



सत्यमेव जयते

Agenda for 196th OCCM, NERPC



Govt. of India
Ministry of Power
North Eastern Regional Power Committee
Shillong

North Eastern Regional Power Committee
Agenda For

196th OCC Sub-Committee Meeting

Time of meeting : 10:00 Hrs.
Date of meeting : 25th November 2022 (Friday)
Venue : “NERPC, Shillong”

A. C O N F I R M A T I O N O F M I N U T E S

CONFIRMATION OF MINUTES OF 195th MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 195th meeting of Operation Sub-committee held on 18th October, 2022 at Shillong were circulated vide letter No. NERPC/SE (O)/OCC/2021/8441-8477 dated 3rd November, 2022.

The Sub-committee may confirm the minutes of 195th OCCM of NERPC with no modifications as no comments/observations were received from the constituents.

B. FOLLOW UP AGENDA ITEMS

B.1. Operational Performance and Grid discipline during October, 2022:

NERLDC will present the Operational Performance and Grid Discipline in October 2022.

NERLDC may please deliberate.

B.2. Generation Planning (ongoing and planned outages)

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

Plants	Reservoir level in meter	MU content	Present DC (in MU)	No of days as per current generation
Khandong + Kopilistg II			0	
Kopili			0	Will be "0" until further intimation.
Doyang	319.81	24.3	0.381	64
Loktak	766.63	16.3	1.251	13

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

The sub-committee may please deliberate.

B.3. 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 please deliberate.

B.4. Estimated Transmission Availability Certificate (TAC) for the month of September, 2022:

Transmission Utilities have submitted the outage data for the month of October, 2022. So, the attributability of outage of the said elements is being finalized by NERLDC & NERPC. The Availability of the transmission elements of ISTS licensees for the month of September, 2022 is as follows-

Sl no	ISTS Licensee	Availability for September'22 (%)
1	NETC	99.9034
2	KMTL	100.0000
3	NER-II TL	99.6065
4	PGCIL	99.9653 (For August 2022)

The sub-committee may please deliberate.

B.5. Mock Black Start Exercise:

The previous mock black start & restoration exercise has been conducted at various generating stations in NER on the dates mentioned in the following table:

As per regulation 5.8 (b) of IEGC, mock black start shall be carried out by Users/CTU/STUs at-least once in 6 months.

NEEPCO and NHPC informed the dates for testing as follows:

Plant Name	Performed On	Due Date	Schedule of Testing as per 195 th OCCM
AGBPP	after upgradation of DG under R&M
AGTCCPP	09.04.2019	09.10.2019	Oct'22*
PareHEP	25.01.2020	25.07.2020	To be done in lean hydro season
Kopili HEP	10.05.2019	NA	NA
Kameng HEP	In Lean Hydro season
Doyang HEP	-	-	Oct'22
KopiliStg-II	-	-	Under prolonged shutdown

*In the 195thOCCM, NERTS informed that CB for 132kV AGTCCPP – 79Tilla Ckt #II is healthy

DGM, SLDC, TSECL stated that the trolley at 79Tilla S/S would be replaced by Oct'22.

The sub-committee may please deliberate.

B.6. Status of ADMS:

Status for Automatic Demand Management Scheme in 7 states of NER. The SLDCs informed the latest status as follows:

Name of the utility	SAT Completion	DoCO
DoPAr.Pradesh	27-01-2021	Enabled & in-operation
AEGCL/APDCL	07-12-2020	Enabled & in-operation
MSPCL	24-11-2020	Enabled & in-operation
MePTCL/MePDCL	31-08-2020	Enabled & in-operation
P&ED Mizoram	22-02-2021	Enabled & in-operation
DoP Nagaland	17-11-2020	To be enabled after stability of ICCP link
TSECL	24-12-2020	To be enabled by Oct'22

In the 194th OCCM, Member Secretary, NERPC informed that after Inspection by PSDF-CEA team the following points have been raised w.r.t. ADMS implementation in Assam:

- (a) ADMS implementation over ICCP protocol rather than with the approved OPC system
- (b) Go Live or DoCO post Cyber Security Audit certification
- (c) Non-communication of 5 out of 10 Sub-stations with ADMS Server

In 195th OCC NERPC provided clarification on the following two aspects:

- ADMS System Implementation with ICCP Protocol Interface with existing EMS SCADA System implemented and supported/managed by GE.
- Revision of x Go Live or DoCO date vis-a-vis Cyber Security Audit certification.

DGM, SLDC, TSECL informed the forum that ADMS could not be enabled due to connectivity problems i.e. at present only 1 MODEM is working and 3 MODEMs are non-operational. The forum requested TSECL to enable the scheme ASAP.

States may kindly update

B.7. Violation of state wise TTC/ATC:

As per POSOCO KPI, NERLDC has to report the violation of import TTC/ATC of NER states in daily, weekly and monthly basis. It has been observed that most of the NER states are not N-1 secure causing violation of TTC/ATC limit although the actual drawl remains within the schedule values. Violation has been observed in case of Assam, Meghalaya, and Tripura states.

The TTC/ATC calculation of States done by NERLDC is as follows:

State	Time Period	N-1 considered	Limiting element	TTC	RM	ATC
Arunachal Pradesh	Off-Peak	132kV Lekhi – Pare	132 kV Pare – Itanagar S/C	195	5	180
	Peak	Pare		195	5	180
Assam	Off-Peak	220kV Misa-Samaguri I or II	220 kV Balipara-Sonabil	1730	40	1690
	Peak			1600	40	1690
Manipur	Off-Peak	132kV Imphal MA-Imphal PG Ckt I	132 kV Imphal (MA)-Imphal (PG) II & III	320	5	315
	Peak			320	5	315
Meghalaya	Off-Peak	132 kV Umiam3 – Umiam	132 kV Umiam-Umiam	340	10	330
	Peak		Umiam 1 II	260	10	250
Mizoram	Off-Peak	132 kV Melriat-Silchar I ORII	132 kV Aizawl-Luangmual S/C	160	5	155
	Peak			155	5	150
Nagaland	Off-Peak	220/132 kV ,100 MVA Dimapur ICT	220/132 kV ,30 MVA Mokochung ICTs	255	5	245
	Peak			290	5	285
Tripura	Off-Peak	132 kV SM Nagar(ISTS)	132 kV SM-Nagar (TR) – SM Nagar (ISTS) S/C	340	6	334
	Peak	Budjungnagar S/C		315	6	304

In previous OCC meeting(s) it was decided that in the event of any major shutdown (approved/emergency) the state periphery ATC/TTC shall be calculated by respective SLDC and communicated to NERLDC. NERLDC conducted a training session on 29.06.2022 on calculating ATC, TTC for states at NERPC.

In 195th OCCM, NERLDC informed the forum that Assam, Manipur, Meghalaya, Mizoram & Tripura have provided the state-wise TTC/ATC for the month of Sep 2022. DoP, AP & SLDC, Nagaland assured that the same will be provided from next month.

The sub-committee may please deliberate

B.8. Issues pertaining to Kopili & Khandong.

A. Load restriction in Meghalaya Power System due to planned outage of Khandong HEP & KopiliStg-II:

The planned shutdown of Khandong HEP and Kopili Stage II has been approved from 10.01.2022 to 09.05.2022 in the 185thOCCM for the following activities:

- Inspection and repairing of Khandong Head Race Tunnel, Trash Rack Gate, Intake Gate, Surge Shaft Gates, Steel Liner of HRT etc.
- Acid Proof Coating of Stage-II Penstock
- Installation and commissioning of Penstock Protection BFV System of Khandong
- Annual Planned Maintenance of Khandong Unit# I & II.

Decisions as per previous meetings: (i) Meghalaya System shall be operated by opening of 132kV Mawngap-Nongstoin T/L right from the start of Khandong HEP shutdown. (ii) In normal circumstances no load shedding is required and Meghalaya can continue to

cater full demand based on present generation scenario. (iii) In event of tripping of any one circuit of 132kV UmiamStg-I to UmiamStg-III D/C SLDC Meghalaya shall swiftly shed load till loading of 132kV UmiamStg-I to UmiamStg-III S/C is within limit and also increase generation from UmiamStg-I HEP and Leshka HEP. (iv) based on Real Time Condition Mawphlang may be shifted to be fed from Agia side after concurrence of NERLDC, (v) Early restoration of Misa-Kopili-Khandong link by NERTS/NEEPCO.

B. Station supply at Khandong and Kopili Power Station:

Following the discussions in the 189th OCC and in the special meeting held on 27.04.2022 in presence of representatives from NERPC, NERLDC, NEEPCO, NERTS and AEGCL, Khlerihat – Khandong – Umrangshu link was charged as an interim special arrangement.

1. As agreed in the special meeting, AEGCL was requested to extend the PLCC system from Umrangshu to Haflong by 15th May 2022.
2. Since all the CRPs at Khandong Control room are under debris now and it is doubtful for revival of the same, NEEPCO is planning to arrange following CRPs and 220V DC source to charge the Khandong bus radially from Umrangso Sub-station only.

It may kindly be noted that due to Khandong incident, the construction restoration activities of 4x50MW Kopili P.S, 2x25MW Khandong and 1x25MW Kopili Stage-II is badly hampered. Whatever activities are being carried out is based on DG Power only which is not the solution and progress of work has been severely hit.

As a stop gap arrangement following CRPs and 220V DC source shall be arranged by NEEPCO at the earliest.

- 132KV Umrangso bay – 1 No.
 - 132/33KV 7.5MVA & 3MVA – 2 Nos.
 - 33/0.4KV SAT 1MVA – 2 Nos.
 - 33KV Umrangso line – 1 No.
 - 33KV Kopili line – 1 No.
3. As discussed in 192nd OCC, NEEPCO has sent consent letter for becoming Bulk power consumer of APDCL for the consumption of construction power for restoration works of Khandong HEP. Further NEEPCO shall be sending weekly

SEM reading to Assam/NERLDC. Also, NEEPCO requested for installation of 2 nos SEMs at the earliest so that restoration works can be started.

4. In 193rd OCC, GM, NEEPCO proposed space for 2 CRP in old kiosk room near Khandong stage 1 to PGCIL for Panel installation for 132kV Khliehriat-Khandong - 2 line and 132kV Khandong-Kopili line 2.
5. In 194th OCC, GM, NEEPCO informed the forum that for drawing of construction power from 132kV Bus at Khandong via the two 132/33kV Transformers CRPs are at site but 220V DC battery bank is unavailable, for which order has been placed and will be supplied by Sep'22. Thereafter, drawing of power from the Grid shall commence by 1st week of October'2022. Regarding Panel installation for 132kV Khliehriat-Khandong - 2 line and 132kV Khandong - Kopili - 2, NERTS assured the forum to complete the work before Feb'23.

