

North Eastern Regional Power Committee
Agenda For

169th OCC Sub-Committee Meeting

Time of meeting : 10:30 Hrs.

Date of meeting : 14th August, 2020 (Friday)

Venue : “NERPC Conference Hall”, Shillong.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 168th MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 168th meeting of Operation Sub-committee held on 20th July, 2020 at Shillong were circulated vide letter No. NERPC/SE (O)/OCC/2020/3052-3089 dated 3rd July, 2020.

The Sub-committee may confirm the minutes of 167th OCCM of NERPC as no comments/observations were received from the constituents.

ACTION TAKEN -ITEMS

B.1. ACTION TAKEN:

1. IMPLEMENTATION OF PROJECTS FUNDED FROM PSDF:

The status as informed in 168th OCC:

State	R&U scheme	ADMS	Capacitor Installation	SAMAST**	Line Differential Protection
Ar. Pradesh	Package-I (Diagnostic tools) Materials supplied. P-II (for PLCC & communication) LOA issued. P-III (Substation equipment) Under tendering stage Work delayed due to COVID situation. Station-wise status to be updated	Requisition for second tranche of 60% submitted in June'20.	-	TESG approval awaited	-
Nagaland	All completed except for PLCC package. Delayed due to COVID situation. Station-wise status to be updated.	Requisition for second tranche of 60% submitted. Associated documents like CA certificate to be sent.	-	Reply against TESG queries sent except BoD approval.	Lines identified. Under DPR preparation stage.

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Mizoram	Completed. 10% remaining claim to be submitted ASAP.	Requisition for second tranche of 60% submitted alongwith CA certificate on 07 th July,2020.	To reply to TESG queries.	TESG approval awaited.	Lines identified for installation of DPR viz. 132kV Aizawl - Luangmual and 132kV Kawmzawl - Khawiva.
Manipur	Package-II: completed Package-I: WIP Delayed due to COVID situation Station-wise status to be updated.	Amount corresponding second tranche of 60% received. To be disbursed.	PSDF approved. NIT to be floated.	TESG approval awaited.	Lines identified. LDP for 132kV Imphal-Imphal and 132kV Jiribm-Jiribam proposed. Under DPR preparation stage.
	33kV System Integration with SLDC	In tendering stage			
	Reliable Communications for grid connectivity	In tendering stage			
Tripura	Work completed. 10% remaining claim to be sent ASAP. Station wise status to be updated.	New a/c to be opened by 18 th July,2020. Requisition for first tranche of funds to be sent immediately	Study results to be submitted alongwith DPR	TESG approval awaited.	Only single line 132kV 79Tilla to Budhjangn agar. DPR to be prepared.
Assam	LOA issued. WIP, delayed due to COVID situation Station-wise status to be submitted.	Bank a/c to be opened. Requisition for 30% to be submitted ASAP.	-	Under finalization stage for LOA.	Lines identified. Under DPR preparation stage.

Meghalaya	MePTCL Completed in all respects** MePGCL – 10% claim to be submitted ASAP. Station-wise status to be updated.	Final tranche of 10% received.	-	Under finalization stage for LOA.	WIP. Delayed due to COVID situation

All state utilities are requested to furnish latest status station-wise as per format by first week of every month on regular basis to Member Convener, PSDF Project Monitoring Group (AGM, NLDC, POSOCO) with a copy to NPC & NERPC. The LOAs of R&M Scheme are to be furnished to NERLDC/NERPC regularly.

States may please intimate the latest status.

B.2. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING JULY, 2020

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

C. ITEMS- STATUS REVIEW

C.1 Auto-reclosure issues at Azara:

In 168th OCCM, AEGCL informed that the communication channel mismatch issues still persist. It was decided that shutdown would be availed by AEGCL & NERTS in July'20.

AEGCL/NERTS may please inform the latest status.

C.2 Implementation of SPS-2&4 related to Bangladesh

It was agreed during the special meeting held on 20.02.20 that for SPS 2 and SPS 4 related to Bangladesh, the tripping can be done at Indian side. The issue was also discussed during the outage coordination meeting held on 22.05.20 via VC.

