

# North Eastern Regional Power Committee

## Agenda

### For

### 3rd NETeST Sub-Committee Meeting

Time of meeting : 10:00 Hrs.

Date of meeting : 10<sup>th</sup> June, 2016 (Friday)

Venue : "Hotel Nandan", Guwahati.

#### **A. CONFIRMATION OF MINUTES**

##### CONFIRMATION OF MINUTES OF 2nd NETeSTS Meeting held on 08.01.2016.

The minutes of 2<sup>nd</sup> NETeST Meeting held on 8<sup>th</sup> January, 2016 at Guwahati were circulated by NERPC vide letter No. NERPC/SE(O)/TeST/2016/ dated 15<sup>th</sup> January, 2016.

*The Sub-committee may confirm the minutes of 2nd NETeST meeting of NERPC as no comments/observations were received from the constituents.*

#### **ITEMS FOR DISCUSSION**

##### **A.1 Status of SLDCs in NER:**

During 2nd NETeST meeting the Sub-committee discussed the scheme in totality viz.

- a) Status of different SLDC s-A presentation by Alstom
- b) Status of building by Nagaland & Mizoram---respective state may comment.
- c) Status of permanent building by Arunachal Pradesh
- d) It is proposed that each utility may kindly take care for more involvement during RTU & SCADA installations at Site.
- e) Any other Issue

ALSTOM representative through a presentation intimated the following:

Name of SLDC/ RLDC	STATUS GIVEN IN 3 <sup>rd</sup> TEST	STATUS AS GIVEN IN 2 <sup>ND</sup> TEST
Assam		VC is now installed and SAT will be carried out on 25.01.2016.
		VC yet to be implemented. UPS

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Tripura		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 <sup>nd</sup> 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 Chimpu SS

		control room. On confirmation from AP side, Alstom will start the work.
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During 2<sup>nd</sup> NETeST meeting 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 Asltom 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.

***Members may kindly intimate the status.***

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

**A). POWERGRID**

- a. KOPEX SAS out from 20.08.2015.  
As per 1<sup>st</sup> NETeST meeting ABB-SAS Service Engineer and POWERGRID Engineer from MISA end will be deputed to sort out KOPEX SAS issue but nobody went there till today and KOPEX is not reporting.
- b. Kolasib which was out from 27.08.2015 has been restored but important telemetry such as Trans-1,Trans-2,132 KV Bhairabi flow not available which are very important for realtime drawal calculation for Mizoram. MIZORAM drawal erroneous.
- c. Salakati data updation is very slow 6mins against 10 secs results in inconvenience to Grid operators & further inter-regional exchange not getting updated correctly.

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As per 2<sup>nd</sup> NETeST meeting no one from Alstom attended the issue- SCT software on C264 RTU at Salakati by 30/11/2015. New RTU has also not been commissioned.

- d. Most of the CS RTUs are on single link due to 2<sup>nd</sup> link failure (responsibility POWERGRID) resulting in 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)

POWERGRID assured to complete the MISA, MARIANI and SILCHAR double link by 15<sup>th</sup> Dec'15 but till today no improvement.

Double link for rest RTUs also no visible action seen where four month time taken to restore.

- e) RTU at 132 Aizawl S/Sn is out from 30.03.2016.

***POWERGRID may kindly restore the links at the earliest.***

## **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. Partial data coming from 2-12.2015

In the last meeting NEEPCO informed that procurement of new RTUs are already underway. Within 4(four) month they replace KOPILI, KATHALGURI, DOYANG, RANGANADI RTUs.

RCN new RTU yet to be installed which was supposed to be installed by November'15.

***NEEPCO may kindly intimate the current status***

**C). AEGCL:**

In new system 20-25 RTUs are reporting against 51 RTUs. This creates loss of observability of NER Grid. So it is very important to restore all RTUs at the earliest.

***AEGCL may kindly intimate the current status***

**D). MePTCL/MeECL:**

**Generating Stations;** LESHKA (84 MW).

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

In the last meeting Meghalaya representative informed that Khliehriat reporting but it is not reporting.