C. Recommissioning of 1X25 MW Khandong Stage-II plant

NEEPCO is planning to re-commission and synchronize 1X25MW Khandong Stage-II unit within this current financial year. Since all the Control & relay panels are submerged and damaged beyond repair during the inundation on 26.03.2022, for successful commissioning and evacuation of the generated power, the Khandong Switch Yard has to be adequately restored within February – 2023.

Present Status:

1. One CRP for Khandong-Umrongso feeder at Khandong end is procured and expected to commissioned by NEEPCO before February 2022.
2. One Temporary KIOSK room has been identified and Cable trenches are under Construction and, cables are being re-routed.

Status of action being taken by NERTS, POWERGRID:

1. The matter for availability one more 132KV line from Khandong SY to Khleirihat (PG) Sub-Station was discussed in the last OCC meetings, the availability of towers nearby Khandong Power Stations/new arrangement may be intimated to NEEPCO.
2. For the above, NERTS, POWERGRID was requested to install 1(one) BCU based CRP February-2023. Status of the same may kindly be shared with NEEPCO.
3. NERTS, POWERGRID was requested to ensure the installation of PLCC panel for Khandong - Khleirihat line along with FOTE panels for digital and analog data/voice, protection and communication to NERLDC before synchronization of the Khandong Stage-II.

Status of action taken by AEGCL:

1. AEGCL was requested to provide a PLCC Panel for Khandong-Umrongso line and NEEPCO was to provide the 48V battery bank with charger for PLCC. Status of the same may please be intimated to NEEPO.

In the 195th OCCM, following points were discussed-

- Meghalaya Power system to operate in bifurcation i.e.132kV Mawngap-Nongstoin T/L shall be opened and Nongstoin, Nangalbibra, Tura and Ampati to be fed from Agia. It is decided that joint studies will be done by NERLDC & SLDC, Meghalaya for winter peak load management. NERLDC raised concern that such radial connectivity may create security issue in Meghalaya power system and frequent disturbances may occur.
- Early restoration of 132kV Jiribam –Haflong line (out due to Line diversion work by NHIDCL – NH48 / replacement of tower due to landslides in road widening area) which will improve the ATC/TTC of Meghalaya State. NERTS informed the forum that the matter of wildlife clearance for the said line has been referred to the National Wildlife Board.
- Early commissioning of 220kV Mawngap-Killing line. NERPSIP informed severe RoW issues are hampering the progress, the matter has been taken up with the Government of Meghalaya.

NERTS opined that since the temporary restoration works may not be able to restore the envisaged Misa-Kopili-Khandong link before lean hydro season, it would be prudent to take up the permanent restoration work instead of going for the temporary arrangements. Permanent restoration at Kopili & Khandong is to be completed by March'23 for providing alternate path to Meghalaya System via Misa and 2nd line for evacuation of Khandong Stage#2 generation. Following decisions emerged out of the deliberations:

1. Kopili Related activities -

- i.48V DC Supply for PLCC Panels at Kopili Switchyard to be taken up by NEEPCO. NEEPCO requested NERTS to provide the load requirement.
- ii. All POWERGRID owned bays shall be restored as per their permanent scope.

2. Khandong S/y related activities

- i) 132kV Khliehriat– Khandong#1&2 to be restored on permanent towers

- ii) AEGCL has agreed to provide 02 sets of CRP Panels to NERTS for restoration of 132kV Kopili-Khandong#2 & 132kV Khandong-Khliehriat#2 Lines. These panels shall be provided from Srikona (AEGCL) S/s on replenishment basis. POWERGRID requested AEGCL to provide panels for utilization in line with assets of POWERGRID being used by AEGCL in Mariani. CGM, AEGCL agreed.
 - iii) NERTS & NEEPCO officials visited site for finalizing the location to house the CRP panels of Lines mentioned in Point no. 3 above. After exploring all options, New Switchyard Panel Room constructed by NEEPCO has been finalized for housing CRP & PLCC panels for 2 Lines.
 - iv) 48V DC system for PLCC shall be arranged by NEEPCO.
3. POWERGRID requested NEEPCO to provide staff accommodation at Umrangsho Township for maintenance of bays at Khandong & Kopili. NEEPCO informed that the same will be reverted back after discussion with Management.

B.9. Implementation of Guwahati Islanding Scheme:

In the 190th OCCM, DD, NERPC stated that in the Special Meeting on 13th May'22 it was decided that dedicated fiber is required in order to ensure Cyber Security. AEGCL intimated that Dedicated Fiber is available in the link SLDC – Sarusajai – Mirza – Boko – Agia – BTPS – BgTPP and offered the same for the Islanding Scheme. The forum requested NERTS to explore the availability of dedicated fiber. Member Secretary, NERPC stated that after budgetary offer is received from at least two vendors the DPR will be finalized.

In 194th OCC, DGM, SLDC, AEGCL informed that in the meeting with M/s GE at SLDC Assam on 25th Aug'22 all points have been clarified and the inputs have been submitted also forthwith.

In 195th OCC, Member Secretary, NERPC informed the forum that the budgetary offer from M/s GE has been received. He added that the DPR for the Guwahati Islanding Scheme shall be finalized by Oct, 2022.

The sub-committee may please deliberate

B.10. Furnishing details of upgraded UFR settings along with list of feeders and quantum of load:

Status as updated in the 194th OCC meeting:

Name of the	Submission	Implementation of revised	Status of
-------------	------------	---------------------------	-----------

Agenda for 196th OCC Meeting to be held on 25th November 2022

state/utility	of revised UFR list	settings	mapping
Ar. Pradesh	Submitted	Stg-1 (49.4Hz) implementation in new feeders. UFR to be procured by July'22, implementation to be done by Mar'23**	Written to GE, will be done soon*
Assam	Submitted	Installation Completed. UFR to be shifted to Samaguri for 132kV Khaloigaon-Samaguri line.	Done
Manipur	Not submitted	No extra shedding required only Stage upward revision to be done.	To be done
Meghalaya	Submitted	17 out of 17 feeders completed. Forum requested to share the points with RLDC SCADA	One feeder of Stage IV left for mapping Other stages completed.
Mizoram	To be submitted	Completed	By Sep'22 subject to resolving of SCADA issues***
Nagaland	Submitted	Completed	Mapped except Stage-I feeders##
Tripura	Submitted	Stage-1(49.4Hz), Stage-2 (49.2Hz), Stage-3(49Hz) require installation of UFR. – Delivery at site by Sep22 and installation by Oct'22	To be done by the end of this month except for Non-RTU lines.

*No RTUs available for the selected feeders, DPR being prepared. The forum requested to share the SLDC display with NERLDC.

**waiting for Guwahati Islanding scheme to come. UFR to be put into that scheme

***Forum requested to resolve the communication issue and meanwhile share the SCADA display with the RLDC.

In the 195th OCCM, Member Secretary, NERPC informed the forum that the status of UFR scheme had been closely monitored in the 12th NPC Meeting held on 17th Oct, 2022 chaired by Chairperson, CEA. He added that the following points should be noted:

- The Quantum of load to be shed at each step to be matched by the states as per the minutes of the 12th NPC Meeting.
- As envisaged one-third of the UFR relays shall be inspected. The list for the same shall be shared by NERPC.
- The states are requested to map the respective feeders for required visibility purposes at SLDC/NERLDC.

P&ED, Mizoram and DoP, AP raised the issue of non-availability of connectivity with SCADA for the feeders installed with UFR at 33kV level. The forum requested P&ED, Mizoram and DoP, AP to install RTUs for these feeders so that the same can be mapped.

SLDC, Tripura informed the forum that 12 nos. of UFR have been installed and work for SCADA mapping is under progress. UFR installation and SCADA mapping shall be completed by Oct'2022.

Sr. GM, NERLDC informed the forum that the ADMS and UFR feeders should be segregated which is currently not followed by DoP, Nagaland as UFR Stg-I has been implemented through ADMS in Nagaland. The forum recommended that DoP, Nagaland should segregate the UFR scheme from ADMS. This would also resolve the SCADA Mapping issues of Stg-I.

He further added that the quantum of load shedding to be done at Stage 1 and Stage 4 for the Manipur is presently not 10 MW as envisaged.

NERLDC highlighted that there should be uniformity in ADMS logic for all the NER states. The forum requested NERLDC to coordinate with the NER states in order to bring the said uniformity.

The sub-committee may please deliberate

B.11. Primary Frequency Response testing plan of remaining units in NER:

Primary Frequency Response Testing of generator units is being carried out in line with the Clause no.5.2(g) of Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010.

Schedule as agreed in the 195th OCC meeting:

Region	Station	No.of generators	Suggested Schedule		Duration (days)
			Test Start	Test End	
NER	NEEPCO-Monarchak	1	26 th July'22	28 th July'22	done
NER	NEEPCO-Kameng	1 (by M/s Solvina)	Oct'22	Oct'22	2
NER	OTPCL-Palatana	2 (by M/s Solvina)	Nov'22	Nov'22	4
NER	Doyang-NEEPCO	2 (by M/s Siemens)	Oct'22	Oct'22	4 (water level to be sufficient enough to run the units at full capacity)

In the 195th OCC, NEEPCO informed that the PFR testing for Kameng may be scheduled on 20th – 21st October, 2022 for unit-4. He added that the water level at Doyang is sufficient to run the machine at close to 90% of Generating unit MCR. The forum requested NEEPCO to schedule the testing of Doyang PFR testing based on the water level sufficiency.

OTPC informed that the PFR testing can be conducted after the planned shutdown of Unit#1 to be availed from 28th Oct,22 - 3rd Nov, 22.

The sub-committee may please deliberate.

B.12. Regular furnishing of Patrolling report for all Important Lines to NERLDC/NERPC

There is a requirement of regular and proper maintenance of transmission lines. It is requested to carry out the patrolling activities as per Cl.No. 23 (2), (3) &(4) of CEAGrid Standards Regulation,2010 on regular basis and submit the report to NERPC/NERLDC. It is requested to upload DR, EL& FIR outputs for transmission lines in the NERLDC tripping portal in line with Cl.5.2 R of IEGC 2010 Regulations.

In previous OCC meetings, Member Secretary, NERPC took strong note of the non-submission of patrolling report by the utilities in spite of repeated persuasion. He directed all the utilities to submit the patrolling report for all Important Lines to NERLDC/NERPC periodically. The forum requested NERPC to send letters to states in order to urge them to submit patrolling reports.

