

North Eastern Regional Power Committee

MINUTES OF THE 2nd NER Telecommunication, SCADA & Telemetry

(NE-TeST) COORDINATION

SUB-COMMITTEE MEETING OF NERPC

Date : 08/01/2016 (Friday)
Time : 10:00 hrs
Venue : "Hotel Nandan", Guwahati.

The List of Participants in the 2nd NE-TeST Meeting is attached at **Annexure - I**

Shri P.K. Mishra, Member Secretary, NERPC welcomed all the participants to the 2nd North Eastern Telecommunication, SCADA & Telemetry meeting. He informed the house that next TCC/NERPC meetings are likely to be held in the last week of January, 2016 and therefore requested all the constituents to actively participate in the discussion and finalized so that if any items are required for approval, the same can be placed in the next NERPC meeting for the benefit of the region. He then requested Shri B. Lyngkhai, Director/SE(O) to take up the agenda items for discussion.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF THE 1st MEETING OF "NORTH EASTERN TELECOMMUNICATION, SCADA & TELEMETRY (NETeST)" SUB COMMITTEE OF NERPC.

SE(O) informed that minutes of the 1st meeting of NETeST held on 6th November, 2015 at Guwahati were circulated vide letter No. NERPC/SE(O)/TeST/2015/8875-8900 dated 19th November, 2015.

The Sub-committee confirmed the minutes of the 1st NETeST Meeting as no comments/observations were received from the constituents.

SE(O), NERPC informed that as agreed during the 1st TeST meeting, NERPC has to finalize the CBR and get the endorsement for amendment of Conduct of Business Rules (CBR) of NERPC in the next NERPC Board Meeting. He briefed about the composition of members of TeST and also the various functions of this sub-committee and requested the house to give suggestions accordingly.

During the 1st TeST meeting, it was agreed that constituents would be represented by officials at least of the rank of Superintending Engineer/GM/Head of Communication & Logistics. The convener of meetings would be Superintending Engineer of NERPC.

Functions:

TeST Sub-Committee shall carry out the following works:

- a. To coordinate and resolve issues related to Planning, Commissioning and Maintenance of SCADA, EMS and PMU related applications.
- b. Planning, Monitoring and Maintenance of Telecommunication System for data and speech
- c. SCADA & Operation & Maintenance
- d. RTUs and PMUs
- e. Telemetry
- f. Any other issues assigned by NERPC.

Meetings:

As and when required and as decided by the Convener.

The forum unanimously approved the above naming of NETeST Sub-committee, its functions and meeting and requested NERPC to get endorsed in the next TCC/NERPC Meetings.

A.1 Status of SLDCs in NER:

The status of setting-up of SLDC as informed by POWERGRID during 2nd TeST meeting is given below:

Name of SLDC/ RLDC	STATUS GIVEN IN 2 ND TEST
Assam	VC is now installed and SAT will be carried out on 25.01.2016.
Tripura	VC yet to be implemented. UPS installed and completion date is 31.01.2016.
Meghalaya	SE, SLDC informed that ACDB was damaged and earthing is yet to be completed. PGCIL informed that earthing works of sample pit (chemical earthing) will be completed by 17.01.2016. ACDB will be repaired by Alstom Feb, 2016 and 2 nd UPS will be commissioned soon. SAT start by 25.01.2016
NERLDC	NERLDC will confirm SAVT completion. Further NLDC-NERLDC integration on new SCADA system to be taken up NERLDC through Alstom.

NERLDC backup	Scheduled after Integrated FAT completion and onward material dispatch.
Manipur	Integrated FAT at Factory (Manipur, Mizoram, AP, Nagaland, B/U) to start by 10.03.16 and will complete in two months. LD&C dept of POWERGRID may take up for early completion
Mizoram	Building vacation & partitioning work started. Alstom, POWERGRID, P&E, Mizoram joint visit made. In NETeST, Mizoram representative was not present to comment on building vacation and completion of internal works.
Nagaland	EE, SLDC, Nagaland informed that Building will be ready by 31.03.2016. ALSTOM would start work by April, 2016.
Arunachal Pradesh	AP representative was not present to comment on exact completion of internal works, partitioning of SLDC temporary set up at Chimpur SS control room. On confirmation from AP side, Alstom will start the work.

Regarding AMC, all constituents were again requested for signing. Meghalaya intimated that the same is already approved and soon be signed. Members opined that two UPS should be in place in all SLDCs for redundancy of the system. Moreover, the house strongly mentioned that the dates of completion of SLDCs in the region should not be delayed further since AMCs in three existing SLDCs were expired and the house requested PGCIL to arrange the review meeting with Alstom frequently till the SLDCs are commissioned.

The house also expressed concerned about non-cooperation and delay in response by Alstom and this had hampered many works in the region. The house requested NERPC to write to Executive Director, LD&C, POWERGRID with a copy to highest authority of Alstom India in the SLDC project purpose.

Under quantity variation, AEGCL requested for purchase of RTU-10nos. under SLDC upgradation project from M/s Alstom & also requested that DG set to be included for AEGCL in the project which may be agreed upon by Forum.

Further, Manager (AM), NERTS informed that only Assam, Nagaland & POSOCO have signed the AMC Agreement, he requested other constituents to sign the same at the earliest. All constituents agreed. There have been some reports of theft from SLDC Manipur location also for which work also delayed. It is requested to Manipur representatives to take up the matter with higher authority to prevent such issues in future.

The Sub-committee noted as above.