It was expected that these two schemes out of the four schemes can be implemented on immediate basis. This would also facilitate in availing the shutdowns of 400 kV Silchar – Palatana I or II without reduction in generation of Palatana by keeping SPS-2 (India) in operation.

NERTS may please inform the latest status.

C.3 Restoration of Assets damaged at Kopili HEP due to failure of Penstock:

As per decisions in previous meeting(s):

- (i) Detailed ownership and scope of work finalized in the 168th OCC meeting
- (ii) Immediate restoration of one 220kV line, one 132kV line and 160MVA ICT at Kopili S/S via AIS by NERTS.

NERTS may please inform the status.

C.4 Difficulties faced in management of high voltage scenario in Upper Assam System

Decisions regarding measures to control over voltage in Upper Assam System is difficult due to non-availability of real time MVAR support from Namrup and Lakwa. This causes opening of 220 kV AGBPP-Mariani (AS) and 220 kV Mariani- Namrup lines as a precautionary measure. SLDC Assam is requested to take necessary actions regarding the following:

- a. Real time SCADA data availability from state owned generating stations
- b. Namrup and Lakwa should deliver maximum MVAR support as per capability curve limit

In 168th OCCM AGM, SLDC, AEGCL informed that Old LTPS and NTPS generating station data will be reporting through old RTUs as they are not part of SAS upgradation project. Also for additional analog/digital data integration as demanded by NERLDC additional MFM and RTU installation at Generating station control room (both LTPS and NTPS) is required and also to bring the RTU data to PLCC room located at switchyard control room RS232 to RS485 converters will be required(zpc proposal already submitted for procurement of the converters). Communication Division Jorhat shall carry out the works with assistance from APGCL authority. The above works are hindered due to prevailing lockdown.

For LRPP and NRPP the commissioning of Remote SAS gateway is pending which is under the scope of APGCL. These works are also hindered by lockdown due to virus outbreak as per APGCL. He assured that both the works are being expedited and tentative completion is Aug'20.

AEGCL/NERLDC may please inform the status.

C.5 Status update of important grid elements under prolonged outage impacting system operation:

Sl. No	Element	Owner	Remarks	Latest status
1	63MVAR Reactor at Byrnihat to replace with 80MVAR Reactor	MePTCL		
2	132kV Dimapur - Imphal	NERTS	Out since 25.07.2018	
3	220kV Sonabil-Samaguri-I	AEGCL	Out since 14.01.2019	
4	132kV Srikona-Panchgram	AEGCL	Out since 14.01.2019	
5	63MVAR L/R for 400kV Palatana-SilcharCkt-I	OTPC	Out since Apr'19	
6	132kV Jiribam – Rengpang	MSPCL		
7	220KV-Agia-BTPS-I	AEGCL	Out since 15.03.2020	
8	132KV-Pare-Itanagar-1	Arunachal Pradesh	Out since 12.07.2020	
9	132KV-Ranganadi-Itanagar-1	Arunachal Pradesh	Out since 12.07.2020	

Concerned utilities may please inform the status.

D. I T E M S FOR DISCUSSION

D.1 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			0	
Kopili			0	Will be "0" until further intimation.
Doyang			1.14	
Loktak			1.80	

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.2 Outage Planning Transmission elements

It was agreed in the 99th 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 10th of the month, the shutdown availing agency would reconfirm to NERLDC on 7th 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.

It was decided in the previous OCCM that shutdown would be granted from the 1st day of the following calendar month to the 30th/31st day of the same month.

The sub-Committee may kindly discuss and approve the transmission line outages proposed by Constituents for 01st September,2020 to 30th September,2020 which is available in the website of NERPC.

D.3 Estimated Transmission Availability Certificate (TAC) for the month of July,2020:

NETC and POWERGRID have submitted the outage data for the month of July,2020. So the attributability of outage of the said elements may please be finalized.

Members may please discuss.