The sub-committee may please deliberate

B.13. Monthly Review of LGBR

PARTICULARS (Peak Demand in MW as per LGBR vs Actual)	Aug-22 (LGBR)	Aug-22 (Actual)	Sept-22 (LGBR)	Sept-22 (Actual)	Oct-22 (LGBR)	Oct-22 (Actual)
Arunachal Pradesh	162.00	154.72	163.00	144	141.00	121
Assam	2261.81	2378.85	2267.21	2308	2109.98	2312
Manipur	206.25	206.79	199.00	203	205.00	202
Meghalaya	332.97	348.369	340.69	354	327.00	356
Mizoram	106.81	118.68	113.30	127	114.66	127
Nagaland	184.99	161.8	170.00	161	160.00	167
Tripura (exc. Bangladesh)	310.49	323.95	305.00	333	300.00	321
NER DEMAND (exc. Bangladesh)	3258.70	3599.76	3309.56	3497	3196.00	3405.00

PARTICULARS (Energy Requirement in MU as per LGBR vs Actual)	Aug-22 (LGBR)	Aug-22 (Actual)	Sept-22 (LGBR)	Sept-22 (Actual)	Oct-22 (LGBR)	Oct-22 (Actual)
Arunachal Pradesh	82.43	79.7	77.00	72.12	69.88	88.53
Assam	1187.80	1320.510	1159.35	1211.630	1071.11	1006.800
Manipur	84.96	83.090	82.09	79.7	84.20	77.21
Meghalaya	180.84	185.320	168.39	176.96	180.70	186.79
Mizoram	50.07	55.498	48.46	51.58	76.43	53.17
Nagaland	83.69	86.180	78.68	82.69	79.63	76.44
Tripura (excl. Bangladesh)	151.58	168.6	155.40	155.14	152.69	150.28
NER DEMAND (exc. Bangladesh)	1788.46	1979.643	1743.50	1830.5987	1684.38	1639.979

The sub-committee may please deliberate

B.14. Installation of AWS by IMD Guwahati

It was informed in 158th OCCM that RMC, IMD, Guwahati would install Automatic Weather Station (AWS) in NER. As per the proposed list of stations by the constituents, IMD has surveyed the stations and has mentioned the requirement of NoC for the suitable stations.

In 195th OCCM, Representative from IMD in his presentation had highlighted the status of site surveys and the location finalized by the respective states and IMD w.r.t the installation of AWS. NERLDC informed that a draft MoU has been prepared by Assam.

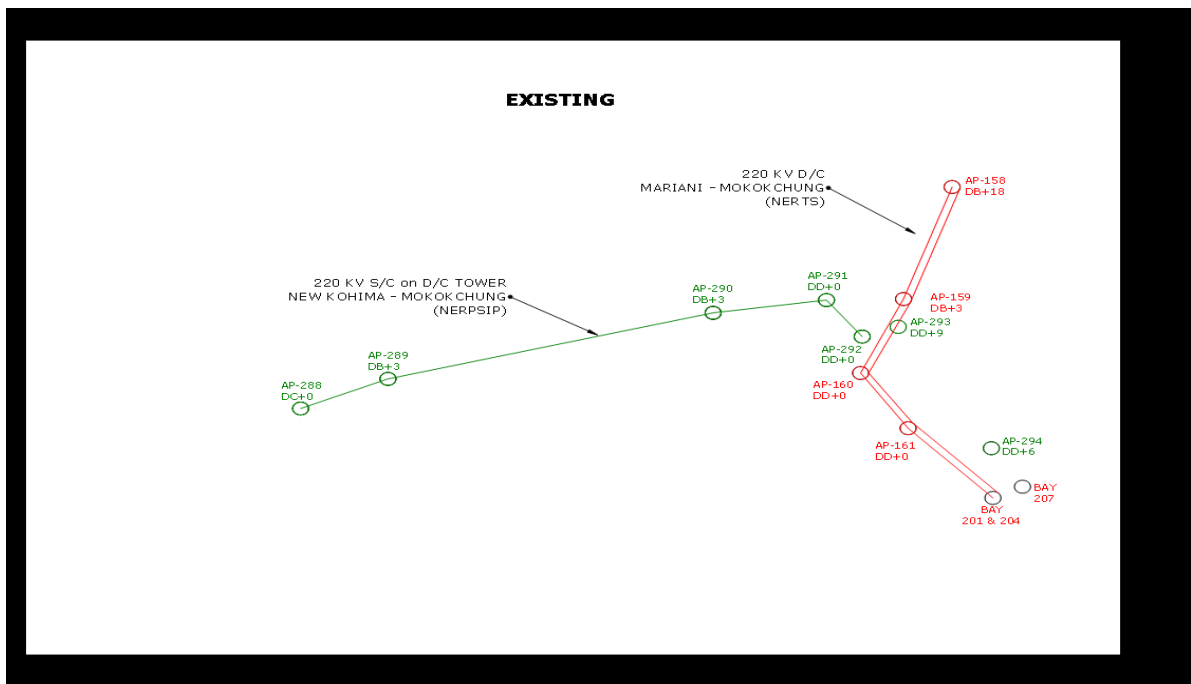
The forum requested that for the benefit of other states the said draft MoU may be circulated and requested all the other states to provide inputs on the draft MoU prepared by Assam so that the same may be finalized as early as possible.

The sub-committee may please deliberate

B.15. Requirement of shutdown for executing bay exchange and line swapping for 220kV New Kohima – Mokokchung TL under NERPSIP Nagaland:

Under the scope of NERPSIP, 220kV New Kohima GIS bay at 220/132kV Mokokchung GIS (POWERGRID) is completed and associated 220kV New Kohima – Mokokchung Transmission line on the verge of completion. However, due to non-availability of adequate corridor for crossing the existing 220kV Mariani – Mokokchung TL by the newly constructed line, swapping of the two lines near the substation and exchange of the bays at the substation is required. Matter has also been intimated to DOP.

The swapping of the transmission lines are proposed to be carried out from 07.09.2022 and since one number tower erection along with de-stringing and re-stringing of both the lines are required to be carried out only after obtaining shutdown of the existing 220kV D/C Mariani Mokokchung TL. The minimum shutdown requirement shall be of 18 days.



In the 193rd OCCM the forum had requested DoP Nagaland to intimate suitable timeline for the proposed shutdown of 220kV Mariani-Mokokchung D/C so that swapping of the two lines near the substation and bay exchange work at 220/132kV Mokokchung substation can be carried out.

In the 194th OCC, EE, DoP Nagaland intimated the forum that the shutdown of 220kV Mariani-Mokochung D/C is contingent upon return of shutdown of 132kV Kohima-Meluri line which is under outage due to tower collapse, and can be taken from 23rd Sept to 10th October. The forum had requested NERPSIP to finalize the schedule of the shutdown by 20th September'2022 and intimate to NERPC thereafter. As per the decision of the 195th OCCM, special meeting was convened on 20th Oct, 2022 to resolve the issues w.r.t the bay exchange and line swapping for 220kV New Kohima – Mokokchung TL with 220kV Mariani-Mokokchung line 1. The deliberation of the said meeting is as follows:

- POWERGRID informed that after bay swapping, the changes in Bays will be as follows:

Bay No	201	204	207
Before Bay Exchange/Existing	Mariani II	Mariani I	New Kohima
After proposed Bay Exchange	New Kohima	Mariani II	Mariani I

The owner of Bay no 207 shall remain with DoP, Nagaland only while Bay no 201 and 204 will remain with POWERGRID.

- Since transfer of assets is not possible, it was requested that NERTS and DoP, Nagaland may have a bilateral agreement for O&M of their respective bays.
- CTU connectivity agreement shall not be required.
- NERTS to confirm with the RIO w.r.t the clearances required for charging of the Bays after the proposed changes are made, since there is an addition of two towers (AP293 and AP294) for the diversion of 220 kV Mariani – Mokokchung I and II Line.
- NERTS to adhere to the PTCC clearance as per the CEA's guidelines.
- Since the proposed configuration allows for double OPGW at tower AP-159, its collapse may make the system vulnerable. NERTS mentioned that the same shall be reviewed.
- Various undertakings/compliances (Protection, Telemetry, and Metering etc.) were requested by NERLDC to be duly filled by NERTS before FTC.
- Necessary changes to be done by NERTS in the SCADA & metering database.
- SIO clearance dated 28.02.22 submitted by DoP, Nagaland for Bay no 207 mentions New Kohima Bay and has no validity. Also, the same has not been energized till date. DoP, Nagaland prior to FTC, may obtain clarification from SIO regarding validity of SIO clearance and swapping of the inspected Bay (207) for New Mariani II Line.

The Sub-committee may deliberate.

B.16. Overloading of 220 kV Mariani (PG)-Mariani (AS) S/C

It has been observed that the loading in 220 kV Mariani (PG)-Mariani (AS) has reached beyond 180 MW on some instances while the maximum allowable loading of the line is 213 MVA.

A joint visit was conducted by AEGCL and POWERGRID and the matter was discussed among NERPC, POWERGRID and AEGCL through a VC meeting on 06-10-2020. Based on the joint investigation of the matter, Triangular configuration of Mariani (POWERGRID) – Kathalguri (NEEPCO) – Mariani (AEGCL) at 220kV level with existing Twin Moose Conductor was recommended by NERPC. AEGCL vide letter dated 22.01.2021 requested for 'in-principle' approval of triangular configuration of the same. CEA, vide letter dated 09.02.2021, granted no objection in implementation

of triangular configuration by AEGCL. The scheme was agreed in the 3rd NERPC-TP held on 19th July 2021.

AEGCL may look into the implementation of the downstream 220 kV system at New Mariani and plan for better evacuation of the generation in Upper Assam Power System.

It is also proposed for upgrading the conductor configuration of 220 kV Mariani (PG) – Mariani (AS) line from existing Zebra to Twin Moose Conductor, as no objection received from CEA, vide letter dated 09.02.2021. This will increase the capacity of the conductor from 213 MVA to more than 300 MVA.

It is also proposed to look into the possibility of commissioning of 2nd circuit of 220 kV Mariani (PG) – Mariani (AS) line so that under the N-1 contingency of 220 kV Mariani (PG) – Mariani (AS) one circuit, the other circuit will provide safe evacuation of generation of Upper Assam Power.

In 195th OCC AEGCL informed that at present some portion of the 220 kV Mariani (PG) – Mariani (AS) line is still Zebra Conductor and could not be converted to Twin Moose as it is likely to create clearance issue while charging. The forum requested NERTS and AEGCL to do a joint inspection so that a solution can be drawn as the said portion of the line is limiting the loading capacity for the line. The forum suggested that the option of conversion of the Zebra Conductor to HTLS Conductor may also be explored to avoid clearance issue.

The sub-committee may please deliberate

C. NEW AGENDA ITEMS

Agenda from NERLDC

C.1. Furnishing daily data of generation, demand and shortage by State, ISGS and IPPs:

Gross generation and ex-bus generation of all State Generators, ISGS (Inter State Generating Station) & IPP (Independent Power Producer) for each day is to be furnished to MOP/NLDC which was discussed in 193rd OCC meeting held on 12th August 2022.

