

North Eastern Regional Power Committee

Agenda

For

1st TeST Sub-Committee Meeting

Time of meeting : 10:00 Hrs.

Date of meeting : 06th November, 2015 (Friday)

Venue : "Hotel Nandan", Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF LAST MEETING OF UNIFIED LOAD DISPATCH (21st UCC) SUB-COMMITTEE MEETING.

The minutes of 21st UCC Meeting held on 29th December, 2014 at Guwahati were circulated by NERLDC vide letter No. NERLDC/UCC/NEULDC/2014/2046-2072 dated 02nd February, 2015.

The Sub-committee may confirm the minutes of 21st UCCM of NERLDC as no comments/observations were received from the constituents.

During 111th OCC meeting, all the constituents agreed that UCC meeting, presently coordinated by NERLDC, should be a part of Sub-committee meeting of NERPC and necessary amendment of Conduct of Business Rules (CBR) of NERPC in this regard may be endorsed. This is in line with the practice followed in Northern Region. Accordingly, the same was approved by the 15th NERPC meeting.

In view of the above, the following issues may kindly be discussed:

1. **Renaming of UCC forum as "North Eastern Telecommunication, SCADA & Telemetry Sub Committee Meeting – NETeST".**
2. **Members of the Sub-committee**
3. **Finalization of Scopes of NeTEST Sub-committee:**
 - a) O&M Issues & Project Issue
 - b) Future Perspective of communication & SCADA system in region.

A.1 Status of SLDCs in NER:

The status of setting-up of SLDC as informed by POWERGRID during 113th OCC meeting is given below:

UPGRADATION OF SLDCs

SN	State	Completion Target
1	Assam	30.09.2015
2	Tripura	31.10.2015
3	Meghalaya	31.10.2015
4	NERLDC	30.09.2015

NEW SLDCs

SN	State	Completion Target
5	Manipur	30.11.2015
6	Nagaland	31.03.2016
7	Mizoram	31.03.2016
8	Ar. Pradesh	31.12.2015

EE, SLDC Ar. Pradesh informed that surface area required by Alstom is more than area available with them and this has to be reviewed again. Moreover, as mentioned earlier earthing problem has to be carried out in the scope of POWERGRID. Mizoram, Nagaland endorsed the view of Ar. Pradesh.

The Sub-committee requested POWERGRID to ensure that Alstom, POWERGRID & constituents should have a frequent review meeting to sort out the deficiencies before commissioning of SLDCs.

During 114th OCC meeting, DGM(AM), NERTS informed work is progressing as per schedule. Regarding Communication between SLDC/RLDCs he proposed that it be taken up in the next UCC meeting.

The Sub-committee may kindly deliberate 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

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)
- b. Mariani-Mokokchung 220 KV line MW/MVAR data suspect.
- c. KOPEX SAS out from 20.08.2015.
- d. Kolasib out from 27.08.2015 (Modem problem)
- e. 220 KV Misa-Dimapur line 1&2, Dimapur Transformer 1&2, 132 KV Dimapur-Dimapur line 1&2, telemetry data not updating correctly.
- f. Salakati data updating is very slow 6mins against 10 secs results inconvenience to Grid operators & further inter-regional exchange not getting updated correctly.

- 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 one 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 may kindly intimate the current status.

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.

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.

AEGCL may kindly intimate the current status

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

MePTCL 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).

TSECL may kindly intimate the current status

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

Constituents may kindly intimate the current status

During 113rd OCC meeting, NTPC representative informed that SEM at NTPC has to be installed by POWERGRID before 20.09.2015 and once again requested them to comply the same.

DGM (AM) stated that SEM has already been dispatched to Bongaigoan and the SEM will be installed as mentioned above.

Sr. Manager, NEEPCO stated that since POWERGRID has mentioned that they are not in a position to help the constituents regarding maintenance of RTUs, he requested them to furnish all the details to the constituents so that they can examine the matter.

