

# North Eastern Regional Power Committee

## Agenda For

### 179<sup>th</sup> OCC Sub-Committee Meeting

**Time of meeting : 10:30 Hrs.**

**Date of meeting : 18<sup>th</sup> June, 2021 (Friday)**

**Venue : “NERPC Conference Hall”, Shillong.**

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

##### **CONFIRMATION OF MINUTES OF 178<sup>th</sup> MEETING OF OPERATION SUB-COMMITTEE OF NERPC.**

The minutes of 178<sup>th</sup> meeting of Operation Sub-committee held on 21<sup>st</sup> May, 2021 at Shillong were circulated vide letter No. NERPC/SE (O)/OCC/2020/3052-3089 dated 04<sup>th</sup> June, 2021.

***The Sub-committee may confirm the minutes of 178<sup>th</sup> OCCM of NERPC with suitable amendments as no other comments/observations were received from the constituents.***

#### **ITEMS FOR DISCUSSION**

##### **B.1. Ensuring reliable power supply and redundancy of power connected to oxygen plants:**

In 178<sup>th</sup> OCC meeting Director(O&P), NERPC informed that Assam and Manipur have been submitting the Status of Power supply to oxygen plants in their states regularly. He requested other states to follow suit.

GM, NERLDC opined that number of trippings have to be reduced for the lines supplying power to the oxygen plants and shutdown of the said lines have to be reduced to a minimum. He further requested the SLDCs to ensure that proper corrective actions are taken in case of tripping of any of these feeders. He requested the SLDCs to furnish detailed report on the reasons of tripping and corrective actions taken to avoid such tripping in future.

EE, SLDC, DoP Ar. Pradesh informed that presently six oxygen plants are in operation at the following locations:

- a.** Tezu District Hospital
- b.** Ziro District Hospital
- c.** Aalo District Hospital
- d.** Chimpu District Hospital
- e.** Anini District Hospital
- f.** Tawang District Hospital

The first five are grid connected and also have DG backup. Tawang oxygen plant is off-grid and is fed from the 11kV grid.

EE, SLDC, P&ED Mizoram stated that three oxygen plants are operational at Aizawl. AGM, SLDC, AEGCL intimated that voltage drop has been observed at Dhemaji oxygen plant. For this AVR has been procured and will be installed latest by May'21.

The forum requested all the SLDCs to submit the status of power supply to oxygen plants and power outage report of oxygen power plants on daily basis to NERPC and NERLDC.

***NERLDC/NERPC may please intimate the status.***

**B.2. Non-closure of Circuit Breaker at Mustem end for 132kV Khliehriat-Mustem line:**

132 kV Khliehriat-Mustem S/C line had tripped on 2nd, 3rd May'21 and was restored by charging the line bypassing the CB at Mustem end due to non-closure issue of the CB as a temporary measure. Also, 132 kV Mustem-Khliehriat S/C and 132 kV Nehu-Mawlyndep S/C lines tripped on 12th May'21 leading to grid disturbance with a load loss of 26 MW at Mustem and Mawlyndep S/S and yet again the 132 kV Khliehriat- Mustem line was charged bypassing the CB at Mustem end.

MePTCL to expedite the rectification of faulty Circuit Breaker at the earliest for reliable operation & provide the schedule for rectification.

In 178<sup>th</sup> OCCM MePTCL informed that ABB personnel would visit in the first week of June'21 to rectify the CB at Mustem.

***MePTCL may please intimate the status.***

**AGENDA ITEM FROM NEEPCO:**

**B.3. Relaxation in regulations required for operation of Pare Power House:**

Pare HEP was originally envisaged as Run of the River Scheme by CEA/CWC in the year 1978 forming a part of the Panyor - Pare Basin Development. As a result, Dikrong basin is being utilized by developing Pare HEP as a run of the River project. Run of river scheme is generally considered as sub optimal design to control flood and irrigation. The benefits of irrigation, flood control etc. for Pare Hydro Electric Project are well accounted in the basin development through the planned downstream Doimukh Storage Project.