A.2 Non-reporting of RTUs of Constituents on Existing SCADA:

A). POWERGRID

- a. 400 KV Balipara-BNC Lines 1,2 &3 data not reporting & line-4 data showing more than double (wrong). During 1st NETeST meeting for Balipara- BNC III & IV by 15/01/2016(15/12/2015). New RTU at BALIPARA to be commissioned shortly. NERLDC has been asked to rearrange database by removing Kameng feeder as analog ports at Balipara is not working. However, NERTS will confirm healthiness of left over ports to NERLDC.

Deliberation in the meeting

Manager (AM), NERTS informed that for Balipara-BNC-Ranganadi 1,2 & 3 – within one working week i.e. 20.01.2016 for ckt-4 and new RTU at Balipara – within 31.03.2016.

The Sub-committee noted as above.

- b. Mariani-Mokokchung 220 KV line MW/MVAR data suspect. During 1st NETeST meeting NERTS informed matter would be sorted by November, 2015.

Deliberation in the meeting

Manager (AM), NERTS informed that above work has already been rectified. NERLDC also agreed.

The Sub-committee noted as above.

- c. KOPEX SAS out from 20.08.2015. During 1st NETeST meeting NERTS informed ABB-SAS Service Engineer and POWERGRID Engineer from MISA end will be deputed to sort out KOPEX SAS issue.

Deliberation in the meeting

For Repair of BCU & system at Kopili (POWERGRID part) , LOA will be placed to ABB and apx one month work to be done through ABB for restoration of system. Target Completion: 30.03.2016

- d. Kolasib out from 27.08.2015 (Modem problem). During 1st NETeST meeting NERTS informed Kolasib data is out due to LILO of Badarpur-Kolasib Line by Mizoram which is requested to be restored by Mizoram soon.
132 kV Badarpur-Kolasib has been restored w.e.f. 19.12.15

Deliberation in the meeting:

For checking problem POWERGRID representative will visit by 20.01.16 and any issue in scope of NERTS will be attended by 31.01.16

- e. 220 KV Misa-Dimapur line 1&2, Dimapur Transformer 1&2, 132 KV Dimapur-Dimapur line 1&2, telemetry data not updating correctly. During 1st NETeST meeting NERTS informed Dimapur RTU card problem would be solved by 15/12/2015(pl note S900 supply/support not available). Dimapur-NERTS to confirm healthiness of remaining ports by a week to NERLDC for SCADA DATA BASE change if any.

Deliberation in the meeting

Dimapur RTU restored by POWERGRID.

- f. Salakati data updating is very slow 6mins against 10 secs results inconvenience to Grid operators & further inter-regional exchange not getting updated correctly. During 1st NETeST meeting NERTS informed Alstom will depute someone for attending the issue- SCT software on C264 RTU by 30/11/2015. Further new RTUs are in the process of being commissioned within two months.

Deliberation in the meeting

Manager (AM), NERTS informed that above works c & f will be completed by 30.04.2016.

The Sub-committee noted as above.

- g. Most of the CS RTUs are on single link due to 2nd link failure (responsibility POWERGRID) resulting lack of redundancy. List is as follows.

- 1) 800 KV HVDC_BNC (Only one channel made)
- 2) 400 KV MISA (2 channels made but only 1 available)
- 3) 400 KV Bongaigaon (Only one channel made)
- 4) 400 KV Silchar (Only channel made)
- 5) 220 KV Dimapur (One channel working)
- 6) 220 KV Salakati (Only one channel made)
- 7) 132 KV Imphal (2 channels made but only 1 available)
- 8) 220 KV MOKOKCHUNG (Only one channel made)
- 9) Ranganadi ISGS (Only one channel made)
- 10) 132 KV ITANAGAR (Only one channel made)
- 11) KATHALGURI, ISGS (Both channel channels out)
- 12) PALATANA, ISGS (Only one channel made)
- 13) 132 KV Kumarghat (2 channels made but only 1 available)
- 14) LOKTAK ISGS (2 channels made but only 1 available)
- 15) KHANDONG, ISGS (2 channels made but only 1 available)

- 16) JIRIBAM (2 channels made but only 1 available)
- 17) AIZAWL (2 channels made but only 1 available)
- 18) BADARPUR (2 channels made but only 1 available)
- 19) 220 KV MARIANI (Only one channel made)

Deliberation in the meeting

Manager (AM), NERTS informed that above works 2, 4 & 19 have already been rectified and balance works by 30.04.2016.

SE(O) requested NERLDC to monitor the status as informed by NERTS so that time line given should be strictly adhered to.

The Sub-committee noted as above.

B). NEEPCO

- a. Doyang HEP out from 24.01.2015
- b. Kopili HEP out from 09.05.2015.
- c. Ranganadi HEP out from 31.08.2015 to 19.10.2015 but unstable.
- d. Kathalguri RTU out from 16.10.2015.

Deliberation in the meeting

DGM, NEEPCO informed that procurement of new RTUs are already underway. Within 4(four) month they replace KOPILI, KHANDONG, KATHALGURI, DOYANG RTUs – By 30.04.2016. LOA of Kathalguri RTU by Jan'2016.

New RTU of AGTPP has already reached the site, commissioning is awaited – By 31.01.2016. For RHEP NEEPCO would explore possibility about replacement of cards.

The Sub-committee noted as above.

C). AEGCL:

In new system 20-25 RTUS are reporting against 51 RTUs. This creates loss of observability of NER Grid.

During 1st NeTEST meeting, AEGCL informed that most RTUs are not reporting due to malfunctioning of ports and they do not have spares. For this interchange of Serial & Ethernet port configuration is required. M/s ALSTOM was requested to extend help for upgradation of RTU (101 to 104) so that procuring of new panel are not required. It was decided during 1st TeST meeting that Alstom will do it and the to-&-for travelling charges of Alstom engineers, AEGCL will have to pay. Further Assam informed that link between Tinsukia to Samaguri via Dibrugarh & Baihating has to be put through at the earliest.

