

North Eastern Regional Power Committee

Agenda

For

15th NETeST Sub-Committee Meeting

Time of meeting : 14:00 Hrs.

Date of meeting : 21st October, 2019 (Monday)

Venue : "Hotel Nandan", Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 14th NETeST Meeting held on 11.07.2019.

The minutes of 14th NETeST Meeting held on 11th July, 2019 at Guwahati were circulated by NERPC vide letter No. NERPC/SE(O)/TeST/2019/ dated 29th July, 2019.

The Sub-committee may confirm the minutes of 14th NETeST meeting of NERPC as no comments/observations were received from the constituents.

ITEMS FOR DISCUSSION

A.1 Status of SLDCs in NER:

| SN | Utility | Status as informed in 14th NETeST | Latest status |
|-----------------------------|----------------|--|----------------------|
| UPGRADATION OF SLDCs | | | |
| 1 | Assam | Completed in all respect. Assam is requested to complete SAS upgradation which is under progress. | |
| 2 | Tripura | Completed in all respect. However for GPRS system communication, Broadband connection for all site & SLDC(Site where bband not possible, 3G data activated SIM to be given) to be provided by 25-07-2019 but getting delayed due to administrative issues. | |
| 3 | Meghalaya | Completed in all respects. | |
| 4 | NERLDC | Completed in all respects. | |
| NEW SLDCs | | | |
| 5 | Manipur | SLDC SCADA EMS part completed in all respect. 5 sations are reporting.Three (03) stations not reporting: Kongba, Chandel and Tipaimukh. Feasibility of providing Broadband at the station-level to be explored. | |

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|---|---------------|---|--|
| 6 | Nagaland | SLDC SCADA EMS part completed in all respect. GPRS scheme implemented for 6stations. Nagaland-DoP to strictly adhere to the timelines for rectification works as per MoM signed with NERLDC. | |
| 7 | Mizoram | SLDC SCADA EMS part completed in all respect. Out of 4 RTUs, only 1 RTU is reporting at present and OPGW between Lungmaul-Aizawl is not working. Mizoram is requested to provide GPRS/ BB connectivity for Zuangtui, Lungmual and Sihhmui. | |
| 8 | Ar. Pradesh | SLDC SCADA EMS part completed in all respect. Regarding communication (GPRS), DOP,AP has taken up with POWERGRID for some stations. For other stations, DOP,AP has opted in state projects. NERLDC requested NERPC to take up the matter of non-participation and telemetry related issue with DoP, AP. | |
| 9 | Backup NERLDC | Completed in all respects. | |

Any pending points may be discussed

Members may kindly intimate the status.

A.2 Status of FO works under different projects:

Latest status as per 14th NETeST:

| Name of the Project | Latest status may be intimated |
|----------------------------|--|
| MW Vacation & OPGW Project | <p>M/s KEC Handing over MOM signed between AEGCL and PGCIL.</p> <p>A. M/s TENDOT</p> <ul style="list-style-type: none"> a. WIP in all 14 links b. Progress affected due to ROW. c. Expected completion March'19. <p>NOTE:</p> <p>Arunachal Pradesh may please provide new tower route schedule & readiness for LILO part (Lekhi connectivity from existing Nirjuli-Ranganadi line). The schedule completion 2 months from receipt of new tower route schedule.</p> |

| | |
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| | <p>Railway diversion of POWERGRID also suffering due to ROW in 3 locations to be resolved by Arunachal Pradesh.</p> <p><i>NERTS replied that OPGW link Nirjuli-Ranganadi with LILO at Lekhi is still having ROW issue. Equipment for the above are also considered in NER FO expansion project.</i></p> <p><i>Action: DoP Ar. Pradesh</i></p> |
| <p>NER FO Expansion/Additional requirement of OPGW</p> | <p>TRIPURA</p> <ul style="list-style-type: none"> • 257 of 320 .319 (Actual 257, 63km-no front) Km Completed. Details attached • 63.522 km (02 links viz. SM Nagar~Rokhia & SM Nagar~Monarchak, line is under construction) front not available due to construction of 2 lines by TSECL • Completion Status : <p>NOTE1: Silchar-Pallatana OPGW work under halt due to objection of NETC & OTPC for transient lightning related fault in rainy season.</p> <p>NOTE 2: Manipur: Supply – Complete, Erection: 160/365km km, Team is mobilized by M/s TCIL. Target completion: July-19. Battery bank/DCPS under NERFO- Supplied & installed</p> <p>Central Sector: NERTS mentioned that the only OPGW link pending in Tripura is the Surjamani Nagar-Palatana and rest all links have been completed. There is space constraint in RC Nagar. Support from RC Nagar NEEPCO is requested for early commissioning of the link. Letters & Reminders sent to NEEPCO. Without the same, connectivity of Fibcom link is pending for a long time. The real-time data of stations such as Rokhia, Udaipur, Gumti and Kamalpur will report to Tripura-SLDC by 01st August in case space is provided by NEEPCO in time at R.C. Nagar.</p> <p>Action: NERTS & NEEPCO.</p> <p>Tripura : Connectivity of Islanded location Satchand & Sabroom (Satchand-Sabroom OPGW part is completed) TSECL may use PLCC or NERPSSIP fiber to</p> |

| | |
|--|--|
| | <p>connected by TSECL. The same is pending from State. Action: TSECL</p> <p>Meghalaya : WIP for both equipment and OPGW part. MePTCL may help in getting Shut-down of Leskha-Khliehriat Link. A shut-down time of around 5 hrs is required for it. .</p> <p>Action: MePTCL & NERTS.</p> <p>Manipur : 1. The work got delayed due to tower collapse between Kakching- Churachandpur- Ningthoukhong. As reported same is restored recently, the work will be restarted. 2. 132kV Loktak (NHPC) ~ Rengpang: Team retreated after one trial (during Loktak –Imphal was done)/ Links around Loktak area will be tried at one go to avoid ROW/ miscreant/terrorist prone area.</p> <p>NERLDC requested for progress report in the matter of links in Manipur at the end of Jul '19 and convey the list of communication links which will be extended till Aug'19 for completion.</p> <p>Note: NERTS mentioned that works related to RTUs and associated cabling-works which are handed over to state-utilities is not under the scope of NERTS and hence needs to be done by state-utilities themselves. The requisite hand-sets for voice communication needs to be procured and provided by the site/SLDC itself.</p> <p>MS i/c-NERPC stated that the jurisdiction of works to be done by POWERGRID and State-utilities need to be specified and brought-out clearly for time execution of projects. All the works to be done by POWERGRID and state-Utilities can go in parallel for achieving the targets in time.</p> <p>Action: POWERGRID-NERTS to write to each state about works which needs to be done from their side with the corresponding timelines.</p> |
| | <p>15 Location Completed.</p> |

| | |
|------------------------------------|--|
| <p>Upgradation of ULDC FO node</p> | <p>Except Umtru Power Station. MePTCL informed that there is space constraint in the present PLCC room. A separate room will be needed to accommodate the equipments under this project.</p> <p>NERTS informed that official from NERTS had visited for collection of card and found there is still no space. Without the same, project cannot be completed. And so help from MEPTCL/G division is requested.</p> <p>2nd visit made. Report submitted to Director, Generation-MePGCL. Further space inside UMTRU is to be cleaned & AC system not working.</p> <p>NERTS informed that joint visit of SLDC, MePTCL & POWERGRID was done 08.05.2019 to Umtru after meeting CE-Generation. It was decided that SDH & PDH shall be installed in PLCC room. Original ULDC fibers to be used to connect STM16 ring. However, MePTCL may connect their equipment with Fibcom or ECI equipment for wide band path access. Further PLCC room at Umtru is to be made dust free & facilitated with AC by the owner. Detailed scheme sent to MePTCL.</p> <p>A meeting called by PGCi with MePTCL for making schedules of work but postponed to pre-assignments of MePTCL. Target for meet (MePTCL & PGCi) by 20.07.19</p> |
|------------------------------------|--|

NERTS may discuss the present status:

Critical Issues against project implementation may be discussed

| Name of the Project | Critical Issue |
|-----------------------------|---|
| Upgradation of ULDC FO Node | Space constraint in Umtru, non-availability of fiber in Misa-Dimapur-Imphal (old OPGW) & Space in Kohima |
| MW Vacation | ROW issue in Nirjuli-Ranganadi Line, non-readiness of two tower peak in DoP AP transmission Line for LILO to Leikhi. Stoppage of work due to ROW/Paddy field etc. |

NERTS may please submit the latest status link-wise under various FO projects

Members may please discuss.

B. NEW ITEMS

B.1 Strengthening of PLCC System by NER States:

As per discussion in previous meetings the following were supposed to be completed by Jan'19:

- a. 18th TCC/RPC consolidated network of OPGW.
- b. NERPSIP communication details.
- c. Assam, Manipur, Meghalaya communication map submitted by the respective utilities.

In 14th NETeST meeting NERLDC mentioned that Tripura has given comments regarding editing its corresponding network in communication map on 10-07-2019 and the same will be incorporated in the existing communication map. The map will be updated as and when inputs are given by state-utilities and NERTS to keep it up-to-date for necessary use.

NERLDC mentioned that representatives from NERPSIP team are not attending the NETeST meeting and hence the corresponding updates are not getting updated to the Forum. Hence, NERPSIP team should be invited to the quarterly review meeting on NERPSIP projects conducted by NERPC.

Members may please discuss.

B.2 Improvement of data availability of NER:

As per IEGC 4.6.2, all users shall ensure telemeter power system parameters to RLDC. The present level of data availability of NER grid is as tabled in the **Annexure-B.2**, which is less than 50% in the region.

NERLDC submit to NERPC to advice TSECL, DoP Mizoram and DoP, Arunachal Pradesh for improvement of the data availability of respective state-owned stations.

All constituents should have a detailed action plan and deadlines for strict compliance to ensure 100% reliable & redundant data to NERLDC for efficient grid operation.

NERLDC may please deliberate

B.3 Status of URTDSM

Angle error and rectification: Angle Error/Phase sequence error was solved in six (06) number of stations out of nine (09) stations in the month of September'19. However, NERTS is requested to solve the issue in remaining three (03) stations namely, 220 kV Dimapur (PG) S/s, 220 kV Mariani (AS) and Kopili HEP

Status of Loading of Power System Analysis package by IIT Mumbai: Five (05) applications of Powergrid Analytics Software (PAS) out of Six (06) were uploaded in NERLDC URTDSM system, by IIT Bombay and PGCIL officials, in the month of July'19. However, an application for Control schemes for improving system security is still pending for uploading. NERTS is requested to expedite the work.