In addition to the above, hourly demand and shortage data of the states is also required to be furnished to NLDC/MOP.

In view of the above it is requested to furnish above data in the format specified (as sent in mail dated 07.11.2022)

C.2. Unauthorized synchronizing attempts of AGBPP Units:

Several times it is observed that repeated CB closing attempts are taken by AgBPP on un-successful synchronization of its units against single code.

For example, on 15.10.2022, after tripping of AgBPP unit - 5 at 11:34 NERLDC code (8598) was obtained by AGBPP for synchronisation of unit - 6. However, it was observed that two attempts were taken to synchronise the unit at 11:59 Hrs and 12:30 Hrs which went unsuccessful.

On expiry of the previous code, a new code was provided (Code No: 8600) for a final attempt for synchronisation of unit - 6, but the unit could not be synchronized again.

Eventually, it was discussed via telephone that no further code will be issued for synchronisation of GTG-6 till AGBPP provides full details of the cause of de-synchronisation in the above mentioned attempts. However, AGBPP went on to synchronise the unit at 12:44 Hrs without necessary code from NERLDC despite of instruction given regarding non-closing of the unit without any code.

It is to be noted that this attempt also failed and the machine de synced again at 12:49 Hrs.

Hence, AgBPP is requested to take the matter seriously and avoid such attempts of unauthorized synchronization without analyzing the root cause of desynchronization of units as it may lead to adverse effects and serious disturbances in the grid.

SOE of unit closing for reference is attached as **Annexure 1**.

C.3. Delayed returning of shutdown in peak hours:

It is observed in the month of September, October & November that in many instances NERTS has delayed in returning the shutdown of grid elements. As Powergrid owns most of the ISTS as well as important transmission lines/elements, returning of the shutdown in stipulated time becomes crucial for transfer of power to many constituents with security, especially during peak hours. Few instances when delayed returning of shutdown has caused constraints in the system are tabulated below:

Sl. No.	Element	Approved Date and Time	Availing Time	Returning Time	Returning Delay	Impact on grid
1	132KV/33kV ZIRO-ICT	08:00 hrs to 16:00 Hrs of 08.11.2022	08:22	17:12	1 Hr 12 Min	Ziro area of AP was in dark having load of around 10 MW
2	132kV- DAPORIJU- ZIRO	08:00 hrs to 16:00 Hrs of 07.11.2022	08:19	19:10	3 Hrs 10 Min	Dark in Ziro, Along, Pasighat, Roing, Tezu and Namsai area.
3	132kV- BISWANATH CHARIALI- PAVOI-2	06:00 Hrs to 15:30 Hrs of 28.10.2022	08:59	18:39	3hrs 9min	20 MW load curtailed in PavoI area of Assam
4	132kV- BADARPUR- KHLIEHRIAT- 1	08:00 hrs to 16:00 Hrs of 05.10.2022	09:41	22:31	6hrs 31min	Overloading of 132kV Lumshnong-Panchgram and load curtailment by Meghalaya

Agenda for 196th OCC Meeting to be held on 25th November 2022

						in Lumshnong area
5	132kV-DIMAPUR-DIMAPUR(PG)-2	08:00 hrs to 16:00 Hrs of 07.10.2022	08:12	16:52	52 min	Overloading of other circuit and load curtailment in Dimapur area during peak hours.
6	132kV-BADARPUR-KHLIEHRIAT-1	08:00 hrs to 16:00 Hrs of 22.09.2022	08:34	20:20	4 hrs 20 min	Overloading of 132kV Lumshnong-Panchgram and load curtailment by Meghalaya in Lumshnong area

In many of the cases of delayed S/D return, it is observed that there was delay in availing shutdowns. Hence it is suggested that the shutdown may be availed on time so as to avoid delay in returning the shutdown during peak hours.

List of elements with delay in returning shutdowns is attached as **Annexure 2**.

C.4. Non-Switching of grid elements due to failure of remote switching:

On 03.11.2022 at 01:06 Hrs, a code (9704) was issued from NERLDC for closing of 400kV, 50MVar Bus Reactor-1 at Misa S/S due to high system voltage. However, the same could not be closed from RTAMC nor from site due to some remote switching issue and lack of communication with site staff respectively (as informed by RTAMC). Hence NERTS is requested to ensure the switching of system elements whenever instructed/ on system requirement either from remote or locally.

C.5. Long Outage of Reactors in the grid:

With the onset of lean hydro period and reduction in the demand of the region in the Night hrs, high voltage is observed in the grid. As such, taking reactors into service becomes essential to contain the system voltage within IEGC band. However, it is observed that few of the bus/line reactors are under outage for quite sometimes. List of such reactors are shown below:

Sl. No.	Element	outage date	outage time	reason of outage
1	63 MVAR , 400kV- BONGAIGAON- BYRNIHAT (KILLING) L/R@ BONGAIGAON – 400kV	25-07- 2022	08:17	Approved time: 08:00 Hrs to 16:00 Hrs of 25-07-22. Extended several times to 15-09-22, 05-10-22, 20-11-22. For upgradation of CAG type English electric make Differential and REF relay with Micom P643 and P141.
2	50 MVAR, 400kV- BISWANATH CHARIALI- BALIPARA-2 L/R@ BALIPARA – 400kV	14-07- 2022	11:05	For internal inspection of high rise of Fault gases. (Emergency without approval)
3	20 MVAR, 132kV B/R @ KUMARGHAT	11-11- 2022	23:42	Y-ph Bushing Blast
4	400 kV, 63 Mvar Bus Reactor at Byrnihat	09-12- 2014	-	Replacing 63 MVAR Bus Reactor with 80 MVAR Bus reactor
5	125 MVAR, 400kV Bus Reactor at Bongaigaon	05-11- 2022	19:48	Approved time: 08:00 Hrs of 05-11-22 to 16:00 Hrs of 12-11-22. Extended tp 19-11-22. Due to DCRM violation of Circuit Breaker of Balipara#3 Main Bay 419

				at Bongaigaon (Severe in R-ph/ nominal in Yand B ph).
6	20 MVAR, 132kV B/R @ AIZWAL	02-11-2022	08:28	Approved time: 08:00 Hrs of 02-11-22 to 16:00 Hrs of 16-11-22. Extended to 23-11-22. HIGH MOISTURE OBSERVED IN THE OIL. Dryout and filtration for increasing the dielectric strength of oil and paper for enhancement of useful life.

Hence, concerned constituents are requested to expedite restoration of the reactors and also provide a tentative date of restoration of the above mentioned reactors.

C.6. Commissioning of 420 kV, 80 MVAR Bus Reactor at Ranganadi HEP

Voltage rise issue is witnessed at Ranganadi HEP throughout the year and it gets more severe during the lean hydro period leading to difficulty in grid operation. 400 kV lines at Ranganadi HEP are also kept open for considerable period of time to control voltage at Ranganadi during real-time operation which is affecting the reliable operation of NER Grid.

As per deliberations in 192nd OCCM, NEEPCO informed that work will be completed within 18 months from LOA date. The table below shows the duration for which high voltage was observed at Ranganadi for the years 2021 & 2022. NEEPCO is requested to update the latest status and expedite Installation of 420 kV, 80 MVAR bus reactor at Ranganadi HEP.

Sl No.	Year	Total Hours for which Bus voltage of Ranganadi Bus above IEGC band (420 kV and above)
1	2021	169.98
2	2022	26.66

C.7. Installation of 10 MVAR Bus Reactor at 132 kV Meluri S/S for Closed loop formation of Kohima-Meluri-Kiphire-Tuensang-Mokokchung link

132 kV Kohima S/S is presently connected with the rest of the NER grid via 132kV Karong-Kohima line, 132 kV Kohima-Chiephobozou-Wokha-Sanis-Doyang link, 132 kV Dimapur-Kohima line & 132 kV Kohima-Meluri line but Kohima-Meluri-Kiphire-Tuensang-Mokokchung link is generally kept open from Kiphire end. Kohima S/S caters to the load of Capital area of Nagaland Power System, hence the availability of Kohima S/S is very important. However, this area is prone to frequent grid disturbances due to its geographical location.

On 2nd Nov'22 at 13:52 hrs during the visit of Honourable President of India, Grid disturbance occurred in Kohima area of Nagaland Power System with a load loss of 19MW and generation loss of 8MW making it a critical situation.

Forming closed loop connection of Kohima-Meluri-Kiphire-Tuensang-Mokokchung will strengthen the connectivity of Kohima S/S and upgradation of 66kV Kiphire-Tuensang-Mokokchung link to 132 kV will enhance the reliability and security of the Capital area of Nagaland Power System. However, high voltage issue at Meluri S/S (upto 145 kV) is observed in the present condition. As per system study, installation of Bus reactor of 10 MVA capacity at Meluri S/S will resolve the issue. Hence, the Kohima-Meluri-Kiphire-Tuensang-Mokokchung link at 66kV or 132 kV can be kept in closed loop only after installation of 10MVAR Bus Reactor otherwise high voltage condition will persist in Meluri and Kohima S/S.

DoP, Nagaland is requested to install the reactor at 132 kV Meluri S/S for closed loop operation of the above mentioned link and expedite the upgradation works of the same to 132 kV.

Members may please discuss.

C.8. Implementation of Bus Bar Protection at 132 kV Kahilipara(AEGCL) Substation:

Grid Disturbance occurred twice in Kahilipara, Kamalpur and part load of Sishugram areas of Assam Power System on 2nd Aug'21 and 23 Sept'22 with load loss 100 and 120 MW respectively which is a cause of concern.

As per Minutes of 57th PCC meeting, the forum deliberated that Busbar protection is to be implemented at Kahilipara with procurement of 5 core CTs. AEGCL is requested to implement and expedite Bus Bar protection scheme at Kahilipara (AEGCL) to ensure the reliability of capital area of Assam System.