Deliberation during 2nd NETeST:

AEGCL assured to take up for restoration of RTUs at the earliest possible through AEGCL PLCC & OPGW links. AEGCL also took up for purchase of new RTUs under SLDC upgradation project. AEGCL requested POWERGRID to provide on E1 on Ethernet link (without any further cost implication beyond MW vacation project) between Samaguri to Tinsukia by 27.01.16 for integrating some of AEGCL RTUs which has been agreed upon by POWERGRID.

POWERGRID requested AEGCL to put a communication (email) to Alstom with a copy to POWERGRID along with a finalized date for demo of conversion of Sisugram RTU reporting on K101 into K104 with requisite changes be demonstrated at SLDC end too.

The Sub-committee noted as above.

D). MePTCL/MeECL:

Generating Stations; LESHKA (84 MW) & Umiam-II (18 MW)

Sub-Stations: 400 KV Byrnihat S/S, 220 KV Killing S/S & 132 KV Khliehriat S/S

Deliberation in the meeting

Umiam-II & Khliehriat already reporting. At Leshka new RTUs have been procured and commissioning by Alstom is awaited. Further, for restoration of Byrnihat(Killing) SAS system, matter separately being taken up by MePTCL

Manager (AM), NERTS informed that a Link on ethernet (after meeting with MePTCL & Alstom-Communication team executing for MePTCL) between Agia to Kahilipara (via Agia Sarusajai Kahilipara) will be provided by 31.03.16 to MePTCL for dropping at SLDC Kahilipara . Agia – Mendipathar – Nangalbibra will then be restored by MePTCL by taking up with AEGCL SLDC. AEGCL rep also consented to extend necessary help in this regard.

The OPGW link in 132 kV Byrnihat – EPIP- II has been agreed by the forum to be included in under Expansion Project of POWERGRID. However, MePTCL will request through a letter to NERPC for inclusion in Expansion scheme.

The forum requested NERPC to conduct a special meeting relating to OPGW network in the region so that new OPGW conceived by the States would not be over lapsed with the plan by POWERGRID and Govt. of India.

SE(O), NERPC informed that the list of OPGW network was circulated in the minutes of 15th NERPC meeting and requested constituents to go through the list and if required the same can be discussed again.

The Sub-committee noted as above.

E). TSECL:

7-8 RTUs are reporting out of 15 RTUs.

Generating Stations: Gumti (since Jan, 2011), Baramura (partial, 5-5 NA, CB status Suspect), Rokhia (U-3 NA, all CB status suspect)

Sub-Stations: Badharghat, Kamalpur, Jirinia, Budhjungnagar, Ambasa, Udaipur (132 KV Palatana line not connected).

Deliberation in the meeting

With the integration of new SCADA / RTUs problems if any as covered under project (SLDC upgradation) scope will be solved. However, TSECL representative was not present to comment on completion date & related communication system required for reporting of aforesaid RTUs.

F) Manipur (4 RTUs), Nagaland (3 RTUs), Mizoram (1 RTU) not reporting

Manipur has already taken care of restoration of PLCC system and completion date will be confirmed by Manipur representatives after they discuss with their higher authorities.

Nagaland & Mizoram, AP are also requested accordingly so that the problems will be addressed after installation of SLDCs along with new RTUs (subject to establishment of communication links by state utility itself if not covered in any central sector scheme.)

The Sub-committee noted as above.

A.3 Data Telemetry & Communication problem during Grid disturbances:

It has been observed that during most of the cases of Grid disturbances, data telemetry data & voice communications systems are very much affected resulting in non-availability of most of the SCADA data causing poor visibility of the existing Grid as well as communication with many locations remained out causing difficulty in information sharing. As a result of these, restoration becomes very difficult and causes avoidable delay. All concerned are requested to kindly ensure data & voice communication systems without interruption for smooth & secure Grid operation.

During 114th OCC meeting, DGM(AM) NERTS informed that VoIP would be established by March- April 2016.

During 1st NETeST meeting, the forum voiced concern and hoped that with the completion of New SCADA-upgradation project by M/s ALSTOM and other communication projects in NER, the situation would improve.

After detailed deliberations, members suggested that specific event wise issues may be pin pointed so that matter may be sorted and rectified. As new SCADA-Upgradation project of NERLDC system is almost completed, analysis report of the same may be achieved from AISTOM.

Deliberation in the meeting

The Sub-committee once again suggested that specific event wise issues may be pin pointed so that matter may be sorted and rectified.

The Sub-Committee noted as above.

A.4 Dedicated Voice Communication:

During 113rd OCC meeting, NERLDC informed that under existing VOIP communication system (executed by ORAGNGE Ltd) NERLDC requested to provide two nos. of voice links in all 132kV station and four no of voice communication channel at important station like BNC HVDC, all 400kV stations such as Bongaigaon, Balipara, Misa, Silchar (currently no voice communication), BYRNIHAR, AZARA, Palatana and all CGS (NTPC-BTPS, Ranga, Kopili, Khandong, Kathalguri, Doyang, RC Nagar) stations.

POWER GRID accepted the proposal and assured to do the same at the earliest.

During 1st TeST meeting, it was informed that Dedicated voice communication system will be taken care by NERTS as per instruction of GM-NERLDC's communication to GM-AM, NERTS

Deliberation in the meeting

The same work is under process and links provided as per availability. However, further voip links will be provided once new SDH/PDH equipment are installed under expansion node terminal equipment pkg(award by Feb 2016 and implementation by another 18months). All station owners (as covered under Expansion project link

nodes) are requested to keep Air conditioning units & Power supply healthy in the room where new SDH/PDH equipment will be supplied installed as per node locations.