D.4 Charging of 132kV Sihhmui S/S and related issues:

In the Special meeting held on 24.07.2020 with participation of NERLDC, P&ED Mizoram, NERTS at NERPC Shillong the following were decided regarding charging of 132kV Sihhmui S/S:

- Present condition of idle charging from Melriat end as anti-theft measure to remain in place. For charging of 132 kV Bays of Melriat – Sihhmui D/C at Sihhmui Substation, 132 kV Sihhmui Bus and 132/33 KV, 12.5 MVA Transformer at Sihhmui Substation, fresh application is to be applied to NERLDC and approval to be obtained.
- NERTS-POWERGRID to apply afresh for charging clearance/First Time Charging and Trial operation certificate for 132kV Melriat-Sihhmui including bays at both ends after obtaining clarification from NERPCTP, CEA.

Members may please discuss.

D.5 Continuous shutdown of 220 kV Bus Coupler & 4 x 33 MVA 220/132kV ICT-1 along with associated bays w.e.f 06/09/2019 and shifting of 01 set of 220 kV Bus PT at Dimapur w.e.f 02/09/2019 at Dimapur Substation.

Decisions/deliberation in previous meeting(s) and Special meeting with Engineer-in-Chief, DoP Nagaland & Chairman, TCC on 19.03.2020:

- Continuous Shutdown of the 220kV/132kV 4x 33 MVA ICT – 1, 220 kV Bus coupler and ICT-1 bays (Bay No.203 & 204) till erection, testing and commissioning of the new GIS system - required by NERTS
- Upgradation of 132kV Karong-Mao completed and presently upgraded 132kV Karong-Kohima(panther conductor) available.
- Pre-requisites for shutdown approval: 132kV Imphal-Kohima-Dimapur connectivity (Breaker NO at 132kV Imphal-PG), requirement of 85-90MW for Dimapur load center.
- No SPS shall be implemented for the shutdown.

Members may please discuss.

D.6 RGMO analysis for events dated 11th June, 2020

In 168th OCC meeting, NERLDC presented the RGMO Analysis for event dated 11th June 2020 and the following was highlighted by NERLDC:

- Palatana GTGs gave positive response initially but could not sustain the same
- Palatana STGs response reduced immediately after oscillation
- BgTPP Unit 2 response immediately reduced after initial positive response
- RHEP unit -1 gave a negative response

- Very less or negligible response from all generators except Loktak Unit-2 which provided response equal to desired response

Members may please discuss.

D.7 Shutdown of OTPC Module-I:

It is proposed to have shutdown of OTPC Palatana Unit-1 in the first week of Oct'20 for 8 days for HRSG-1 license renewal.

In 168th OCCM Sr. Manager, TSECL requested that the shutdown be deferred by one month in view of Puja. Sr. Manager, OTPC informed that since license renewal is a periodic activity and is completed in a short time frame, the shutdown may be allowed in the proposed time frame so that uninterrupted power supply can be ensured in the Puja period.

Members may please discuss.

D.8 Status of NERPSIP, Comprehensive Scheme of Transmission & Distribution System in Arunachal Pradesh & Sikkim and TCB projects:

The disturbances due to weak connectivity and radial transmission systems of NER grid may be avoided with the completion of various transmission projects which are being implemented in NER under NERPSIP, Comprehensive Scheme of Transmission & Distribution System in Arunachal Pradesh & Sikkim and TCB projects. Implementation of these projects may be expedited in order to reduce occurrences of these disturbances.

In 168th OCCM, ED, NERLDC stated that under NERPSIP and Comprehensive Scheme many transmission elements shall be integrated into the grid, so monitoring the status of such projects are essential. He requested POWERGRID-NERPSIP to submit the quarterly status report to NERLDC/NERPC. It was decided that representative(s) from NERPSIP-POWERGRID and respective state utilities (dealing with the project) shall be invited henceforth to OCC meeting for updating the forum about progress of works.

Members may please discuss.

D.9 Capitalization of 80MVAR Bus Reactor at Misa.

In 168th OCCM CGM(AM), NERTS informed that 420kV 80MVAR Bus Reactor has been installed and charged at 400kV Misa S/Sn as part of Misa-Mariani line upgradation. However, the 220kV line is yet to be upgraded. He stated that the reactor may be capitalized if there is grid requirement. After detailed deliberation the forum requested NERLDC to assess the present requirement of the Bus Reactor.

