

North Eastern Regional Power Committee

Agenda For

164th OCC Sub-Committee Meeting

Time of meeting : 10:00 Hrs.

Date of meeting : 21st January, 2020 (Tuesday)

Venue : "Hotel Landmark", Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 163rd MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 163rd meeting of Operation Sub-committee held on 17th December, 2019 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2016/4556-4591 dated 15th January, 2020.

The Sub-committee may confirm the minutes of 163rd 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 162nd OCC:

State	R&U scheme	ADMS	Capacitor Installation	SAMAST**	Line Differential Protection
Ar. Pradesh	Package-I NOA issued Finance dept concurrence not given. P-II tender opened. P-III tender by Nov'19. Station-wise status to be updated *	TPA to be signed by Govt. of Ar. Pradesh by 22.11.2019.	-	Reply against TESG queries to be sent.	-
Nagaland	All completed except for PLCC. Station-wise status to be updated.	TPA completed, A/c opened. Fund requisition to be sent to NLDC.	-	Reply against TESG queries to be sent.	Lines identified. Under DPR preparation stage.
Mizoram	Not updated due to absence of representative	Not updated due to absence of representative	To reply to TESG queries.	To reply to TESG queries.	Lines identified for installation of DPR viz.

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					132kV Aizawl - Luangmual and 132kV Kawmzawl - Khawiva.
Manipur	By Nov'19 Station-wise Status report to be submitted	By Nov'19 A/C will be opened and subsequently requisition for funds.	Approval awaited for NIT	To reply to TESG queries.	Lines identified. LDP for 132kV Imphal- Imphal and 132kV Jiribm- Jiribam proposed. Under DPR preparation stage.
Tripura	Station-wise status to be updated *	Contract agreement signed. Draft TPA with Govt of Tripura. TPA & A/C opening by Nov'19	Study to be carried out in consultatio n with NERLDC.	To reply to TESG queries.	Lines not yet identified. To be taken up in Sub- group.
Assam	Station-wise status to be submitted for 48 stations by Nov'19	TPA by Nov'19	-	Appraisal Committee approved.	Lines identified. Under DPR preparation stage.
Meghalaya	MePTCL Station-wise status updated MePGCL - Station-wise status to be updated.	TPA completed and A/C opened. Requisition for first tranche given to PSDF. Work at SLDC & 2 stations completed.	-	Appraisal Committee approved.	LOA issued. Fund awaited.

Meghalaya has submitted the station-wise status. The other state utilities are requested to furnish status in similar format, 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. As per deliberation in the previous meetings all the utilities were requested to submit station-wise status of R&U schemes.

States may please intimate the latest status.

2. Long Outage of Important Grid Elements:

Name of the Element	Name of Utility	Status as informed in 163 rd OCC	Latest status
63MVAR Reactor at Byrnihat to replace with 80MVAR Reactor	MePTCL	Agreed by NLDC/NPC	
132kV Dimapur - Imphal (out since 25.07.18)	NERTS	Land survey for relocation of 2 Towers completed by NERTS. Latest survey report to be shared by NERTS.	
220kV Sonabil-Samaguri-I	AEGCL	OBD on 26.12.2019.	
132kV Srikona-Panchgram(out since 14.01.2019)	AEGCL	Pile foundation may be required. LOI for soil testing soon.	
63MVAR L/R for 400kV Palatana-Silchar Ckt-I (out since Apr'19)	OTPC	By Dec'19	
OTPC Module-I (out since 07.10.2019)	OTPC	-	

Utilities may please intimate the latest status.

3. Follow up of recommendations of PCC/Sub-group:

SN	Name of element	Actions to be taken	Concerned Utilities	Status as informed in the 163 rd OCC Meeting	Latest status
1	132 kV AGTCCPP - Agartala D/C	Installation of Line Differential in 132 kV AGTCCPP - 79 Tilla D/C & Review of impedance setting of both ends as a temporary measure.	NERTS/ NEEPCO	LDR: Technical evaluation completed. Under commercial evaluation stage. Award by Dec, 2019 <u>Impedance Measurement</u> : To be completed by 31.12.19	

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2	132kV AGTCCPP- Kumarghat	GPS to be procured and time synchronization of relay to be done	NEEPCO	Dec'19	
3	132kV P.K. Bari- Kumarghat	Installation of Line differential relay	NERTS	Technical evaluation completed. Under commercial evaluation stage. Award by Dec, 2019	

Utilities may please intimate the latest status.

4. Furnishing of various data for reliable operation of grid:

SN	Data reg.	Target deadline	Status as informed in the 163 rd OCC Meeting	Latest status
1	Furnishing Technical and Commercial data for computation of PoC Charges and Losses for January to March'20 (Q4 of 2019-20)	15.10.19	Manipur, Assam, Meghalaya, Mizoram and Nagaland submitted. Rest 2 states to be submitted. Tripura by Nov,2019, Ar. Pradesh- by Nov'19 end, NHPC & NEEPCO to submit	
2	Furnishing details regarding GT Tap Positions of ISGS and other generators. Required for studies related to reactive power capability testing	15.10.19	Pare not submitted. Data from State Generators also required	
3	Furnishing Nodewise half hourly data monthly Required for studies pertaining to Real Time Market	By 10 th of the month	Received from Arunachal, Manipur, Mizoram. TSECL will submit by Nov'19. Assam, Meghalaya and Nagaland to submit from next month.	

NERLDC may please intimate the latest status.

B.2. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING DECEMBER, 2019

As per the data made available by NERLDC, the grid performance parameters for December, 2019 are given below:

NER PERFORMANCE DURING DECEMBER, 2019

States	Energy Met (MU)		w.r.t. Nov,19 % inc (+) /dec (-)	Energy Reqr. (MU)		w.r.t. Nov,19 % inc (+) /dec (-)	% surplus (+) /shortfall (-) of energy In Dec,19
	Dec-19	Nov-19		Dec-19	Nov-19		
Ar. Pradesh	65.69	56.07	17.16	65.98	56.43	16.92	-0.44
Assam	653.7	699.61	-6.56	663.14	719.77	-7.87	-1.42
Manipur	79.02	73.45	7.58	79.48	73.96	7.46	-0.58
Meghalaya	184.93	175.87	5.15	188.25	175.87	7.04	-1.76
Mizoram	64.6	63.71	1.40	64.89	64.07	1.28	-0.45
Nagaland	66.84	64.62	3.44	67.15	65.04	3.24	-0.46
Tripura	104	108.96	-4.55	104	108.98	-4.57	0.00
Region	1218.78	1242.29	-1.89	1232.89	1264.12	-2.47	-1.14

States	Demand Met (MW)		w.r.t. Nov,19 % inc (+) /dec (-)	Demand in (MW)		w.r.t. Nov,19 % inc (+) /dec (-)	% surplus (+) /shortfall (-) of demand In Dec,19
	Dec-19	Nov-19		Dec-19	Nov-19		
Ar. Pradesh	139	146	-4.79	139	146	-4.79	0.00
Assam	1380	1508	-8.49	1380	1508	-8.49	0.00
Manipur	216	201	7.46	216	224	-3.57	0.00
Meghalaya	365	350	4.29	365	364	0.27	0.00
Mizoram	125	107	16.82	126	107	17.76	-0.79
Nagaland	153	148	3.38	167	150	11.33	-8.38
Tripura	224	257	-12.84	224	257	-12.84	0.00
Region	2530	2639	-4.13	2544	2714	-6.26	-0.55