They also informed that Leshka would start reporting by 31/12/2015. For Killing & Byrnihat approval would be taken for OPGW stringing.

In 2<sup>nd</sup> NETeST meeting, 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.

***MePTCL/NERTS may kindly intimate the current status***

**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).

Tripura representative informed that with the integration of new SCADA /RTUs problem would be solved but till today no improvement.

***TSECL may kindly intimate the current status***

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

As informed by ALSTOM Manipur new ICCP link(one way) is restored and Manipur is getting RLDC/CS data but RLDC is not getting Manipur data. So arrange Manipur data to RLDC.

***Constituents may kindly intimate the current status***

G). 132 KV AGIA-MENDHIPATHAR new link telemetry: From AGIA S/s (Assam) the line is not included in the database and data is not coming. Mendipathar S/S(Meghalaya) telemetry is not available.

The line charged but realtime drawal for Assam and Meghalaya affected due to non telemetering problem. Every day there is tussle between RLDC and SLDC due to this.

***NERTS may kindly intimate the current status***

**H). 132 KV BADARPUR-LUMSNONG link telemetry out:**

BADARPUR S/S (Assam) telemetry data is not coming.

Lumsnong S/S(Meghalaya) telemetry is not available.

Realtime drawal for Assam and Meghalaya affected due to non-telemetry problem.

Realtime Grid Management process hampered.

***NERTS may kindly intimate the current status***

I) **Kathalguri & Doyang Voice Communication problem:** It is the responsibility of ISGS/NEEPCO as per IEGC to look up to nearest wide band location through PLCC or strengthening of existing system thereof. After that POWERGRID will take up. But presently it is not being followed and voice communication with ISGS remains out for long. So it is very important to note and follow the same.

***NEEPCO may kindly intimate the current status***

**J) HVDC BNC end 400 KV line marking mis-match:** It is observed that 400 KV BALIPARA-BNC 1 and 2 line(LILO at BNC) at BNC end named as BALIPARA-BNC 2 and 1. Also 400 KV RANGANADI-BNC 1 and 2 line (LILO at BNC) at BNC end numbering reversed.

So immediate correction is needed as it is creating real-time operation problem.

***NERTS may kindly intimate the current status***

**K) At BNC end 400 KV BALIPARA-BNC line 3 and 4 line bay connection is not done** as per diagram sent from BNC end, in fact line -3 connected to line bay-4 and vice -versa resulting network/real time operation related problem. Correction or re-connection is necessary.

***NERTS may kindly intimate the current status***

### **A.3 Dedicated Voice Communication:**

During 113<sup>rd</sup> OCC meeting, NERLDC informed that under existing VOIP communication system (executed by ORANGGE 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 2nd NETeST meeting it was informed that the said 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 may like to discuss.***

**A.4 Rates of new CARDS, service support, assurance of lifespan by M/s ALSTOM:**

As per the resolution of 20<sup>th</sup> UCC meeting held at Agartala on 28<sup>th</sup> 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 21<sup>st</sup> 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 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 to quality of work, price etc. It was decided that the issue needs detailed deliberation

***AEGCL may kindly intimate the status.***

**A.5 Status of SDH installation by POWERGRID:**

As per deliberation of 21<sup>st</sup> 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.

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During 2<sup>nd</sup> NETeST meeting Manager (AM), NERTS informed the forum that supply of SDH equipment for original ULDC nodes (17 locations) under MW vacation was approved in 15<sup>th</sup> 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.)

***NERTS may kindly intimate the status.***

#### **A.6 Status of phase –I of URTDSM project:**

As per deliberation of 21<sup>st</sup> UCC meeting survey completed for NER part. FAT call raised by M/s Alstom. It was informed that NER sites are not under 1<sup>st</sup> 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.

During 2<sup>nd</sup> NETeST meeting DGM (LD&C), CC informed the forum that target date of completion is December, 2016.

***POWERGRID may intimate the status.***

#### **A.7 Replacement of Multiplexers:**

As per deliberation of 21<sup>st</sup> 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 like NERTS. Contact details will be provided to MePTCL.