NERLDC may confirm or update what to be done for rest of that stations based on the feedback by POWERGRID after corrections done as per system study group of NERLDC.

NERTS, NERLDC may please intimate the latest status

B.4 GPRS connectivity for Substations and Leased line for SLDC:

In 14th NETeST meeting the following timeline(s) were agreed to by the different utilities:

| Name of utility | GPRS SIM/Broadband | Lease Line connectivity at SLDC |
|------------------------|--|--|
| TSECL | 2 (DharmaNagar and PK Bari) Location completed (SAT not signed by TSECL) but for other locations, SIM is yet to be provided by State Utility. NERTS informed that Broadband connection shall be provided, wherever possible, for better data connectivity. | Not Available. |
| MSPCL | All stations are reporting. | Available |
| DoP Nagaland | 5 out of 11 locations (Nagarjan, Khipire, Mokokchung, Kohima & LHEP) completed. For other locations, link could not be established due to poor network. Party requested DoP, Nagaland through letter dated 01.07.2019 to provide broadband connection. | Not Available |
| P&ED Mizoram | 3G SIM & Internet link with static IP is yet to be provided. | Not Available |

TSECL/MSPCL/DoP Nagaland/P&ED Mizoram/NERTS may please inform the latest status.

B.5 Selected cases of sub-stations for rectification of corresponding data/communication related issues:

a) NEEPCO:

- i. Ranganadi:** The matter was discussed in 14th NETeST Meeting and it was deliberated that 'NERTS will make 2nd path of PLCC between BNC and RHEP as BNC is wideband location. The proposed path will be Ranganadi to BNC (on PLCC) and BNC to NERLDC (on wideband) subsequently. The work will be completed by first week of Sep'19.'
- ii. Kathalguri:** SSingle-channel PLCC between Kathalguri and Misa. The matter was discussed in 14th NETeST meeting, it was deliberated that 'NERTS informed the forum that the PLCC link from Kathalguri to Mariani station was tested. Mariani station has a wide-band connection for further data transfer. The Kathalguri-Mariani PLCC link may be used as a backup path after

completion of FO connection. The work will be completed by first week of Sep'19.'. The aforesaid work is yet to complete.

- iii. Doyang:** Real-time Data of Doyang HEP are not reporting since 16/09/2019. On further observation, it was found RTU is not getting through to communication equipment at Doyang. Phone is also not working as Doyang sub-station is not able to hear voice on Orange-VoIP phone.

NEEPCO may address the different issues of each station on priority with strict deadline.

NEEPCO may please intimate the status.

- b) NTPC BgTPP:** Only one (01) VoIP phone is available and that too in "Switchyard Control Room". No phone is available in the Unit Control Room (03 in nos.).

The matter was discussed in 14th NETeST and it was deliberated 'NERTS informed the forum that one phone is working. The other voice link which was earlier working via PLCC may kindly be restored by NTPC. NERTS has already allotted port for the same. NTPC representative were absent. Since NTPC member is absent NERLDC requested Forum to inform about shift of VoIP phone from Switchyard to Unit Control Room in subsequent meeting. NERTS provided "23640135" as second number. The same needs to be extended to all the unit control rooms at the earliest.' However, the VoIP are still not extended till control rooms of NTPC BgTPP.

NTPC may provide dedicated VoIP phones in all Unit Control Rooms on priority with strict deadline.

NTPC may please intimate the status.

- c) POWERGRID Salakati:** The data of the sub-station takes a lot of time in pooling (happens automatically after every communication failure and restoration). It generally takes about 1 hr. for this station. The matter was highlighted in 14th NETeST meeting, it was deliberated that 'NERTS will address the issue' as well as in meeting held between NERLDC and NERTS on 17/09/2019. The issue is long pending and yet to solve.

NERTS, POWERGRID may address the issue by finding and resolving the issue of slow pooling on priority with strict deadline.

NERTS may please intimate the status.

- d) OPTC Palatana:** Real-time data of Palatana are reporting over single channel of PLCC between Palatana - Silchar. It is observed during data outages that restoration of data takes significant amount of time. However, it is requested to ensure dualchannel which can reduce the outage period of data.

OTPC may please intimate the status.

- e) NHPC Loktak:** In 14th NETeST NHPC informed the forum that the Notice Inviting Tender (NIT) has been approved and will be uploaded in CPP Portal for tendering purposes. The work-order is expected to be placed by Sep'19 with a completion schedule of three (03) months i.e. end of December 2019.

NHPC may please intimate the status.

f) Tripura: i. General Issue: Data of all the sub-stations (especially southern Tripura) goes OUT in case of any grid failure. All data is being received through Agartala-Rokhia line in which any tripping leads to high noise in PLCC leading to data interruption.

In 14th NETeST Manager, TSECL informed the forum that Tripura will investigate on the mentioned issues and rectify it at the earliest.

ii. Surjamani Nagar: Battery bank issues are being faced in the sub-station. All data goes OUT in case of any power supply failure. In 14th NETeST, Manager, TSECL informed the forum that the battery will be replaced in July, 2019. And NERTS requested that Air-conditioning environment needs to be provided in all battery-bank rooms at the earliest.

Tripura may please intimate the status.

g) Meghalaya owned stations: SLDC NEHU may update the stations as per observations, in table, in SCADA system of SLDC. Necessary help will be extended by NERLDC.

| Sl. No. | Station Name | Observation |
|---------|--------------|--|
| 1. | Ampati | Entire Station not modelled at SLDC. |
| 2. | Rongkhon | EMS database not modelled in SLDC. Only SCADA database is modelled. |
| 3. | Nangalbibra | EMS database not modelled in SLDC. Only SCADA database is modelled. |
| 4. | Nongstoin | EMS database not modelled in SLDC. Only SCADA database is modelled. |

MePTCL may please intimate the status.

h) Mizoram: SLDC Mizoram may update the stations as per observations, in table, in SCADA system of SLDC. Necessary help will be extended by NERLDC.

| Sl. No. | Station Name | Observation |
|---------|--------------|--------------------------------------|
| 1. | Saitul | Entire Station not modelled at SLDC. |
| 2. | Khawzawl | Entire Station not modelled at SLDC. |
| 3. | Champai | Entire Station not modelled at SLDC. |
| 4. | Serchhip | Entire Station not modelled at SLDC. |
| 5. | Lunglei | Entire Station not modelled at SLDC. |

DoP Mizoram may please intimate the status.

i) Assam: SLDC Assam may update the stations as per observations, in table, in SCADA system of SLDC. Necessary help will be extended by NERLDC.

| Sl. No. | Station Name | Observation |
|---------|--------------|--|
| 1. | Majuli | EMS database not modelled in SLDC. Only SCADA database is modelled. |
| 2. | Dhemaji | EMS database not modelled in SLDC. Only SCADA database is modelled. |

SLDC Assam may please intimate the status.

j) Nagaland: SLDC Nagaland may update the stations as per observations, in table, in SCADA system of SLDC. Necessary help will be extended by NERLDC.

| Sl. No. | Station Name | Observation |
|---------|--------------|--|
| 1. | Meluri | EMS database not modelled in SLDC. Only SCADA database is modelled. |
| 2. | Kiphire | EMS database not modelled in SLDC. Only SCADA database is modelled. |

SLDC Nagaland may please intimate the status.

B.6 Status of pilot VSAT project:

The quotation for terminal server for converting 101 RTUs to Ethernet output has been acquired which is of cost Rs. 1, 40,000.

NERPC may please make consensus and gather purview of constituents in implementation and cost-sharing of VSAT pilot project.

Members may please discuss.

B.7 Drawal points data availability:

In 14th NETeST meeting, MS i/c-NERPC stated that the states have to put efforts to improve the availability of the telemetry, which in turn is causing them huge penalty amounts in the DSM Pool Account, etc. Major steps needs to be taken at the earliest by all utilities so that the drawl point data availability can be ensured at the earliest.

NERLDC insisted that all constituents must maintain the telemetry data of drawl points consistently..

NERLDC may please intimate the status.

B.8 VSAT For Roing Tezu Namsai:

Demo VSAT communication link was established between 132 kV Tezu S/s and NERLDC for transmitting real time data of 132 kV Tezu S/s. The demo was successful and data were transmitting from 21st August 2019 to 30th September 2019 without interruptions in link. NERTS is requested to update the status of data communication link for 132 kV Roing, Tezu and Namsai.

NERTS may please intimate the status.

B.9 Readiness for supply of CFEs in Badarpur (2nd TS Node)

Two nos. of links have been taken from POWERTEL on cost-plus basis for Badarpur to Backup NERLDC, Misa to Backup NERLDC. Process of procurement of Terminal servers has been initiated by NERLDC, Purchase order will be placed by the month of October'19. Following which vendor will take two-three months for supply, installation and commissioning of the equipment. NERTS is requested to submit the list of stations which can be dropped at Badarpur substation.

NERLDC may please intimate the status.

B.10 Data validation status of all PGCIL owned substations:

The database validation (refer **Annexure-B.10**) of POWERGRID owned sub-stations in NER has been completed from POSOCO end and the list of addresses has been shared with NERTS, POWERGRID.

NERTS / NERLDC may please intimate the status.

B.11 Data validation status of all stations of Assam:

The database validation from POSOCO and Assam end has been completed. The corresponding data validation table can be referred as **Annexure-B.11a**. NERLDC extended support for integrating data of LTPS and NTPS. However, the data integration of LRPP and NRPP are pending as per MoM attached as **Annexure-B.11b**.

The corrective actions for rectification to be done by APGCL and AEGCL and corresponding deadline to be conveyed and the status of rectification of data related issues as highlighted in the Validation-List with corresponding deadlines needs to be elaborated.

APGCL & AEGCL may please intimate the status.

B.12 Data validation status of all stations of Meghalaya:

The database validation from POSOCO and Meghalaya end has been completed. The corresponding data validation table can be referred as **Annexure-B.12**.

The corrective actions for rectification to be done by MePTCL corresponding deadline to be conveyed and the status of rectification of data related issues as highlighted in the Validation-List with corresponding deadlines needs to be elaborated.

MePTCL may please intimate the status.

B.13 Schedule for completion of FO projects under execution:

A meeting on the above referred matter has been done between NERTS, POWERGRID and NERLDC, POSOCO on 17-09-2019. The list of undergoing FO projects can be referred from **Annexure-B.13**.

Members may please discuss.

B.14 Data validation status of all stations of Nagaland:

A meeting on data validation was conducted between POSOCO and DoP, Nagaland on 05th July 2019. And another meeting on VC was conducted between POSOCO, POWERGRID and DoP, Nagaland was conducted on 08th July 2019. The corresponding MoMs can be referred as **Annexure-B.14**.