REGIONAL GENERATION & INTER-REGIONAL EXCHANGE IN MU

Month---->	Dec-19	Nov-19
Total Generation in NER (Gross)	1447.282	1400.490
Total Central Sector Generation (Gross)	1078.343	1001.845
Total State Sector Generation (Gross)	368.939	398.645
Inter-Regional Energy Exchange		
(a) NER-ER	271.34	212.61
(b) ER-NER	2.44	40.71
(c)NER-NR	0	37.18
(d)NR-NER	299.59	183.50
© Net Import	30.69	-25.58

AVERAGE FREQUENCY (Hz)

Month---->	Dec-19	Nov-19
	% of Time	% of Time
Below 49.9 Hz	6.48	4.07
Between 49.9 to 50.05 Hz	71.67	73.62
Above 50.05 Hz	21.85	22.26
Average	50.00	50.01
Maximum	50.34	50.27
Minimum	49.65	49.65

C. ITEMS- STATUS REVIEW

1. Status of Generating Units, Transmission Lines in NER:

During 162nd OCC meeting, the status as informed by different beneficiaries is as follows:

SN	Items	Status as given in 162 nd OCC Meeting		Latest status	
		Timeline for completion	Timeline for completion	Timeline for completion	Furnishing of detail parameters
a. New elements					
1	400/220kV, 315 MVA ICT-1 of NTPC at Bongaigaon	Jan'20	Already submitted		
2	Kameng HEP of NEEPCO two units (2 x 150 MW) Next two units (2x150 MW)	Dec'19	CEA clearance available		
3	220/132 kV, 1x160 MVA ICT with GIS Bay at Kopili	Test charging shall be delayed due to damage to the Power House and Switchyard after failure of Penstock at Kopili.	To be submitted to NERLDC.		
4	Dedicated 33kV feeder at Khliehriat Substation from Lumshnong.	Date to be finalized.	Not applicable.		
5	220kV Balipara-Sonabil-2	Dec'19	To be submitted to NERLDC.		
6	Bay at Agia S/S for 132kV Agia-Nangalbibra Ckt #II by AEGCL	ERL panel supplier expect to deliver in 15 days. By Dec'19	To be submitted to NERLDC.		
7	80MVAR B/R at RHEP by NEEPCO	Discussed in 2nd NERSCT	To be submitted to NERLDC.		

b. Elements under breakdown/upgradation					
8	Up-gradation of 132 kV Lumshnong-Panchgram line	TESG queries submitted	Not applicable.		
9	PLCC Panels at Loktak end of Loktak - Ningthoukhong 132 kV feeder and Loktak - Rengpang 132 kV feeder	Nov'19. NERPC to write to MD, MSPCL for expediency.	Not applicable.		
10	Upgradation of 132 kV Bus Bar at Umiam Stg- III to ACSR Zebra	DPR submitted. Other upgradation works to be included in DPR	Not applicable		
11	Upgradation of 132kV Karong-Kohima (till Mao) by MSPCL	It was decided that MSPCL would upgrade the entire line. DoP Nagaland to take up with MSPCL for entire upgradation by MSPCL. Loc.No. 189 to 228 i.e., 9km stringing left. Shutdown applied for.	-		
12	Installation of LDP for 132kV AGTCCPP-Agartala D/C & 132kV PKBari-Kumarghat by NERTS	Technical evaluation completed. Under commercial evaluation stage. Award by Dec 2019	-		
13	Procurement of GPS at AGTCCPP & time synchronization for 132kV AGTCCPP-Kumarghat by NEEPCO	Dec'19	-		

14	Diversion of 132kV Bawktlang-Sihhmui	Technical Evaluation completed. Award by 20 th Nov 2019. Work completion: 28 th Feb 2020	-		
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Concerned constituents may kindly intimate the status.

C.2. Update on Real Time Energy Assessment for Effective Grid Management:

Data availability is given below:

Name of the state /utility	Data Availability (in%)	Issues	Status as updated in the 162nd OCCM
DoP Ar. Pradesh	Not updated	-	Same problems persisting. CDAC to visit critical locations immediately.
Assam	62%	-	
Manipur	80%	(i)Frequent hang of TARA device, resumes reporting upon reboot. (ii) Yurembam end of 132kv of Imphal(PG)-2 fdr, corresponding to SEM NP-8374-A not reporting. (iii) Jiribam 132/133kv ICT(manipur consumption), corresponding to SEM NP-8501-A not reporting	
Meghalaya	0% detailed report to be submitted	after TARA devices are connected the SEMs they hang.	
Mizoram	50%	Luangmual end of 132kV Aizawl(PG) not reporting; Kolasib end of 132kV Badarpur(PG) not reporting	
Nagaland	37.5%	Non-reporting: (i)Kohima end of 132kV Dimapur(PG)-2 (ii)Sanis end of 132kV DHEP (iii)Mokokchung end of Mokokchung(PG)-1 (iv) Mokokchung end of Mokokchung(PG)-2 (v) Mokokchung end of DHEP FDR	
Tripura	12.5%. Network available 24x7. Device fault suspected.	-	

CDAC/SLDCs may please intimate the latest status.

C.3. Ensuring proper functioning of Under Frequency Relays(UFR) & df/dt Relays:

In 7th NPC meeting held on 08.09.17 it was agreed that mock test is good enough to test the healthiness of the UFR & df/dt relays. The frequency of site inspection was proposed to be upto six months. RPC may carry out periodic inspection, in line with provisions of IEGC and furnish inspection reports to NPC.

Deliberations in the previous meetings:-

- Inspection for Mawphlang completed.
- Inspection for Sankardevnagar, Rangia and Rowta under Assam was completed in April'2019.
- UFR Inspection and Testing for TSECL Stations as well as UFRs under Islanding Scheme No.2 carried out in June'19.
- UFR Inspection for Dimapur, Nagaland completed in the third week of September, 2019.
- Status of recommendations subsequent to UFR Inspection:

TSECL

UFR location, No. feeders	Recommendation	Status
132/33kV Surjamaninagar, 1no 33kV feeder	Relay to be replaced.	
132/33kV 79Tilla, 4nos 33kV feeders	Relay operation to be instantaneous with no time delay. To be taken up with OEM	
66/33/11kV Badarghat, 2nos 33kV feeders	Relay operation to be instantaneous with no time delay. To be taken up with OEM	
132/66/33/11kV Rabindranagar, 1nos 33kV feeder	Relay operation to be instantaneous with no time delay. To be taken up with OEM	

DoP Nagaland

UFR location, No. feeders	Recommendation	Status
132/66/33kV Dimapur, 2nos 33kV feeder	Relays to be retrofitted.	

Common recommendation for AEGCL, MePTCL, DoP Nagaland & TSECL - Separate records for UFR operation to be maintained at the respective Sub-station(s).

- UFR Inspection for Manipur in Nov'19.

NERPC/TSECL may please inform the status.

C.4. Extended C Band VSAT for power system communications in NER:

Latest status as informed in previous meeting(s):

- cost for the pilot project would be around Rs.6, 85,000/- (Rupees Six lakhs eighty five thousands only).
- Killing VSAT Pilot is expected to commence reporting by end of Dec'19.

NERLDC/MePTCL may please intimate the status.

C.5. DIMAPUR PG telemetry out since Feb'18.

In 162nd OCCM, NERTS informed that the Analog and Digital Data has started reporting. Additional new signals provided by RLDC being configured and validated. The same would be completed by 30.11.2019.

