सत्यमेव जयते

भारत सरकार Government of India
विद्युत मंत्रालय Ministry of Power
उत्तर पूर्वी क्षेत्रीय विद्युत समिति
North Eastern Regional Power Committee
एन ई आर पी सी कॉम्प्लेक्स, डोंग पारमाओ, लापालाङ, शिल्लोंग-७९३००६, मेघालय
NERPC Complex, Dong Parmaw, Lapalang, Shillong - 793006, Meghalaya

SPEED POST/FAX
Ph : 0364-2534039
Fax: 0364-2534040
email: nerpc@ymail.com
website: www.nerpc.gov.in

No.: No. NERPC/SE (O)/OCC/2021/*245-287* June 26, 2023

To
As per list attached

Sub: Minutes of 203rd OCC Meeting.

Sir / Madam,

Please find enclosed herewith the minutes of the 203rd OCC Meeting held at "Hotel Royale de' Casa", Guwahati on 15th June, 2023 for your kind information and necessary action. The minutes is also available on the website of NERPC: www.nerpc.gov.in.

Any comments/observations may kindly be communicated to NERPC Secretariat at the earliest.

भवदीय / Yours faithfully,

(एस. एम. आइमोल / S. M. Aimol)
निदेशक / Director

Encl: As above

Distribution List:

1. Managing Director, AEGCL, Bijuli Bhawan, Guwahati – 781 001
2. Managing Director, APGCL, Bijuli Bhawan, Guwahati – 781 001
3. Managing Director, APDCL, Bijuli Bhawan, Guwahati – 781 001
4. Managing Director, MSPCL, Electricity Complex, Keishampat, Imphal – 795 001
5. Managing Director, MSPDCL, Secure Office Bldg. Complex, South Block, Imphal – 795 001
6. Director (Transmission), MePTCL, Lumjingshai, Short Round Road, Shillong – 793 001
7. Director (Generation), MePGCL, Lumjingshai, Short Round Road, Shillong – 793 001
8. Director (Distribution), MePDCL, Lumjingshai, Short Round Road, Shillong – 793 001
9. Director (Tech.), TSECL, Banamalipur, Agartala -799 001.
10. Director (Generation), TPGCL, Banamalipur, Agartala -799 001.
11. GM (Transmission), TPTL, Bidyut Bhaban, Banamalipur, Agartala -799 001.
12. Chief Engineer (WE Zone), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
13. Chief Engineer (TP&MZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
14. Chief Engineer (Commercial) -cum- CEI, DoP, Govt. of Arunachal Pradesh, Itanagar- 791111
15. Engineer-in-Chief, P&E Department, Govt. of Mizoram, Aizawl – 796 001
16. Engineer-in-Chief, Department of Power, Govt. of Nagaland, Kohima – 797 001
17. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
18. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad, Haryana-121003
19. Group GM, NTPC, Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
20. Vice President (Plant), OTPC, Badarghat Complex, Agartala, Tripura – 799014
21. ED, PGCIL/NERTS, Dongtieh-Lower Nongrah, Lapalang, Shillong -793 006
22. AGM (BD), NVVN, Core 5, 3rd floor, Scope Complex, 7 Institutional Area, Lodhi Rd., N. Delhi-3
23. Vice President, PTCIL, 2nd Floor, NBCC Tower, 15, Bhikaji Cama Place, New Delhi – 110066
24. Dy. COO, CTUIL, “Saudamini”, 1st Floor, Plot No. 2, Sector-29, Gurugram, Haryana – 122001
25. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066
26. Chief Engineer, NPC Division, Central Electricity Authority, New Delhi – 110066
27. ED, NERLDC, Dongtieh, Lower Nongrah, Lapalang, Shillong -793 006
28. CGM, AEGCL, Bijuli Bhawan, Guwahati – 781001
29. CGM, APGCL, Bijuli Bhawan, Guwahati – 781001
30. CGM, DISCOM, Bijuli Bhawan, Guwahati – 781001
31. Head of SLDC, Dept. of Power, Govt. of Arunachal Pradesh, Itanagar – 791111
32. CGM, (LDC), SLDC Complex, AEGCL, Kahilipara, Guwahati-781 019
33. Head of SLDC, MSPCL, Imphal – 795001
34. Head of SLDC, MePTCL, Lumjingshai, Short Round Road, Shillong – 793 001
35. Head of SLDC, P&E Deptt. Govt. of Mizoram, Aizawl – 796 001
36. Head of SLDC, Dept. of Power, Govt. of Nagaland, Dimapur – 797103
37. Head of SLDC, TSECL, Agartala – 799001
38. Chief Engineer (Elect), Loktak HEP, Vidyut Vihar, Kom Keirap, Manipur- 795124
39. DGM (O&M), OTPC, Badarghat Complex, Agartala, Tripura – 799014
40. Director, NETC, 2C, 3rdFloor, D21Corporate Park, DMRC Building Sector 21, Dwarka, Delhi-77
41. Head, Transmission, KMTL, 7th Floor, Fulcrum, Sahar Road, Andheri (E), Mumbai-400099
42. Project Head, NERPSIP/PGCIL, Pub Suraj Nagar, Nutun Bazar, Kahelipara, Guwahati- 781019
43. ED, Comprehensive Scheme (Ar. Pradesh), PGCIL, Tayeng Building, Nitivihar, Itanagar-791111