The corrective actions for rectification to be done by DoP, Nagaland corresponding deadline to be conveyed and the status of rectification of data related issues as highlighted in the Validation-List with corresponding deadlines needs to be elaborated.

DoP, Nagaland may please intimate the status.

B.15 Shut Down Procedure for Optical Links:

In 14th NETeST meeting, NERLDC mentioned that the shut-down procedure is not being followed by many utilities and at many occasions which is leading to real-time data interruption. Many-a-times the shut-down of communication links is being taken without prior intimation OR just an e-mail is being sent for intimation.

MS i/c-NERPC stated that the shut-down procedure of communication links needs to be strictly followed by all utilities.

Members may please discuss.

B.16 Dual channel availability for reliable and redundant communication system in NER:

The Dual-channel availability for reliable and redundant communication system to be provided at Main NERLDC, Shillong as well as Backup NERLDC, Guwahati.

NERTS to update the dual-channel reporting considering the completion of FO projects by Dec'19. Dual-channels are required at both Shillong and Guwahati premises of NERLDC, POSOCO.

NERTS and NERLDC may please discuss.

B.17 Long outage of RTU data:

In 14th NETeST meeting, DGM, NERTS informed the forum that the process for reporting fault & restoration (for each station, NERTS) is under preparation and will be shared by NERTS with NERLDC.

Further regarding any issue related to Regulation/CERC-May'17, NERLDC/NLDC may write & take up with LD&C, CC-POWERGRID for early solution.

NERTS may please intimate the status.

B.18 Standard procedure to exchange the information regarding the SCADA database between SLDC and NERLDC.

In the 14th NETeST meeting, GM, NERLDC mentioned that the SCADA databases of SLDCs should always be in sync to eliminate the non-availability of data due to mismatch in respective databases. He requested all SLDCs to maintain the databases in sync and inform NERLDC in case of any change.

Members may please discuss.

B.19 The time line for OPGW connectivity to the following Power Stations of NEEPCO:

- i) AGBP
- ii) DHEP
- iii) PaHEP

In the 14th NETeST meeting, NERTS informed the forum that the OPGW connectivity for the above stations are covered under NER-FO project and timeline(s) are as follows:

- i) AGBP - July'19
- ii) DHEP - July'19
- iii) PaHEP - Dec'19.

Members may please discuss.

B.20 Utilities executing regional projects to submit monthly progress report to NERPC:

The issue was discussed in 14th NETeST meeting and NERPC stated that monthly progress report may be submitted to NERPC. Till date, only NERTS is submitting the same. NERLDC & NERTS may discuss between each other as & when required as needed for smooth grid monitoring. The monthly progress report shall contain information related to projects under micro-wave vacation, FO expansion and PSDF funded projects and State projects.

Members may please discuss.

B.21 Integration of Dikshi HEP real time data and pending Voice communication:

Dikshi HEP generation station data were integrated on 12/09/2019 by extending all technical support from NERLDC. Real time data are reporting over VSAT communication link. However, voice communication is pending. DoP, AR may kindly take up with Dikhsi for providing dedicated voice communication from Dikshi to SLDC Arunachal.

DoP, AP may please intimate the status.

B.22 Integration of RTUs over completed FO links:

POWERGRID informed that following FO links are completed:

- a. Imphal(State) to Yaingangpokpi

- b. Yaingangpokpi to Kongba
- c. Nagarjan to SLDC Nagaland.
- d. Dimapur to Doyang

On completion following RTUs should be integrated by respected states:

- a. Yaingangpokpi and Kongba: By Mainpur State
- b. Nagarjan: By DoP, Nagaland.
- c. Doyang HEP: By NEEPCO

DoP, Nagaland, MSPCL and NEEPCO may please intimate the status.

B.23 Issue of mismatch in timestamp of SoE of PGCIL owned Substations:

Mismatch of timing between NERLDC SCADA time and field time is observed in substation of PGCIL. PGCIL has solved the issue in 132 kV Aizawl, 132 kV Kumarghat and 132 kV Nirjuli S/s. However, the issues of few stations are still pending and those are list in the table below. As Sequence of Events (SoE) is important for grid disturbance analysis. The mismatch should be rectified at the earliest.

| Sl. No. | Station Name | SOE mismatch |
|----------------|---------------------|---------------------|
| 1 | Jiribam | 30 min |
| 2 | Mariani | 60 min |
| 3 | Salakati | 60 min |
| 4 | Silchar | 30 min |
| 5 | Tezu | 05:30 hr |
| 6 | Ziro | Date and Time |
| 7 | Imphal | 20 min |
| 8 | Khliehriat | 15 min |
| 9 | Mokokchung | 60min |

NERTS may please intimate the status.

B.24 Delay of FO Expansion for shut down related issues:

Non availability of Shut down in last 3 OCCs for OPGW Links and related delay in project execution. (Many shutdown like LILO of Rang anandi Balipara at BNC, LILO of Ranganadi-Nirjuli, SM Nagar-Pallatana(Silchar Pallatana) has been cancelled or postponed for grid constraints or due to avoiding loss of generation). The executing agencies like Tendot, TCIL have been asking gang idling charges. All are requested to put emphasis so that shut down (for power line crossing, critical safety, diamond formation , river cross where earth wire not available) is allowed in time to complete project in time.

Members may please discuss.

B.25 Co-ordination issue at some sites where Link is ready but RTU not connected through New Link:

POWERGRID had intimated respective utilities for advance action (what is to be done by State/ISGS & what is in scope of communication vendor). However, for example, even after link & port details are ready & communicated, RTU of Kathaguri, Do yang, Khandong are not integrated.

Members may please discuss.

B.26 Data restoration in minimum possible time:

A brief description will be given by POWERGRID on data restoration in minimum possible time when Kopili Node was disturbed due to water burst.

Members may please discuss.

Any other item:

Date and Venue of next NETeST:

It is proposed to hold the 16th NETeST meeting of NERPC on second week of January 2020. The date & exact venue will be intimated in due course.

Annexure B.2

Telemetry Availability Status at NERLDC from Constituents (as on 03-10-2019):

| Sl. No. | Name of the Constituents | Total Analogue Data points | Total Digital Data points | Total Data Points | Analogue Data points Reporting | Digital Data Points Reporting | Total Reporting | Total Percentage of data Availability |
|---------|--------------------------|----------------------------|---------------------------|-------------------|--------------------------------|-------------------------------|-----------------|---------------------------------------|
| 1 | Arunachal Pradesh | 128 | 172 | 300 | 3 | 38 | 41 | 13.66% |
| 2 | Assam | 1476 | 1994 | 3470 | 697 | 809 | 1506 | 43.40% |
| 3 | Manipur | 180 | 255 | 435 | 48 | 77 | 125 | 28.73% |
| 4 | Meghalaya | 409 | 386 | 795 | 232 | 97 | 329 | 41.38% |
| 5 | Mizoram | 71 | 50 | 121 | 12 | 12 | 24 | 18.60% |
| 6 | Nagaland | 237 | 270 | 507 | 51 | 128 | 179 | 35.30% |
| 7 | Tripura | 524 | 715 | 1239 | 168 | 178 | 346 | 27.92% |
| 8 | PGCIL | 568 | 1147 | 1715 | 470 | 973 | 1443 | 84.14% |
| 9 | NEEPCO | 205 | 295 | 500 | 137 | 214 | 351 | 70.2% |
| 10 | NTPC | 28 | 53 | 81 | 28 | 53 | 81 | 100% |
| 11 | OTPC | 41 | 78 | 119 | 41 | 78 | 119 | 100% |
| 12 | NHPC | 20 | 36 | 56 | 17 | 29 | 46 | 82.14% |
| | NER | 3867 | 5423 | 9290 | 1887 | 2657 | 4544 | 48.91% |

ANNEXURE B.10
STATUS OF DATA VALIDATION OF NERTS STATIONS AS ON
10/10/19

| Sl. No. | Name of RTU | Status of Data validation |
|---------|-------------------|--|
| 1 | Aizawl | Completed |
| 2 | Badarpur | Completed |
| 3 | Balipara | Completed |
| 4 | BNCHVDC | Completed |
| 5 | Bongaigoan | Completed |
| 6 | Dimapur | New gateway under integration |
| 7 | Haflong | Completed |
| 8 | Imphal | Completed |
| 9 | Itanagar(Nirjuli) | Completed |
| 10 | Jiribam | Completed |
| 11 | Khleiriat | Completed |
| 12 | Kopili-Ex | After completion of GIS |
| 13 | Kumarghat | Completed |
| 14 | Mariani | Completed |
| 15 | Melriat | Completed |
| 16 | Misa | Completed |
| 17 | Mokokchung | Completed |
| 18 | Namsai | To be corrected after implementation of VSAT |
| 19 | Roing | To be corrected after implementation of VSAT |
| 20 | Salakati | Completed |
| 21 | Silchar | Silchar gateway doesn't support configuration of both side of ICTs |
| 22 | Tezu | To be corrected after implementation of VSAT |
| 23 | Ziro | Completed |

ANNEXURE B.11a

| SL. NO | Name Of The Sub-Station | Present Reporting Source | Target Date Of Completion as per MOM | Issue Description | Remarks | New Target Date |
|--------|-------------------------|--------------------------|--------------------------------------|---|---|-----------------|
| 1 | AGIA | RTU | August-19 | SAS Upgradation work in progress | | January,20 |
| 2 | ASHOK PAPER MILL (APM) | NONE | August-19 | 1. RTU is Faulty 2. SAS Upgradation going on | Covered under PSDF PLCC Equipement and associated service project. | December,19 |
| 3 | AZARA | SAS | August-19 | 1. Most of Digital Data not reporting 2. 220KV BUS3 Voltage Wrongly reporting 3. 220KV BUS3 Frequency not reporting 4. Transformer Tap position not reporting | ABB SAS Engineers Deputation Required. | -- |
| 4 | PANCHGRAM | None | July-19 | No Issue | Completed | -- |
| 5 | BEHIATING | SAS Gateway | July-19 | Transformer2 LV not reporting because of meter issue | New MFM has been ordered as per RE, Behiating GSS. | Feb,2020 |
| 6 | BILASIPARA | SAS Gateway | July-19 | Gateway Issue | Diagnosis To be done by ALSTOM/GE SAS Engineers | Not provided |
| 7 | BNC | NONE | July-19 | 1. SAS COMMISSIONING NOT COMPLETED. 2. PLCC link work under PSDF under progress | SAS Upgradation work will start Soon material received at Substation | December,19 |
| 8 | BOKAJAN | RTU Gateway | | 1. Transformer2 Analog Data not reporting 2. Isolators are wrongly reporting 3. Transfor's tap positions not reporting 4. Transformer-2 ,HV & LV breaker status to be checked 5. SAS work yet to start 6. ECI Mux Card Issue At SLDC | Bokajan is restored on 17.08.2019 and it is reporting now. All other issues would be resolved once SAS gateway is commissioned. SAS panel commissioning is yet to be started. | Mar-20 |
| 9 | BOKAKHAT | SAS Gateway | April-19 | 1. Bus Coupler status not reporting 2. Bus-2 , Voltage & frequency not reporting 3. Transformer-1 & 2 Tap positions not reporting | Field Issue | Not provided |
| 10 | BOKO | RTU | | 1. ECI Mux data Card issue at SLDC, 2. SAS conversion work not yet started | SAS Upgradation work will start Soon material received at Substation | Feb,2020 |
| 11 | BONGAIGAON (BTPS) | RTU | April-19 | SAS Upgradation Partially Completed | Reporting | -- |
| 12 | BORDUBI | NONE | May-19 | SAS Gateway Commissioning not done | | Feb,2020 |