NERTS may please update the latest status.

C.6 Update on PDMS:

As per deliberation in the previous meeting(s) the following status/decisions:-

- SAT for Assam system completed. Data collection for Meghalaya, Tripura & Mizoram completed.
- Network to be finalised based on the feedback of Operational load flow given by NERLDC
- Data collection & database building to be completed for Arunachal Pradesh and Nagaland.
- Prospective Go Live by second week of Jan'20.
- All utilities(esp. nodal officers) to assign the roles and responsibilities as per the circulated format.

NERPC/PRDC may please update the status.

C.7 Non-availability/ Non-functioning of synchronization facility at numerous stations

As per deliberations in the previous meetings the following is the status for synchronization facility at stations of different utilities:

- AEGCL – along with the black start testing of AGBPP, demonstration of Synchronisation using BCU would be done at Mariani (PG) for which NERLDC will arrange isolation / separation system into two parts and POWERGRID will synchronize the systems in SAS.
- DoP Ar. Pradesh –Lekhi S/S no Sync check relay is available while for Chimpu relay is available. The approval for procurement of trolley/synchroscope by Nov'19.
- P&ED Mizoram - Synchronizing facility with Synchronizing trolley to be established at 132kV Kolasib S/Sn.

AEGCL/DoP Ar. Pradesh/P&ED Mizoram may please update the status.

C.8 Phase shift errors in PMU:

The following status as updated in previous meeting(s):

- Issues in some of the stations have been rectified. NERLDC may confirm or update what to be done for rest of the stations based on the feedback by NERTS after corrections, as per system study group of NERLDC.
- Site drawing for PMU connection has been handed over to Assam which would be adopted (for rewiring etc.) by AEGCL during SAS upgradation in four stations.

NERTS/AEGCL may please update the status.

C. 9 Tentative schedule for Black Start & Restoration Procedure Mock exercise in NER during the year 2019

Status/decisions as per previous meetings:

- RHEP to be done in lean season & after Bus A is restored.
- AGBPP – segregation of auxiliary supply has been completed. Presently 2-3 mins are required for shifting of generator from one bus to another and minimum 100MW load is required at 132kV level.

NEEPCO/NERLDC may please intimate the status.

C. 10 DVAR and PSS at AGTCCPP:

In 163rd OCCM DGM, NEEPCO informed that DVR installation was completed in Unit 1, 2, 3 & 4 on 07.12.2019 and PSS has been kept OFF in all DVR panels. NEEPCO further intimated that some data required for PSS tuning has been asked of CTU and tuning would be done on receipt of data. NERTS agreed to co-ordinate with CTU.

NEEPCO may please intimate the status.

C. 11 Bus Configuration issues for various sub-stations:

Status as on 163rd OCC Meeting:

- 400kV Bus A at RHEP - Procurement of the following initiated:
 - Four sets of Pantograph isolators
 - One Set CT(Bus Coupler)
 - One set CVT(Bus-A).

Target date to be intimated after LOA.

- 132kV Bus Coupler at Pavo - NERTS mentioned that AEGCL shall replace the old POWERGRID protection panels to SAS enabled panels. The protection transfer would be completed subsequently.

NEEPCO/AEGCL may please inform the status.

C. 12 Status of recommendations reg GD-Vs on 03rd & 20th April,2019:

Recommendations	Status as informed in the 162nd OCCM	Latest status
Investigation of conductor failure for 400kV Palatana-Silchar D/C (Scope NERTS)	Report submitted to NERPC. Manufacturing defect. Referred to OEM.	
Study for reactive compensation in Tripura System(scope of TSECL)	NERPC vide letter dated 11.10.2019 has written to CMD, TSECL for forthwith submission of data. No update from TSECL	
Identification of feeders for additional UFR based load shedding under Islanding Scheme-II(Scope of TSECL)	NERPC vide letter dated 11.10.2019 has written to CMD, TSECL for procurement & installation of UFRs. No update from TSECL	

Standalone EL for integration of relay at AGTCPP by Oct'19(Scope of NEEPCO)	By Mar'2020	
All stations to confirm DR downloading facility and it's healthiness at respective stations. A consolidated undertaking by the respective utility in this regard is to be submitted prior to each OCCM.	NERTS The REL-670 relay at Khandong for Kopili – II feeder is planned to be upgraded by Dec'19.	
NHPC to procure standalone EL for Loktak HEP	Under process exact date of LOA to be confirmed	
Revised SPS-3 scheme offer sought from GE by NERTS	M/s GE is yet to submit the detailed breakup. Target: by 30.11.2019	
Impedance measurement for 400kV Paltana-Silchar D/C, 400kV Silchar-Azara, 400kV Silchar – Byrnihat	Impedance measurement shall be completed by 30.11.19.	
Line parameters to be matched at Silchar, Azara and Byrnihat.	The reviewed parameters shall be given to Azara by 30.11.19 for implementation.	
NERTS and AEGCL to jointly visit Azara and check exact cause for delay in appearance of voltage input to relay when charged via Tie Breaker	Joint visit done. But the problem of delayed appearance of voltage while charging through Tie CB could not be identified. AEGCL to take up with OEM	

Concerned utilities may please update the status.

C.13 Tripping of all units of BgTPP:

On 23/05/2019 Units I, II, III of BgTPP tripped at 03:06 hrs, 03:37 hrs, 03:56 hrs respectively. In 158th OCCM NTPC gave a detailed presentation on tripping of the three units on 23.05.2019. The suggested recommendations by NTPC are as follows:

Sl. No.	Recommendation	Status as informed in the 162nd OCCM	Latest status
2	Providing alternate cooling water source to compressors	Unit-1 overhead tank connection made, when unit-2 will go under s/d then	

		connection would be completed. S/D planned Apr'2020	
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NTPC may please intimate the status.

C.14 Transformer Tap Optimization Study:

NERLDC has conducted Transformer Tap Optimization studies considering High Hydro Scenario in North Eastern Region. Suggested taps position of important transformers in NER for maintaining bus voltages within permissible limit as well as to minimize system losses was circulated in the 158th OCCM.

In 162nd OCCM NERLDC stated that tap position for 400/220kV 315MVA ICTs at Byrnihat is to be changed from 9 to 6. MePTCL agreed in principle subjected to approval from authority.

In 163rd OCCM MePTCL informed that the tap position would be changed by Jan'20 after taking shutdown.

NERLDC may please intimate the status.

C.15 Better weather forecasting for power sector by IMD:

Decisions/deliberations in the previous meetings:

- IMD to conduct survey for each of the individual utilities.
- Nodal officers for all the utilities nominated in the 159th OCCM.
- All utilities agreed to install AWR in their stations. All utilities are requested to submit the station list by November 2019.
- Selection of stations after survey remaining for all utilities except AEGCL & TSECL.
- The report submitted by IMD Department regarding site selection for Automatic Weather Station is attached as **Annexure-C.15**.

NERLDC may please intimate the status.

C.16 Frequent trippings in Arunachal Pradesh system:

In 162nd OCCM DoP Ar. Pradesh representative communicated that SE (SO&PSC), DoP, Ar. Pradesh has committed to send personnel to POWERGRID Biswanath Chariali/Misa for training by Nov'19. The forum requested DoP Ar. Pradesh to co-ordinate with NERTS RHQ for the same. AEGCL also proposed to arrange training on different numerical relays to officials from DoP AP, MSPCL, DoP Nagaland, P&ED Mizoram & TSECL.