Members may please discuss.

Metering Agenda

D.10 SEMs to be Procured

In 168th OCCM NERTS informed that M/s L&T has confirmed completion of manufacturing of all the SEMs and has submitted the test reports. Based on the test reports, POWERGRID is proposing waiver of pre-dispatch inspection.

NERTS may please inform the status.

D.11 SEM time drift:

NERLDC may please present the time drift report.

Members may please discuss.

AGENDA ITEMS FROM NERLDC:

D.12 Accurate Load forecasting by SLDCs as per IEGC c1.5.3 for better system operation:

RMSE for actual data in comparison to that forecasted data by the states for the month of Jun'20 is as follows:

Day	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
Median (Jun'20)	14	12	8	23	27	10	17

NERLDC may please deliberate.

D.13 Status of commissioning for Upcoming projects:

(a) Kalpataru Power Transmission Limited (KPTL) was selected based on tariff based competitive bidding to execute the transmission system for Kohima – Mariani Transmission Limited in respect of NERSS-VI on BOOM basis. The scope of the project was (a) Establishment of 400/220 kV, 7X167 MVA (Single Phase including one spare) S/S at New Kohima, (b) Imphal-New Kohima 400 kV D/C line, (c) New Kohima-New Mariani 400 kV D/C line. In the 5th SCM of NER, it was decided that New Kohima (400/220 kV TBCB) – New Kohima (220/132kV - Nagaland) 220 kV D/c line would be implemented by Nagaland, CTU (POWERGRID) would provide 2 no. 400 kV line bays at New Mariani S/s for termination of New Kohima – New Mariani 400 kV D/C line and CTU (POWERGRID) would up-grade New Mariani substation to 400/220 kV with 2x500 MVA transformer along with associated bays.

NERLDC vide letter no NERLDC/SOII/343 dated 23.07.20 requested POWERGRID to intimate the status of upgradation of New Mariani Substation to 400/220 kV with 2x500 MVA Transformer along with associated bays & elements. Also, NERLDC vide letter NERLDC/SOII/344 dated 23.07.20 to the Commissioner , Power and Information Technology

& Communication had requested to intimate the status of 220 kV New Kohima (KMTL)- New Kohima (DoP Nagaland) D/C & 220/132/33 kV New Kohima S/S.

(b) M/S Sterlite selected based on tariff based competitive bidding is constructing several transmission lines which would provide alternate evacuation path for Palatana GBPP and also connectivity of Silchar S/S with Misa S/S.

Certain elements not under the scope of Sterlite are crucial for enabling proper utilization of upcoming system.

Some such elements are:

132kV SM Nagar (Sterlite)-SM Nagar (TSECL)

132kV PK Bari (Sterlite)-PK Bari (TSECL)

400 KV Connectivity between Palatana-SM Nagar

NERLDC may please deliberate.

D.14 Idle Charging of Transmission Element and Request for Issuance of Trial Operation Certificate

As per Clause no 5(2) (b) of CERC (Terms and Conditions of Tariff) Regulations, 2019, it is mentioned about Trial operation certificate issued by the concerned RLDC for charging anelement with or without electrical load.

However, as per Clause no 6.3 A (5) of CERC (Indian Electricity Grid Code) Regulations, 2010, Trial run and Trial operation in relation to a transmission system or an element thereof shall mean successful charging of the transmission system or an element thereof for 24 hours at continuous flow of power, and communication signal from the sending end to the receiving end and with requisite metering system, telemetry and protection system in service enclosing certificate to that effect from concerned Regional Load Despatch Centre.

It may be mentioned that TBCB projects are under commissioning stage in NER where the ownership of a transmission line along with associated bays belongs to more than one utility (Say, 400 kV Imphal – New Kohima D/C, 400 kV Silchar(PG) - Misa(PG) Ckt-D/C, etc). If all concerned utilities are not ready at their respective ends, there will be no active power flow and communication signal from sending end to receiving end. On application by the concerned utility who has completed his part to charge the respective asset as per provision in CERC (Terms and Conditions of Tariff) Regulations, 2019, RLDC may issue the certificate of idle charging of the concerned asset for the requested period after verification of the submitted documents.