8.
ANNEXURE 11. A

| SL. NO | Name Of The Sub-Station | Present Reporting Source | Target Date Of Completion as per MOM | Issue Description | Remarks | New Target Date |
|--------|-------------------------|--------------------------|--------------------------------------|--|--|-----------------|
| 13 | BORNAGAR | SAS Gateway | April-19 | 1. Bypass Isolator of Dhaligaon and Rangia not reporting 2. Transformer 3 Analog and Digital not reporting | 1. Bypass Isolator MB (Marcelin Box)not available 2. Transfromaer 3 Panel can not be Intregrated with present SAS there is no supplied BCU panel in PSDF Scheme | Not provided |
| 14 | CHANDRAPUR | NONE | July-19 | SAS Upgradation Work in Progress | | November,19 |
| 15 | DEPOTA | SAS Gateway | | 1. BUS Isolator of Dhekiajuli and Ghoramari wrongly reporting 2. Transformer1 Analog and Digital not reporting 3. BUS-2 Voltage & Frequency not reporting 4. BUS sectionalizer isolator not reporting 5. Tranformer-1 & 2 tap positions not reporting 6. Transformer 2 LV isolator Not Reporting | 1. Transfromer 1 Bay BCU Burn out 2. No Control cable Available at for indication Bus2 voltage & Current 3. No Transducer Present for Transformer 1&2 Tap Positions 4. For Remaining issues necessary Action taken up with Siemens Engineer | Not provided |
| 16 | DHALIGAON | RTU | May-19 | 1. Transfor 1 and 3 Analog and Digital not reporting 2. BUS1 Voltage not reporting 3. BUS2 Voltage and Frequency not reporting | 1. Transfromer1& 3 is not in the Scope of Present SAS Upgradation Program | Not provided |
| 17 | DHEKIAJULI | SAS Gateway | May-19 | 1. Field Issue | Daignosis to be done by Vention Engineers | Not provided |
| 18 | DHEMAJI | NONE | July-19 | SAS COMMISSIONING WORK IN PROGRESS. | | December,19 |
| 19 | DIBRUGARH | SAS Gateway | July-19 | 1. Bus2 Voltage and Frequency not reporting 2. Transformer 1 and 2 Tap position wrongly reporting 3. Tinsukia BUS1 and BUS2 isolator wrongly reporting | Reporting | --- |
| 20 | DIPHU | RTU | July-19 | SAS Upgradation Work in Progress by M/s ERL | | Dec-19 |
| 21 | DISPUR | SAS Gateway | July-19 | 1. Chandrapur Analog and Digital not reporting 2. Transformer 2 Analog and Digital not reporting | Not reporting | Not provided |
| 22 | DULLAVCHERRA | RTU | | ECI Mux card Card issue at SLDC | To be covered under PSDF PLCC Equipement project | Dec-19 |

ANNEXURE B.11.a

| SL. NO | Name Of The Sub-Station | Present Reporting Source | Target Date Of Completion as per MOM | Issue Description | Remarks | New Target Date |
|--------|-------------------------|--------------------------|--------------------------------------|--|--|-----------------|
| 23 | GAURIPUR | SAS Gateway | April-19 | 1. All Digital are Suspect 2. Transformer -1 tap position suspect | Completed | -- |
| 24 | GOHPUR | SAS Gateway RTU | July-19 | 1. SAS Upgradation Work In progress 2. Link Issue | | December,19 |
| 25 | GOLAGHAT | RTU | July-19 | SAS work under progress by M/S ERL | | January,20 |
| 26 | GOSSAINGAON | NONE | August-19 | EARTH MAT Work Going on | Completed | -- |
| 27 | HAFLONG | RTU | October-19 | LINK WORK UNDER PROCESS. | Waiting for Financial approval followed by LOI | Not provided |
| 28 | HAILAKANDI | SAS Gateway | April-19 | 1. Current Values of feeder and Transformer Not Reporting 2. Analog data of Panchgram Not Reporting 3. ECI Mux data Card issue at SLDC | GE SAS Engineers Deputation Required. | Not provided |
| 29 | JAGIROAD | SAS Gateway | April-19 | PLCC Link Issue | Gateway Issue, Inverter problem | September,19 |
| 30 | JAWAHARNAGAR | SAS Gateway | April-19 | 1. All data suspect except MVAR data of Sarusajai 2. Gateway Issue | ERL engineer deputation required | December,19 |
| 31 | JORHAT (GARMUR) | RTU | April-19 | 1. Bus-1 voltage & frequency not reporting 2. Tranfo-1 all data suspect/wrongly reporting 3. Most of the digital status suspect/wrongly reporting 4. Transformer -2 & 3 tap suspect | Not reporting | Sep-19 |
| 32 | JORHAT (WEST) | SAS Gateway | | No Issue | Completed | -- |
| 33 | KAHILIPARA | SAS Gateway | May-19 | No Issue | Completed | -- |
| 34 | KAMAKHYA | SAS Gateway | | No Issue | Completed | -- |
| 35 | KAMALPUR | SAS Gateway | April-19 | 1. BUS-1 Voltage and Frequency not reporting 2. Digital Data of Rangia Line1 not reporting 3. Transformer1 LV Digital not reporting. 4. Transformer2 LV Digital not reporting. | Field Issue | Not provided |

ANNEXURE B.11.A

| SL NO | Name Of The Sub-Station | Present Reporting Source | Target Date Of Completion as per MOM | Issue Description | Remarks | New Target Date |
|-------|-------------------------|--------------------------|--------------------------------------|---|--|-----------------|
| 36 | KOKRAJHAR | SAS Gateway | | No Issue | Completed | -- |
| 37 | NORTH LAKHIMPUR | NONE | July-19 | Link Establishment Work in Progress | SAS Upgradation work under process, Link to be established under NERPSIP | Oct-19 |
| 38 | LTPS | RTU | | 1. Most of Digital Data not reporting 2. BUS Voltage wrongly reporting 3. ECI Mux Card Issue at SLDC | Not reporting | Sep-19 |
| 39 | KARBI-LANGPI | RTU + SAS | | Only Generators data reporting | Single channel PLCC panel available. No channel available for Gateway data | Not provided |
| 40 | LANKA | RTU | July-19 | SAS Upgradation work under process | Not reporting | Sep-19 |
| 41 | MAJULI | NONE | July-19 | LINK TO BE ESTABLISHED. | LINK TO BE ESTABLISHED. | January,20 |
| 42 | MARGHERITA | NONE | August-19 | 1. SAS work not started yet 2. PLCC LINK NOT AVAILABLE. | SAS upgradation work not started yet | Feb,2020 |
| 43 | MARIANI | RTU | July-19 | 1. Samaguri-1 Analog and Digital Data suspect/ Wrongly reporting 2. Most of the Digital Suspect 3. BUS-2 Isolator of BUS reactor suspect 4. Tap position of transformers suspect | SAS upgradation work not started yet | January,20 |
| 44 | MORAN | SAS Gateway | April-19 | Transfer Bus Voltage & Frequency Not reporting | Not reporting | Not provided |
| 45 | MATIA | SAS Gateway | | Link Issue | Tower Collapse at LOC no. 51 | Oct'19 |
| 46 | NAGAON (KHALOIGAON) | SAS Gateway | May-19 | | Reporting | -- |
| 47 | NALBARI | SAS Gateway | April-19 | BCU Issue | Reporting | -- |
| 48 | NAMRUP | RTU | | ECI Mux data Card issue at SLDC | SAS upgradation work not started yet | Not provided |
| 49 | NAMRUP PS 1 | NONE | | 1.SAS Gateway Commission not done | 1.SAS Gateway configuration update is required as IP series at SLDC end got changed. | Not provided |
| 50 | NARANGI | SAS Gateway | | Resolved | Completed | -- |

**MOM held between APGCL and AEGCL at O/o GM LTPS Maibella, Assam-785689
on 6th September 2019**

Members Present :

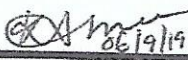
| <u>For APGCL</u> | <u>For AEGCL</u> | <u>For NERLDC</u> |
|-------------------------|------------------|--------------------|
| Sri A. K Kalita GM LTPS | Sri. P. Saha AGM | Sri M. K Ramesh GM |
| Sri T Basumatary DGM | Sri D. Saikia DM | |
| Sri A Saikia DGM | Sri A. Sarmah M) | |
| Sri H Hazarika AGM | | |


Reference:

1. APGCL/CGM(G)/AERC/2018/115/PT-XI/39, dated 28-08-2019
2. MD/AEGCL/DPRO/2017/Part-1/64 dated 29.08.2019

Following points were discussed for early integration of Switchyard data, LRPP data , LTPS Phase-II HV side data and Steam Turbine HV Data :

1. Joint visit of AEGCL and NERLDC representatives made on 5th September in LTPS and LRPP Generating station with the objective of improving the telemetry status.
2. A joint meeting was organized by GM LTPS ,DGM LTPS and other senior and field officials along with AEGCL and NERLDC representative to decide how to proceed with improving the telemetry status and also Nodal officers for telemetry work was identified from APGCL and AEGCL for proposed actions and rectifications. Nodal officers from APGCL and AEGCL are as follows:
 - a. Sri Harinarayan Hazarika, AGM (Electrical) APGCL
 - b. Sri Bikash Sarma , DM APGCL
 - c. Sri Migom Mili ,DM APGCL
 - d. Sri Sanjay Mallick, AM APGCL
 - e. Sri Debojit Saikia DM AEGCL


06/09/19
GM NERLDC
(in presence of)


Kalita


Basumatary


Saha


Saikia


Ramesh

3. It has been observed under joint visit of representatives that LV side 3 nos. Generators of LTPS Phase-II and 1 no. Steam Turbine Generator is reporting SLDC via AREVA C264 RTU installed at Switchyard Control Room. However the digital data i.e CB and isolator status is not reporting
4. In the LTPS switchyard all the analog data except Namrup Feeder I MW ,MVAR ,Bus Coupler CB and Isolator status are reporting to SLDC .
5. No real time data from LRPP reporting to SLDC.
6. Based on the above observation the team of APGCL nodal officers and AEGCL, NERLDC representatives a detailed field study was made and following are the suggestions for implementation

i. For LRPP

The nodal officers of APGCL have to study with the vendor Warstila for integration of electrical parameter data over IEC 60870-5-101/104 to the communication equipment located at switchyard control room. The nodal officers have to initiate an email to get the confirmation regarding the above said configuration on or before 16th September 2019. Also the nodal officers have to collect detailed information on as built control system automation layout (Document No. CBG01247801A1000). Copy enclosed. AEGCL will ensure physical communication interface for IEC 60870-5-101/104 is available at LTPS Switchyard Communication equipment. The nodal officer of AEGCL has to ensure the link upto SLDC Kahilipara.

ii. For LTPS Phase -II and Steam Turbine

Nodal officer of APGCL has to ensure the commissioning of 4 nos. MFTs at HV side of the Generator to C264 RTU and for the CB status data of both LV side and HV side of generator also to be provided.