NERTS/DoP Ar. Pradesh may please intimate the status.

C.17 Reactivation of SPS -1

The SPS-1 associated with tripping of generation of both Modules of Palatana CCGT (2 x 363.3 MW) is deactivated at present. The same needs to be activated to Avoid Violation of ATC of NER-ER Corridor.

In 162nd OCCM NERTS informed that SPS-1 is turned ON at Silchar Substation. OTPC requested for scheme from Silchar end so that signal send may be reviewed at Palatana. NERTS agreed to share the same.

OTPC/NERTS may please intimate the status.

C.18 PSS tuning testing for AGTCCPP and Tuirial

Oscillations have been observed near Agartala on 28.10.2019. Also on 27.10.2019 oscillation was observed on Badarpur PMU. During that period, sufficient MVAR fluctuation was observed in Tuirial Unit-1. Oscillation subsided when Tuirial Unit-1 generation reduced and faded as Unit-1 was withdrawn. Hence PSS tuning test need to be performed in order to check such oscillations.

In 163rd OCCM DGM, NEEPCO informed that OEM would visit Tuirial shortly for PSS tuning.

NERLDC/NERPC may please intimate the status.

C.19 PLCC link issues

(i) Presently, there is no communication link with Deomali. It is proposed to establish PLCC link between Deomali and AGBPP at the earliest for tele-protection and SCADA data. The approved VSAT for Arunachal Pradesh may be kept in Deomali. In 162nd OCCM it was requested DoP Ar. Pradesh to clarify whether the project envisages to install VSAT for one station or seven (7) stations.

(ii)As per visit of Committee ,comprising of members from NERPC, NERLDC, NERTS and P&ED Mizoram, to Kolasib Substation on 30.10.19, it was observed that PCC Link of Badarpur, Tuirial and Bairabi feeders are out of service. The PLCC link is to be restored at the earliest to ensure secure and reliable operation. In 163rd OCCM the following status was given:

- 132kV Badarpur-Kolasib: PLCC link in place and working.
- 132kV Bairabi - Kolasib: To be intimated by P&ED Mizoram
- 132kV Tuirial-Kolasib: Restoration by NEEPCO in Dec'19.

NERTS/P&ED Mizoram may please intimate the status.

C.20 Submission of the Annual Load Generation Balance Report (LGBR) for Peak as well as Off-peak scenarios and the Annual outage plan for 2019- 20 by 31.12.19 as per IEGC

As per IEGC, each SLDC shall submit LGBR for its control area, for peak as well as off-peak scenario, by 31st December for the next financial year, to respective RPC Secretariat. The annual plans for managing deficits/surpluses in respective control areas shall clearly be indicated in the LGBR submitted by SLDCs. As per IEGC, all SEBs/STUs, Transmission Licensees, CTU, ISGS, IPPs, MPPs and other generating stations shall provide to the respective RPC Secretariat their proposed outage plan in writing for the next financial year by 31st October of each year. These shall contain identification of each generating unit/transmission line/ICT etc., the preferred date for

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each outage and its duration and where there is flexibility, the earliest start date and latest finishing date.

Members may please discuss

C.21 SCED Refund

In 161st OCCM NERLDC informed that as per CERC order 08/SM/2019 dated 28.09.2019; 400Cr is to be distributed on Pan-India basis. The Account details of all the state utilities/Power Departments was requested for smooth transfer of money.

In 162nd OCCM APDCL informed that a/c details submitted was submitted on 24.10.2019. NERLDC informed that payment for beneficiaries could not be released due to non-submission of account details by Tripura and P&ED Mizoram.

State DISCOMS/NERLDC may please intimate the status.

C.22 Upgradation of 132kV Karong-Kohima

MSPCL informed that NERTS is upgrading the portion of Karong to Mao of 132 KV Karong-Kohima line under NERPSIP. It was discussed and agreed that upgradation (from existing Panther conductor to HTLS) of Mao-Kohima section of 132kV Karong-Kohima is required and same may be included under NERPSIP. DoP Nagaland was requested to initiate revision of NERPSIP scope in this regard.

DoP Nagaland may please intimate the status.

C. 23 Metering Status Review:

<i>Agenda Description</i>	<i>Status as updated in the 162nd OCC Meeting</i>	<i>Latest status</i>
Correction of Meter error: <i>(i) Erratic reading:</i> I. Ningthokhoung end of Imphal, II. Kohima end of Karong, <i>(ii) Sign Change:</i> I. Dimapur I & II state end, II. Motanga end of Rangia III. Mokokchung end of Doyang	In 161st OCC Meeting, NERTS informed that they will look into the matter	
SEMs to be Procured	In 162nd OCC Meeting, NERTS informed that concurrence had been completed. Tender issue expected by	

Agenda Description	Status as updated in the 162nd OCC Meeting	Latest status
	31.12.19	
Urgent Meter Replacement of 1. Mariani (AS) end of Misa 2. Mariani (AS) end of Kathalguri 3. Mariani (AS) end of 33 kV Changki	In the 162 nd OCC Meeting, it was proposed that SEMs 1. Golaghat end of Mariani 2. Golaghat end of Bokajan will be diverted to 1. Mariani end of Misa 2. 33 kV Mariani end of Changki NERTS informed that they will look into the matter.	

NERLDC/NERTS/All STUs may please intimate the status.

D. ITEMS 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			0.588	
Kopili			0	
Doyang			0.462	
Loktak			1.6	

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.

Delay in returning of shutdown has been summarised by NERLDC in **Annexure D**.

The sub-Committee may kindly discuss and approve the transmission line outages proposed by Constituents for 01st February,2020 to 29th February,2020 which is available in the website of NERPC.

D.3 Estimated Transmission Availability Certificate (TAC) for the month of November,2019 - December,2019:

NETC and POWERGRID have submitted the outage data for the month of November,2019 - December,2019. So the attributability of outage of the said elements may please be finalized.

Members may please discuss.

D.4 Assessment of TTC, TRM & ATC by SLDC on respective Inter-State Transmission Corridor

NERLDC has assessed the state control area wise, state subsystem wise and group of control-area wise TTCs for NER Grid. The study results will be presented during the meeting. SLDCs are requested to check and validate the TTC of their control areas as computed by NERLDC for the period Jan-March'20.

Members may please discuss.

D.5 RGMO performance analysis of events

Decisions in the previous meetings:

- NERLDC to scan PMU records for any event prior to 11:55hrs on 05.02.2019 resulting in droop of frequency by more than 0.03 Hz.
- BgTPP Unit #II mechanical problem in Turbine to be rectified.
- BgTPP DAS data to be submitted for event dated 05.06.19.
- For event dated 21.08.2019 DAS data to be submitted by Kopili HEP, Khandong HEP and Palatana GBPP.
- Reasons for non-sustenance of positive generation of Unit –II & III at BgTPP to be furnished.
- For event dated. 01.11.2019, BgTPP and Loktak HEP to provide DAS data.

Members may please discuss.

D. 6 Reactive power capability/injection of generating stations:

Decisions/deliberations in the previous meetings:

- Palatana GBPP - Joint Meeting of OTPC with NERLDC for GT & UAT tap settings – done on 11.12.19
- BgTPP - Testing completed on 30th of Sept. Load angle limiter setting to be increased. NTPC is in the process of consultation with OEM.
- AGTCCPP - Testing at AGTCCPP done on 07.12.19

Members may please discuss.