NERLDC may please deliberate.

D.15 First Time charging of Intra-state elements:

NERLDC vide Letter no: NERLDC/SOII/353 dated 29.07.2020 had mentioned the requirements of NERLDC during First Time Charging of Intra- State Elements.

It was mentioned in the letter that SLDCs may follow the procedure issued by NLDC which is available at NERLDC website (<https://www.nerlhc.org/first-time-charging-procedure/>) for Intra – state elements as well for bringing uniformity throughout the region for smooth operation of power system and the interest of grid security.

In addition, SLDCs must ensure telemetry data and communication system and also ensure healthiness of the protection system in line with various provisions in the Regulations.

In view of the same, all the SLDCs are requested to submit the documents as per the Letter **NERLDC/SOII/353 dated 29.07.2020** in FTC portal (http://103.7.131.237:8080/FTC_NERLDC/) for confirmation from NERLDC prior to issue of first time charging clearance by SLDC in order to ensure availability of real time data for smooth grid management and also ensure grid security and reliability.

NERLDC may please deliberate.

D.16 Regarding – Ensuring healthiness of transmission network involving Eastern region and North Eastern region for safe and reliable evacuation of high hydro generation during ongoing monsoon season:

Due to heavy rainfall in northern part of Bihar, 400/220 kV Dharbanga substation has flooded since morning hours of 28th Jul'20. For safety purpose, all lines from aforesaid substation have been manually switched off since 11:31 Hrs on 28.07.20. Any contingency in the nearby substation may endanger the connectivity of North

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Eastern Region, Bhutan, Sikkim and Northern part of West Bengal state and rest of the system.

All planned shutdown related to Alipurduar S/S may be differed and all the concerned utilities are advised to be in alert mode to take swift action in case of any further tripping and depletion of network.

NERLDC may please deliberate.

D.17 Tripping of 220kV BTPS-Salakati D/C on 05.08.2020:

220 kV BTPS – Salakati 2 line tripped due to unbalance current at 20:33 Hrs on 05.08.20. Subsequently, 220 kV BTPS – Salakati1 line tripped on over current.

- AEGCL is requested to intimate the status of SPS related over loading of 220 kV BTPS – Salakati D/C
- Reconductoring of BTPS- Salakati 220kV D/c line with HTLS conductor (ampacity of single HTLS shall be 1596A, which is equivalent to Twin ACSR Moose conductor for 45°C ambient and 85°C maximum conductor temperature) along with requisite modification in bayequipment at both ends was agreed in 2nd NERSCT. Status of this project may be updated.

NERLDC may please deliberate.

D.18 Details of upcoming Renewable Energy Sources(RES) in NER:

In view of the penetration of the Renewable Energy Sources (RES) in the NER grid as per upcoming projects, proper planning and system study becomes critical from grid operators point of view for ensuring the grid security and reliability. To facilitate the same, it is requested to furnish the following details of planned RE generation interfacing in your respective states latest by 31.08.2020.

- a) Nodal Person for RE Project (Name, Designation, Email ID, Communication Address Phone number)
- b) Details of Implementing Agency
- c) Name and Voltage level of node at which RES will be connected
- d) Type of Renewable Source and Installed Capacity
- e) Locations (Latitude and Longitude) and
- f) Target date of completion

NERLDC may please deliberate.

D.19 Furnishing of D-2 generation forecast on daily basis:

In 164th OCC Meeting (Agenda D.22) it was approved that all ISGS of NER shall furnish their generation availability on D-2 basis i.e. 2 days ahead basis. This has been useful not only for calculation of TTC/ATC but also for pre-planning of grid operation. Thus, for better planning it is now proposed that all other generating stations of NER should also furnish the D-2 generation forecast on daily basis. SLDCs may kindly coordinate and provide the said generation data on D-2 basis daily.

NERLDC may please deliberate.

Any other item:

Date and Venue of next OCC