The Sub-Committee noted as above.

A.5 Non-Display of CFE Data in existing SCADA system:

In the existing SCADA System, it has been seen that though many field sites report till CFE data is not displayed in the console. AEGCL would like to know how this problem will be sorted out in the SCADA Up-gradation Project.

As per deliberation of 21st UCC meeting POWERGRID informed the forum that the matter was discussed with Alstom over Phone and Alstom reverted that CFE/SCADA will be configured as per TS and there will be no such issue. POWERGRID requested all state SLDC representatives to provide a list of queries which in consolidated manner would be sent to Alstom. POWERGRID also requested all utilities to take care of such issues during training in parallel.

During 1st TeST meeting, the forum requested M/s ALSTOM to look into the matter and replace terminal port/splitter port if required.

Deliberation in the meeting

Manager (AM), NERTS confirmed that the similar problem will not be encountered in new SLDC project. Any work related to existing old SCADA system & existing old CFE (old SLDCs SCADA system) is not in scope of POWERGRID executed project(new SLDCs).

The Sub-Committee noted as above.

A.6 Rates of new CARDS, service support, assurance of lifespan by M/s ALSTOM:

As per the resolution of 20th UCC meeting held at Agartala on 28th August 2014, the forum has requested M/S ALSTOM to keep rates of new Cards justifiable & service support/defect liability period, assurance over life span of newly supplied equipment/quality in India should be at par with international level.

AEGCL would like to have any reference in this regard mentioned above so that we can initiate afresh the procurement process of C264 RTU spare cards as they have quoted a very high price in their previous proposal.

The 21st UCC forum opined that AEGCL may write/take up the matter with highest authority of M/s Alstom with a copy to GM, NERLDC & GM, NERTS.

It was also felt by forum that price justification issue & quality control of services/supply may be faced by other utilities also in future. It was opined that matter may be intimated by this forum to NERPC as the same, indirectly would affect/may delay implementation of diff telemetry regulation & so may affect grid security & proper monitoring.

During 1st NETeST meeting, representative of M/s ALSTOM informed the forum that cards cannot be manufactured separately, there must be AMC of RTU to do so. The forum requested ALSTOM to give fresh proposal for AMC of old RTUs keeping in mind quality and price concerns to AEGCL. AEGCL was also requested to take up the matter with highest authority wherever RTU AMC is required.

Deliberation in the 2ND NETeST meeting

It was opined that as utilities are facing on different issues with Alstom, same may be communicated through a letter to NERPC specifically (list wise) so that NERPC may write to M/s Alstom on behalf of forum.

As intimated by Alstom over telecom, Alstom requests AEGCL to take up the requirement with the Sales & Tendering team of Alstom.

The forum also requested that NERPC may explore various measures, control measure if possible in regulations in future for utility consumers where different utilities are facing problem related quality of work, price etc. It was decided that the issue needs detailed deliberation

The Sub-Committee noted as above.

A.7 Status of SDH installation by POWERGRID:

As per deliberation of 21st UCC meeting due to some unavoidable contractual issue/constraints beyond POWERGRID's control, though awarded but implementation has been delayed. Now the matter has been sorted out with M/s KEC, supply has been confirmed for SDH units for ULDC nodes and target completion date is May 2015. (date to be corrected)

Deliberation in the meeting

Manager (AM), NERTS informed the forum that supply of SDH equipment for original ULDC nodes (17locations) under MW vacation was approved in 15th NERPC meeting.

The delivery of SDH units is expected by end of March, 2016 and scheduled completion is end of August, 2016 for ULDC nodes. All station owners are requested to keep AC units healthy in the room where new ULDC equipment will be installed as per node locations. (Khandong, Kopili, RC Nagar, Kohima etc.)

The Sub-Committee noted as above.

A.8 Status of phase –I of URTDSM project:

As per deliberation of 21st UCC meeting survey completed for NER part. FAT call raised by M/s Alstom. It was informed that NER sites are not under 1st phase as planned by CC-POWERGRID. NER utilities/forum requested POWERGRID to expedite the same and works may be completed by March 2015 as & where connectivity available.

Deliberation in the meeting

DGM (LD&C), CC informed the forum that target date of completion is December, 2016.

The Sub-Committee noted as above.

A.9 Replacement of Multiplexers:

As per deliberation of 21st UCC meeting POWERGRID informed the forum that ABB has replied for repair of cards. As discussed with AEGCL, MePTCL has been again requested to take up checking of healthiness of FOX515-Mux & then repairing of existing Mux through ABB alike NERTS. Contact details will be provided to MePTCL.

During 1st TeST meeting, NERTS informed the forum that separate tendering process has been initiated for replacement of MUX. OBD date would be intimated separately. Forum also requested that node equipment of any SLDC or any other node (OPGW link planned but terminal equipment not considered), may also considered under quantity variation once the order is in place

Deliberation in the meeting

NERTS & LD&C, POWERGRID informed that PDH Multiplexers are to be procured under quantity variation of order terminal equipment packages of expansion project which is under tendering stage by LD&C, CC POWERGRID. LOA by March 2016 and completion of installation (in all ULDC node locations) by another one year.

The Sub-Committee noted as above.

A.10 Finalization of Consolidated OPGW Network & Installation Project:

As per GOI direction, MW links are being replaced by OPGW links and as discussed in the last 19th & 20th UCC meetings, the project is to be completed by July 2014. Latest status may be appraised by POWERGRID and also redundant channels for single channel RTUs planned may be appraised.

