Nogli line due non-availability of shutdown since 25 Oct '22. HPSEBL vide letter No. HPSEBL vide letter dated 05 .11.2022 has informed that they shall not be able to provide shutdown on daily basis on Transmission line till May 2023.
- 3.2. MS, NRPC stated that HPSEBL should provide shutdown on daily basis so that Powergrid could complete the work and close the contract. However, number of hours for shutdown may be as per HPSEBL. He further stated that a D.O. letter will be sent to HPSEBL in this regard.
- 3.3. POWERGRID briefed the issue to the forum and mentioned that this project is pending since 5-6 years and repeatedly work permit was not being issued. Now HPSEBL has mentioned in their letter that permit may be issued after May' 2023, then rainy season will come and work could not be possible at site, specially in hilly terrains.
- 3.4. MS, NRPC asked HPSEBL for any specific reason for allowing permits after May' 2023.
- 3.5. Representative of HPSEBL informed that due to election year, water supply in day time and unavailability of backup feeder for these transmission lines, regular shutdown could not be possible. He also mentioned that one backup feeder is under construction and likely to be commission by May' 2023, after that regular shutdown can be issued for these 66kV lines.
- 3.6. MS, NRPC mentioned that now elections has been completed, HPSEBL has to find out some solution for arranging shutdown / live line permits.
- 3.7. POWERGRID mentioned that on 66kV lines, live line works could not be possible due to clearance issues.
- 3.8. MS, NRPC suggested that HPSEBL and POWERGRID may jointly work out the required shutdowns and HPSEBL may arrange shutdown at the earliest to complete the works.

4. Redundant Communication for Sub-station/Power plant/ Generators (Agenda by Powergrid)

4.1. Executive Engineer, NRPC informed that this agenda is the Follow up Agenda against 20th TeST Meeting agenda point 2. He requested Powergrid to update the status.

4.2. Redundant communication for Budhil (GreenCo) &Chamera-III (NHPC)

4.2.1. Representative of Powergrid informed that presently Chamera – III & Budhil connected on single fiber path. Redundant path to these stations can be implemented through under construction HPPTCL transmission lines i.e. Budhil to Lahal and Lahal to Chamera PS where new OPGW has also been laid by HPPTCL along with transmission line. He requested HPPTCL to update the status.

4.2.2. HPPTCL informed that construction works has been completed, however OPGW works may further take 10 more days to commission.

4.2.3. MS, NRPC stated that states should not be burdened for connectivity of IPP's. Since IPP will also get benefit of connectivity, they may also share the cost of the project.

4.2.4. It was decided that this agenda will be taken up in the NRPC meeting and views of states may be taken on this agenda.

4.3. Redundant communication for Pithoragarh (PG) & Sitarganj (PG)

4.3.1. Representative of Powergrid informed that Pithoragarh, Dhauliganga, Jauljibi and Sitarganj are only connected to single transmission line where OPGW has already been laid. In 20th TeSt meeting, representative of PTCUL informed that consent from PTCUL management is required for sharing of fibres for the proposed links.

4.3.2. Representative of NRLDC suggested Powergrid to Follow up this agenda with PTCUL before next meeting of TeST sub-committee.

4.3.3. Representative of Powergrid stated that a letter will be sent to PTCUL on this matter.

4.3.4. Representative of CTUIL stated that a guidelines may be framed for sharing of fibres among beneficiaries.

4.3.5. MS, NRPC agreed with the suggestion of CTUIL. He requested CTUIL to frame draft guidelines that may be discussed in the next meeting.

4.4. Redundant communication for Faridabad (NTPC) & Jhajhar (NTPC)

4.4.1. POWERGRID informed that in last meeting, it was discussed that Jhajhar (NTPC) is connected with single path through 400kV Jhajhar – Mundka line. Redundant path can be created utilizing HVPNL OPGW network over Jhajhar – Daulatabad (HVPNL) – Gurgaon HVPNL-Gurgaon (PG). POWERGRID informed that as per last meeting discussion, commissioning of the link may be planned for ULDC purpose.

4.4.2. It was decided that POWERGRID will coordinate with HVPNL for providing the redundant connectivity for Faridabad (NTPC) & Jhajhar (NTPC) as per the discussion of 20th meeting of TeST sub-committee.

4.5. Redundant communication for Fatehgarh PS (Adani), Mohindergarh (Adani) & Mundra (Adani) stations.

4.5.1. EE, NRPC informed that this agenda was also discussed in the 20th TeST meeting wherein Adani representative stated that they will revert back after discussing with their management for providing redundant connectivity to Fatehgarh PS (Adani), Mohindergarh (Adani) & Mundra station on fibre through ULDC network.