During 2<sup>nd</sup> NETeST 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.

***MePTCL/POWERGRID may kindly intimate the current status.***

#### **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 19<sup>th</sup> & 20<sup>th</sup> 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 NETeST 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.

***NERPC, NERLDC, POWERGRID may kindly intimate the status.***

## 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 2nd NETeST 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 1<sup>st</sup> NETeST to be procured under SLDC Upgradation scheme (with a new heading under central sector scope) is Rs. 73 lakhs (approx).

***NERPC/ POWERGRID may kindly intimate the status.***

### **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 2nd NETeST 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.

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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.***

***AEGCL/NERLDC may kindly intimate current status.***

### **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.

During 1st NETeST 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.***

***NERPC may kindly intimate the status.***

### **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.

As per deliberation of 1st NETeST meeting,

**Point 1:** Target date of providing 2<sup>nd</sup> 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.**

***NERTS,POWERGRID may kindly intimate the status.***

#### **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 2nd NETeST 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 March2016 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.

Karbi (Langpi) Hydel station is located at remote site, where mobile connectivity is very poor. Absence of voice communication link between Sarusajai & Karbi-Langpi is hampering the system operation. AEGCL request PGCIL to commission the RSU unit under VOIP project at Langpi & Sarusajai at the earliest. AEGCL will extend all possible help required.

***NERTS, POWERGRID may kindly intimate the current status.***

**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.

***SLDCs, POWERGRID and ISGS may kindly intimate the status.***

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

During 2nd NETeST 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.

***TSECL, POWERGRID may kindly intimate current status.***

**B.8 MW Vacation Project:**

During 2nd NETeST meeting Manager (AM), NERTS informed that due to some modifications in tender documents, and approval of new SDH in last RPC, 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 15<sup>th</sup> 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).

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It has been almost 2 years since stringing works of OPGW for Microwave replacement project is completed for some of the major links, but installation and commissioning of the links has not been done, as such connectivity till SLDC could not be provided for those links. AEGCL requests PGCIL who is monitoring this project to look into this matter seriously and do the necessary.

Again Communication Division AEGCL requests PGCIL to configure some ports of Tejas Equipment at both Sarusajai and SLDC kahilipara end. This equipment is connected to optical fiber link of Sarusajai-Kahilipara which was used during ULDC.

Currently only one port is enabled for PMU. With the availability of more ports in this equipment we can provide VOIP to 220 KV Sarusajai, and also look more other options like bringing the Sarusajai Data over 104 protocol via Ethernet link, whose feasibility was discussed in previous NeTEST meeting.

The delay in installation and commissioning of MUX panels under microwave replacement project has also delayed the AEGCL's ADB funded replacement of ground wire with OPGW project. In station where interfacing of KEC supplied ECI MUX with L/S cable supplied Key mile MUX is required, AEGCL would like to request PGCIL to ensure the presence of ECI engineers and AEGCL accordingly will arrange L/S engineers and do that interfacing within this month itself.

***AEGCL, POWERGRID may kindly intimate the status.***

#### **B.9 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).

During 2nd NETeST 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.

***MePTCL, NERTS may kindly intimate the status.***

#### **B.10 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. During 2nd NETeST 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.

***TSECL may please deliberate.***

#### **B.11 CERC telemetry order dated 29.01.2016:**

1.Persistent non-availability of data from the generating stations/sub-stations be taken up in RPC meetings for appropriate direction and action.

2.NLDC is directed to submit user- wise latest status of telemetry, by 31.8.2016.

3. POWERGRID to undertake effective monitoring of telemeter data and to minimize the intermittency in telemetry in all regions within six months from the issue of the order. NLDC is directed to submit status of PGCIL's telemetry within one month thereafter.

4. All the utilities/generating companies which have to still establish telemeter power system parameters as per details given in para 11 of the Order to provide data to RLDCs/SLDCs as per the provisions of the Grid Code and CEA Grid Standards Regulations by 31.7.2016.