- a) POWERGRID has already submitted the OPGW network for region like MW vacation, Expansion, ULDC network etc.
- b) It is requested that all constituents may submit the communication plan which have been taken up by them in region.
- c) Further it is requested that min 2 pair of fibers of any communication system laid in region may be left ready for ULDC purpose of State & NERLDC telemetry/metering scheme.

During 1st TeST meeting, Manager (AM), NERTS through a presentation illustrated the various communication projects undergoing execution in NER (copies of network-initial assessment attached as **Annexure – A.10**).

Forum agreed that out of FO network established by State, 2nos. fiber pair will be kept intact for ULDC purpose. Further out of FO OPGW network established by CTU under (ULDC/MW Project/Expansion/NERSSIP/132kV scheme), it is recommended that half of total number of fibers may be kept for ULDC & grid security purpose. (earlier it was 6 nos. of 12nos. for 12F FO , now 12 nos. out of 24fibers for 24FO)

The forum advised POWERGRID and other constituents to share communication network diagram with NERPC for future course of action.

Deliberation in the meeting

POWERGRID already shared the network diagram and all other utilities confirmed to submit the same to NERPC by 15 days.

Regarding Fiber sharing, the Sub-committee decided that out of 24 fibers, 6 FO will be utilized for ULDC Scheme, the remaining FO should be under the custody of the owner. However, additional fibers as required for SCADA/PMU/Expansion scheme are to be provided by the owners in case of any technical exigencies/requirement.

The Sub-Committee noted as above.

D. NEW ITEMS

B.1 Video Conferencing (VC) in NERPC:

The issue of setting up of VC in NERPC was discussed with POWERGRID and they intimated that supply & installation of VC for NERPC will be carried out by them. As per information from POWERGRID one set of VC with MCU is kept for NERPC under NERLDC SLDC SCADA EMS gradation LOA. But the same is yet not dispatched to NERPC.

During 1st TeSt meeting it was agreed that:

- 1) In line with ERPC, NRPC-other region, one no. VC system with MCU under SLDC upgradation project is to be provided by NERLDC to NERPC for smooth functioning of NERPC for grid monitoring purpose, SD arrangement, meeting etc. Target-December, 2015.
- 2) POWERGRID would provide two links, one for SCADA and other for VC from NERLDC main to NERPC within 30/11/2015. Links may be taken from POWERTEL as required.

Further NERTS requested that one no. 3x2 VPS is proposed to be procured for CTU (under SLDC SCADA Project- new item under new heading) for assisting for grid management purpose which will be provided to NERTS CPCC for better coordination of system operation as an support coordination to RLDC/SLDC for managing POWERGRID station from a common center. Forum agreed in principle and requested submit cost

Deliberation in the meeting

After detailed deliberation, it was agreed that the VC, SCADA & PMU links will be completed by 25.01.2016 and the same link with consoles will be commissioned by February, 2016. NERLDC will take necessary action to install the VC unit and PDC/SCADA client in NERPDC accordingly. Regarding Internet link, Manager (AM), NERTS informed that the work will be taken up separately soon.

Further the cost of VPS for NERTS as consented in 1st NETeST to be procured under SLDC Upgradation scheme (with a new heading under central sector scope) is Rs. 73 lakhs (approx).

The Sub-Committee noted as above. Put up for approval of RPC

B.2 On Job Training for SCADA for identified employees of new SLDC:

It is proposed that NERLDC & SLDC-Assam, Tripura, and Meghalaya may facilitate on the job training for to be deployed employees of new SLDCs of Manipur, Mizoram, AP, and Nagaland.

During 1st TeST meeting, the forum agreed that training was crucial for employees of new SLDCs. NERLDC viewed that separate training for Data Validation & Day to Day operation needs to be conducted. AEGCL & Tripura agreed to provide on job training for 2 officials of each state LDC. New SLDCs will finalize deputation of their engineer to Assam & Tripura SLDCs

Deliberation in the meeting

SE(O), NERPC informed that SLDCs in Manipur and Ar. Pradesh are almost completed, he suggested that on job training for officers from these States should be carried out at the earliest. He enquired from Assam, SLDC if they can extend help in this regard.

AGM, LD&C, Assam informed they are agreed to the proposal and mentioned that atleast five days is required for new SLDC officers to make them familiarized with the system. He suggested that these States can nominate their officers before the next OCC/PCC/NETeST meetings so that they can attend both the training and meeting.

After discussion, the Sub-Committee requested Ar. Pradesh, Manipur, Mizoram & Nagaland to start sending their officers in batches so that on job training can be carried at the earliest either at SLDC, Assam/ Meghalaya/Tripura.

B.3 Strengthening of PLCC System by NER States:

PLCC system works as a back-up path for telemetry of RTUs. It is proposed that each constituent may kindly revive/ install PLCC as per relevant norms for 132Kv & above T/Ls for data path connecting to respective SLDC.

Each state may discuss about their present status of connectivity & future plan PLCC connectivity. Present network may be submitted to NERPC.

During 1st TeST meeting, it was decided that all state utilities will submit the PLCC network of their own state system by 1month to NERPC and further take up measure like repair, AMC etc for revival of PLCC system. Especially Nagaland, Manipur, Mizoram (where new SLDC is being targeted for completion) had been requested to revive PLCC system.

Present PLCC network of state may be submitted to NERPC within one month.

Deliberation in the meeting

SE(O), NERPC informed that only Meghalaya has submitted the present PLCC network and requested Assam to send the same at the earliest.

After detailed deliberation, the Sub-Committee recommended that whenever OPGW is not available, PLCC should be made available compulsorily.