4.5.2. Adani representative was not available in the meeting.

4.5.3. Representative of NRLDC stated concerned stakeholders should follow up agenda after the discussion in the meeting.

4.5.4. MS, NRPC agreed with the suggestion of NRLDC and stated such agenda where follow up has not been done by concerned stakeholders, may not be discussed in the next meeting.

4.6. Redundant communication for Narora (NAPP) (NPCIL)

4.6.1. UPPTCL representative stated that they are already planning OPGW over 220kV NAPP – Atruali line which may be utilized for establishing redundant path.

4.6.2. It was decided that all agenda's pertaining to planning of the communication system, would be routed by Powergrid to CTU and CTU shall place such agenda's in the TeST meeting with complete background.

4.7. Redundant communication for Samba (PG)

4.7.1. It was decided that Powergrid would follow up this agenda with Indigrid.

4.8. Redundant communication for Bhinmal (PG) & Kankroli (PG) S/S

4.8.1. As discussed at 4.6.2.

5. Telemetry data reporting on single route

5.1. As discussed at point 4.6.2.

6. Signing of AMC contract for Synergy make RTUs (replaced by POWERGRID)

6.1. Representative of Powergrid informed that defect liability period has been completed for the 63 nos. of RTUs replaced by Powergrid as per MOU signed by Northern Region Constituents (BBMB, DTL, PSTCL, NHPC, NTPC, NPCIL, SJVNL, THDC and IPGCL) with POWERGRID. POWERGRID has issued AMC contract for next 6 years effective from 01.12.2022 to 30.11.2028. He requested concerned constituents to expedite the signing of Contract Agreement and BG submission may be confirmed as per the contractual

terms, so that maintenance activity may be carried out by vendor in smooth manner.

- 6.2. Representative of DTL informed that they agree for single contract as done in SCADA project. Single bank guarantee can be submitted to POWERGRID and Powergrid may confirm the same to all utilities before payment proceedings.
- 6.3. Representative of BBMB informed that they also don't have any objection in single contract and bank guarantee. However, since BBMB partners are paying on behalf of BBMB for all maintenance works, here also BBMB is of the opinion that constituents partners will pay the O&M cost to vendor M/s Synergy, same is being done in SCADA project as well.
- 6.4. Representative of PSTCL mentioned that since RTU replacement cost has been borne by BBMB itself, then why O&M cost is being put on constituents partners.
- 6.5. Representative of BBMB stated that they will discuss with their partners and inform POWERGRID.
- 6.6. Representative of NHPC mentioned that if all constituents agree for single contract and single CPG/BG then they also don't have any issue.
- 6.7. Representative of POWERGRID requested that contract signing formalities may be completed in next three months time, as payment is due for M/s Synergy after that and without payment/ contract signing, vendors might not support for AMC which will impact telemetry data availability and AMC services.
- 6.8. The sub-committee requested all concerned constituents to Sign Contract Agreement and confirm submission of contract performance guarantee for AMC as per MOU.

7. Extension of AMC for Hot Line Speech Communication System (M/s ORANGE) (Agenda by Powergrid)

- 7.1. Representative of Powergrid informed that hot line speech communication system was implemented by POWERGRID for PAN India basis. This scheme was executed by M/s ORANGE and 7 years of AMC was also part of the original contract and this AMC going to expire in coming July' 2023. There is no extension clause in the contract. All stakeholders may discuss extension modalities/ Replacement/ upgradation of EPABX system.
- 7.2. Representative of NRLDC stated that Powergrid may coordinate with M/s ORANGE for extension of AMC. Further, Powergrid may provide feedback to CTU for extension of AMC so that CTU may bring proposal for upgradation, if required.
- 7.3. Sub-committee urged Powergrid to explore the possibility of extension of AMC and accordingly inform CTU so that CTU may take up the proposal for Replacement/ upgradation, if required.