**B.12 PMU placement in NER under URTDSM scheme:**

NERTS, POWERGRID has given details of PMU placement in NER under URTDSM in Phase-1 and Phase-2 to NERLDC.

From the proposed schemes, the following were observed:

- 1) At some locations, PMUs are already available under Pilot Project taken up by POSOCO. Hence, PMU placement under URTDSM would result in duplicate.
- 2) Commissioning of some of identified lines are delayed.
- 3) At some locations, the feeders originally proposed are not of critical importance in respect of NER Grid operation.

Considering above, it is proposed to change the PMU locations in Phase-1 of URTDSM project in NER to cover the maximum no. of critical feeders & substations.

The existing PMU locations and proposed changes are given in detail in **Annexure – B.12.**

***NERLDC may please deliberate.***

**B.13 Alternate Telemetry Channel for OTPC Platana Plant:**

At present, there is one communication channel via PLCC from Platana to Silchar. To have reliable telemetry channel another telemetry channel may be incorporated so that data communication is via two channels.

NERLDC is of the view that the crucial importance of Platana plant in NER Grid operation it is requested to take up suitable action so that data communication with PALATANA plant and NERLDC is via two channels. Take up suitable action with POWERGRID.

**B.14 Absence of battery backup at Meghalaya SLDC:**

In the event of grid disturbances the current UPS system at NEHU cannot provide backup to the system due to lower capacity of battery banks. It was understood that replacement was not possible due to administrative issues of vendor. So it is requested that replacement may be considered under current Upgradation project.

***MePTCL may please deliberate.***

**Any other item:**

**Date and Venue of next NETeST**

It is proposed to hold the 4<sup>th</sup> NeTeST meeting of NERPC on second week of August, 2016. The date & exact venue will be intimated in due course.