Pare Hydro Electric Plant is located very near to densely populated areas and downstream Pare River runs through areas like Doimukh town & Nirjuli. Despite all the best efforts some untoward incidents in Pare River downstream of Pare Hydro Electric Project has been noticed. To prevent such unfortunate incidents social awareness via public address announcement and board casting awareness messages in different mediums is being carried out by Project authorities. Also, there is an Early warning system and siren to alarm caution or evacuate the river bank during water release into the river.

As per NERLDC operation procedure, scheduled revision to be made for 7th block and overloading can be done only when there is spillage. As our Pare HEP is in the downstream of RHEP and catchment volume of Pare HEP is relatively less as it is designed to utilized as run of river with small pondage. Due to which RWL increasing trend is very abrupt when RHEP is at full load or inflow of Pare river is high.

The 6 blocks gap (from revision block to schedule block] is enough to increase RWL near to FRL. Also, NERLDC generally don't allow overloading of units till there is spillage. It's also to be noted that during Pare HEP dam spillage, generally RHEP runs at full load, at this condition frequency tends to be higher and for higher grid frequency in RGMO mode our machine loading decreases automatically below set point which further decrease the water consumption of units.

Therefore, considering Pare HEP being run of river with small pondage and regulations of NERLDC, it has become considerably tough to prevent water release through radial gate opening. This is not only wastage of national renewable resources but also uncontrolled release of impounded water hit the livelihood of downstream people.

We have seen that different power plants from different locations of our nation opted for exemption of regulations in the line of vintage plants or for other different constraints. Therefore, competent authority may pursue the matter for some relaxation in regulations in the line with constraints of Pare HEP.

The following relaxations may consider especially for Pare HEP-

- a. Six (6) blocks gap may be reduced to 3-4 blocks.
- b. Allowing to overload units before spillage to prevent Radial gate opening.
- c. Allowing to turn off RGMO mode to prevent Radial Gate opening.

***NEEPCO may please deliberate.***

**AGENDA ITEM FROM NERLDC:**

**B.4. Voltage discrepancy among the phases of Bus CVT at Ranganadi and commissioning of 400kV Bus A at Ranganadi:**

A voltage difference of around 3-4 kV is observed among the phases of 400 kV Bus CVT at Ranganadi due to faulty R-phase of the 400 kV Bus CVT. Since the SCADA input of the Bus Voltage reported at NERLDC is fed from the 400kV Bus CVT, a discrepancy of 3-4 kV is observed between the Ranganadi Station and that reported at NERLDC and hence the 400kVbus voltage remains predominantly above the IEGC BAND causing high voltage deviation. NEEPCO is requested to look into the matter and take corrective action to resolve the issue of voltage discrepancy of the 400 kV Bus CVT.

Also, as per the minutes of 163rd OCCM, procurement of the elements required for installation of 400 kV Bus-A at Ranganadi was initiated and the target date was to be intimated after placing of LOA and the collection of budgetary offers along with tendering was to be done in May'2020 as per 166th OCCM. Thereafter, there is no update on the matter. Hence, NEEPCO is requested to share the latest status regarding the same and expedite the commissioning works.

***NERLDC may please deliberate.***

**B.5. Ensuring reliability of the transmission network and adhering to best Operation and Maintenance Practices during ongoing pandemic:**

NLDC vide its letter dated 07th June'21 asked the transmission utilities to take necessary measures of preventive line maintenance/vegetation management and/or other best practices to enhance transmission system reliability.

NERLDC vide letter dated 11th June'21 to the NER utilities highlighted that a large number of multiple trippings of transmission lines had occurred since May'21. It was observed that most of the elements had tripped due to transient nature of fault and a few trippings occurred due to mal-operation/non-operation of the protection system. Hence, proper vegetation clearance and ensuring the healthiness of the protection system is of utmost importance. It is therefore, requested that respective constituents and ISTS licensees may take necessary measures of preventive line maintenance/vegetation management and checking healthiness of protection system and various protection schemes. It is also requested to share a copy of the measures taken in this regard for reducing the number of trippings and ensuring reliable power supply.