(एस. एम. आइमोल / S. M. Aimol)
निदेशक / Director

सत्यमेव जयते

Minutes of Meeting of 203rd OCCM

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

North Eastern Regional Power Committee

Minutes of the

203rd Operation Coordination Sub-Committee Meeting

Time of meeting : 10:30 Hrs.

Date of meeting : 15-06-2023 (Thursday)

Venue : "Hotel Royale de' Casa, Guwahati"

The list of participants attached as **Annex-I**

Member Secretary welcomed all the participants. He noted the absence of representatives from the states of Arunachal Pradesh, Mizoram and Manipur and requested all the states utilities to regularly join the OCC meeting so that a fruitful discussion may take place in the meeting. Moreover, He requested Tripura and all States to send at least two representatives, covering Market operation or other relevant wings and System operation division, to attend the OCC meetings.

He apprised the forum about successful charging of 220kV Balipara-Sonabil ckt II, which has increased ATC of NER region for interregional exchange of power by 120MW, and appreciated the stakeholders for the feat. Further, he requested PGCIL to expedite the commissioning of 132kV Roing -Chapakhowa D/C line so that necessary redundancy can be provided to Arunachal Pradesh power system.

He then requested Director NERPC to take up the agenda items for discussion.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 202nd MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 202nd meeting of Operation Sub-Committee held on 18th May 2023 at Hotel Soolin Grand, Guwahati was circulated vide letter No. NERPC/SE (O)/OCC/2021/987-1025dt. 02/06/2023

No comment(s)/observation(s) were received from the constituents.

The Sub-committee confirmed the minutes of 202nd OCCM of NERPC

B. FOLLOWUP AGENDAITEMS

B.1. Operational Performance and Grid discipline during May, 2023:

NERLDC presented the Operational Performance and Grid Discipline report for the month of May, 2023. (**Annexure B.1**)

Sub-committee noted as above

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 (as on 14/06/2023)	MU content	Present DC (In MU)	No of days as per current generation
Khandong	Under outage and restoration process going on	Under outage and restoration process going on	**0**	Will be "0" until further intimation.
Kopili	Under outage and restoration process going on	Under outage and restoration process going on	**0**	Will be "0" until further intimation.
Doyang	**306.80**	**1**	**0.14**	**20**
Loktak	**766.47**	**8**	**0.018**	**62**

b. The outage of other generating stations may be approved considering the present water levels in reservoirs and long-term outage of Kopiliand Khandong HEPs.

Deliberation of the sub-committee

The list of OCC approved shutdowns of Generating units for the month of July'23 has been provided in **Annexure B.2**

Sub-committee noted as above

B.3. Outage Planning Transmission elements

It was agreed in the 99thOCC 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.