D.7 3-phase Auto-reclosure for 400kV Silchar-Azara & 400kV Silchar - Byrnihat:

In 161st OCCM NERLDC opined that in view of separation of grid(s), the 3 phase AR may not be implemented. Sr.DGM, NERTS stated that 3-ph AR for the 2 lines may be implemented with dead sync at Azara and Byrnihat and check sync at Silchar. This would address the concern of NERLDC. Further SOTF will act for 3-ph through fault at Azara and Byrnihat.

Director, NERPC informed that the proposal was mooted in view of frequent faults due to back flashover affecting more than 2 phases. The forum requested NERPC to take views of CEA in the matter and referred the item to next OCCM for further discussion.

In 162nd OCC NERLDC informed that the Single phase Auto-reclosure is non-functional at Azara end of 400kV Silchar-Azara and such steps may be taken to restore the same alongwith other anomalies at Azara, prior to implementation of 3-ph AR.

Director, NERPC stated that the views of CEA have been sought i.r.o. of 3-ph AR for 400kV Silchar-Azara and 400kV Silchar-Byrnihat.

NERLDC/NERPC may please intimate the status.

D.8 Accurate Load forecasting by SLDCs as per IEGC c1.5.3 for better system operation

RMSE for load forecast of actual data in comparison to that forecasted by the states for the month of October'19 & November'19 is as follows:

Day	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
Median (Oct'19)	15	15	10	25	14	16	12
Median (Nov'19)	20	12	8	20	10	9	13

Forum decided that load forecast error will be monitored in OCC Meeting till the RMSE comes below 5%

In 160th OCCM CGM, NERLDC informed that POSOCO in association with IIT, Guwahati is developing methodology to forecast at the regional level. He requested all SLDCs to be proactive for the same.

Members may please discuss.

D.9 Continuous shutdown of 220 kV Bus Coupler & 4 x 33 MAV 22/132kV ICT-1 along with associated bays w.e.f 06/09/2019 and shifting of 01 set of 220 kV Bus PT w.e.f 02/09/2019.

Under the NERSS VIII, SS01 package , the 220/132 kV Dimapur substation is being upgraded from AIS to GIS including replacement of existing 4x33.33 MVA, 220/132 kV single phase unit transformer by 1 x 160 MVA, 220/132 kV 3-phase unit and addition of 1 No 1x160 MVA, 220/132 kV 3-phase transformer.

The existing 220/132 kV Dimapur substation is a conventional AIS substation having 220 kV bays with double main cum transfer scheme and 132 kV bays with single main and transfer bus schemes. Under the NERSS VIII project, all the existing 220 kV and 132 kV AIS bays shall be changed to GIS bays (Double main bus scheme) in the same existing switchyard by creating space for 220 kV GIS building , 132 kV GIS building and outer Gas Insulated Bushings **after dismantling the existing tower/ beams/ equipment's along with structures. During this upgradation period, both the 220 kV & 132 kV bays shall be operated on single bus system and only 220 / 132kV 100 MVA ICT 2 shall remain in service. "**

As per the proposed up-gradation and dismantling, only 220 KV Bus-A (towards the Transmission line side) will be in service. For construction of 200kV GIS Building and 132kV GIS building following assets at Dimapur substations shall be required to be dismantled.

- (1) 220/132 kV 4 X 33MVA ICT-1
- (2) 200kV ICT – 1 BAY
- (3) 132kV ICT – 1 BAY
- (4) 200kV BUS B
- (5) 200kV BUS COUPLER BAY

The substation layout diagram is attached for further reference.

The existing 220 kV PTs of Bus 1 & 2 are installed where the 220 kV GIS building is proposed to be constructed. As such 1 set of the bus PT is to be shifted to a convenient location towards ICT-2 area.

After shifting of the PT to the new location, dismantling works of the bus coupler bay and ICT-1 bays including the 4x33.33 MVA 1-Phase transformer will commence.

Once the above shutdown is approved, the shutdown shall continue till erection, testing and commissioning of the new GIS system which is February 2021 as per the approved L2 schedule.

Considering the above, It is proposed for Shutdown below mentioned assets under new construction activity related outage:

- b. Continuous Shutdown of BUS A w.e.f 02.09.2019 to 05.09.2019 for shifting of 1 set of 220 kV Bus PT as above.
- c. Continuous Shutdown of the 220kV/132kV 4x 33 MVA ICT – 1, 220 kV Bus coupler and ICT-1 bays (Bay No.203 & 204)w.e.f 06/09/19 till erection, testing and commissioning of the new GIS system.

In 162nd OCCM the following were decided to be the pre-requisites for granting shutdown for 220/132kV ICT-1 at Dimapur:

- (i) Restoration of 132kV Dimapur-Kohima - Status: By 10.12.2019

Agenda for 164th OCC Meeting to be held on 21st January, 2020

(ii) NEEPCO to complete installation of Numerical relay for 132kV Doyang-Dimapur D/C by 27.11.2019. Shutdown for installation of relay for 132kV Doyang-Sanis shall be after Hornbill festival i.e. after 10.12.2019

(iii) 132kV Karong-Kohima upgradation to be completed and line returned to service by 30.11.2019.

In 163rd OCCM DoP Nagaland informed that the 132kV Dimapur-Kohima is ready for charging, however since the GIS CB at Dimapur(PG) end is non-functional the line cannot be charged at the moment. NERTS informed that the GIS CB for Kohima line has been restored at Dimapur(PG) on 16.12.2019. The forum requested NERTS and P&ED Mizoram to charge the line as early as possible.

Members may please discuss.

D.10 Monitoring of Critical Elements affecting the reliability of and security of the Grid

Critical Elements which affect NER/ER TTC/ATC Values and Cause major Grid Disturbance		
Sl No	Name of Element	No of tripping during Dec' 19
1	400 kV Bongaigaon - Byrnihat S/C	Count will be presented during the meeting
2	400 kV Bongaigaon - Azara S/C	
3	400 kV Silchar - Azara S/C	
4	400 kV Silchar - Byrnihat S/C	
5	400 kV Palatana - Silchar D/C	
6	400/132 kV, 125 MVA ICT I and II at Palatana	
7	132 kV Palatana - Surajmaninagar S/C	
8	400 kV Balipara - Misa D/C	
9	400/220 kV 1x315 MVA and 1 x 500 MVA ICTs at Misa	
10	132 kV Imphal - Dimapur S/C	
11	132 Khandong - Kopili D/C	

D.11 Implementation of revised SPS-3 scheme

As per the Minutes of 20th TCC & 20th NER Power Committee Meetings held at Guwahati on 12th Sept., 2019 (Agenda No. D 20), the said SPS is to be discussed again in OCC and it is to be put up in the 21st TCC/RPC Meeting.

In 162nd OCCM Director, NERPC recounted the deliberations of the 20th TCC/NERPC meeting, wherein it was decided that the scheme of SPS-3 with generation reduction for Palatana to be reviewed in OCC forum.

OTPC representative stated that 400kV corridor is tripping prone and this triggers SPS-3 condition frequently. Due to this machines come under tremendous stress and their health is affected.

ED, NERLDC stated SPS-3 is necessary for secure operation of the NER Grid. As the generation in the southern NER pocket remains high for most of the time of the day, generation reduction is the only option for successful operation of SPS 3. He stressed upon the forum to implement revised SPS-3 scheme based on flow based scheme at the earliest to ensure reliable and secure operation of NER Grid. Until the implementation of revised scheme, existing SPS-3 to be kept in service as per the real time requirements.