Members may please discuss

Agenda from KMTL

C.9. Related to commissioning of 220 KV downstream transmission line of DOP Nagaland at New Kohima (400/220kV) SS

Concerns of KMTL:

1. OPGW wire for 220 KV downstream Transmission line has not been installed so it is very difficult to achieve the protection of 220 KV transmission line by using line differential Relay. As line length is 10 KM (Approx.) for 220 KV Transmission line therefore Line differential Relay has been considered for both the end.
2. PLCC & SDH panel has not been installed at 400/220 KV GIS substation, New Kohima till date.
3. 220 KV downstream transmission line conductor parameters yet to received from DOP, Nagaland for Relay setting at 400/220 KV GIS substation, New Kohima

Members may please discuss

D. ITEMS FOR STATUS

D.1. Implementation of projects funded from PSDF:

The status as informed in 195thOCC:

State	R&U scheme	ADMS	Capacitor Installation	SAMAST**	Line Differential Protection
Ar. Pradesh	Package-I (Diagnostic tools) Complete in all respects. P-II (for PLCC & communication) Supply completed. Erection WIP. 50% requisition submitted. P-III (Substation equipment) Agreement signed and 10% requisition submitted. Total 90% requisition by Apr'22. Completion by Dec'22. (Approval from TSA and Account opening in 3 months)	Project completed in all respects.	-	30% requisition submitted.	-
Nagaland	Completed in all respects.	Work completed in all respects. UC submitted.	-	30% requisition submitted	Lines identified. Under DPR preparation stage.
Mizoram	Final 10% disbursed. UC to be submitted.	Work completed in all respects. Remaining part of final 10% to be disbursed ASAP.	To reply to TESG queries.	30% requisition submitted.	Revised DPR including both 132kV Aizawl-Luangmual and 132kV Khamzawl-Khawiva to be submitted.
Manipur	Package-II: completed Package-I: all stations complete except Ningthoukhong. By May'22.	Work completed in all respects. UC submitted in Oct'21.	WIP.	10% disbursed. 20% requisition sent.	Revised DPR for LDP of 132kV Imphal-Yurembam-III to be submitted by June'22.

Agenda for 196th OCC Meeting to be held on 25th November 2022

	33kV System Integration with SLDC	In tendering stage			
	Reliable Communications for grid connectivity	In tendering stage			
Tripura	Completed. Final UC submitted on 04 th May'22.	Final 10% requisition submitted.	Not relevant in present scenario with commissioning of ISTS lines. Issue dropped	10% funds received. 20% requisition to be sent ASAP	For 132kv 79Tilla-Budhjungnagar line and for Rokhia link LDP at own cost. Tendering undergoing. DPR preparation for rest of the lines
Assam	Work completed except CRP, SAS work in 8stations which have been retendered and awarded to M/s SIEMENS. Completion by Dec'22	Project completed in all respects.	-	30% funds yet to be fully disbursed. 60% requisition sent.	Lines identified. Under DPR preparation stage.
Meghalaya	MePTCL – completed in all respects. MePGCL – Completed in all respects.	Project completed in all respects.	-	30% funds yet to be fully disbursed. 60% requisition sent.	All works except OPGW done

In the 194th OCC, CGM, SLDC, AEGCL requested for extension of Milestone date for SAMAST. The forum unanimously decided that in view of the pandemic restrictions throughout NER in 2021 the extension is to be granted. Member Secretary, NERPC informed that originally the Project Completion deadline as per PSDF was 12 months, however in LoA target is completion by 18 months. The forum decided to extend the milestone date(s) and completion/Go Live/DoCO date(s) by 3 months, with target completion by 10th November'2022.

D.2. Status update of important grid elements under prolonged outage impacting system operation:

Sl. No	Element	Owner	Status as informed in the 195 th OCCM	Latest Status
1	132kV Mariani – Mokokchung (out since April'2008)	AEGCL	Non clearance due to persisting funding issue	
3	132kV Roing-Pasighat (charged through ERS tower)	NERTS	By Mar'23	
4	220kV Misa-Kopili D/C, 220/132kV ICTs at Kopili, 132kV Khandong –Kopili D/C(out since Oct'19)	NEEPCO/ NERTS	Nov 22 As decided, under NERTS Scope, restoration of ICT#2, one ckt of 132kV KhandongKopili is targeted for restoration. As decided, Control & Relay panel for the same shall be placed in SPR being constructed by NEEPCO. After readiness of SPR, one month shall be required for commissioning.	
5	132kV Srikona – Panchgram	AEGCL	DPR approved by the standing finance committee of Govt of Assam. However Administrative approval still awaited	
6	400kV Imphal – Thoubal-I and 315MVA 400/132kV ICT at Thoubal	MSPCL	RoW, litigation pending in court.	
7	63MVAR Bus Reactor at Byrnihat to be replaced with 80MVAR Reactor	MePTCL	Reactor dispatched from the Siemens Factory on the 12th October 2022. Will reach by November 2022.	
8	Mawlyndep and Khliehriat CBs at Mustem	MePTCL	Expected to energize after 29th October 2022. Bus shutdown will be required for Mustem Sub Station.	
9	400kV Silchar-Misack DC (permanent restoration)	NER-II TL	Restoration work (ERS) of both the ckt done. Work	

			underway for permanent restoration	
--	--	--	------------------------------------	--

D.3. Status of commissioning for upcoming projects:

Sl. No	Name of the element	Utility	Status as informed in 195th OCC meeting	Latest Status
1	132kV Monarchak-Surjamaninagar	TSECL	March 23	
2	PLCC for 132kV Loktak-Ningthoukong and 132kV Loktak-Rengpang(existing lines)	MSPCL	PLCC EQUIPMENT INSTALLATION COMPLETED AT RENG PANG END. COMMISSIONING PENDING. PLCC FOR LOK-NINGTHOUKHONG TO BE TAKEN ALONGWITH WITH 132KV LOK-NINGTHOUKHONG 2ND CKT	
3	Construction of 2 nd bay at Balipara for 220kV Balipara-Sonabil-2	AEGCL	SAS integration going on	
4	Upgradation of 132kV Lumshnong – Panchgram line	MePTCL	Recondcutoring works of Lumshnong-Panchgram line has started on the 13th October 2022 and is in full progress. About 0.434 Ckt. Km is completed	
5	PLCC for 132kV Karong-Kohima. PLCC at Kohima	DoP Nagaland	PLCC panel at Karong has also to be changed as to ensure same make at both the substations. Awaiting sanction from PSDF	
6	132kV Loktak-Ningthoukhong-II	MSPCL	RoW issue at two spans, resolution underway	
7	132kV Roing-Chapakhowa	NERTS	Work is in progress with a target for completion of the line by Dec'22. Constraints/	

Agenda for 196th OCC Meeting to be held on 25th November 2022

			Challenges: a. Severe Obstruction from Forest dwellers in Deopani RF(20 loc.) b. Severe ROW in 21 locations in Jia & Ezengo areas. Immediate requirement of releasing compensation. Approval for final compensation awaited from District Admn.	
8	Re-conductoring 220kV BTPS-Salakati D/C	NERTS	Work in Circuit -1 targeted for commencement by 3 rd week of October 2022. Constraint: Incessant Rain	
9	420kV 80MVAR Bus Reactor	NEEPCO	October'2022	
10	220kV Killing - Mawngap	NERPSIP	RoW not yet resolved at 05 locations (01 foundation & 04 erection). Stringing RoW in 01 section in Mawphlang area, East Khasi Hills to be resolved.	
11	220kV Samaguri - Mariani-I	AEGCL	FC still awaited in the Samaguri-Khumtai section. While the Mariani-I to Khumtai section is charged	
12	Reconductoring of 132kV UmiamStg-III to UmiamStg-I by HTLS	MePTCL	About 10 Ckt Km has been completed out out of 13 Ckt Km.	
13	PLCC/DTPC for 220kV Balipara- Sonabil	AEGCL	Will be commissioned along with charging of line 2	
14	220kV AGBPP -Namsai D/C	TBCB		

Agenda for 196th OCC Meeting to be held on 25th November 2022

15	Upgradation of 132kV Surjamaninagar-Surjamaninagar(ISTS), 132kV Bodhjungnagar-SMNagar, 132kV P.K.Bari-Ambassa, 132kV P.K. Bari-P.K.Bari(ISTS)	TSECL	WIP	
16	LILO of 132kV Leshka-Khliehriat-I at Mynkre and Mynkre SS and 33kV downstream at Mynkre.	NERPSIP	Mynkre SS work is severely affected by incessant rain in the last month. S/s will be ready by Nov'22.	
17	220kV Tinsukia-Behiating D/C	NERPSIP	The balance 01 no. foundation location is still water logged. Line targeted to complete by Nov'22.	
18	LILO of 132kV Kamalpur-Kamakhyia& 132kV Kamalpur-Sishugram at Amingaon	NERPSIP	AEGCL will arrange S/D by end Oct'22. As a special case and on request of AEGCL, POWERGRID has sanctioned Rs 15.5 Lacs for installation of ERS.	
19	220kV Rangia – Amingaon D/C and 220/132kV 2x160MVA Amingaon S/S	NERPSIP	Work in Progress. By Nov'22.	
20	132kV Rengpang-Tamenglong and 132/33kV 4x6.67MVA at Tamenglong at Manipur	NERPSIP	Compensation estimate received from District Authority, Noney and is under process for disbursement. By Nov'22.	
21	132/33kV 2x20MVA Gamphazol at Manipur	NERPSIP	Few balance testing are under progress. Will be charged Nov'22.	
22	132/33kV West Phaileng S/S at Mizoram	NERPSIP	Ready for charging. 3 nos of collapsed towers in the connecting line to be restored by State DISCOM.	
23	132/33kV 2x12.5MVA Marpara S/S at Mizoram	NERPSIP	Work hampered due to frequent Rain and landslide. Materials transportation is severely affected due to very bad road conditions. By Dec'22	

Agenda for 196th OCC Meeting to be held on 25th November 2022

24	132/33kV 2x12.5MVA Lungsen S/S at Mizoram	NERPSIP	Work hampered due to frequent Rain and landslide. Materials transportation is severely affected due to very bad road conditions. By Dec'22
25	132kV Lungsen- Chawngte S/C at Mizoram	NERPSIP	Foundation work completed. Erection and Stringing activities are going on. By Oct'22.
26	132kV Chawngte – S.Bungtlang S/S at Mizoram	NERPSIP	Work in Progress. By Oct'22.
27	132kV W.Phaileng- Marpara S/C at Mizoram	NERPSIP	Work hampered due to frequent Rain and landslide. Materials transportation is severely affected due to very bad road conditions. By Nov'22
28	220kV Zhadima – Mokokchung at Nagaland	NERPSIP	Bay Swapping at 220kV Mokokchung (GIS) SS under progress. By Oct'22.
29	LILO of 132kV Wokha – Kohima at 132/33kV New Kohima at Nagaland	NERPSIP	Row at one location is yet to get resolved. A compensation amount yet to be furnished by DC Kohima. Nov'22.
30	132kV Wokha- Zunheboto – Mokokchung at Nagaland	NERPSIP	Heavy rain fall affected progress. RoW pertaining to tree cutting / stringing is being resolved with support from District Administration. Transportation of man and materials are affected due to bad road condition. By Nov'22
31	132kV Tuensang – Longleng at Nagaland	NERPSIP	Line by Oct'22, Tuensang SS is not yet ready.
32	132/33kV Amarpur S/S at Tripura	NERPSIP	WIP. Heavy rain fall affected the