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## ANNEXURE-B.12

Sl No	As per Scheme			Proposed Changes			Remarks		
	Station	Feeders	No. of PMUs	Station	Feeders	No. of PMUs			
1	Gohpur (Arunachal Pradesh)	132 kV Gohpur - North Lakhimpur	2	400 kV Ranganadi (NEEPCO)	400 kV Ranganadi - BNC I	2	Since PMU is assigned under Arunachal Pradesh, it is shifted to 400 kV and 132 kV buses at Ranganadi in Arunachal Pradesh		
		132 kV Gohpur - Tezpur			400 kV Ranganadi - BNC II				
		132 kV Gohpur - Itanagar			132 kV Ranganadi - Nirjuli				
		-			132 kV Ranganadi - Ziro				
2	Mariani(Assam)	220 kV Mariani (AS) - Kathalguri	2	220 kV Mariani(Assam)	No Change	1	As per discussions in 5th SCM of NER, the 220 kV Mariani(AS) - Misa, 220 kV Mariani (AS) - Kathalguri, 220 kV Mariani(AS) - Samaguri I will be shifted to 400 kV Mariani(PG) bus after upgradation. Also, the 2nd Ckt. Of 220 kV Mariani(AS) - Samaguri is not existing. The feeders of 220 kV PMUs need to be changed to 220 kV Mariani(AS) - Mariani(PG) after project upgradation. Also, 1 PMU may be connected to 132 kV Mariani(AS) to cover LTPS and Golaghat sections, which are important nodes in Upper		
		220 kV Mariani (AS) - Misa			No Change				
		220 kV Mariani (AS) - Samaguri I			132 kV Mariani - LTPS	1			
		220 kV Mariani (AS) - Samaguri II			132 kV Mariani - Golaghat				
3	Samaguri (Assam)	220 kV Samaguri - Sarusajai I	5	220 kV Samaguri (Assam)	No Change	4	The 2nd Ckt. Of 220 kV Mariani(AS) - Samaguri is not existing. Also, the 220 kV Samaguri - Balipara line is not existing after LLOing of this line at 220 kV Sonabil (Assam). Hence, it is proposed to install 1 no. PMU at 400 kV Azara (Assam) covering 400 kV Azara - Bongaigaon and 400 kV Azara - Silchar.		
		220 kV Samaguri - Jnagar			No Change				
		220 kV Samaguri- Sonabil I			No Change				
		220 kV Samaguri- Sonabil II			No Change				
		220 kV Samaguri- Misa I			No Change				
		220 kV Samaguri- Misa II			No Change				
		220 kV Samaguri - Mariani -I			No Change				
		220 kV Samaguri - Mariani -II			No Change				
		220 kV Samaguri - Balipara			400 kV Azara - Bongaigaon 400 kV Azara - Silchar				
4	-		0	400 kV Azara (Assam)	400 kV Azara - Bongaigaon	1	2 nos. PMUs were as per original scheme at Agia. It is proposed to move these 2 nos. PMUs to cover the 220 kV Azara (Assam) substation, given it's importance. Also, one no. PMU from 220 kV Samaguri may also be installed at 400 kV Azara (Assam).		
					400 kV Azara - Silchar				
		220 kV Agia - Boko			2			220 kV Azara (Assam)	220 kV Azara - Agia
									220 kV Azara - Boko
5	Tinsukia (Assam)	220 kV Tinsukia - Behiating I	2	220 kV Tinsukia (Assam)	220 kV Tinsukia - AGBPP I	2	220 kV Tinsukia - Behiating I & II lines, 220 kV Tinsukia - Makum lines are not existing, and not planned in near term. Hence, it is proposed to install the 2 nos. PMUs at Tinsukia in feeders as indicated.		
		220 kV Tinsukia - Makum			220 kV Tinsukia - AGBPP II				
		220 kV Tinsukia - Behiating II			220 kV Tinsukia - NTPS-I				
		-			220 kV Tinsukia - NTPS-II				
6	Balipara (Central)	400 kV Balipara - Misa II	6	400 / 220 kV Balipara (Central)	No Change	6	The 400 kV Balipara - Misa I and 400 kV Balipara - Bongaigaon I are already covered under PMUs by Pilot Project of POSOCO. It is proposed to install 1 no. spare PMU at 220 kV Balipara substation with 220 kV Balipara - Sonabil I & II feeders.		
		400 kV Balipara - Misa I			220 kV Balipara - Sonabil I				
		400 kV Balipara - BNC I			No Change				
		400 kV Balipara - BNC II			No Change				
		400 kV Balipara - BNC III			No Change				
		400 kV Balipara - BNC IV			No Change				
		400 kV Balipara - Bongaigaon I			220 kV Balipara - Sonabil II				
		400 kV Balipara - Bongaigaon II			No Change				
		400 kV Balipara - Bongaigaon III			No Change				
		400 kV Balipara - Bongaigaon IV			No Change				
		400 kV Balipara - Kameng I			No Change				
		400 kV Balipara - Kameng II			No Change				
		7			Bongaigaon (Central)			400 kV Bongaigaon - Binaguri II	7
400 kV Bongaigaon - Binaguri I	400 kV Bongaigaon - BgTPP - I								
400 kV Bongaigaon - Balipara I	400 kV Bongaigaon - BgTPP - II								
400 kV Bongaigaon - Balipara II	No Change								
400 kV Bongaigaon - Balipara III	No Change								
400 kV Bongaigaon - Balipara IV	No Change								
400 kV Bongaigaon - Azara	No Change								
400 kV Bongaigaon- Byrnihat	No Change								
400 kV Bongaigaon - Alipurduar I	No Change								
400 kV Bongaigaon - Alipurduar II	No Change								
220 kV Birpara - Bongaigaon I	No Change								
220 kV Birpara - Bongaigaon I	No Change								
8	Aizawl (Central)		-	0		132 kV Aizawl (Central)	132 kV Aizawl - Zimabawk	1	
		-	132 kV Aizawl - Luangmual						