Member Secretary, NERPC decided that the Special Committee tasked for study of backing down generation at Palatana (and other matters) would review the SPS-3 scheme on lines suggested by the 20th TCC/NERPC. The Committee would submit its report by Nov'2019.

Members may please discuss

D.12 Restoration of Assets damaged at Kopili HEP due to failure of Penstock:

220kV Misa-Kopili ckt I, II, III and 132kV Kopili-Khandong D/C are under outage since 07.10.2019. This is considerably reducing reliability of NER grid.

To finalise action plan for early restoration of the said connectivity, it is proposed to form a senior level task force consisting of members from NERPC, NERLDC & NERTS and convene a meeting of the task force at the earliest.

Decisions/status as per deliberation in the previous meeting(s):

- 220kV Switchyard at Kopili HEP to be cleared by NERTS within Jan'20.
- Kiosk to be diverted from Silchar to Kopili
- 220V DCDB & charger to be tested
- Milestone Bar chart to be prepared by NERTS
- 2 nos 220/132kV ICTs to be cleaned by NEEPCO.

Members may please discuss

D.13 Mock Test for SPS in NER

Decision as per the 162ndOCCM:

(i) Periodic Mock test (frequency once in six months) to be conducted for all SPS. However, the scope would not cover physical tripping of elements/generating units. Prior to a Mock Test the modalities and objectives for testing to be determined by Sub-group.

(ii) A Special Meeting on SPS would be convened by NERPC in the 3rd week of Nov'19 for review of SPS-5 to SPS-9.

(iii) Testing of SPS-1 to SPS-4 agreed in the 1st week of Dec'19 by the team constitutes earlier for mock testing

Members may please discuss

D.14 Automatic Generation Control(AGC) in Indian Grid:

Hon'ble Central Electricity Regulatory Commission (CERC) has stipulated the implementation of AGC in Indian Grid.

Stations in NER to have AGC:

BgTPP, AGBPP, Kopili, Loktak, Doyang, Khandong.

In 162nd OCCM NERLDC informed that BgTPP pilot started on 07.10.2019. NERLDC also presented the plant wise communication status till date. The forum noted that Fiber connectivity was discussed in detail in the 15th NETeST and except for Loktak all the plants have Fiber connectivity.

The present status of communication link availability for AGC and proposed plan for provision of redundant communication with route diversity for power plants in NER may be discussed.

Members may please discuss.

AGENDA ITEMS FROM NERTS:

D.15 Regarding up gradation of Bay control and Relay panels of POWERGRID by constituents under PSDF fund for SCADA integration.

Up-gradation of conventional Bay Control and Relay panels by BCU based control panels for SCADA communication being carried out in some locations by Assam and other constituents under PSDF funds. This shall result in dismantling of existing POWERGRID C/R panels. Power grid suggest that the spare C/R panels to be utilized as regional spare and kept at the dismantled station. Also, Since the BCU based C/R panels shall be controlled from local SCADA which is unique to each station, the commissioning and maintenance of new C/R panels such upgraded shall be responsibility of constituents. Powergrid shall still continue to maintain the bay switchyard equipments.

NERTS may please deliberate

AGENDA ITEMS FROM AEGCL

D.16 Request for Bay re-location for 220kv Mariani — New Mariani line at New Mariani GSS of PGCIL

The two no. of bays proposed to be allotted for AEGCL at New Mariani GSS of PGCIL for termination of 220kv Mariani — New Mariani D/C line need to re-located since it will be highly difficult to approach the proposed bays as the D/C line will have to cross three major D/C lines at the same narrow area— viz. 400kv MISA- New Mariani D/C, 220kv New Mariani Kathalguri D/C & 220kv New Mariani Mokukchung D/C. For such an arrangement the surveyor has suggested 'line crossing gantries' which will obviously require a large plot of land to procured for construction of security fencing etc. Further, as per the survey report, the ground clearance of 220kv New Mariani — Mokukchung D/C line is also not enough to allow the new line to pass under it.

Under such circumstances it may be advisable to re-locate the AEGCL bays by way of suitable interchange of the bays at New Mariani

AEGCL may please deliberate

AGENDA ITEMS FROM NERLDC

D.17 Visit of executives from NERLDC for Real time grid operation at SLDCs of NER

Executives from NERLDC shall visit each of the seven SLDCs of NER for performing real time grid operation activities along with the control room operators of respective SLDCs for a complete cycle. This shall help in knowledge sharing and capacity building as well as better coordination between operators of RLDC and SLDCs.

NERLDC may please deliberate

D.18 RE Generation details

All states are requested to furnish details of RE generations including hydro generations below 25 MW capacity in their respective control area. Also, it is requested to provide details of procedure followed by the respective SLDCs while permitting new RE generation connecting to the state grid.

NERLDC may please deliberate

D.19 Scheduling of Power from Kameng HEP

Two units of NEEPCO's 600MW Kameng HEP project are ready for undertaking commissioning test and first unit is likely to be synchronized on 10.01.2020. However, the required PPAs have not been executed by many of the beneficiaries who have been allocated power from the said project.

The Commission has vide order dated 19.12.2019 directed NEEPCO to approach the Central Government to either pursue the matter with the concerned States or to get the capacity re-allocated suitably.

NERLDC may please deliberate

D.20 Tripping of all units of AGBPP

All the units of AGBPP tripped on 25th Dec, 2019 due to tripping of Gas Booster Compressor. NEEPCO may please intimate the reason of the tripping of Gas Booster Compressor and actions taken to avoid such events in future.

NERLDC may please deliberate

D.21 Utilization of Powertel fiber network in NER for Power System Purpose

The power system data are being transferred across the region through ULDC fibre network as a main path. To increase the reliability of real time data transfer, the fibre network of Powertel may also be utilised as an alternate path to transfer Power System data.

NERLDC may please deliberate

D.22 Generation forecast on D-2 basis for computation of TTC/ATC

Forecasted generation figures are essential for computation of TTC/ATC figures of ER-NER corridor. In order to facilitate system study for the planned shutdowns (shutdown confirmation by intending agency on D-3 basis, system study by D-2 basis), all ISGS are requested to furnish their forecasted generation by 10:00 Hrs on D-2 basis.

NERLDC may please deliberate

D.23 Auto recloser in 132 kV Rangia – Motonga line & 132 kV Salakati - Gelephu line (International lines connecting Bhutan Power System):

As per the discussions in the 5th Operational Coordination Meeting between India and Bhutan, Bhutan informed that gang operated circuit breaker at Gelephu station has been replaced with independent pole CB for the 132 kV Salakati – Gelephu line and single-phase auto recloser can be operationalized at any time. Bhutan requested India to replace 3 phase gang operated CB mechanism with single phase CBs at Salakati end. In 132 kV Rangia – Motonga line Single Phase Auto Recloser (SPAR) is ready at Bhutan (Motonga) end but not ready at India end due to the same reason. POWERGRID to look in to this matter.

NERLDC may please deliberate

D.24 Deployment of First Time Charging Software

NERLDC had procured First Time Charging Software from M/s CDAC which will ease the entire first-time charging process, aid in systematic archiving and tracking and also help in saving paper. To familiarize the utilities with the FTC software, training for Power utilities was conducted on 27.09.19.

It is for your kind information that the ***FTC software has been deployed in the website on 01.12.19*** after incorporating the observations of the participants during the training program. ***All the applications that shall be submitted to NERLDC will be processed in the FTC portal only*** as per the procedure discussed during the training program held on 27.09.19. No hardcopy of the application will be accepted.