During the above discussion APGCL submitted that 4nos. MFTs may be provided by AEGCL. In this nodal officer of APGCL may send official request through proper channel.

iii. For switchyard

Namrup Fdr-1 analog data and CB data of Namrup Fdr-1 to be rectified by AEGCL by September 2019.

Integration of 11/132KV Trafo-1 and Trafo-2 Analog MW and MVAR data at HV side along with CB status of the bay need to be done by AEGCL.

Integration of 132/33KV Trafo-1 and Trafo-2 Analog MW and MVAR data at HV side along with CB status of the bay need to be done by AEGCL.

AEGCL to ensure the integration of above switchyard data latest by September 2019.

iv. Voice communication from LRPP and LTPS to SLDC Kahilipara

AEGCL will ensure the voice communication from LRPP and LTPS unit control room to Kahilipara for which APGCL has to provide necessary cabling from unit control room to switchyard Communication room with necessary handset at unit control room.

The work targeted to complete by September 2019.

GM NERLDC
(in presence of)

**Draft of Minutes of Meeting between NERLDC and Meghalaya SLDC held at
NEHU SLDC premises on 27th May 2019**

A meeting was held, inline with minutes of 13th NETeST meeting, among representatives from NERLDC, Shillong and Meghalaya SLDC, Nehu and System Protection Division on 27th May 2019 for discussing various issues related to non-availability of real-time data of stations and communications etc. owned by MePTCL. The list of participants is listed in table below.

| | |
|---------------------------------------|----------------------------|
| M.K. Ramesh (General Manager, NERLDC) | F.E.Kharshiing (SE, SLDC) |
| Akhil Singhal (Chief Manager, NERLDC) | B.Nikhla (EE, SP) |
| Sakaideep Chauhan (Engineer, NERLDC) | D.J.Lyngdoh (EE, SM, SLDC) |
| | B.Narry (AEE,C&C) |
| | C.W.Chen (AEE, SLDC) |

The General Manager (SL, NERLDC) gave opening remarks about proceedings of the meeting and expressed his concerns about low availability of real-time data (32%) related to stations under MePTCL. The GM (SL, NERLDC) also suggested that the issues may be classified into following categories –

- Non-availability of data due to projects getting implemented under PSDF
- Communication Links issues
- Site-level issues related to RTUs, Transducers, CT/PT terminations, etc.
- Operation & Maintenance like loose cabling, earthing issues, etc.
- Single Line Diagram between Field/Site and SLDC SCADA system
- Database validation checking between Meghalaya SLDC and NERLDC

A summary of discussion is listed below.

1.0 Station-wise issues related to non-availability of real-time data to NERLDC

As a first step, station-wise issues were discussed in detail related to non-availability of real-time data at SLDC and subsequently to NERLDC and a target action plan with time-line was prepared, wherever possible. The summary of the above discussion is listed in table below.

| Sl. No. | Name Of Stations | Reason for Non-availability of Real Time data | Category of Work to be executed | Target Date for rectification | Remarks |
|---------|------------------|--|---------------------------------|---|---|
| 1 | Cherapunjee | PLCC issue b/w Mawlai to Nehu | Communication Media | Commissioning dates to be intimated at the earliest (MePTCL to complete on priority to increase availability of data) | Commissioning of Digital PLCC b/w Mawlai to NEHU to be taken up on priority to resolve the issue. |
| 2 | EPIP-1 | <ul style="list-style-type: none"> • New MFTs are required • Additional Digital Card to be procured for capturing remaining Digital inputs | O&M | Analog data by 2 nd Week of Jun'19 | MFTs computability issues also being faced |

| Sl. No. | Name Of Stations | Reason for Non-availability of Real Time data | Category of Work to be executed | Target Date for rectification | Remarks |
|---------|------------------|---|---------------------------------|---|--|
| 3 | EPIP-2 | <ul style="list-style-type: none"> New MFTs are required Additional Digital Card to be procured for capturing remaining Digital inputs | O&M | Analog data by 2 nd Week of Jun'19 | -- |
| 4 | Khleiriat | <ul style="list-style-type: none"> New Cables will be laid for all digital inputs. Additional Digital cards to be procured for Isolators status. | O&M | 3 rd week of Aug'19 | Digital Cards are available only for CBs at present. |
| 5 | Killing | <ul style="list-style-type: none"> Failure of PLCC link between Killing & EPIP 2 Status of some of the Isolators is intermittent in nature and needs to be analysed by SLDC | O&M | Till 31 st May 2019 | <ul style="list-style-type: none"> Some alarm at Killing end indicating problem at EPIP 2 end. May require manual tuning of PLCC panels ON/OFF of PLCC panels can be tried |
| 6 | Leska | NSK 5 modem in PLCC panels seems to have some problem in its card | O&M | 4 th Week of Jun'19 | <ul style="list-style-type: none"> RTU and media seems to be functional. Speech transfer in working but not data transfer. MePTCL to test modem at Leska. May request PGCIL to divert some additional Modem in spares, if available. |
| 7 | Lumshnong | <ul style="list-style-type: none"> Operation and Maintenance issues. Needs to be checked and resolved | O&M | 1 st Week of Jul'19 | <ul style="list-style-type: none"> Digital status data of some feeders not reporting Analog data of ICT-1 not reporting |
| 8 | Mawlai | <ul style="list-style-type: none"> CBs status to be rectified Additional Digital Card to be procured for Isolators status | O&M | 31 st May 2019 | <ul style="list-style-type: none"> Station under modernization and a new bay is also under construction which may take around 1 year. Shifting of panels is being done and new |

[Handwritten signatures and initials]

| Sl. No. | Name Of Stations | Reason for Non-availability of Real Time data | Category of Work to be executed | Target Date for rectification | Remarks |
|---------|------------------|--|---------------------------------|--------------------------------|--|
| | | | | | panels will be placed subsequently. • Date of modification will be intimated to SLDC/NERLDC |
| 9 | Mawngap | Additional Digital Card to be procured for capturing remaining Digital inputs | O&M | To be decided | -- |
| 10 | Mendipathar | <ul style="list-style-type: none"> • ICT 2 whole bay not reporting • Additional card for Digital Data to be procured | O&M | Tentatively In Jul'19 | Visit to Garo Hills to be decided tentatively In Jul'19 |
| 11 | Mustem | <ul style="list-style-type: none"> • ICT 2 whole bay not reporting • Needs to be checked and resolved | O&M | 3 rd week of Jun'19 | <ul style="list-style-type: none"> • Bus 2 data and ICT 2 data not available • All digital status data not available |
| 12 | Nangalbibra | <ul style="list-style-type: none"> • 132 kV Nongstoin Digital data is under PSDF • ICT 2 is removed from service | O&M | Tentatively In Jul'19 | Visit to Garo Hills to be decided tentatively In Jul'19 |
| 13 | Nehu | Additional Digital Card to be procured for capturing remaining Digital inputs | O&M | To be decided | All isolators data not available |
| 14 | NEIGHRIMS | <ul style="list-style-type: none"> • ICT 2 data is not reporting as it failed last week • Additional Digital Card to be procured for capturing remaining Digital inputs under PSDF | O&M | To be decided | -- |
| 15 | Nongston | Earthing issues at Nangalbibra | O&M | Tentatively In Jul'19 | <ul style="list-style-type: none"> • Entire station's data not reporting • MePTCL to take up the issue with EE (T&T, Tura) |
| 16 | New Umtru | No issues | -- | -- | -- |
| 17 | Rongkhon | <ul style="list-style-type: none"> • C&R panels are erected; only terminations required • Additional Cards for isolators status needs to be procured | O&M | Tentatively In Jul'19 | Visit to Garo Hills to be decided |

~~Signature~~

Signature - *Signature*

| Sl. No. | Name Of Stations | Reason for Non-availability of Real Time data | Category of Work to be executed | Target Date for rectification | Remarks |
|---------|------------------|--|---------------------------------|-------------------------------|---|
| 18 | Umiam 1 | To be analysed by SLDC and reported/resolved subsequently (visit planned till 31 st May 2019) | -- | 31 st May 2019 | <ul style="list-style-type: none"> Visit till 31st May'19 for planning further action plan Unit 2 & 3 data are not reporting All digital data are not reporting |
| 19 | Umiam 2 | Problem with DC supply of RTU (visit planned till 31 st May 2019) | O&M | 31 st May 2019 | Visit till 31 st May'19 for planning further action plan |
| 20 | Umiam 3 | <ul style="list-style-type: none"> Additional Digital Card to be procured for capturing remaining Digital inputs To be analysed by MePTCL and reported/resolved subsequently (visit planned till 31st May 2019) | O&M | 31 st May 2019 | <ul style="list-style-type: none"> Visit till 31st May'19 for planning further action plan Unit 1 under long outage |
| 21 | Umiam 4 | <ul style="list-style-type: none"> PLCC media issue To be analysed by MePTCL and reported/resolved subsequently (visit planned till 01st week of Jun'19) | Communication Media | To be decided | -- |
| 22 | Umiam | To be analysed by MePTCL and reported/resolved subsequently (visit planned till 01 st week of Jun'19) | O&M | To be decided | <ul style="list-style-type: none"> ICTs data is not reporting Chemtrols-make RTU installed. |
| 23 | Umtru | Additional Digital Card to be procured for capturing remaining Di inputs | O&M | To be decided | <ul style="list-style-type: none"> All units are put out-of-service No plan for R&M of units Station is acting like a switching station at present |

2.0 Schedule Plan for procurement of additional Digital Cards along with other accessories

MePTCL needs to be furnish the schedule-plan for procurement of additional digital cards, cabling, field cabling works, etc. to SLDC/NERLDC for improvement of Isolator status.