- 7.4. POWERGRID informed that Hot line speech communication system was implemented by POWERGRID for PAN India basis wherein NLDC, RLDCs and all SLDCs are inter connected through Alcatel Lucent make EPABX system. VOIP/Analog phones are also installed at power plants/sub-station/IPPs, etc over dedicated OPGW network of ULDC. This scheme was executed by M/s ORANGE and 7 years of AMC was also part of the original contract and this AMC going is to expire in coming July' 2023. There is no extension clause in the contract, therefore extension modalities may be discussed in details. Being an electronic item, old model, spare unavailability, etc, Replacement/ upgradation of EPABX system may also be discussed among all stake holders.
- 7.5. NRLDC mentioned that Hot line communication system (EPABX) is very critical for grid operation as communication media. 24x7 services are needed with all control centre and power plant/AGC/sub-stations. Therefore AMC is required regularly without any gap. Further, if any upgradation is required, same shall be taken up separately based on life, availability of spares and integration issues with exiting VOIP phones with new exchange.
- 7.6. CTU mentioned that POWERGRID may update the status of availability of spares, life of equipment (being electronic hardware and software item), technology upgradation. If required separate meeting can be conducted with OEMs or stake holders for future course of action for upgradation.
- 7.7. MS, NRPC stated that provision for extension of AMC may be kept in all future contracts.
- 7.8. After detailed deliberation, it was agreed that POWERGRID will explore the options for extension of AMC for next 2-3 years based on availability of spares. Input from OEM (Alcatel Lucent)/System Integrator (ORANGE) for technology upgradation / equipment obsolescence may be shared with CTU for upgradation planning centrally for pan India as done last time.

8. Connectivity of Central Control room of Sterlite with Hotline Exchanges (Agenda by NRLDC)

- 8.1. Matter regarding providing VOIP to central control room was discussed in detail by POWERGRID, NRLDC , CTU and NRPC . After detailed deliberations it was decided that a uniform approach needs to be finalised before allowing such connections.
- 8.2. MS NRPC informed that separate meeting will be called by NRPC consisting of officials from CTU and Grid-India to finalise the approach.

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

- 9.1. Representative from PTCUL informed that they are in process of tendering and RTU procurement and OPGW installation will take at least 1 year. Further, PTCUL informed that they have started replacement of faulty MFTs/CMRs and process will be completed in 1-2 months.

10. Non-availability of Reliable / Redundant Communication System for PTCUL, SLDC (Agenda by NRLDC)

10.1. Representative from PTCUL informed that interim arrangement for providing redundancy will be done within 1-2 months.

11. J&K Telemetry Issues (Agenda by NRLDC)

11.1. Representative from J&K was not available in meeting.

11.2. NRLDC informed that there is no progress in regard to RTU communication and requested POWERGRID to arrange joint visit from Siemens , POWERGRID and J&K officials so that rectification process of RTU can be started

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

12.1. Following timelines were shared by representative from NHPC, POWERGRID.

S.NO.	Name of RTU	Comments	Timeline
1	KISHANGANGA	NHPC	15 th jan 2023
2	PARBATI-2	NHPC	31 st Dec 2023
3	BUDHIL	IPP	
4	KARCHAM WANGTOO	IPP	
5	PARBATI-3	NHPC	31 st Dec 2023
6	AD Hydro	ADHydro	
7	Bhiwadi HVDC	POWERGRID	28 th feb 2023

13.. Telemetry Issues from POWERGRID Stations (Agenda by NRLDC)

13.1. Representative from POWERGRID informed that they are in process of rectification /upgradation and it will take 3 months for rectification i.e. by 28th Feb 2023.

14. Telemetry issue from NTPC Singrauli (Agenda by NRLDC)

14.1. NRLDC expressed concerned about incorrect data from NTPC singrauli. However NTPC representative was not available in the meeting.

15. Incorrect Solar Generation from Punjab (Agenda by NRLDC)

15.1. Representative from PSTCL informed that it was due to incorrect data from one of the developers and they have already taken for rectification and issue will be resolved within 15 days.

16. Non-modelling of Solar Plants in REMC by RRVPNL (Agenda by NRLDC)

16.1. Representative from RRVPNL informed that they will take with vendor for integration of pending in REMC forecasting tool. Further , they informed that

RRVPNL is using existing scheduling tool for scheduling of RE generator and they have not migrated to REMC scheduling tool. NRLDC requested RRVPNL to see the feasibility if RE generator can be scheduling through REMC scheduling tool.

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

17. Issues being faced by HARYANA SLDC

17.1. Non-displaying of Dynamic Values on SLDC Haryana Website

17.1.1. Representative of HVPNL informed that the issue re-appeared in May, 2022 after it was resolved in April'22.

17.1.2. M/s Siemens agreed to resolve this issue in next one month.

17.2. E-DNA new data points list not updating in e-DNA ChAD manager & Loss of data

17.2.1. M/s Siemens informed that issue is pending with the OEM of eDNA and their partner Kalkitech. They have tried multiple time to resolve the issue. They agreed to take up this issue with OEM of eDNA. Further they will also conduct a functionality test of eDNA.

17.3. Dependency of Site Engineer on one or two engineer deputed at NRLDC and Regarding Contractual obligation (qualification) of Site engineer.

17.3.1. M/s Siemens informed that they will depute well-trained engineer at HVPNL and also arrange training for engineers deputed at HVPNL.