The software can be accessed at https://ftc.nerlhc.in:8080/FTC_NERLDC/. The procedure to upload the documents as per various categories of charging of transmission element/grant of start-up power/synchronizing of units etc. is available in the Procedure Help section of the software.

A letter dated 10.12.19, regarding the same has been communicated to the utilities.

NERLDC may please deliberate

D.25 Furnishing Technical and Commercial data for computation of PoC Charges and Losses for April to June'20 (Q1 of 2020-21)

All the power utilities are requested to furnish Technical and Commercial data for computation of PoC Charges and Losses for April to June'20 (Q1 of 2020-21) by 20th January'20.

NERLDC may please deliberate

D.26 Status of CT upgradation

The status of CT upgradation as per the mentioned table as per 161st OCC Meeting is to be reviewed.

Sl No	Name of the Line	Remarks	Status as per 161st OCCM	Latest status
1	132 kV Jiribam-Aizwal	400/1 CTs at both ends will be replaced by 600/1 CTs	CTs to arrive at site by 30.11.19	
2	132 kV Jiribam-Haflong	400/1 CTs at both ends will be replaced by 600/1 CTs	CTs to arrive at site by 30.11.20	
3	132 kV Khandong -Umrangso-Haflong	400/1 CTs at Umrangso will be replaced by 600/1 CTs	To be updated by AEGCL	
4	132 kV D/C Doyang - Dimapur	300/1 CTs at Doyang (NEEPCO) will be replaced by 600/1 CTs	By Dec'20 as informed by NEEPCO	
5	132 kV Dimapur-Dimapur 1 & 2 lines	1200/1 CTs at Dimapur (DoP Nagaland) will be replaced by 600/1 CTs	By Dec'19 as informed by DoP Nagaland	
6	132kV Lekhi-Chimpu	Upgradation of CT at Lekhi	By Mar'20 by DoP Ar. Pradesh	

It has been observed that adopted CT ratio of 132 kV Melriat – Zuangtui line was kept at 300/1 at Melriat due to which line loading was restricted. Later, CT ratio was increased to 600/1. It is requested to all the utilities to intimate us whether any grid connected line is having adopted CT ratio of 300/1 or below.

A letter dated 06.12.2020 regarding the same was communicated to the utilities.

NERLDC may please deliberate

D.27 Submission of availability of Hot Spares of transformers and reactors of ISTS

Hon'ble CERC has advised POSOCO to collect the availability of Hot spares of Transformers and Reactors of ISTS licensees on quarterly basis. It has been observed by experience that quarterly collection of data has its own issues and challenges. Thus, In order to streamline the process of data collection, it is proposed that ISTS licensees may submit the data of availability of Hot spares of transformers and reactors along with data for verification of transmission elements availability. A separate sheet containing details of all spares, its usage (change over) and outages etc. may be included in monthly outage file.

NERLDC may please deliberate

D.28 Mock Test of Substations and Hot Spares:

It is proposed that in 220 kV and 132 kV substations wherever double bus scheme is available, all the elements connected to one bus be swapped to the other bus in real time. This will help in checking the healthiness of bay which were not used for longer duration and the reliability of the grid.

Also, to check the availability and healthiness of hot spares, it is proposed to conduct mock test of hot spares in real time.

NERLDC may please deliberate

D.29 Arrangement of Cold Spares to Hot Spares:

It is requested to explore the possibility of arrangement of cold spares into hot spares wherever available for quick restoration of power supply in case outage of any single phase unit and to reduce downtime of the elements.

Agenda for 164th OCC Meeting to be held on 21st January, 2020

It is also requested to all the utilities to share the list of cold spares and regional spares by 31st January'2020.

NERLDC may please deliberate

D.30 Protection related issues of Dikshi HEP Evacuation System:

NERLDC vide its letter dated 19.07.19 to M/s Devi Energies Pvt. Ltd. (DEPL) stated that there is no carrier aided inter-tripping at Tenga & Dikshi for 132 kV Dikshi – Tenga line, 132 kV Tenga – Balipara line and 132 kV Tenga – Khupi line and requested to mention the timeline for the implementation of the scheme.

M/s Devi Energies Pvt. Ltd. (DEPL) vide its letter dated 20.07.19 replied that PLCC vendor had been identified and would deliver the product as per PGCIL approved drawings within two months from the date of receipt of purchase order.

A letter dated 07.01.2020 from NERLDC was communicated to DEPL to update the status.

NERLDC may please deliberate

D.31 Progress report of states:

All the SLDCs are requested to intimate status of the ongoing projects on monthly basis.

NERLDC may please deliberate

D.32 Protection Conclave:

Power System Protection Conclave will be organised by NERLDC on 16th and 17th March'2020 where eminent personalities from academics and power industry, like IITs, PRDC, NLDC, POWERGRID etc. will be participating. Therefore, all the utilities are requested for active participation to make the program a grand success.

NERLDC may please deliberate

Metering Agenda

D.33 High SEM Time Drift:

Time drift in SEMs may result in computational errors in Regional Energy Accounts & Weekly Loss. All constituents in whose premises the meters are installed are required to take corrective action for time correction whenever meter time drift > 1minute and submit weekly compliance report of the same to NERLDC.

The compliance report of many locations as detailed in **Annexure D.33.a**, are not received by NERLDC and **Annexure D.33.b** provides location details of Drift correction action not being done / weekly SEM data not sent.

NERLDC may please deliberate.

D.34 Meter Errors:

Pair check error observed in following location, CT / PT error suspected.

I) Imphal (S) end of Imphal (PG) –II : NP-9546-A

II) PK Bari end of Kumarghat : NP-6875-A

III) Dullavchera end of Dharmanagar : NP-9438-A

NERLDC may please deliberate.

Any other item:

Date and Venue of next OCC

STATE : TRIPURA (Undertaken by M C Agartala)

SN	Name of sub-station where AWS required to be installed	SL NO 1 to 9 inspected by Sri M K Mazumdar, SA of M C Agartala	Site approved or not
1	Grid S/S, 79 Tilla, Agartala	SL NO 1 to 9 inspected by Sri M K Mazumdar, SA of M C Agartala	Site not suitable
2	S.M Nagar S/S		OK
3	Budhjungnagar S/S		OK
4	Jirania S/S		Site not suitable
5	Barmura GTP S/S		Site not suitable
6	Rokhia GTP S/S		Site not suitable
7	Banduar S/S, Udaipur		Site not suitable
8	Rabindranagar S/S, Udaipur		OK
9	SLDC, 79 Tila for SCADA integraion and monitoring		Site not suitable
10	Gamaitilla S/S, Teliamura	SL NO 10 to 16 inspected by Malay Pal, SA of M C Agartala	Site not suitable
11	Ambassa S/S		Site not suitable
12	Garo Tilla S/S, Kamalpur		OK
13	P K Bari S/S, Kumarghat		Site not suitable
14	Gournagar S/S, kailasahar		OK
15	Mission Tilla S/S, Dharmanagar		Site not suitable
16	Dhalabil S/S, Khowai		OK

STATE : MEGHALAYA (To be undertaken by M C Shillong)

SN	Name of sub-station where AWS required to be installed	Site approved or not
1	Byrnihat (Killing), Ri-Bhoi District	
2	Lumshnong Jaintia Hills District	
3	Mustem West jaintia Hills District	
4	Mynkre S/S, East Jaintia Hills District	
5	Mendipathar East Khasi Hills District	
6	NEHU East Khai Hills District	
7	Lad Nongkrem (Mawlyndep), East Khasi Hills District	
8	Nongstoin West Khasi Hills District	
9	Nangalbibra South Garo Hills District	
10	Rongkhon West Garo Hills District	
11	Ampati South West Garo Hills District	
12	Phulbari S/S, West Garo Hills District	