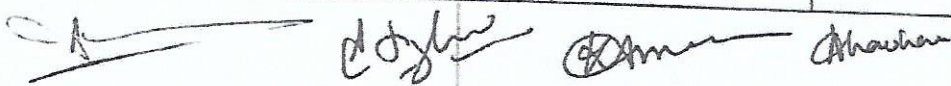
3.0 Validation of database and displays

It was jointly agreed by NERLDC and SLDC that the database and displays of NERLDC will be validated with that available with SLDC and the same process will be followed by SLDC w.r.t. that available with sub-station site.

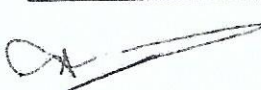
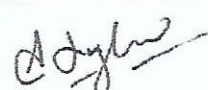




NERLDC mentioned that an executive from NERLDC will be deputed at SLDC from 27-28th May 2019 for the validation of displays and database of stations under jurisdiction of Meghalaya SLDC. The observations after the database and displays validation activities are listed in table below for necessary rectification at SLDC/NERLDC end.

| Sl. No. | Name Of Stations | Database Comparison | SLD Comparison (Site and SLDC) | SLD Comparison (SLDC and RLDC) |
|---------|------------------|--|--|---|
| 1 | Cherrapunjee | No issues. | No Issues. | To be done after necessary corrections at SLDC end. |
| 2 | EPIP-1 | Transformer 2 is removed from SLDC database; To be removed from NERLDC database | Extra at site: Grey Stone, Transformer 2, Sai Prakash Extra at SLDC: Killing 2, Pione | To be done after necessary corrections at SLDC end. |
| 3 | EPIP-2 | Transformer 2 is removed from SLDC database; To be removed NERLDC database | Extra at site: ICT, Capacitor, Trishul Extra at SLDC: New Umtru | To be done after necessary corrections at SLDC end. |
| 4 | Khleiriat | Transformer 2 is removed from SLDC database; To be removed NERLDC database | Extra at site: Badarpur, ICT 2, Nehu Extra at SLDC: Mustem, Leska 1, Leska 2 | To be done after necessary corrections at SLDC end. |
| 5 | Killing | No issues. | Updated site SLD not available | To be done after necessary corrections at SLDC end. |
| 6 | Leska | No issues. | No issues. | To be done after necessary corrections at SLDC end. |
| 7 | Lumshnong | Amrit Line is under testing; Amrit_ME to be added in NERLDC database after commissioning of station; Load D_HILCM_LUMSH to be replaced with AMRIT line; Load D_JUD_LUMSH to be replaced with D_LUMSH_MPL_load | Extra at site: Hill Cement, Jud Extra at SLDC: Amrit, MPL | To be done after necessary corrections at SLDC end. |
| 8 | Mawlai | No issues. | Extra at site: Mawph 2 Extra at SLDC: Cherrapunjee | To be done after necessary corrections at SLDC end. |
| 9 | Mawngap | Bus 2 kV is not modelled in SLDC & NERLDC Database; No issues | Extra at site: Mawla 2, Cherrapunjee Extra at SLDC: Future | To be done after necessary corrections at SLDC end. |
| 10 | Mendipathar | No issues. | Extra at site: Nangalbibra 2 Extra at SLDC: Agja | To be done after necessary corrections at SLDC end. |



| Sl. No. | Name Of Stations | Database Comparison | SLD Comparison (Site and SLDC) | SLD Comparison (SLDC and RLDC) |
|---------|------------------|---|--|--|
| 11 | Mustern | No issues. | No issues. | <i>To be done after necessary corrections at SLDC end.</i> |
| 12 | Nangalbibra | Transformer 2 is removed from SLDC database; To be removed NERLDC database | Updated site SLD not available | <i>To be done after necessary corrections at SLDC end.</i> |
| 13 | Nehu | Bus 2 kV is not modelled in SLDC & NERLDC Database; No issues | Extra at site: Khleiriat Extra at SLDC: Mustern | <i>To be done after necessary corrections at SLDC end.</i> |
| 14 | NEIGHRIMS | No issues. | No issues. | <i>To be done after necessary corrections at SLDC end.</i> |
| 15 | Nongston | No issues. | No issues. | <i>To be done after necessary corrections at SLDC end.</i> |
| 16 | New Umtru | No issues. | No issues. | <i>To be done after necessary corrections at SLDC end.</i> |
| 17 | Rongkhon | Ampati Substation to be modelled in NERLDC SCADA database; D_AMPAT_RONGK 1 & 2 to be added in NERLDC SCADA database; Transformer 5 to be removed from NERLDC SCADA database | Updated site SLD not available | <i>To be done after necessary corrections at SLDC end.</i> |
| 18 | Umiam 1 | No issues. | Site SLD not available | <i>To be done after necessary corrections at SLDC end.</i> |
| 19 | Umiam 2 | No issues. | Site SLD not available | <i>To be done after necessary corrections at SLDC end.</i> |
| 20 | Umiam 3 | Bus 2 kV is not modelled in SLDC & NERLDC Database; No issues | Site SLD not available | <i>To be done after necessary corrections at SLDC end.</i> |
| 21 | Umiam 4 | Bus 2 kV is not modelled in SLDC & NERLDC Database; No issues | Site SLD not available | <i>To be done after necessary corrections at SLDC end.</i> |
| 22 | Umiam | Bus 2 kV is not modelled in SLDC & NERLDC Database; No issues | No issues. | <i>To be done after necessary corrections at SLDC end.</i> |
| 23 | Umtru | Bus 2 kV is not modelled in SLDC & NERLDC Database; Unit 1 to 4 and DA_T1, DA_T2 to be | Extra at site: Unit 1 to 4 Extra at SLDC: New Umtru | <i>To be done after necessary corrections at SLDC end.</i> |

| Sl. No. | Name Of Stations | Database Comparison | SLD Comparison (Site and SLDC) | SLD Comparison (SLDC and RLDC) |
|---------|------------------|------------------------------|--------------------------------|--------------------------------|
| | | removed from NERLDC database | | |

4.0 Projects under implementation by Power System Development Fund (PSDF)

MePTCL's System Protection Division stated that various projects are under progress and being funded by PSDF such as establishment of communication links and upgradation of sub-stations by implementing SAS systems. NERLDC mentioned that the plans and target dates for completion need to be listed and shared to NERLDC in view of availability of telemetry.

5.0 Weekly/Monthly report of telemetry status

NERLDC stated that a weekly/monthly report of telemetry status is being shared by NERLDC to Meghalaya SLDC and System Protection Division of MePTCL on regular basis. Meghalaya SLDC mentioned that it is in receipt of all such reports and will coordinate accordingly.

6.0 Joint collaboration for resolution of issues

The meeting ended with a resolution to provide all support from both NERLDC and Meghalaya SLDC side for quick rectification of all the listed issues and extending support for all related matters.



ANNEXURE 6.13

| S. No. | Link name | OPGW Stringing Status | End Equipment Status | Terminal Equipment related Remarks | Target as per 20th TCC Agenda |
|-----------|--|--|----------------------------------|------------------------------------|---|
| I. | Fiber Optic Expansion Projects | | | | |
| | Central Sector | | | | |
| 1 | 132kV Melriat(PG) - Silchar (PG) | Complete | Complete | -- | Completed |
| 2 | 132kV Khandong - Haflong (PG) | Complete | I&C - Work in Progress | -- | Sep-19 |
| 3 | 132kV Dimapur (PG) - Doyang (NEEPCO) | Complete | I&C - Work in Progress | -- | Sep-19 |
| 4 | 132kV Doyang (NEEPCO) - Mokokchung (state) | Complete | I&C - Work in Progress | -- | Sep-19 |
| 5 | 220kV Mokokchung (PG) - Mariani (PG) | Complete | I&C - Work in Progress | -- | Sep-19 |
| 6 | 400kV Mariani (PG) - Kathalguri (NEEPCO) | Complete | I&C - Work in Progress | -- | Sep-19 |
| 7 | 400kV Surjamani Nagar - (TSECL) - Palatana (OTPC) | Stringing Completed: 27.967/ 36.714 km. | I&C - Work in Progress | -- | Oct-19 |
| 8 | 132kV Badarpur (PG) - Jiribam (PG) | Stringing Completed: 48/ 67.166 km. | I&C - Work in Progress | -- | Sep-19 |
| 9 | Bongaigaon (PG, 400kV) - 220kV Salakati - 220kV BTPS | 0/ 4.5 km | I&C - Work in Progress | -- | Oct-19 |
| 10 | 400kV Mirza (Azara) - Byrnihat | 0/ 47.208 km | I&C - Work in Progress | -- | Oct-19 |
| 11 | 400kV Silchar - Palatana | Stringing completed: 61.146/ 247.409 km. RoW Issues. | I&C - Work in Progress | -- | Dec-19 |
| 12 | 132kV Agartala (TSECL) - RC Nagar (NEEPCO) | Complete | Pending due to space constraints | -- | Oct-19 Space is provided by NEEPCO in August only. |
| 13 | 132kV Jiribam (PG) (Manipur) - Loktak (NHPC) | 0/ 82.461 km | I&C - Work in Progress | -- | Dec-19 |
| 14 | 132kV Loktak (NHPC) - Imphal (PG) | Complete # | I&C - Work in Progress | -- | Sep-19 |
| 15 | P.K. Bari (TSECL) - LILO of NETCL Belonia | 0/ 10.441 km | I&C - Work in Progress | -- | Dec-19 |
| 16 | 132kV Pare - Chimpu | 0/ 31 km | I&C - Work in Progress | -- | Dec-19 |
| | Manipur State Sector | | | | |
| 1 | 132kV Yurembam - Yaingangpokpi | Complete # | I&C - Work in Progress | -- | Sep-19 |
| 2 | 132kV Yaingangpokpi - Kongba | Complete # | I&C - Work in Progress | -- | Sep-19 |
| 3 | 132kV Kongba - Kakching with LILO at Thoubal | Complete # | I&C - Work in Progress | -- | Sep-19 |