9	BiswanthChariali (Central)	400 kV BNC - Lsubansiri I	6	400 kV BiswanthChariali (Central)	132 kV Silchar - Imphal I	4	The 400 kV BiswanthChariali - Lower Subansiri I, II, III, IV lines are delayed, and hence it is proposed to move 2 nos. PMUs covering these lines, to 132 kV Silchar (PG) substation covering 132 kV Silchar - Imphal I & II and 132 kV Silchar - P.K.Bari I & II lines. Also, after upgradation of these 132 kV lines to 400 kV level, it is required to move the PMUs to 400 kV Silchar (PG).
		400 kV BNC - Lsubansiri II			132 kV Silchar - Imphal II		
		400 kV BNC - Lsubansiri III			132 kV Silchar - P.K.Bari I		
		400 kV BNC - Lsubansiri IV			132 kV Silchar - P.K.Bari II		
		400 kV BNC - Agra Pole-I			No Change		
		400 kV BNC - Agra Pole-II			No Change		
		400 kV BNC - Balipara I			No Change		
		400 kV BNC - Balipara II			No Change		
		400 kV BNC - Balipara III			No Change		
		400 kV BNC - Balipara IV			No Change		
		400 kV BNC - Ranganadi I			No Change		
400 kV BNC - Ranganadi II	No Change						
10	Silchar (Central)	400 kV Silchar - Azara	2	400 kV Silchar (Central)	400 kV Silchar - Azara	2	2 PMUs moved from 400 kV BiswanthChariali (PG) to be installed at 132 kV Silchar (PG).
		400 kV Silchar - Byrnihat			400 kV Silchar - Byrnihat		
		400 kV Silchar - Palatana I			400 kV Silchar - Palatana I		
		400 kV Silchar - Palatana II			400 kV Silchar - Palatana II		
		-	0	132 kV Silchar (Central)	132 kV Silchar - Imphal I	2	
		-			132 kV Silchar - Imphal II		
-	-	132 kV Silchar - P.K.Bari I					
-	-	132 kV Silchar - P.K.Bari II					
11	Misa (Central)	400 kV Misa - Balipara II	6	400 kV Misa (Central)	No Change	6	220 kV Misa - Dimapur II will be LILoed at New Kohima. 220 kV Misa - New Kohima line will not require separate PMU as 220 kV Misa - Dimapur II is having existing PMU under Pilot Project of PMUs by POSOCO. There will be one spare current input of PMU available at 220 kV Misa. Hence, 1 no. PMU may be installed at 220 kV Misa (POWERGRID) to cover 220 kV Misa - Samaguri I & II lines.
		400 kV Misa - Balipara I			No Change		
		220 kV Misa - Mariani (AS)		220 kV Misa (Central)	No Change		
		220 kV Misa - Mariani (PG)			No Change		
		220 kV Misa - Dimapur			No Change		
		220 kV Misa - Kopili I			No Change		
		220 kV Misa - Kopili II			No Change		
		220 kV Misa - Kopili III			No Change		
		220 kV Misa - Byrnihat I			No Change		
		220 kV Misa - Byrnihat I			No Change		
		220 kV Misa - NewKohima			No Change		
		-			220 kV Misa - Samaguri I		
		-			220 kV Misa - Samaguri II		
12	Kopili (Central)	220 kV Misa - Kopili I	2	Kopili	No Change	2	
		220 kV Misa - Kopili II			No Change		
		220 kV Misa - Kopili III			No Change		
13	Birpara	220 kV Birpara - Siliguri I	4	Birpara (Central)	No Change	4	
		220 kV Birpara - Siliguri II			No Change		
		220 kV Birpara - Chukha I			No Change		
		220 kV Birpara - Chukha II			No Change		
		220 kV Birpara - Chukha III			No Change		
		220 kV Birpara - Bongaigaon I			No Change		
		220 kV Birpara - Bongaigaon II			No Change		
14	New Mariani	220 kV NewMariani - Kathalguri	2	New Mariani	No Change	2	
		220 kV NewMariani - Misa			No Change		
		220 kV NewMariani - Mokokchung I			No Change		
		220 kV NewMariani - Mokokchung II			No Change		
15	Dimapur	220 kV Dimapur - Misa I	1	Dimapur	No Change	1	
		220 kV Dimapur - NewKohima			No Change		