STATE : ASSAM

SN	Name of sub-station where AWS required to be installed	Site approved or not	
1	NTPC, Bongaigaon, Salakati	OK	RMC GUWAHATI
2	Gauripur	OK	
3	BTPS	OK	
4	Barnagar	OK	
5	Mirza	OK	
6	Rangia	OK	
7	Agia	OK	
8	Samaguri		
9	Gohpur		
13	Bokajan		

STATE : AR. PRADESH/ASSAM

SN	Name of sub-station where AWS required to be installed	Site selected or not	To be undertaken by
1	Khupi S/S		M C Itanagar
2	Itanagar S/S	OK	--do--
3	Lekhi S/S	Not suitable	
4	Daporizo S/S		M O Pasighat
5	Aalo S/S		
6	Pasighat S/S		
7	Deomali S/S	Site OK . On a plain land and free from obstruction	AMO Mohanbari
8	Mariani	Site uneven. Required cleaning of jungle and levelling. Suitable if levelling and cleaning is done	
9	Nazira	Site plain. Required cleaning of jungle . Suitable if cleaning is done	
10	NTPS	Site uneven. Required cleaning of jungle and levelling. Suitable if levelling and cleaning is done	
11	Ledo	Site OK but only the tree should be cut. NOC issued	
12	Panchgram		M O SILCHAR
13	Dullavcherra		

INSPECTION STATEMENT FOR THE YEAR 2019-20 (as on 04.12.2019)

SN	OBSERVATORIES	ACTUAL NO.	INSPECTION COMPLETED	% of INSPECTION
1	DEPARTMENTAL	16	14	88
2	PART TIME	12	12	100
3	FMO	49	31	63
4	CLASS V	44	12	27
5	IAF	06	06	100
6	AWS	74	12	16
7	POSOCO site selection	54	30	56
8	DAMU site selection	18	16	89

Annexure: T1

SL NO	Element Name	Outage Start Date	Outage Start Time	Revival Date	Revival Time	Delay in availing	Delay in returning
1	132KV-DIMAPUR(PG)-DOYANG-2	31/Dec/2019	08:14	31/Dec/2019	16:20	00:14:00	01:20:00
2	132KV-DIMAPUR(PG)-DOYANG-1	31/Dec/2019	08:14	31/Dec/2019	16:19	00:14:00	01:19:00
3	132KV-DIMAPUR(PG)-DOYANG-2	30/Dec/2019	08:20	30/Dec/2019	16:06	00:20:00	01:06:00
4	132KV-DIMAPUR(PG)-DOYANG-1	30/Dec/2019	08:19	30/Dec/2019	17:41	00:19:00	02:41:00
5	400KV/220KV BONGAIGAON-ICT-1	18/Dec/2019	10:17	20/Dec/2019	17:23	02:17:00	02:23:00
6	220KV-AGBPP-MARIANI (PG)	17/Dec/2019	08:18	17/Dec/2019	15:41	00:18:00	00:41:00
7	400KV-BISWANATH CHARIALI-BALIPARA-4	17/Dec/2019	09:20	17/Dec/2019	22:55	01:20:00	07:55:00
8	132KV-AGARTALA (79 TILLA)-AGTCCPP-1	05/Dec/2019	10:12	08/Dec/2019	16:08	01:12:00	01:08:00
9	132KV-KHANDONG-KHLIEHRIAT-2	05/Dec/2019	09:02	05/Dec/2019	13:30	00:02:00	00:30:00
10	MISA - 400KV B/R 1	04/Dec/2019	08:20	04/Dec/2019	17:38	00:20:00	02:38:00
11	400KV/220KV BISWANATH CHARIALI-ICT-1	03/Dec/2019	10:13	03/Dec/2019	13:40	00:13:00	00:40:00
12	220KV/132KV MOKOKCHUNG-ICT-2	03/Dec/2019	07:55	03/Dec/2019	16:55	00:00:00	01:55:00
13	132KV-HAFLONG-UMRANSHU-1	17/Dec/2019	08:18	19/Dec/2019	17:21	00:00:00	02:21:00
14	132KV-KHANDONG-UMRANSHU-1	16/Dec/2019	08:44	16/Dec/2019	13:05	00:44:00	00:00:00
15	132KV-JIRIBAM(PG)-PAILAPPOL-1	09/Dec/2019	08:01	10/Dec/2019	14:12	00:01:00	00:00:00
16	JIRIBAM(PG) - 132KV - BUS 1	07/Dec/2019	07:42	07/Dec/2019	15:33	00:00:00	00:33:00

SUMMARY OF IMPORTANT SHUTDOWNS OF PGCIL

Average delay while availing shutdown	30 min
Average delay while returning shutdown	100 min
Maximum delay while availing shutdown (SL.5)	137 min
Maximum delay while returning shutdown (SL.7)	475 min

TIME DRIFT REPORT STATUS

SL.NO	PGCIL	STATUS
1	BNC (PG)	REPORT NOT RECEIVED/ACTION NONE
2	BADARPUR (PG)	REPORT NOT RECEIVED/ACTION NONE
3	Silchar(PG)	REPORT NOT RECEIVED/ACTION NONE
4	MARIANI (PG)	REPORT NOT RECEIVED/ACTION NONE
5	HAFLONG (PG)	REPORT NOT RECEIVED/ACTION NONE
6	Mokokchang(PG)	REPORT NOT RECEIVED/ACTION NONE
7	RANGIA (PG)	REPORT NOT RECEIVED/ACTION NONE
8	Aizawl(pg)	REPORT NOT RECEIVED/ACTION NONE
9	SALAKATI(PG)	REPORT NOT RECEIVED/ACTION NONE
10	BONGAGIGAON(pg)	REPORT NOT RECEIVED/ACTION NONE
11	DIMAPUR(pg)	REPORT NOT RECEIVED/ACTION NONE
12	Khliehriat(Pg)	REPORT NOT RECEIVED/ACTION NONE
	ASSAM	
13	DULLAVCHERRA	REPORT NOT RECEIVED
14	NAGALAND(S)	REPORT NOT RECEIVED
15	MIZORAM(S)	REPORT NOT RECEIVED
	TRIPURA	
16	SM NAGAR	REPORT NOT RECEIVED
17	79 TILLA	IRREGULAR
	ARUNACHAL PRADESH	
18	CHIMPU	REPORT NOT RECEIVED
	GENERATION	
19	AGBPP	REPORT NOT RECEIVED
20	DOYANG	REPORT NOT RECEIVED
21	PALATANA	IRREGULAR
22	PARE	IRREGULAR

Time Drift Corrective Action Not taken

SI. NO.	ENTITY	LOCATION	TIME DRIFT STATUS (MIN)	STATUS
1	ASSAM	AZARA-BONG	-04:46	No action taken
2	ASSAM	AZARA-SIL	-05:07	No action taken
3	ASSAM	JIRIBAM (MAN)	-21:00	No action taken

Locations not sending weekly SEM data

SI. No.	LOCATION NOT REPORTING	STATUS
1	UDAIPUR	DATA NOT SENT
2	SONABIL	DATA NOT SENT
3	TINSUKIA	DATA NOT SENT