B.4 New SCADA – Upgradation Project/PMU Related Issues:

Point-1: In order to have a complete SCADA network & to complete the Installation, a minimum of 02 (Two) communication links from each SLDC to NERLDC is required as also noted in Item 1-A (vii). As of date, only 01 link each to Assam & Tripura has been provided & it is understood that there is some last minute hurdle in terminating the NEHU link. POWERGRID may provide 02 (Two) links each from existing SLDC to RLDC. The links to new SLDCs (Mizoram, Manipur, Nagaland and Arunachal) are to be provided subsequently. This is apart from the dedicated VC network.

Point- 2: As RLDC & SLDC are dependent on each other for SCADA Data, delay in execution one affects the other. POWERGRID may update the current status of Assam, Meghalaya & Tripura portion of the project & also provide the schedule of completion. Unless SLDC systems are integrated with NERLDC, the Parallel Operation (90 days) & System Availability Test (SAVT) cannot be initiated.

Point- 3: As envisaged, the Backup RLDC should receive data even in case of complete failure of Main RLDC & hence suitable splitting to be used for redundancy & the location of splitters to be decided during detailed engineering. As regards the location of Terminal Servers, ideally they should be placed at strategic locations other than Main RLDC/ Backup RLDC so that data is not interrupted at Backup Control Centre in case of total outage of Main Control Centre & vice versa. POWERGRID may provide the detail plan for implementation of the scheme.

Point-4: PMUs of Bongaigaon, Badarpur & MISA are connected to the CVTs of Lines. Any shut-down of the lines to which the PMUs are connected leads to non availability of data from that PMU. Specially the Bongaigaon PMU is a very critical as there are inter-regional links from Bongaigaon and any shutdown of the Bongaigaon - Balipara II leads to outage of data from Bongaigaon PMU which is a major hurdle to

system analysis. POWERGRID is requested to arrange to connect the Bongaigaon PMU to the bus PT very urgently and shift MISA and Badarpur PMU to Bust PT from CVT subsequently.

Deliberation in the meeting

Point 1: Target date of providing 2nd link for SCADA/ EMS up-grade project: ***February, 2016.***

Point 2: By ***February, 2016.***

Point 3: Detailed Plan to be provided by POWERGRID at the earliest:

Members requested NERTS to arrange the workshop on WAMS & comprising of NER constituents, NERPC, NERLDC & NLDC.

Manager (AM), NERTS & DGM,LD&C-CC, POWERGRID informed that the above workshop on request of form is likely to be arranged in February/March, 2016 and the training modules will be sent to constituents to give their comments on the topic.

Point 4: After detailed deliberation POWERGRID was asked to change connection of PMUs to bus CVTs. ***Target-1.5months.***

The Sub-Committee noted as above.

B.5 Status of VOIP Exchange Project Status & Implementation:

As per deliberation of 21st UCC meeting POWERGRID informed the forum that materials of NERLDC has already under transit and will be delivered by a week's time For SLDCs, FAT completed and party has asked for road permit.

All SLDCs/Communication division representatives are requested by NERTS to process for road permit once request received by the party so as to expedite the supply. Target Completion date is May 2015.

During 1st TeST meeting, representatives of ORANGE Ltd. informed the forum that the entire project would be complete by 31/03/2016. It was deliberated that VOIP exchange is the replacement of earlier exchange of NERLDC & SLDC. The same may not linked with other project. Further all state utilities agreed to receive the remote sub, remote telephones etc at SLDC end from M/s Orange and further State, CTU would transport their allotted materials to own stations & connect thereof. Orange representative confirmed to demonstrate one link for each SLDC.

M/s Orange representative was instructed to depute sufficient manpower for left over works at SLDCs like Assam, Tripura and Meghalaya. Further any additional switch (24 ports) required for full-fledged commissioning works (especially in Assam/Tripura/ Meghalaya/NERLDC) may be provided by M/s Orange as required for full-fledged commissioning. POWERGRID may look in to amendment if any required.

Deliberation in the meeting

Manager (AM), NERTS informed that as committed by the above firms, the works will be completed by 31.03.2016 (for established SLDCs/NERLDCs). Demo of VOIP phone has been given by M/s Orange representative in AEGCL substation. Additional switches have been provided to SLDC Kahilipara under project to AEGCL for incorporating their request for Ethernet link establishment. VOIP exchange project for Mizoram, Nagaland, AP are delayed beyond March 2016 in respective location as space/building room could not be handed over in time. There have been some reports of theft from SLDC Manipur location also for which work delayed. It is requested to Manipur representatives to take up the matter with higher authority to prevent such issues.

The Sub-Committee noted as above.

B.6 State Estimator/RTCA Operation:

RTCA and SE in NER is not giving graceful solution due to poor availability of analog/digital data and non-reporting of so many RTUs mainly of NEEPCO/ POWERGRID/ AEGCL/ Meghalaya/ Tripura. RTCA is not converging for on-line study of real time power system. Constituents are requested to restore the system RTUs on top priorities.

Deliberation in the meeting

The house suggested that the real state estimator can be finalized once all the RRUs in the region are in place. The forum decided to drop for the time being.

The Sub-Committee noted as above.

B.7 Data of SM Nagar end (against SM Nagar to Comilla (B'Desh) D/C T/L):

During 1st NETeST meeting, Alstom agreed to install RTU at S.M. Nagar end by 1st week of Dec15. As S.M. Nagar being a State SS, TSECL will provide a PLCC for two data paths and two speech paths up to Grid, SLDC. TSECL confirmed of the same.