Deliberation of the sub-committee

The list of OCC approved shutdowns of Transmission elements for the month of July'23 has been provided in Annexure B.2

Sub-committee noted as above

B.4. Estimated Transmission Availability Certificate (TAC) for the month of April, 2023:

Transmission Utilities have submitted the outage data for the month of April, 2023. The attributability of outage of the said elements has been finalized by NERLDC and NERPC. The Availability percentage of the transmission elements of ISTS licensees for the month of April, 2023 is as follow:

SN	ISTS Licensee	Availability for April'23(%)
1	NETC	99.9903
2	KMTL	100.0000
3	NER-II TL	99.9874
4	PGCIL	99.8915

The sub-committee noted as above

B.5. Mock Black Start Exercise:

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.

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

Status as updated in 202ndOCCM

Plant Name	Last testing date	Due date	Schedule of Testing as per 202nd OCCM

AGBPP	.....	.....	after upgradation of DG under R&M*
AGTTCCPP	04.02.2023	04.08.2023	04.08.2023
RHEP	28.11.2022	28.05.2023	28.05.2023
PareHEP	15.02.2023	15.08.2023	15.08.2023
Kopili HEP	10.05.2019	Under prolonged shutdown	Under prolonged shutdown
Khandong HEP	09.12.2021	Under prolonged shutdown	Under prolonged shutdown
DHEP	21.10.2022	21.04.2023	Done on 12th May 2023
Kameng HEP	.....	.....	**
Loktak HEP	16.12.2021	20.06.2022	NHPC will confirm the dates once the water level improves

*Regarding AGBPP, GM, NEEPCO updated that R&M of the plant has been approved and procurement process will start soon.

**Regarding Kameng HEP, Sr. GM NERLDC intimated the forum that as per a study on feasibility of Mock black start exercise on Kameng Machine the MVAR required to be absorbed by the machine for idle charging of 400kV Balipara-Kameng single circuit is 34 MVAR while the corresponding capability of the machine, as per the capability curve, is 67MVAR. So, the machine is capable for the exercise. GM, NEEPCO requested Member Secretary NERPC to write a letter to the OEM, M/s BHEL to expedite the process.

Deliberation of the sub-committee

Status as updated in 203rd OCCM

Plant Name	Last testing date	Due date	Schedule of Testing as per 203rdOCCM
AGBPP	.....	.....	after upgradation of DG under R&M*
AGTTCCPP	04.02.2023	04.08.2023	04.08.2023
RHEP	28.11.2022	28.05.2023	Completed on 30.05.2023
PareHEP	15.02.2023	15.08.2023	15.08.2023**
Kopili HEP	10.05.2019	Under prolonged shutdown	Under prolonged shutdown
Khandong HEP	09.12.2021	Under prolonged	Under prolonged shutdown

		shutdown	
DHEP	21.10.2022	21.04.2023	Done on 12th May 2023
Kameng HEP	……	……	**
Loktak HEP	16.12.2021	20.06.2022	NHPC will confirm the dates once the water level improves

*Regarding AGBPP, GM, NEEPCO updated that R&M of the plant has been approved and procurement process will start soon.

**Regarding Pare HEP, GM NEEPCO stated that MBS exercise is not possible in High Hydro season.

ED NERLDC informed that the concerned generating utilities need to adhere the IEGC regulation and timely conduct the MBS exercise on respective generating units.

***GM, NEEPCO stated that M/s BHEL is not responding to the repeated request for NEEPCO to resolve the MVAR settings issues of the machine.
Member Secretary, NERPC stated that a letter has been written to the OEM, M/s BHEL to expedite the process. He further stated that the contact persons' details of BHEL will be shared with NEEPCO for further follow-ups.

Sub-committee noted as above

Action: NEEPCO, NHPC

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	Enabled & in-operation
TSECL	24-12-2020	Enabled for two substations while yet to be enabled for other three substations

As updated in previous OCC meetings:

DGM, SLDC, TSECL stated that shifting works at the Takerjhala, Bishalgarh and Badarghat substations is completed, however, some issue related to handing over etc remain to be settled. He further informed that ADMS is expected to be installed by August'23.