17.4. Issue regarding functionality of IMM: - Transfer failed:

17.4.1. M/s Siemens informed that would arrange training session at HVPNL regarding functionality of IMM.

17.5. Compatibility of Siemens web-server:

17.5.1. M/s Siemens informed that this issue has been resolved.

17.6. Image Backup of servers:

17.6.1. M/s Siemens informed that they are planning to install image back up software (acronis) for back up of servers.

17.7. IMM in PDS console not working:

17.7.1. M/s Siemens informed that they will install another IMM at HVPNL in next one month.

17.8. AMC Payment issue:

17.8.1. Representative of HVPNL stated that M/s Siemens is not generating invoice bill since Jan-2022 whereas all the quarterly availability reports were submitted timely till date.

17.8.2. Representative of NRLDC suggested that M/s Siemens may request exemption from HVPNL for non-availability of one site engineer.

17.8.3. M/s Siemens agreed to seek exemption from HVPNL for non-availability of one site engineer and raise invoice at the earliest.

17.9. Regarding extension of AMC of existing SCADA System installed under ULDC Phase-II.

17.9.1. Representative of Powergrid informed that they have started discussion for extension of AMC of existing SCADA System for next two years.

17.10. Replacement/Up-gradation of SCADA-EMS System under ULDC Scheme Phase-III- Modalities of 7 years AMC

- 17.10.1. POWERGRID mentioned that we are not changing their stand for AMC in ULDC Phase-III. He informed that in line with ULDC phase-I, POWERGRID is ready to do AMC on behalf of SLDCs based on their requirement but overhead charges/consultancy cost shall be borne by respective constituent as done in ULDC phase-I, where all payment shall be made to M/s Areva by POWERGRID/ NRLDC, and for maintaining the SCADA System/AMC, Powergrid raised separate invoice for overhead charges.
- 17.10.2. PSTCL informed that we will go ahead in line with ULDC phase-II.
- 17.10.3. RRVPNL mentioned that we want AMC through POWERGRID but AMC changes need to be checked first to avoid additional burden on states.
- 17.10.4. BBMB raised that they will discuss the issue with their management as additional financial implication involves.
- 17.10.5. POWERGRID mentioned that they are going for tendering shortly, therefore all constituents may update their stand, so that same may be incorporated in tender document before floating of NIT to avoid any issues during signing of AMC contract with successful bidders.

18. BBMB Agenda pertaining to ULDC Phase-II and Phase-III SCADA/ EMS

18.1. Modalities for 7year AMC of the SCADA/EMS system.

18.1.1. Already discussed at 17.10.1.

18.2. Implementation of Cyber Security measures in SCADA/EMS — Centralized Patch management/Security controls.

18.2.1. Representative of NRLDC stated that SLDCs may be made responsible for patch management.

18.2.2. Some constituents stated that patch management may be centralized so as to have uniformity among all constituents.

18.2.3. It was decided that POWERGRID, POSOCO and all SLDCs may jointly prepare the procedure for uniform patch management.

18.3. AMC extension of SCADA/EMS System under ULDC Phase-II scheme

18.3.1. Already discussed at 17.9.1.

18.4. Regarding provision/funding for real-time telemetry & 100% visibility of Grid through PSDF.

18.4.1. It was agreed that POSOCO letter dated 13.9.2022 may be forwarded to NPC division CEA for clarification on coverage of replacement/up gradation of SCADA/EMS System under ULDC Phase-III scheme in PSDF funding.

18.5. Regarding Capacity Building for central/state utilities (100% funding maybe done through PSDF)

18.6. Regarding implementation of Security Operation Centre (SOC)

18.6.1. Sub-committee committee decided that this issue may be deliberated by NRLDC and Powergrid, in a separate meeting with will all states.

19. Issues being faced by UP SLDC

19.1.1. Already discussed at 17.10.1

20. Issues being faced by Punjab SLDC

20.1. Regarding suspected data of Power Grid Intrastate drawl Points

20.1.1. Representative of Powergrid assured to resolve the issue at the earliest.

20.2. Cyber security of SCADA system

20.2.1. M/s Siemens informed that an engineer would be sent to PSTCL to address this issue.

20.3. Extension of ULDC-II SCADA system AMC to M/s Siemens

20.3.1. Already discussed at 17.9.1.

20.4. Installation of SOC

20.4.1. Already discussed at 18.6.1.

21. Upgradation of DC Power Supply supplied under ULDC (Agenda by NRLDC)

21.1. POWERGRID informed that they have started the process and replacement would be completed within 3 months i.e. by 28th Feb 2023.