Agenda for 196th OCC Meeting to be held on 25th November 2022

			progress. By Nov'22.	
33	132/33kV Manu(new) S/S at Tripura	NERPSIP	WIP. Heavy rain fall affected the progress. By Nov'22.	
34	132kV Dharmanagar-Kailashor	NERPSIP	RoW recently resolved with the support of District authorities. By Oct'22.	
35	132kV Ziro-Yazali and 132/33kV Yazali S/S	POWERGRID-Comprehensive		
36	132kV Yazali – Palin and 132/33kV Palin S/S	POWERGRID - Comprehensive		
37	132kV Palin- Koloriang and 132/33kV Koloriang S/S	POWERGRID - Comprehensive	Dec'23	
38	132kV Khonsa – Deomali and 132/33kV Khonsa S/S	POWERGRID - Comprehensive	Dec'23	
39	132kV Miao – Namsai and 132/33kV Miao S/S	POWERGRID - Comprehensive	Dec'23	
40	132kV Chimpu – Holongi and 132/33kV Holongi S/S	POWERGRID - Comprehensive	RoW issues at 5 locations resolved. Work resumed, expected by Sept'22	
41	Lower Subansiri HEP	NHPC	Unit 1 by Jan'23 and Unit 2 by Feb'23	
42	400kV Lower Subansiri-BNC line1	PGCIL	Nov'22	
43	400kV Lower Subansiri-BNC line2	PGCIL	Feb'23	
44	Conversion of MT to DM at (i)132kV Khliehriat, (ii)132kV Badarpur, (iii)132kV Nirjuli, (iv) 132kV Imphal	NERTS	As per 1 st NERPC (TP) meeting, upgradation of Nirjuli& Imphal was only approved. Nirjuli – Decmber'22 Imphal - Feb'23	

D.4. Status of ISTS expansion scheme in NER:

A. Status of downstream 220kV or 132kV network by STUs from the various commissioned and under-construction ISTS substations in NER

Sl.	ISTS S/s	State	Voltage ratio, Trans. Cap	Down- stream Voltage level (kV)	Unutilized bays	Status of ISTS bay	STU Lines for unutilized bays	Status of Lines(as updated in 192 nd OCCM)	
								Date of Award	Completion schedule
1	New Mariani (POWERGRID)	Assam	400/220kV, 2x500MVA	220	2	Commissioned	New Mariani (POWERGRID) – Diphu (Assam) 220kV D/c line	Preliminary survey completed	By Jan'25
2	New Kohima (TBCB)	Nagaland	400/220kV, 2x500MVA	220	2	Commissioned	New Kohima (TBCB) – New Kohima (Nagaland) 220kV D/c line	LoA Feb'2021	Resolution of issue of high deviation angle at 1 st tower at New Kohima (TBCB) underway. Completion of the line after the said resolution
3	Nangalbibra (TBCB)	Meghalaya	220/132kV, 2x160MVA	132	2	Under bidding	Nangalbibra (ISTS) – Nangalbibra (MePTCL) 132kV D/c (Single Moose) line	Survey awarded	Dec'23

B. Status of 400kV substations and other important elements being implemented by STUs in NER under intra-state schemes to be connected through ISTS

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
A	Assam (to be implemented by AEGCL)			
I	Rangia	400/220kV, 2x500MVA	1. EPC Contract Award is Tentatively scheduled in the early half of Dec'2022. 2. Master Plan submitted for approval. 3. Tender under preparation 4. AIB points to be addressed	Dec'2025

Agenda for 196th OCC Meeting to be held on 25th November 2022

a)	LILO of both circuits of Bongaigaon – Balipara 400kV D/c line at Rangia	400 kV, D/C	1. EPC Contract Award is expected by Dec'2022. 2. Tender preparation is completed and is to be reviewed by AIIB	Mar'26 (36 months form date of Award)
II	Khumtai	400/220/13 2kV, 2x500MVA + 2x160MVA	Survey work to be completed by June'2022. EPC tender to be floated on finalization of fund allotment. 220kV work will be constructed under ongoing AIIB scheme for which contract has already been award to M/S RS infra PVT tech ltd.	May'2026
a)	Khumtai (AEGCL) – BiswanathChariyali (PG) 400kV D/c line	400kV D/c	Survey work completion by July'22, tender floating after finalization of fund allocation.	220kV LILO part 60% complete. 400kV line by May'2026
III	Upgradation of Gohpur S/s from AIS to GIS	-	1. Notice of Award has been issued on 8 th June 2022 to M/S Sumaja Electro infra Pvt ltd.	June'2025
a)	2 no. 132kV GIS line bays at Gohpur for termination of LILO of one circuit of BiswanathChariyali – Itanagar 132kV D/c line (line works under ISTS through TBCB route)	132kV	1. LoA by Jun'22	June'2025
IV	Upgradation of Sonapur S/s from AIS to GIS	-	1. Contract to be awarded by Jun'23. LoA by Jun'23	June'2026
a)	LILO of 400kV Silchar-Byrnihat at Sonapur	-	1. LoA by Jun'23	June'2026

Sl. No.	Substation/Location	Transformation Capacity/ Element	Date of Award	Completion Schedule
B	Tripura (to be implemented by TSECL)			
I	Surajmaninagar (TSECL)	400/132kV, 2x315MVA	Award by Sep'22	12 months from Date of Award

Agenda for 196th OCC Meeting to be held on 25th November 2022

a)	LILO of both circuits of Surajmaninagar (ISTS) – Palatana 400kV D/c line at Surajmaninagar (TSECL) S/s	400kV D/c	All works except 400kV termination at Surajmaninagar (TSECL) by POWERGRID to be done. Balance works under separate contract.	84% Line works complete by PGCIL, total completion subjected to Sub-station readiness at Surajmaninagar
C	NEEPCO (to be implemented by NEEPCO)			
I	Extension works at Ranganadi HEP end	Oct 22	Oct 22	Oct 22
II	Extension works at Pare HEP end	March'24	March'24	March'24
a)	Bypassing of LILO of Ranganadi - Naharlagun / Nirjuli at Pare HEP so as to form direct Ranganadi- Naharlagun / Nirjuli 132 kV S/c line			
b)	Re-conductoring of LILO portion at Pare end (of Ranganadi - Naharlagun / Nirjuli 132kV S/c line) with HTLS (HTLS equivalent to ACSR Zebra) along with modification of 132kV bay equipment at Pare HEP			

D.5. Status Review for the Items Referred from previous OCCMs:

S.No	Item for Discussion	Status as per 195 th OCCM	Latest Status
1.	Installation of Capacitor banks in Upper Assam area of Assam (Agenda No. B19. of 189 th OCCM)	At Dhemajifunding issue. However, with coming of other lines like Pare-N. Lakhimpur voltage issue may be automatically rectified. Same status	
2.	Introduction of SPS in Leshka S/Sn of Meghalaya (Agenda No. C4 of 189 th OCCM)	OEM has visited the site and proposed certain modifications in the original scheme. The finalised scheme will be submitted to the higher management in the following week.	
3.	Voltage and MVAR issues at 400kV Kameng S/Sn (Agenda No. C7 of 189 th OCCM)	Within Dec'2022	
4.	Non-availability of operational synchronization facility at 132kV	TO BE COMPLETED BY OCT 22 by TSECL.	

Agenda for 196th OCC Meeting to be held on 25th November 2022

Agartala Station (Agenda No. C10. of 189 th OCCM)			
5.	Difficulty in test synchronization at Ningthoukhong S/Sn (installation of line CVT) (Agenda No. C11. of 189 th OCCM)	Issue to be resolved shortly. Test synchronization can be done after 22 nd Oct, 2022	
6.	Outage of 400kV Imphal (PG) – Thoubal-I (Agenda B.15 of 184 th OCCM)		
7.	Charging of 33kV Khupi-Kimi line at 132kV: Recommendations of the 187 th OCCM to be implemented: (a) Installation & Commissioning of PLCC and additional Wave Trap with accessories at Khupi (NEEPCO) - By Mar'22 Minutes of 188 th OCC meeting held on 16 th March, 2022 at Guwahati (b) Defective Relays at Khupi end to be repaired (NEEPCO) – By Mar'22 (c) PID testing and replacement of defective insulators (NEEPCO) – By Mar'22 (d) Infringement checking and vegetation clearance (NEEPCO) – By Mar'22 (e) Stringing of OPGW by POWERGRID Comprehensive – By Mar'22 (f) Procurement and installation of Line Differential Relays (NEEPCO) – By Mar'22 (Agenda B.15 of 188 th OCCM)	Status Report submitted to NERPC.	
8.	Synchronization issue of 220kv AGBPP – Tinsukia 1 & 2 at AGBPP end.(NEEPCO to update the status of CVT procurement and other relevant details.) Item B.24 of 190 th OCCM.	Tender floated in the month of August'2022.	
9.	Installation of second wave trap at Nirjuli SS for both N.lakhimpur and Pare circuits by PGCIL (B.14. Of 192 nd OCC)	To be installed along with charging of the LILO portion	
10.	Frequent breakdowns (BD) of Khuppi- Balipara transmission line (C2 of 191 st OCCM)		
11.	Proposed continuous shutdown of 132kV S/C Loktak Jiribam(PG) for HTLS reconductoring (C.5 of 191 st OCCM)	132kV Loktak-Jiribam S/D needs discussion with higher authority of MSPCL.	
12.	Issues faced during Mock Black Start exercise of Pare HEP on	As per agenda the same shall be performed in lean season.	

Agenda for 196th OCC Meeting to be held on 25th November 2022

	27/05/2022 (C.7 of 191 st OCCM)		
13.	Implementation of Single Phase Auto-Reclosure for 132kV Rangia-Motonga and 132kV Gelephu-Salakati Line (C.14 of 191 st OCCM)	Nov'22	
14.	Non reporting of 132kV Mohanpur S/S under NERPSIP and Comprehensive projects (C.16 OF 191 st OCC)	Work in progress. Telemetry system for reporting to SLDC will be ready by next week.	
15.	High level of dissolve gases on DGA report of Kameng U#3 R-phase GT: (C.17 of 191 st OCCM)	Acetylene is within permissible limit.	
16.	Grid Disturbance in Dhaligaon area of Assam Power System (C.18 of 191 st OCCM)	Estimate prepared and submitted to Disaster Risk reduction Works, 2022-2023, Govt of Assam	
17.	Tower schedule of 220 KV D/C Transmission line (from Zhadima 400/220 KV GIS Substation to Zhadima 220 KV Substation) (B.18 OF 194 th OCC)	Yet to submit. Line Parameters changed due to increasing in no oftowers. Revised parameters to be submitted soon.	
18.	400 kV STG-1 Main Bay at OTPC Palatana (C.6 of 194 th OCCM)	Bay currently Open. To be rectified in Unit 1 S/D.	
19.	400 kV Bongaigaon-Byrnihat L/R at 400 kV Bongaigaon (PG) (C.6 of 194 th OCCM)	Applied for shutdown in Nov'22 and awaiting for Shutdown approval	
20.	Occurrence of Multiple grid disturbance in Gohpur and radially connected areas of Assam Power System (C.10 of 194 th OCC)	Work completed from AEGCL end. SEM meters to be provided.	
21.	Status of Installation of TLSA in 400kV Silchar-Azara T/L & 400 kV Silchar-Byrnihat T/L (C.12 of 194 th OCCM)	Tendering process to be completed.	
22.	PLCC & protection related issues at 132kV Tipaimukh S/s (C.15 of 194 th OCC)	48V charger to be replacement done on 16th Oct 2022	
23.	48V System reliability at Pasighat end (C.16 of 194 th OCC)	Transmission division/ circle was requested to take up the matter, likely to be completed by March 2023 if fund is approved.	