ANNEXURE B13

| S. No. | Link name | OPGW Stringing Status | End Equipment Status | Terminal Equipment related Remarks | Target as per 20th TCC Agenda |
|-----------------------------|---|------------------------------------|------------------------|------------------------------------|---|
| 4 | 132kV Imphal (State) - Karong | 45.4/ 60 km. Work in progress. | I&C - Work in Progress | -- | Oct-19 ROW to be solved. Matter intimated to State |
| 5 | 132kV Kakching - Churachandpur | 19.60/ 38 km. Work in progress. | I&C - Work in Progress | -- | Oct-19 Work delayed & to restart after collapsed tower restored by state |
| 6 | 132kV Loktak (NHPC) - Ningthoukhong | Complete # | I&C - Work in Progress | -- | Sep-19 |
| 7 | 132kV Yaingangpokpi - Hundung | 14.5/ 30 km | I&C - Work in Progress | -- | Sep-19 |
| 8 | 132kV Kakching - Chandel | 16.37/ 25 km | I&C - Work in Progress | -- | Sep-19 |
| 9 | 132kV Loktak (NHPC) - Rengpang | 0/ 47 km | I&C - Work in Progress | -- | Jan-20 |
| 10 | 132kV Jiribam - Jiribam (State) | 0/ 1 km | I&C - Work in Progress | -- | Sep-19 |
| 11 | 132kV Ningthoukhong - Churachandpur | 16.80/ 32 km | I&C - Work in Progress | -- | Oct-19 Work delayed & to restart after collapsed tower restored by state |
| Tripura State Sector | | | | | |
| 1 | 132kV Agartala (TSECL) - Barumura (GTP) | Complete | Complete | -- | Data and Voice reported dated 31-03-2019. SAT Pending, Oct'19. |
| 2 | 66kV 79 Tilla Grid (TSECL) - Badarghat | Complete | Complete | -- | Data and Voice reported dated 31-03-2019. SAT Pending, Oct'19. |

ANNEXURE B 13

| S. No. | Link name | OPGW Stringing Status | End Equipment Status | Terminal Equipment related Remarks | Target as per 20th TCC Agenda |
|--------|--|---|------------------------|------------------------------------|--|
| 3 | 132kV Suramani Nagar (TSECL) - Budhung Nagar | Complete | Complete | -- | Data and Voice reported dated 31-03-2019. SAT Pending, Oct'19. |
| 4 | 132kV Agartala (TSECL) - SM Nagar (TSECL) | Complete | Complete | -- | Data and Voice reported dated 31-03-2019. SAT Pending, Oct'19. |
| 5 | 132kV Palatana (OTPC) - Udaipur (TSECL) | Complete | I&C - Work in Progress | -- | Oct-19 |
| 6 | 132kV Udaipur (TSECL) - Rokhia (GTP) | Complete | I&C - Work in Progress | -- | Oct-19 |
| 7 | 66kV Udaipur (TSECL) - Gumti HEP | Complete | I&C - Work in Progress | -- | Oct-19 |
| 8 | 66kV Gumti HEP - Amarpur (TSECL) | Complete | I&C - Work in Progress | -- | Oct-19 |
| 9 | 66kV Satchand (TSECL) - Sabroom (TSECL) | Complete | I&C - Work in Progress | -- | Oct-19 |
| 10 | 132kV 79 tilla Grid (TSECL) - Dhalabil (TSECL) | Complete | I&C - Work in Progress | -- | Oct-19 |
| 11 | 132kV Rokhia (GBPP) - Surjamani Nagar (TSECL) | Supply complete. Front not ready (TL under construction). | | -- | Link to be deleted. Supply material to be handed over to TSECL. DOCO will be done with consent from TSECL. |
| 12 | 132kV Surjamani Nagar (TSECL) - Monarchak (NEEPCO) | Supply complete. Front not ready (TL under construction). | | -- | Link to be deleted. Supply material to be handed over to TSECL. DOCO will be done with consent from TSECL. |

ANNEXURE 813

| S. No. | Link name | OPGW Stringing Status | End Equipment Status | Terminal Equipment related Remarks | Target as per 20th TCC Agenda |
|-------------------------------|---|-----------------------|--|---|------------------------------------|
| Meghalaya State Sector | | | | | |
| 1 | 132kV Nehu - Neigrihms | 0/7.7 km | I&C - Work in Progress | -- | Oct-19 |
| 2 | 132kV Khliehriat (PG) - Khlieriat (State) | Complete # | I&C - Work in Progress | -- | Oct-19 |
| 3 | 132kV Khlieriat (State) - Myntdu Leshka HEP | 24/24.932 km | I&C - Work in Progress | -- | Oct-19 |
| 4 | 132kV Khlieriat (PG) - Lomshnong (S/C) | 2/25.19 km | I&C - Work in Progress | -- | Oct-19 |
| Nagaland State Sector | | | | | |
| 1 | 132kv Kohima (132kV) - Kohima (220kV) | 0/ 25 km | I&C - Work in Progress | -- | Dec-19 |
| 2 | 132kV Kohima - Wokha | 0/ 58 km | I&C - Work in Progress | -- | Dec-19 |
| 3 | 132kV Doyang - (NEEPCO) - Sanis | 0/ 10 km | I&C - Work in Progress | -- | Dec-19 |
| Mizoram State Sector | | | | | |
| 1 | Aizawl - Zemabawk I | 0/ 1 km | I&C - Work in Progress | -- | Sep-19 |
| II. | MW Vacation Scheme | | | | |
| 1 | 132kV Silchar - Srikona | Complete | Complete | | Data reporting. |
| 2 | 132kV Mariani - Mariani | Complete | Complete | | Completed |
| 3 | 132kV Nirjuli - Ranganadi with Pare | RoW Issue | Supply and Installation over. SAT/ Commissioning pending. | MW vacation - Nirjuli, Ranganadi and Pare. | ** 03 months after ROW is resolved |
| 4 | Imphal (PG) - Imphal (State) | Complete | I&C - Work in Progress | MW Vacation - Imphal (PG). FO Expansion - Imphal (State) | Oct-19 |
| 5 | 132kV LILO of aizawl - Zemabawk-II at Melriat Sub-station | Complete | Jul-19 | MW Vacation - Melriat | Oct-19 |
| 6 | 132kV Melriat-Shimui | Complete | I&C - Work in Progress | MW Vacation - Melriat. FO Expansion - Shimui | Oct-19 |
| 7 | 132kV Mokokchung (PG) - Mokokchung (State) | Complete | I&C - Work in Progress | FO Expansion - Mokokchung (PG) and Mokokchung (State) | Oct-19 |
| 8 | Ranganadi - Gohpur (Part-I) | Complete | Complete | | Completed |
| 9 | Ranganadi - Gohpur (Part-II) | Complete | Complete | | Completed |

ANNEXURE 8.13

| S. No. | Link name | OPGW Stringing Status | End Equipment Status | Terminal Equipment related Remarks | Target as per 20th TCC Agenda |
|--------|--|-----------------------|------------------------|---|--------------------------------------|
| 10 | Aizawl - Zemabawk II | Complete | I&C - Work in Progress | Mw Vacation - Aizawl FO Expansion - Zemabawk II | Oct-19 |
| 11 | Dimapur - Dimapur | Complete | I&C - Work in Progress | MW Vacation - Dimapur FO Expansion - Dimapur (State) | Oct-19 |
| 12 | 132kV Ranganadi - Ziro | Complete | I&C - Work in Progress | MW Vacation - Ranganadi FO Expansion - Ziro | Oct-19 |
| 13 | 132kV Lekhi-Itanagar/ Chimpur SLDC | Complete | I&C - Work in Progress | MW Vacation - Itanagar SLDC FO Expansion - Lekhi | Oct-19 |
| 14 | 132kV LILO of Nirjuli-Ranganadi at Lekhi | RoW Issue | I&C - Work in Progress | MW Vacation - Nirjuli, Ranganadi FO Expansion - Lekhi | **03 months after ROW is resolved |
| 15 | BNC LILO-25 KM | -- | -- | -- | Oct-19 |

Note:

- 1) Strike & Protest in Northeast due to GST Amendment bills.
- 2) Strike, Curfew in Arunachal Pradesh in the month of Feb'19
- 3) Strike, Curfew in Meghalaya in the month of May'18- Jun'18
- 4) Floods in Assam & Manipur - Jul'17
- 5) RoW issues (paddy field/ asking additional compensation)
- 6) Work connected to Trans line connected to Loktak was stopped two times due to miscreants. The same will be restarted soon
- 7) Recent flood in June & July 19 across upper Assam, Lower & South Assam has hindered movement of Fibcom team, Tejas team to Tripura, Meghalaya & AP. However teams have been re-mobilized

Minutes of Meeting for SLDC Nagaland visit on 05th July 2019

The meeting was attended by following executives:

| NERLDC, POSOCO | PGCIL | SLDC Nagaland, DoP Nagaland |
|--------------------------------------|---|---|
| Shri M K Ramesh, GM, NERLDC | Shri P. Borah, DGM, 220 kV Dimapur(PG) | Er. Tiameren, EE(Communication), DoP Nagaland |
| Shri Sakal Deep, Engineer, NERLDC | | Er. Rokobeito, SDO |
| | | Er. D Chakraborty, SDO(SLDC) |
| | | Er. Tiakaba Yimchunger, JE(SLDC) |
| | | |

The meeting started with visit of Control Room of SLDC Nagaland.