Regarding communication (both voice as well as telemetry) with Comilla substation of Bangladesh it was intimated by NERLDC the same should be through NLDCs of both the countries and only in case the same is not possible then communication directly from Comilla –SM Nagar-SLDC/RLDC-NLDC(I)-NLDC(B)-Comilla may be implemented after consulting Bangladesh authority. NERLDC further reiterated that either of the communication schemes should be in position through redundant channels before start of power supply to Comilla S/s]

Deliberation in the meeting

Manager (AM), NERTS informed that

- a) Data of S.M.Nagar has been made available to SLDC & NERLDC along with speech (to SM Nagar) has been made available up to SLDC, NERLDC, NLDC.
- b) The 132kV D/C S. M. Nagar to Comilla has been kept charged up to Indian border.
- c) PGCB, Bangladesh is yet to configure at their end for exchange to exchange connectivity for 4W E&M(SLDC Tripura end already connected).

Forum requested NLDC NERLDC integration to be taken up by NERLDC through Alstom (as data already available at NERLDC) and requested NERTS,LD&C to help in this regard so that M/s Alstom sort out the issue at the earliest.

The Sub-Committee noted as above.

B.8 MW Vacation Project:

During 1st NETeST meeting, AEGCL raised the issue for early completion of left over works. NERTS stated that Terminal equipment teams will be deployed by two weeks and left of SDH/PDH work would be completed by 2months where already fiber & panel installed. Further there are some re-works involved (like 24F approach cable in place where already 12 F cable laid) and the same will be completed after March16.

Further additional works or re-work (like shifting to new PLCC room/Telecom room in a FO node station where already once equipment installed as per originally surveyed location) would be taken up on payment basis through KEC. However other works of original scope LOA awarded to KEC will be March 2016. All SDH & PDH equipment which has been installed (with DC supply taken from station) will be re-installed with new DCPS.

Deliberation in the meeting

Manager (AM), NERTS informed that due to some modifications in tender documents, and approval of new SDH in last RPC15th, the work was re-scheduled and delayed. However, the original scope work (AEGCL sector) is likely to be completed by April, 2016 & SDH equipment installation by Aug 2016.

It was discussed in forum that a few Link of central sector like Badarpur-Silchar, Badarpur-Kolashib got delayed due to huge ROW issue in lower Assam districts of Caccha, Hailakandi & Karimganj along with some issues like flood/landslides. As work was not moving, OPGW materials of said links were diverted to Jharkhand project & Indo-Bangla project for interest of Govt of India/ State public interest. Revised schedule of the above links including new links (approved in 15th RPC-Aug15 beyond original scope) as covered in MW Vacation is apx. Oct' 2016. Further link for Tinsukia-Namsai Transmission line of AEGCL is still not available and hence and proposed to be deleted. Further equipment/OPGW if considered for Namsai may be explored to be used in SLDC location or as suitable other central sector location. Tinsukia Rupai link as informed by AGM, AEGCL has proposed in world bank project by AEGCL also.

It was requested by forum that respective utility coordinator (central sector, state/AEGCL sector) may kindly ensure that there is no rodent issue, AC supply issue, air conditioning issue in Telecom Rooms where SDH/PDH are installed for Telemetry/SCADA system(some cases reported against Sarusajai)

The Sub-Committee noted as above.

B.9 Earthing upgradation of existing earth pits at NEHU:

During 1st NETeST meeting, MePTCL informed SLDC-Meghalaya building is constructed by NERTS for SLDC In new site selected by MePTCL within the NEHU S/S complex. But as earth resistivity value is poor in new location, NERTS would take up further for betterment of existing new earth pits in new SLDC location as per special request from MePTCL.

Deliberation in the meeting

The issue has been discussed in **Item A.1.**

The Sub-Committee noted as above.

B.10 Data Concentrator RTU for MePTCL:

During 1st NETeST meeting, MePTCL informed further data concentrator configuration issue will be addressed by Alstom directly with MePTCL once scope of original Alstom-SLDC project is over(after SAT on AMC).

Deliberation in the meeting

Manager (AM), NERTS informed that for old RTUs, MePTCL has to carry out the job on cost basis but for new RTUs supplied under SLDC project , the matter would be done under AMC through Alstom . The work will be completed by 31.03.2016.

The Sub-Committee noted as above.

B.11 SCADA problem at Tripura SLDC:

SCADA is not function properly. Due to unreliable system, TSECL is unable to see drawal, injection, central sector generation as well as state generation, overdrawal/underdrawal etc for which day to day activities of SLDC is hampering.

Deliberation in the meeting

Manager (AM), NERTS informed there were some issues of ICCP which has been attended from time to time. The work will be completed by 31.03.2016.

The Sub-Committee noted as above.