ED, NERLDC clarified that a report has to be generated at every SLDC when ADMS tripping condition is satisfied, irrespective of tripping of the feeders. The same has to be then submitted to NERPC/NERLDC.

NERLDC informed that Assam, Meghalaya and Mizoram send ADMS reports on event basis. SLDC Nagaland mentioned that reports are being sent on monthly basis. NERLDC clarified that reports regarding ADMS operation must be sent for each event basis apart from monthly reports.

Further, NERLDC mentioned that during the low frequency event on 15-05-2023 when all India grid frequency touched 49.40 Hz, ADMS operation was expected only from Tripura as among all states of NER only Tripura was overdrawing during the aforementioned event. But as the ADMS is not fully operational in Tripura, the same did not operate. SLDC Tripura mentioned that implementation of ADMS is underway in the state.

Deliberation of the sub-committee

SLDC TSECL informed that ADMS at Takerjhala, Bishalgarh and Badarghat will be installed by August 2023 end or 1st week of September 2023. NERLDC stated that no report has been sent by Tripura till date.

Member secretary NERPC exhorted all the states to provide event wise as well as monthly ADMS report to NERPC and NERLDC

Sub-committee noted as above

Action: All state utilities

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

At present NERLDC is reporting 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	190
	Peak			195	5	190
Assam	Off-Peak	220kV Misa-Samaguri I or II	220 kV Balipara-Sonabil	1730	40	1690
	Peak			1600	40	1560
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 – Umiam1	132 kV Umiam-Umiam Umiam 1 II	340	10	330
	Peak			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 Mokokchung ICTs	255	5	250
	Peak			290	5	285
Tripura	Off-Peak	132 kV SM Nagar(ISTS) Budhjungnagar S/C	132 kV SM-Nagar (TR) – SM Nagar (ISTS) S/C	340	6	334
	Peak			315	6	309

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.

As agreed in previous OCCMs, all the states are requested to provide the respective ATC/TTC to NERLDC on monthly basis.

In 202nd OCCM, NERLDC highlighted that the state-wise TTC/ATC report has not been submitted by Arunachal Pradesh, Manipur and Nagaland for the Month of April'23. Further, NERLDC informed that Arunachal Pradesh has not sent the TTC/ATC report since beginning. Forum suggested Arunachal Pradesh to consult NERLDC and start sending the said reports at the earliest.

Deliberation of the sub-committee

NERLDC stated that SLDC Arunachal Pradesh has not yet submitted any monthly report to NERLDC and SLDC Manipur did not submit for May'23.

Member secretary NERPC exhorted all the states to provide the TTC/ATC reports regularly to NERLDC.

Sub-committee noted as above

Action: SLDC, DoP Arunachal Pradesh

B.8. Issues pertaining to Kopili, Khandong and Meghalaya power system.

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

Khandong & Kopili Power Stations have been under forced outage due to which there has been vulnerabilities in the Meghalaya Power system. The following lines are critical for removing the vulnerabilities-

- Restoration of Misa-Kopili-Khandong link
- Reconductoring of 132kV Lumshnong-Panchgram line
- Commissioning of 220kV Mawngap-Killing line

Status may be updated

B. Restoration works at Khandong and Kopili substations

Efforts are being taken to restore the following lines on permanent basis-

- 132kV Kopili-Khandong D/C
- 220kV Misa-Kopili line
- 220/132kV ICTs at Kopili SS
- 132kV Khandong Bus A
- 132kV Khandong-Khleihriat Ckt 1 bay at Khandong

It is to be noted that 132kV Khandong-Khleihriat Ckt 1has been charged through Kopili 2 bay at Khandong till permanent restoration of 132kV Kopili-Khandong D/C line is done.

Status may be updated

C. Recommissioning of 4X50 MW Kopili Stage-I plant (2 units)

NEEPCO is planning to re-commission and synchronizetwo units of Kopili (4x50MW) by July'23, for evacuation of which, either 220kV Misa-Kopili line or Kopili-Khandong D/C is required.