***NERLDC may please deliberate.***

**C. ITEMS FOR STATUS**

**AGENDA ITEM FROM NERLDC:**

**C.1. Status of commissioning of 400kV Thoubal S/S and 132kV Gamphazol S/S of Manipur:**

Provisional test charging approval was accorded for 400 kV Thoubal S/S on 11th March'21 by NERLDC for the inaugural function and the substation was first time charged on 12th March'21 after which the same was kept under outage from 28th March'21 till the submission of pending documents. MSPCL is requested to share the latest status update and expedite the commissioning of 400kV Thoubal S/S along with furnishing of the pending documents.

MSPCL had applied for shutdown of 132kV Yurembam-Karong line for stringing work of conductors from dead end tower LILO portion to gantry of new 132 kV Gamphazol Substation for forming 132kV Yurembam-Gamphazol- Karong link on 5th Jun'21. MSPCL is requested to share the status of commissioning of 132 kV Gamphazol S/S with tentative timeline of completion.

***NERLDC may please deliberate.***

**C.2. Status of 400kV Silchar-Misa-I line reactor at Misa end:**

400kV Silchar-Misa I line reactor at Misa end fault tripped on 21st May 2021 on Bucholz Relay operation and is still under outage. NERTS is requested to look into the matter and restore the line reactor at the earliest for reliable grid operation.

***NERLDC may please deliberate.***

**C.3. Status of commissioning of 220kV Samaguri-Mariani-I:**

Outage of 220 kV Samaguri-Mariani II causes vulnerability and reduced reliability in the Upper Assam area of NER Power System. In the event of shutdown/outage of 220 kV Samaguri - Mariani II, considering N-1 contingency, the system becomes vulnerable and generation backdown from AGBPP, NEEPCO and LTPS, LRPP and NTPS of APGCL is inevitable.

AEGCL is requested to provide the status update of the 220kV Samaguri-Mariani I and expedite the line to ensure reliability and security of the Upper Assam area of NER Power System.

***NERLDC may please deliberate.***

**C.4. SEMs to be procured for Sterlite and KMTL ongoing projects:**

NERTS confirmed over mail regarding receipt of 50 Nos. SEM and 10 Nos. DCD at Misa Substation on 23.03.2021. NERLDC prepared a list of 30 nos. SEM and 07 nos. DCD on priority basis and sent to NERTS via mail on 29.04.21. Therefore, currently a total of 20 nos. SEM and 6 nos. DCD is in stock as spare (considering 3 nos. DCD as spare from earlier 20 nos. DCD procurement and 3 nos. from the present DCD procurement of 10 nos.).

NERTS may ensure the SEM and DCD distribution as per the list provided vide mail on 29.04.21.

***NERLDC may please deliberate.***

**C.5. Procurement of SEM&DCD/laptop for future requirements:**

NERTS may intimate the status of procurement of:

- (I) 125 nos. SEMs and 15 nos. CMRIs
- (II) Additional 40 nos. of DCD

***NERLDC may please deliberate.***

**C.6. Data collection at 132kV Ambassa for Ambassa end of 132kV PKBari line:**

In 176<sup>th</sup> OCCM, the forum agreed for installation of the 5A SEMs procured by M/s STERLITE after getting certification from CTU/POWERGRID at Ambassa S/s till the CTs are replaced with 1A secondary CTs by TSECL at the earliest.

Currently, the other end meter reading (PK Bari (Sterlite)) is used for Tripura drawal accounting, and in case of any malfunction of this meter, energy accounting of this inlet point will not be possible.

Tripura & NERTS may update the status as SEM data of 132kV Ambassa end is yet to be received by NERLDC.

***NERLDC may please deliberate.***

**C.7. Pair check mismatch of 400kV Azara-Silchar:**

In 177<sup>th</sup> OCCM, it was decided that the CT ratio of SEM at Azara end should be 1000:1 in place of existing 2000:1 to enable matching with CT ratio of Silchar end SEM.