E. METERING AGENDA ITEMS

E.1. Procurement of SEM & DCD/Laptop for future requirements:

In the 194th and 195th OCCM, DGM(AM), NERTS informed that 40DCDs are under procurement and delivery is expected by Oct'22.

The sub-committee may please deliberate

E.2. Issues regarding SEM Data Processing:

- a. Mismatch in 220 kV Deomali (AP) - AGBPP (Kathalguri) power flow data: Pair-check mismatch has been observed for 220 kV Deomali (AP) - AGBPP (Kathalguri). Deomali end is reading 2/3rd of Kathalguri end. In 194th OCCM, SLDC A.P assured the forum to send expert form Itanagar to check the SEM at the earliest.

Status may be reviewed.

- b. Non-receipt of SEM data from 220kV Mariani(As) & 132 kV Pailapool Substations: Weekly SEM data of 220kV Mariani(As) & 132 kV Pailapool(As) Substations is important for accounting of Assam drawal. However, SEM data from the said substations is not being received.

In 194th OCCM, SLDC AEGCL intimated the forum that regarding SEM at Mariani(As), USB to serial converter's driver is not available, for which PGCIL assured to ask Mariani(PG) to extend support. Regarding SEM at Pailapool it was informed that a new laptop is required which will be procured very soon.

Status may be reviewed.

- c. Sign reversal of Rengpang end of 132kV Loktak- Rengpang line: Sign Reversal problem exist in Rengpang end of 132kV Loktak-Rengpang line. In 194th OCCM, SLDC MSPCL informed that a thorough evaluation of the meter was done but the problem still persists. The forum requested PGCIL to extend help to MSPCL. To which PGCIL concurred

Status may be reviewed.

- d. Erroneous reading of Tipaimukh end of 132kV Aizwal-Tipaimukh line: Tipaimukh end of 132kV Aizwal-Tipaimukh line is reading close to 0 (Zero). In 194th OCCM, SLDC, MSPCL informed that similar to problem with SEM at Rengpang SS, the problem with SEM at Tipaimukh still persists despite a thorough evaluation of the meter. The forum requested PGCIL to extend help to MSPCL. To which PGCIL concurred

Status may be reviewed.

In 195th OCCM, the followings were concluded:-

- a. DoP, AP will rectify Deomali SEM by Oct'22 for 220 kV Deomali (AP) - AGBPP (Kathalguri) feeder.
- b. Mariani: SLDC, Assam mentioned that the issue has been resolved. However, NERLDC informed that data was received for only 1 week (19-09-2022 to 25-09-2022) on 26th Sep 2022, after which the same has not been received. SLDC, Assam assured to check with the field personnel. Pailapool: Laptop has not been procured by Assam yet
- c. MSPCL vide email dated 17th October 2022 informed that Rengpang SEM undergoing check.
- d. MSPCL vide email dated 17th October 2022 informed that Tipaimukh SEM needs replacement.

The sub-committee may please deliberate

E.3. High Time Drifted SEMs:

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 the same.

Time drift of more than 4 mins observed in the following meters.

S.No	ENTITY	FEEDER NAME	METER NO
1	ASSAM	220 kV TINSUKIA END OF KTG FDR-I	NP-9654-A
2	ASSAM	220 kV TINSUKIA END OF KATHALGURI FDR-II	NP-9658-A
3	ASSAM	132 kV UMRANGSOO END OF KHLEIRIAT (PG)	NP-5290-A
4	ASSAM	132 kV UMRANGSOO END OF HAFLONG	NE-0019-A
5	ASSAM	132 kV RANGIA END OF MOTONGA	NP-9669-A
6	MANIPUR	400 kV THOUBAL END OF IMPHAL(PG)-II FDR	NP-9603-A
7	MIZORAM	132 kV KOLASIB END OF AIZAWL(PG) FDR	NE-0087-A
8	POWERGRID	400/132kV SILCHAR 200MVA ICT-1 (HV SIDE)	NE-0050-A
9	POWERGRID	400 kV SILCHAR END OF BYRNIHAT	NP-9398-A
10	POWERGRID	400 kV SILCHAR END OF PALATANA FDR-I	NE-0030-A
11	POWERGRID	400/132 kV SILCHAR ICT-3 (HV SIDE)	NP-6946-A
12	POWERGRID	400/132 SILCHAR END OF MISA FDR-I	NP-9925-A
13	POWERGRID	400 kV SILCHAR END OF IMPHAL-II	NE-0040-A
14	POWERGRID	400 kV SILCHAR END OF PK BARI (STERLITE)-I	NP-9901-A

Agenda for 196th OCC Meeting to be held on 25th November 2022

15	POWERGRID	400 kV SILCHAR END OF IMPHAL-I	NE-0007-A
16	POWERGRID	132 kV SILCHAR END OF SRIKONA-I	NP-9895-A
17	POWERGRID	400 kV BONGAIGAON END OF NTPC_BgTPP-2	NP-9477-A

Note: Out of 90 Locations, appx. 35-40 Nos. of locations send SEM Time Drift Report.

The sub-committee may please deliberate

E.4. DCD issue at 132 kV Kolasib Substation:

Enormous amount of old files remained dumped in DCD of 132 kV Kolasib station which is causing hindrance in receiving latest weekly SEM data. Even after communicating several times, the problem is still persisting.

The sub-committee may please deliberate

Alarm Viewer - Viewport B - lems_hab

File Navigate HABITAT Applications EMP Applications Related Displays Analyst Displays Summary Displays Help

Begin Time: 15-10-2022 09:03:20
 End Time: 15-10-2022 13:04:14
 Text:
 Location: KATHA_NO
 Category: 1C
 Priority: 1
 Query Results: Total: 10
 Area Permissions: Filter On

Event-Time	Field-Time	Text	Priority	Location	Category
15/10/2022 12:49:44	15/10/2022 13:46:59.172	KATHALGURI CB 11 KV UNIT (GT6) OPEN	1	KATHA_NO	1C
15/10/2022 12:44:29	15/10/2022 13:41:33.775	KATHALGURI CB 11 KV UNIT (GT6) CLOSED	1	KATHA_NO	1C
15/10/2022 12:41:16	15/10/2022 13:35:50.044	KATHALGURI CB 11 KV UNIT (GT6) OPEN	1	KATHA_NO	1C
15/10/2022 12:36:09	15/10/2022 13:33:12.109	KATHALGURI CB 11 KV UNIT (GT6) CLOSED	1	KATHA_NO	1C
15/10/2022 12:31:56	15/10/2022 13:29:16.752	KATHALGURI CB 11 KV UNIT (GT6) OPEN	1	KATHA_NO	1C
15/10/2022 12:30:06	15/10/2022 13:27:12.307	KATHALGURI CB 11 KV UNIT (GT6) CLOSED	1	KATHA_NO	1C
15/10/2022 12:01:28	15/10/2022 12:58:42.588	KATHALGURI CB 11 KV UNIT (GT6) OPEN	1	KATHA_NO	1C
15/10/2022 11:59:57	15/10/2022 12:56:06.533	KATHALGURI CB 11 KV UNIT (GT6) CLOSED	1	KATHA_NO	1C
15/10/2022 10:40:39	15/10/2022 11:36:02.019	KATHALGURI CB 11 KV UNIT (ST3) OPEN	1	KATHA_NO	1C
15/10/2022 10:34:00	15/10/2022 10:28:08.123	KATHALGURI CB 11 KV UNIT (GT5) OPEN	1	KATHA_NO	1C