DGM (AM), NERTS informed that all the details were handed over to NEEPCO by email to ED (O&M), NEEPCO, the same can be availed by them from corporate office NEEPCO.

NEEPCO re-iterated that handing over of details was done in proper manner and requested them to do the same. They requested the forum to intervene in the matter.

After detailed deliberation, the sub-committee requested NERTS, POWERGRID to once again look into the matter and give the details of the RTUs to constituents so that the RTUs can be maintained by them properly.

DGM (SO-II), NERLDC also requested NEEPCO to look into the RTUs dedicated to STGs of NEEPCO at R.C. Nagar since RTUS are not reported properly from above station and suggested to submit a report regarding data availability of AGTPP/AGTPP EXT to NERPC jointly by NERLDC and NEEPCO.

DGM (AM), NERTS informed that S-900 RTUs are obsolete and there is no support from OEM. Hence, replacement of these RTUs is only option which has already been deliberated during earlier UCC Meetings.

During 38th PCC meeting, it was decided that hourly voltage profile of 400kV Azara, Byrnihat and Ranganadi S/S should be sent to NERLDC on daily basis till the RTUs are in place.

After detailed deliberation, the Sub-Committee took note of the matter and referred it to the next UCC meeting.

The Sub-Committee may like to discuss.

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

It has been observed that during most of the cases of grid disturbances data telemetry & 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 remain out causing difficulty in information sharing. As a result of these restoration becomes very difficult and causes avoidable delay. All concerned are requested to kind ensure data & voice communication without interruption for smooth & secure grid operation.

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

The Sub-Committee referred this item to next UCC meeting for further discussion.

The Sub-Committee may like to discuss.

A.4 Dedicated Voice Communication:

During 113rd 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 114th OCC meeting, DGM(AM), NERTS informed that above scheme is likely to be completed by March/April, 2016. Further, he suggested to discuss the issue in forthcoming UCC Meeting

The Sub-Committee decided to refer this item to the next UCC meeting.

The Sub-Committee may like to discuss.

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

In the existing SCADA System, it has been seen that though many filed 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.

NERTS may kindly intimate the status.

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.

AEGCL may kindly intimate the status.

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.

MePTCL, NERTS may kindly intimate the status.

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.

MePTCL, POWERGRID may intimate the status.

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.

MePTCL 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 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.

Members may like to discuss.

A.11 Backup HDR & SOE Data:

SOE & HDR data are highly needed for Grid Operation and for analysis. SLDCs are requested to keep periodical backup of HDR & SOE. Also SOE files are not exchanged/forwarded amongst RLDC & SLDCs on weekly basis against decision made in earlier meetings.

In 21st UCC meeting NERLDC intimated the importance of HDR/SOE backup for analysis of system performance and different kinds of report preparation for higher management. But it has been observed that all SLDCs are not taking backup of HDR and SOE and hence requested again all SLDCs to start taking backup.

Members may like to discuss.

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.

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.

Members may like to discuss.

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.

Members may like to discuss.

B.4 Present Condition of PMU/PDC Client PCs & Phase notations in NER Grid:

Assam, Tripura, Meghalaya & NERLDC may kindly discuss the same. NERLDC may kindly elaborate use of PMU data to forum for fault analysis.

It has been found that PMUs are showing different phasors w.r.t different nodes of same grid. It is suspected that there are change in phase notations in NER grid & connectivity. Forum may comment for correction if any.

Members may like to discuss.

B.5 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.

Members may like to discuss.

B.6 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.

NERTS, POWERGRID may kindly intimate the current status.

B.7 Dedicated Voice Communication:

During 114th OCC meeting, POWER GRID had accepted the proposal and assured to do the same at the earliest.

NERTS, POWERGRID may kindly intimate the status.

B.8 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.

Any other item:

Date and Venue of next OCC

It is proposed to hold the 2nd NeTeST meeting of NERPC on second week of January, 2016. The date & exact venue will be intimated in due course.