- GM, NERLDC addressed the issue of non-availability of LED display for frequency, time and block number.
- The same issue is long pending from M/s GE T&D. This will be rectified by M/s GE T&D on urgent basis. M/s GE T&D informed it will be investigated and if the issue is on software part the same will be rectified by 12th July'19. And if the issue is on hardware part the same will be rectified by 26th July'19.
- The server room was checked and the Fibre Optic connection of PowerTel was found along with Tejas 1400 Mux installed at server room in SLDC Nagaland building.
- From Tejas 1400 Mux (Mux installed at server room in SLDC Nagaland building), ICCP and VC link for SLDC Nagaland are terminating.
- The orange exchange of VoIP phones are also installed at server room of SLDC Nagaland building.
- A new mux of Fibcom, under MW Vacation project, is also erected at server room of SLDC Nagaland building. This will be commissioned after completion of link Dimapur (PG) to Dimapur (NA), the same will be completed on or before 09th July'19 as informed by PGCIL representative.
- Meeting proceeded with discussion on availability of data and communication channel for each Nagaland owned stations. The detailed discussions are attached as Annexure A and Annexure A.1.
- It is informed that SIM for 11 stations out of 12 stations are provided to M/s PMAS for integration of data over GPRS.
- It is further informed, DoP Nagaland are executing the project of PLCC which will connect following nine (9) stations. Erections of panels are completed. Only testing and commission are left, which will be completed in coming three (3) months: Kohima, Dimapur (NA), Sanis, Meluri, LHEP, Mokokchung, and Dimapur(PG): as bypass station.
- NERLDC provided suggestion of rectifying the issue of non-availability in stages. As following:

Shri Sakal Deep
05/07/19
(Sakal Deep)

Rokobeito
(Rokobeito)

1

D. Chakraborty

P. TIAKABA YIMCHUNGER

GM (SL)
NERLDC

Minutes of Meeting for SLDC Nagaland visit on 05th July 2019

- Checking the availability of RTU at site.
- Checking the availability of link from site to SLDC.
- Data validation of RTU after reporting of data.
- GM, NERLDC along with DoP Nagaland officials visited 132 kV Nagarajan and 66 kV Power house to address the issue of non-availability of data.
- During the visit of 132 kV Nagarajan and 66 kV Power house S/s following were the observations:
 - In 132 kV Nagarajan S/s, it is observed that GPRS MODEM is kept inside the RTU room, where signal strength is weak and causing intermittency of data communication. It is suggested to shift the GPRS MODEM outside the room for better signal strength.
 - In 66 kV Power house S/s, it is observed that 110 V DC was not extended to RTU, the same was available at the time of commissioning and later disconnected. It was suggested to extend the 110 V DC to RTU and connect GPRS MODEM for data transmission. The signal strength in this station is healthy, as it is in the vicinity of city. This station is vital for observing the load of Dimapur City like: Civil Hospital, Airport etc. M/s DeeJay has agreed to complete the work by 12th July'19.
- 132 kV Ganesh Nagar, RTU was commissioned. The integration of same will be done by 12th July'19 with GPRS and SLDC Nagaland. This station is 35 KM from SLDC Nagaland.
- 132 kV Sanis S/s, which was not modelled earlier the visit, is modelled at SLDC database. It will be integrated with installation of RTU at site.
- Target dates for each station, as per Annexure A, will be provided in VC on 08th July'19.

Shouham
05/07/19

Aslebank



Amu
GM(SL),
NERLDC

Annexure A

| Sl. No. | NAME OF STATION | Voltage Level (KV) | Total Analog | Total Digital | Total Points | Analog Reporting | Digital Reporting | Total Reporting | %age analog | %age Digital | %age Total | STATUS (as on 04/07/2019) | Current Reporting Media | Fibre Optic Project (Under Implement) | Remarks | Tentative Target |
|---------|------------------|--------------------|--------------|---------------|--------------|------------------|-------------------|-----------------|-------------|--------------|------------|---------------------------|-------------------------|---------------------------------------|--|--------------------------------|
| 1 | DIMAPUR NAGARJAL | 132 | 35 | 39 | 74 | 15 | 38 | 53 | 42.86 | 97.44 | 71.62 | Partially Reporting | GPRS | M/W Vaction Project | Data are reporting. Refer annexure A.1 | |
| 2 | GANESH NAGAR | 66 | 7 | 6 | 13 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | GPRS | | Modem is installed. SIM connection to be checked at site. Data will report after SIM connection rectification. | |
| 3 | KIRHIRE | 132 | 20 | 27 | 47 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | GPRS | | Data are reporting. Refer annexure A.1 | |
| 4 | KOHIMA | 132 | 18 | 27 | 45 | 9 | 13 | 22 | 50.00 | 48.15 | 48.89 | Partially Reporting | Boardband | FO expansion | Data are reporting. Refer annexure A.1 | |
| 5 | LEBP | 66 | 11 | 14 | 25 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | Boardband | | GPRS issue to be rectified NO RTU at station | |
| 6 | MELURI | 132 | 9 | 3 | 12 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | No media | | NO RTU at station | |
| 7 | MOKOKOHUNG | 132 | 55 | 58 | 113 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Partially Reporting | Boardband | FO expansion | Data are reporting. Refer annexure A.1 | To be decide at VC on 08/07/19 |
| 8 | MON | 66 | 7 | 8 | 15 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | GPRS | | GPRS issue to be rectified NO RTU at station | |
| 9 | NAGNMORA | 66 | 8 | 3 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | No media | | DC supply of 48 V to be extended till RTU | |
| 10 | POWERHOUSE | 66 | 12 | 12 | 24 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | GPRS | | NO RTU at station | |
| 11 | SANIS | 132 | 11 | 15 | 26 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | No media | | NO RTU at station | |
| 12 | TIZIT | 66 | 8 | 3 | 11 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | No media | | NO RTU at station | |
| 13 | TIDENSANG | 66 | 9 | 9 | 18 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | GPRS | OPGW proposed existing lines | GPRS issue to be rectified | |
| 14 | TULU | 66 | 17 | 22 | 39 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | GPRS | FO expansion | GPRS issue to be rectified | |
| 15 | WOKHA | 66 | 9 | 12 | 21 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | GPRS | OPGW proposed NEW lines | GPRS issue to be rectified | |
| 16 | ZUHNEBORO | 66 | 7 | 8 | 15 | 0 | 0 | 0 | 0.00 | 0.00 | 0.00 | Not Reporting | GPRS | | GPRS issue to be rectified | |

Highlighted indicate RTU is present in S/S

Amolbor
05/07/19

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AMM
GM (SL)
NBRIDE

Annexure A.1

Dimapur (NA):

- HV side ICT 132/66 kV ICT 1: Direction of flow was opposite, corrected by negating in FE of SLDC.
- HV side ICT 132/33 kV ICT 2: Value from site is coming zero. So flow is coming zero. All isolators and CBs are needed to be modelled in FE database at SLDC
- Isolators of 132 kV Dimapur (PG) line 1 are showing opposite status. Issue to be resolved in RTU at site.
- Isolators of 132 kV Dimapur(PG) Line 2 are showing opposite status. CB is showing in-between status. Issue to be resolved in RTU at site.
- Isolators and CB of 132 kV Bus coupler bay are showing wrong status. Issue to be resolved in RTU at site.
- LV side ICT 132/66 kV ICT 1: Isolators and CB are showing wrong status. Issue to be resolved in RTU at site.
- Isolators and CB of 66 kV Bus coupler bay are showing wrong status. Issue to be resolved in RTU at site.
- 66 kV Bokajan (AS) bay: Isolators and CBs are showing wrong value. Issue to be resolved in RTU at site.
- 66/33 kV ICT 2: Analog value are not reporting. Issue to be resolved in RTU at site.
- 66/33 kV ICT 3: Analog value are not reporting. Issue to be resolved in RTU at site.
- 66 kV Ganesh Nagar: Isolators and CBs are showing wrong value. Issue to be resolved in RTU at site.
- 66 kV Chummukedima: Isolators and CBs are showing wrong value. Issue to be resolved in RTU at site.


Kohima (NA):

- 132 kV Dimapur(PG) line: All analog and digital data are correct.
- 132 kV Wokha line: All analog value are correct. Isolators and CBs are reporting wrong/opposite values. Issue to be resolved in RTU at site.
- 132 kV Meluri line: All analog value are correct. Isolators and CBs are reporting wrong/opposite values. Issue to be resolved in RTU at site.
- 132 kV Karong Line: All analog value are correct. Isolators and CBs are reporting wrong/opposite values. Issue to be resolved in RTU at site.
- 132/33 kV ICT 1: All analog value are correct. Isolators and CBs are reporting wrong/opposite values. Issue to be resolved in RTU at site.
- 132/33 kV ICT 2: All analog value are correct. Isolators and CBs are reporting wrong/opposite values. Issue to be resolved in RTU at site.

Mokokchung (NA):

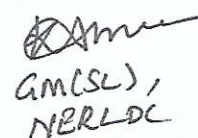
- Reporting of data is not stable
- 132 kV Bus 1: Data are not reporting. Data are not modelled in FE database of SLDC. After modelling in FE database of SLDC. Addressing to be done in RTU at site.

Ahawan
05/07/19








GM(SL),
NERLDC

- 132 kV Bus 2: Data are not reporting. Data are not modelled in FE database of SLDC. After modelling in FE database of SLDC. Addressing to be done in RTU at site.
- 132 kV Doyang Line: All analog and digital data are correct.
- 132 kV Mokochung Line 1 & 2: All analog and digital data are correct.
- 132 kV Maraini(AS) line: All analog and digital data are correct.
- 132/66 kV ICT 1:
 - HV Side: Digital data are reporting. Analog data are not correct, issue to be resolved in RTU at site.
 - LV Side: Digital data are reporting. Analog data are not correct, issue to be resolved in RTU at site.
- 132/66 kV ICT 2:
 - HV Side: Digital data are reporting. Analog data are not correct, issue to be resolved in RTU at site.
 - LV Side: Digital data are reporting. Analog data are not correct, issue to be resolved in RTU at site.
- 66 kV Bus 1: Data are not reporting. Data are not modelled in FE database of SLDC. After modelling in FE database of SLDC. Addressing to be done in RTU at site.
- 66 kV Bus 2: Data are not reporting. Data are not modelled in FE database of SLDC. After modelling in FE database of SLDC. Addressing to be done in RTU at site.
- 66/33 kV ICT 1: All analog and digital data are correct.
- 66/33 kV ICT 2: All analog and digital data are correct.
- 66 kV Tuli Line: All analog and digital data are correct.
- 66 kV Bus coupler: All digital data are correct.
- 66 kV Zuheneboto Line: All digital data are correct. All analog data(MW, Mvar) are not correct, to be rectified at RTU.

Kiphire (NA):

- 132 kV Bus 1: Data are not reporting. Data are not modelled in FE database of SLDC. After modelling in FE database of SLDC. Addressing to be done in RTU at site.
- 132 kV Meluri Line: All analog data are correct. CB is reporting correct value. Isolators are reporting opposite value. Issue to be resolved in RTU at site.
- 132/33 kV ICT 1:
 - HV side: Analog value are not reporting. CB is reporting correct value. Isolators are reporting opposite value. Issue to be resolved in RTU at site.
 - LV side: CB is reporting correct value. Isolators are reporting opposite value. Issue to be resolved in RTU at site.
- 66 kV Bus 1: Data are not reporting. Data are not modelled in FE database of SLDC. After modelling in FE database of SLDC. Addressing to be done in RTU at site.
- 66/33 ICT 1: All analog value are reporting. Isolators and CBs are showing wrong value. Issue to be resolved in RTU at site.
- 66 kV LHEP Line 1 & 2: Analog data are wrong. CBs are correct. Isolators are reporting opposite data. Issue to be resolved in RTU at site.

Ahmed
05/07/19

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GM(SL)
NERLDC