Annexure 2

Meeting N	Request T	Element Name	Cont/Daily	Requester	RPC Approved From Date	RPC Approved From Time	RPC Approved To Date	RPC Approved To Time	Reasons	Tag / Category	Outage Satrt Date	Outage Satrt Time	Revival Date	Revival Time	Availing delay(Hrs: Min)	Returning Delay(Hrs:Min)	Impact on Grid
OCC_195	PLANNED	132KV/33KV ZIRO-ICT-1	Daily basis	POWERGRID	08/Nov/2022	08:00	08/Nov/2022	16:00	LBB relay retrofiting works		08/Nov/2022	08:22	08/Nov/2022	17:12	00:22	01:12	Dark in Ziro area of AP having load around 10 MW
OCC_195	PLANNED	132KV-DAPORJU-ZIRO-1	Daily basis	POWERGRID	07/Nov/2022	08:00	07/Nov/2022	16:00	LBB relay retrofiting works		07/Nov/2022	08:19	07/Nov/2022	19:10	00:19	03:10	Dark in Ziro, Along, Pasighat, Roing, Tezu and Namsai area beyond approved time by 3 Hrs(peak hours)
	POST OCC	132KV-KARIMGANJ (AS)-KUMARGHAT-1	Daily basis	POWERGRID	06/Nov/2022	05:00	06/Nov/2022	11:00	REASON : for OPGW works in		06/Nov/2022	05:28	06/Nov/2022	12:42	00:28	01:42	
	POST OCC	132KV-BADARPUR-KARIMGANJ (AS)-1	Daily basis	POWERGRID	06/Nov/2022	05:00	06/Nov/2022	11:00	REASON : for OPGW works in		06/Nov/2022	05:31	06/Nov/2022	12:44	00:31	01:44	
	POST OCC	220KV/132KV SALAKATI-ICT-1	Daily basis	POWERGRID	29/Oct/2022	08:00	29/Oct/2022	16:00	REASON : For extension of		29/Oct/2022	09:30	29/Oct/2022	17:38	01:30	01:38	
	POST OCC	132KV-SALAKATI-GELEPHU-1	Daily basis	POWERGRID	29/Oct/2022	08:00	29/Oct/2022	16:00	REASON : For extension of		29/Oct/2022	09:28	29/Oct/2022	17:38	01:28	01:38	
OCC_194	PLANNED	132KV-BISWANATH CHARIALI-PAVOI-2	Daily basis	POWERGRID	28/Oct/2022	06:00	28/Oct/2022	15:30	for replacement of insulator.		28/Oct/2022	08:59	28/Oct/2022	18:39	02:59	03:09	
	POST OCC	400KV-BISWANATH CHARIALI-BALIPARA-1	Daily basis	POWERGRID	27/Oct/2022	08:00	27/Oct/2022	16:00	REASON : For Relay retrofi		27/Oct/2022	09:18	27/Oct/2022	20:22	00:08	01:45	
OCC_194	PLANNED	400KV-BALIPARA-BONGAIGON-2	Daily basis	POWERGRID	21/Oct/2022	07:00	21/Oct/2022	17:00	For upgradation of CAG ty		21/Oct/2022	07:15	21/Oct/2022	19:13	00:15	02:13	
	POST OCC	400KV/220KV MISA-ICT-3	Daily basis	POWERGRID	21/Oct/2022	09:00	21/Oct/2022	16:00	Laying of new cables & MF		21/Oct/2022	09:34	21/Oct/2022	17:24	00:34	01:24	
OCC_194	PLANNED	132KV-BALIPARA-BONGAIGON-1	Daily basis	POWERGRID	20/Oct/2022	07:00	20/Oct/2022	17:00	For upgradation of CAG ty		20/Oct/2022	10:31	20/Oct/2022	19:58	03:31	02:58	
OCC_194	PLANNED	400KV-BALIPARA-BONGAIGON-1	Daily basis	POWERGRID	19/Oct/2022	07:00	19/Oct/2022	17:00	For upgradation of CAG ty		19/Oct/2022	08:17	19/Oct/2022	20:21	01:17	03:21	
OCC_194	PLANNED	132KV-AIZWAL-KOLASIB-1	Daily basis	POWERGRID	19/Oct/2022	08:00	19/Oct/2022	16:00	LBB Relay retrofiting at b		19/Oct/2022	08:57	19/Oct/2022	19:15	00:57	03:15	
OCC_194	PLANNED	400KV-BALIPARA-BONGAIGON-4	Daily basis	POWERGRID	18/Oct/2022	07:00	18/Oct/2022	17:00	For upgradation of CAG ty		18/Oct/2022	09:47	18/Oct/2022	19:46	02:47	02:46	
OCC_194	PLANNED	400 KV BALIPARA II & 50 MVAR BUS REACTOR IIAT BC	Daily basis	POWERGRID	17/Oct/2022	08:00	17/Oct/2022	16:00	AMP of Bay Equipments		17/Oct/2022	09:50	18/Oct/2022	17:23	01:50	01:23	
OCC_194	PLANNED	400KV-BALIPARA-BONGAIGON-4	Daily basis	POWERGRID	17/Oct/2022	07:00	17/Oct/2022	17:00	For upgradation of CAG ty		17/Oct/2022	08:13	17/Oct/2022	20:07	01:13	03:07	
OCC_194	PLANNED	400KV-BALIPARA-BONGAIGON-3 L/R@ BALIPARA - 400KV	Daily basis	POWERGRID	15/Oct/2022	07:00	15/Oct/2022	17:00	For upgradation of CAG ty		15/Oct/2022	09:35	15/Oct/2022	19:02	02:35	02:02	
OCC_194	PLANNED	400KV-BALIPARA-BONGAIGON-3	Daily basis	POWERGRID	15/Oct/2022	07:00	15/Oct/2022	17:00	For upgradation of CAG ty		15/Oct/2022	09:35	15/Oct/2022	19:02	02:35	02:02	
	POST OCC	132KV-BADARPUR-KOLASIB-1	Daily basis	POWERGRID	14/Oct/2022	08:00	14/Oct/2022	16:00	For Relay retrofiting work		14/Oct/2022	09:10	14/Oct/2022	17:56	01:10	01:56	
OCC_194	PLANNED	400KV-BALIPARA-BONGAIGON-3	Daily basis	POWERGRID	14/Oct/2022	07:00	14/Oct/2022	17:00	For upgradation of CAG ty		14/Oct/2022	08:32	14/Oct/2022	20:01	01:32	03:01	
OCC_194	PLANNED	400KV-BONGAIGON-NEW SILIGURI-2	Daily basis	POWERGRID	13/Oct/2022	08:00	13/Oct/2022	18:00	For Retrofitting of CAG ty		13/Oct/2022	10:24	13/Oct/2022	19:44	02:24	01:44	
OCC_194	PLANNED	132KV-SILCHAR-BADARPUR-2	Daily basis	POWERGRID	13/Oct/2022	08:00	13/Oct/2022	16:00	For installation and comm		13/Oct/2022	09:54	13/Oct/2022	18:01	01:54	02:01	
OCC_194	PLANNED	400KV-BONGAIGON-NEW SILIGURI-1	Daily basis	POWERGRID	11/Oct/2022	08:00	11/Oct/2022	18:00	For Retrofitting of CAG ty		11/Oct/2022	09:35	12/Oct/2022	02:05	01:35	08:05	
OCC_194	PLANNED	132KV-SILCHAR-BADARPUR-1	Daily basis	POWERGRID	10/Oct/2022	08:00	10/Oct/2022	16:00	For installation and comm		10/Oct/2022	09:49	10/Oct/2022	17:29	01:49	01:29	
	POST OCC	400KV/132KV BISWANATH CHARIALI-ICT-1	Daily basis	POWERGRID	10/Oct/2022	10:00	10/Oct/2022	14:00	Addition of supplied functi		10/Oct/2022	10:10	10/Oct/2022	17:05	00:10	03:05	
OCC_194	PLANNED	132KV-DIMAPUR-DIMAPUR(PG)-2	Daily basis	POWERGRID	07/Oct/2022	08:00	07/Oct/2022	16:00	AMP of Bay Equipments		07/Oct/2022	08:12	07/Oct/2022	16:52	00:12	00:52	Requested extention upto 17:00 Hrs but denied by NERLDC
OCC_194	PLANNED	132KV-BADARPUR-KHLEHRIAT-1	Daily basis	POWERGRID	05/Oct/2022	08:00	05/Oct/2022	16:00	LBB Relay retrofiting at b		05/Oct/2022	09:41	05/Oct/2022	22:31	01:41	06:31	Overloading of 132kV Lumshong-Panchgram and load curtailment by Meghalaya in Lumshong area
	POST OCC	132KV-BISWANATH CHARIALI-ITANAGAR-2	Daily basis	POWERGRID	01/Oct/2022	10:00	01/Oct/2022	16:00	REASON : For SCADA upgr		01/Oct/2022	10:30	01/Oct/2022	17:47	00:30	01:47	
	POST OCC	132KV-BISWANATH CHARIALI-ITANAGAR-2	Daily basis	POWERGRID	30/Sep/2022	10:00	30/Sep/2022	16:00	REASON : For SCADA upgr		30/Sep/2022	10:15	30/Sep/2022	18:24	00:15	02:24	
	POST OCC	132KV-BADARPUR-KOLASIB-1	Daily basis	POWERGRID	30/Sep/2022	08:00	30/Sep/2022	16:00	Replacement of old BPL m		30/Sep/2022	08:18	30/Sep/2022	20:27	00:18	04:27	
	POST OCC	132KV-BISWANATH CHARIALI-ITANAGAR-1	Daily basis	POWERGRID	29/Sep/2022	10:00	29/Sep/2022	16:00	REASON : For SCADA upgr		29/Sep/2022	10:07	29/Sep/2022	23:45	00:07	07:45	
	POST OCC	400KV/220KV MISA-ICT-1	Daily basis	POWERGRID	29/Sep/2022	08:00	29/Sep/2022	12:00	REASON : MFT installation		29/Sep/2022	09:14	29/Sep/2022	13:58	01:14	01:58	
	POST OCC	132KV-BISWANATH CHARIALI-ITANAGAR-1	Daily basis	POWERGRID	28/Sep/2022	10:00	28/Sep/2022	16:00	REASON : For SCADA upgr		28/Sep/2022	10:55	28/Sep/2022	17:47	00:55	01:47	
	POST OCC	400KV/220KV BONGAIGON-ICT-1	Daily basis	POWERGRID	26/Sep/2022	08:00	26/Sep/2022	16:00	REASON : Connection of B		26/Sep/2022	08:33	26/Sep/2022	17:36	00:33	01:36	
OCC_193	PLANNED	400 KV BALIPARA 4 BAY (WITH 63 MVAR LINE REACTOR) A	Daily basis	POWERGRID	23/Sep/2022	08:00	23/Sep/2022	16:00	AMP of Bay Equipments		23/Sep/2022	13:37	23/Sep/2022	18:02	05:37	02:02	
OCC_193	PLANNED	132KV-AIZWAL-KUMARGHAT-1	Daily basis	POWERGRID	23/Sep/2022	08:00	23/Sep/2022	16:00	For product Warranty con		23/Sep/2022	08:45	23/Sep/2022	17:24	00:45	01:24	
OCC_193	PLANNED	220KV-MISA-DIMAPUR (PG)-1	Daily basis	POWERGRID	23/Sep/2022	08:00	23/Sep/2022	16:00	Changing of damaged insu		23/Sep/2022	10:02	23/Sep/2022	18:08	02:02	02:08	
OCC_193	PLANNED	132KV-BADARPUR-KHLEHRIAT-1	Daily basis	POWERGRID	22/Sep/2022	08:00	22/Sep/2022	16:00	CC ring & Arcing horn rem		22/Sep/2022	08:34	22/Sep/2022	20:20	00:34	04:20	Overloading of 132kV Lumshong-Panchgram and load curtailment by Meghalaya in Lumshong area
OCC_193	PLANNED	400KV/132KV SILCHAR-ICT-1	Daily basis	POWERGRID	20/Sep/2022	09:00	20/Sep/2022	16:00	AMP of ICT		20/Sep/2022	08:21	20/Sep/2022	23:23	00:21	07:23	
	POST OCC	400KV/220KV BALIPARA-ICT-2	Daily basis	POWERGRID	08/Sep/2022	07:00	08/Sep/2022	16:00	REASON : AMP of ICT		08/Sep/2022	08:49	09/Sep/2022	04:49	01:49	12:49	
OCC_193	PLANNED	220KV-AGBPP-MARIANI (AS)-1	Daily basis	POWERGRID	06/Sep/2022	09:00	06/Sep/2022	16:00	AMP of Bay Equipments		06/Sep/2022	09:28	06/Sep/2022	18:48	00:28	02:48	
	POST OCC	400KV-BISWANATH CHARIALI-BALIPARA-2	Daily basis	POWERGRID	02/Sep/2022	10:00	02/Sep/2022	18:00	Dismantling of all three H		02/Sep/2022	11:09	02/Sep/2022	19:19	01:09	01:19	