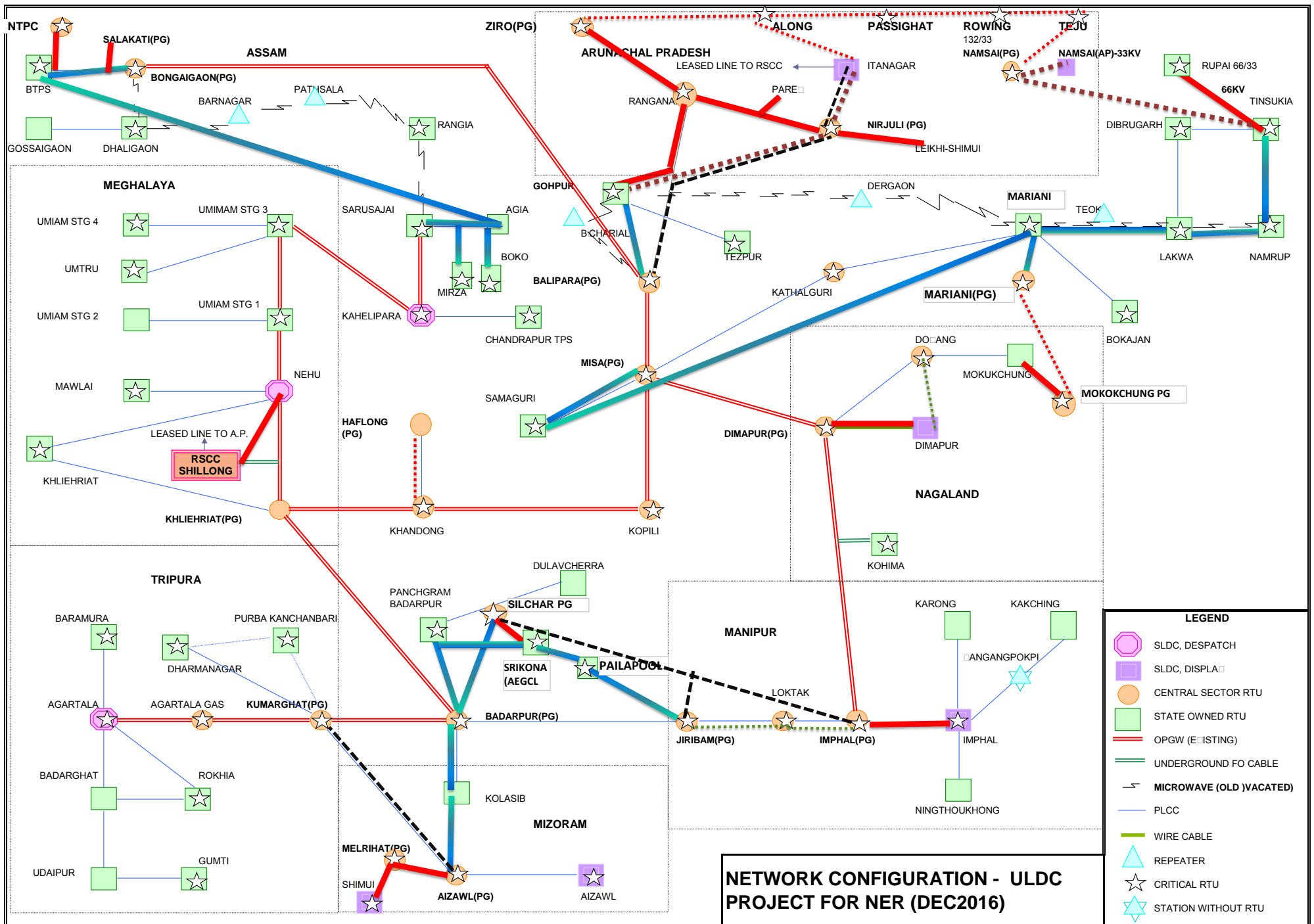
Date & Venue of next NETeST meeting

It is proposed to hold the 3rd NETeST meeting of NERPC on second week of March, 2016. However, the exact date and venue will be intimated in due course.

The meeting ended with thanks to the Chair.

Annexure-I**List of Participants in the 2nd NETeST Meetings held on 08/01/2016**

SN	Name & Designation	Organization	Contact No.
	No Representative	Ar. Pradesh	
1.	Sh. P.K. Sarma, DGM, HRT	Assam	09954047745
2.	Sh. J.K. Baishya, AGM, SLDC	Assam	09435041494
3.	Sh. A.K. Das, AGM, H/Q, AEGCL	Assam	09435045804
4.	Sh. A.K. Kalita, AGM, Comm.	Assam	09435158118
5.	Sh. H. Kakati, AGM, Comm.	Assam	09864110907
6.	Ms. Laishram Ritu, Manager, SLDC	Manipur	09612882984
7.	Ms. H. Memnaobi Chanu, DM, SLDC	Manipur	08131964667
8.	Sh. F.E. Kharshiing, SE, SLDC	Meghalaya	09863066960
9.	Sh. D. J. Lyngdoh, E.E (S.M), SLDC	Meghalaya	-
	No Representative	Mizoram	
10.	Sh. A Jakhalu, E.E (TRANS)	Nagaland	09436002696
	No Representative	Tripura	
11.	Sh. V. Kaikhoichin, DGM	NERLDC	09436302712
12.	Sh. B. S. Roy, Asst. G.M	NERLDC	09436302719
13.	Sh. B.K. Chakraborty, DGM (E)	NEEPCO	09436309730
14.	Sh. S. Sarkar, Sr. Manager	NEEPCO	08974009294
15.	Sh. P. Kanungo, DGM (AM)	PGCIL	09436302823
16.	Sh. S. Paul, Manager	PGCIL	09435602995
17.	Sh. A. Patir, General Manager	PGCIL	09436302529
18.	Sh. K.K Choudhary, DGM	PGCIL	09560690612
19.	Sh. S. Chakraborty, Manager	NTPC	09435322591
	No Representative	ENICL	
	No Representative	OTPC	
20.	Sh. P.K. Mishra, MS	NERPC	
21.	Sh. B. Lyngkhai, Director/S.E (O)	NERPC	09436163419
22.	Sh. S. Mukherjee, AD-I/AEE	NERPC	08794277306
23.	Sh. Shaishav Ranjan, AD-II/A.E	NERPC	08794276168



ORIGINAL SCOPE OF OPGW REPLACEMENT AGAINST MW VACATION

PROPOSED LINK QUANTITY VARIATION OF MW REPL PROJECT PHASE2 APPROVED ON 20.8.15-TCC/RPC
UNDER NKN PROJECT OF TELECOM

FUTURE PROJECT (OR NOT FINALISED BY STATE)
DELETED SCOPE WRT MW REPL PROJECT

Fibre Optic Communication System for North Eastern Region (Under Wideband Expansion Project)