IV. OTHER AGENDA

22. Implementation of Automatic Meter Reading (AMR) in Northern Region (Agenda by CTU)

22.1. Representative of CTU informed that there will be no financial implication on constituents for MDP system.

22.2. Representative of Powergrid informed that they have filed a petition in CERC for seeking relaxation in AMC norms for UNMS project.

22.3. Representative of NRLDC stated that views of constituents may be sought on the proposal.

22.4. MS, NRPC stated that views of constituents may be taken on the proposal. Thereafter, the proposal may be discussed in a separate meeting with constituents after CERC order in PGCIL petition for UNMS project.

23. U-NMS remote console at NRLDC (Agenda by NRLDC)

23.1. Representative from POWERGRID informed that they will provide remote console at NRLDC.

24. Permission to work for Installation of DCPS & Battery and Maintenance activity of existing communication equipment at Manimajra UT sub-station under ULDC scheme (Chandigarh -Panchkula link) (Agenda by POWERGRID)

- 24.1. MS, NRPC suggested that next meeting of TeST may be held in Chandigarh where representative of UT Chandigarh would also be present.
- 24.2. Representative of UT Chandigarh was not available, therefore agenda could not be discussed,
- 24.3. MS, NRPC suggested that next meeting shall be organized at Chandigarh, so that higher officials of UT Chandigarh may be invited for the meeting for resolution of long pending issue.

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

- 25.1. POWERGRID also mentioned that they are going to start integrated FAT for UNMS system from last week of Dec' 2022. All constituents are requested to align their engineers for witness of FAT as per contractual clause. He also informed that they are starting FAT without considering Keymile equipment (HVPNL) as they are still not providing integration permissions, once the permission issued by HVPNL, they will integrate in future. After FAT, materials will be delivered at site (SLDCs). All are requested kindly provide space for placement of server rack and furniture for remote consoles. As on date space issue is being faced at DTL, HPSEBL, PSTCL, BBMB, Jammu SLDC.
- 25.2. Representative of HVPNL stated they they will take up this matter with their management for resolution at the earliest.
- 25.3. It was agreed that a separate meeting may be held by CTU with IPP/Solar park owners for discussion on this issue.

26. Delay in Payment (Agenda by POWERGRID)

- 26.1. It was agreed that this agenda may be taken up by Powergrid in next NRPC and CSC meetings.

27. Settlement of issue of MW tower (Asset of HVPNL) installed at 400KV S/S, Bawana (Agenda by HVPNL)

- 27.1. EE, NRPC informed that as per decision of 20th meeting TeST Sub-committee, a joint meeting may be planned with senior officials (Chief engineer/GM level) from HVPNL and DTL under MS, NRPC to resolve the issue. HVPNL may co-ordinate with NRPC sectt., in this regard.

V. TABLED AGENDA

A.1 End of Life/End of Support of Fortinet Make Internal Firewall for SCADA/EMS System under ULDC Phase-II (agenda by BBMB)

Agenda: In continuation of agenda point 18.3 AMC extension of SCADA/EMS System under ULDC Phase-II scheme, it is intimated that it has recently been learned that current license of Fortinet Make Internal Firewall (OS- Fortigate) installed has current validity till 30.04.2023. Post this the equipment is reaching its end of life/end of support. In this regard, POWERGRID and POSOCO are requested to ensure that M/s Siemens provides a proper solution to this issue so that there is a functional Internal Firewall (with redundancy) till the end of AMC period of ULDC Phase-II, in order to avoid any potential cyber security related issues occurring due to end of life/end of support of existing Internal Firewall.

Minutes: Already discussed at 17.9.1.

A.2 Need for Presentation/Interactive Session to provide clarification on FERV Bills for ULDC State Sector to all Constituents (agenda by BBMB)

- a. **Agenda:** It is intimated that FERV Bills are being raised for ULDC Phase-I scheme in the year 2022. The Phase-I of ULDC Scheme was commissioned on 31.07.2002 and the payment process was done over a period of 15 years (from 2002-2017) the last monthly bill being paid till July 2017. Keeping the above facts and sequence of events in mind, there is need for proper clarification w.r.t background of these bills.
- b. POWERGRID is requested to this clarification through an Interactive Session/PPT/Informative Session for all the constituents of Northern Region to whom these bills are being raised (PSTCL, HVPNL, RVPNL, HPSEB, DELHI, PDD J&K, UPPCL and BBMB) to enlighten these agencies about the entire payment process pertaining to ULDC Phase-I.

Minutes: MS, NRPC stated that since this agenda pertains to finance, BBMB may take up this agenda directly with financial wing of Powergrid.