***NERLDC may please deliberate.***

**C.8. Workshop cum 38<sup>th</sup> Meeting of Fold:**

The 38<sup>th</sup> meeting cum workshop of FOLD is scheduled to be held on 15<sup>th</sup> July 2021, 10:30 hrs onwards through video conferencing and WebEx application mode. The agenda of the meeting is sharing best practices by SLDC Jammu & Kashmir and NRLDC, followed by open forum discussions. All the SLDCs of NER are requested to attend and actively participate in the meeting and provide their confirmation on the mentioned date.

***NERLDC may please deliberate.***

<b>ITEMS FOR DISCUSSION</b>
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**D.1. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING MARCH, 2020**

NERLDC shall present the operational performance for the month of March,2020.

**D.2 Generation Planning (ongoing and planned outages)**

- a. Present per day MU and projected number of days of operation.

Plants	Reservoirs level in meter	MU content	Present DC (in MU)	No of days as per current generation
Khandong + Kopili stg II				
Kopili				Will be “0” until further intimation.
Doyang				
Loktak				

The outage of other generating stations may be approved considering the present water levels in reservoirs and long term outage of Kopili HEP.

***The Committee may discuss and approve the proposed shutdown by Generating Stations as given in Annexure – D.2 which is available in NERPC website.***

### **D.3 Outage Planning Transmission elements**

It was agreed in the 99<sup>th</sup> OCC meeting that shutdown will be availed only after approval is given by the OCC forum. It was also agreed that deferment/revision of outages elements other than already approved in OCC will be henceforth put/displayed in the website of NERPC (**under Operational Activities/OCC Approved shutdown**) as per CERC regulations/ CEA guidelines etc., for ensuring smooth & secure grid operation.

#### **Furnishing request of shut down of the element, which was approved by NERPC, by Indenting Agency (ISTS licensees/STUs/Generating Companies) to NERLDC:**

Planned shutdown approved by NERPC shall be considered for implementation by NERLDC on D-3 basis. If an outage is to be availed on say 10<sup>th</sup> of the month, the shutdown availing agency would reconfirm to NERLDC on 7<sup>th</sup> of the month by 10:00 Hr. This practice is necessary to ensure optimal capacity utilization and the time required for associated system study/coordination by/amongst RLDC/NLDC.

***The sub-Committee may kindly discuss and approve the transmission line outages proposed by Constituents for June - July, 2021.***

### **D.4 Estimated Transmission Availability Certificate (TAC) for the month of April, 2021:**

NETC and POWERGRID have submitted the outage data for the month of April, May, 2021. So, the attributability of outage of the said elements may please be finalized.

POWERGRID has intimated that the shutdown of 132 KV Pasighat - Roing was approved from 08:00hrs of 20/05/2021 to 16:00hrs of 21/05/2021. The shutdown was necessitated for shifting of conductors from existing (but endangered) ERS tower to a new (and located at a safe distance) ERS tower near loc 213.

However, the stringing works had suffered severely owing from rapid rise of water in nearby Dotung river coupled with incessant rainfall. Rising water level has become a major obstacle in stringing of Y-ph conductor. While paying out, a portion (mid-span) of conductor has fallen into river, as it slipped away from the boat engaged in midstream river. A submerged portion of conductor still couldn't be withdrawn due to high turbulence of river water. Moreover, restrictions from COVID - 19 pandemic has prevented the team from accessing additional manpower and machineries. Despite these unforeseen incidents, all possible efforts was put to complete stringing works and enable smooth power flow of this crucial transmission line on 25.05.2021 at 21:47 Hrs.

Now, the above mentioned time taken from 08:00hrs of 20/05/2021 to 21:47 Hrs of 25.05.2021 for restoration of the line for avoiding collapse of tower and hence avoiding major power outage to several districts of Arunachal Pradesh, it is requested to consider the outage under "Forced Majeure due to natural cause" Category.

***Members may please discuss.***

**Any other item:**

**Date and Venue of next OCC**