In previous OCC meetings following points were discussed

i) Regarding Mawngap-Killing line, NERPSIP intimated that there is some development in resolution of RoW issue at Nongpoh and erection work will be done in 1st week of June, 2023. Further, the line will be tentatively charged by 1st week of July, 2023.

ii) Regarding restoration of 132kV Khandong-Khleihriat ckt 1 bay at khandong, GM, NEEPCO updated that the restoration of bay of 132kV Khandong-Khleihriat Ckt 1 will take longer time (more than 1 year). Regarding restoration of Ckt 1, DGM, NERTS proposed to charge the ckt through Kopili 2 bay at Khandong substation till the permanent restoration of 132kV Kopili-Khandong D/C line is done. Forum noted that this shall improve reliability of the corridor and supply of power to Meghalaya and thus the proposal was approved till readiness of Khleihriat-1 bay at Khandong.

iii) Regarding restoration status of 132kV Kopili-Khandong D/C, DGM, NERTS updated that GIS works are underway at Kopili and SAS based panels for the lines are under procurement. He stated that the line will tentatively be charged by September 2023. He further proposed that after restoration of the Kopili-Khandong D/C, the Khliehriat Khandong ckt 1, which would have been charged through Kopili 2 bay at Khandong till then, may be connected directly to Kopili-Khandong ckt 2 through a bypass arrangement at Khandong S/Y using Bus A, thus making a direct Kopili- Kliehriat link. The arrangement will work till the bay restoration work at Khandong is completed by NEEPCO. NERTS opined that this arrangement will not only avoid keeping the Khliehriat-Khandong ckt 1 idle, but also provide necessary redundancy to the Meghalaya Grid.

iv) Regarding restoration of Khandong Bus A, GM, NEEPCO apprised that the restoration will take a longer time frame (more than one year) as tender has not yet been finalized. He also highlighted that till the restoration of Bus A, the whole Khandong substation will be working with singe bus only, thus redundancy at khandong station will remain compromised.

v)NERLDC and SLDC Meghalaya reiterated that Misa-Kopili-Khandong link must necessarily be revived before the onset of next winter season in Meghalaya to cater safely to the peak demand of Meghalaya.

Deliberation of the sub-committee

Status as updated in the meeting-

Sl. No	***Element***	***Update provided by respective utilities in 203rd OCCM***
1	***Reconductoring of 132kV Lumshnong line (MePTCL)***	Work In Progress. MePTCL further stated that the line crosses 33/11kV distribution feeders of Assam in few spans (5Km stretch), thus shutdown of these distribution feeders is required for completing the upgradation work. However, shutdown request is pending with APDCL, thus hampering the work. The forum requested MePTCL to explore the option of cabling the spans of distribution feeders in order to avoid long outage of electricity for consumers. MePTCL assured to look into the option and finally stated that the reconductoring work will be completed by August'23 provided the requested shutdowns are granted by APDCL.
2	***Commissioning of 220kV Mawngap-Killing line (NERPSIP)***	RoW issue still persists and 5 erections, 1 foundation and 5km stringing work left. Disbursal of compensation by end of July'23.
3	***132kV Kopili-Khandong D/C (NERTS)***	GIS work (132kV bays) at Kopili underway, order for procuring SAS based panels to be placed soon. To be charged by Sept'23.
4	***220kV Misa-Kopili line (NEEPCO)***	220kV switchyard at Kopili recommissioning works under process, will be completed before the end of July'23.
5	***220/132kV ICTs at Kopili SS (NERTS)***	SAS based panels under procurement. WIP

6	***132kV Khandong Bus A (NEEPCO)***	Tender floated. Complete restoration may take more than 1 years
7	***132kV Khleihriat Ckt 1 bay and Kopili 1 bay at Khandong(NEEPCO)***	
8.	***4X50 MW Kopili Stage-I plant (2 units) (NEEPCO)***	Recommissioning is expected by July'23

Moreover, DGM, NERTS apprised the forum that Khandong-Khliehriat ckt 1 has been charged through Kopili ckt 2 bay at Khandong.

Sub-committee noted as above

Action: NEEPCO, NERTS, MePTCL, NERPSIP

B.9. Implementation of Guwahati Islanding Scheme:

As per Clause 10 of the Central Electricity Authority (Grid Standards), Regulations, 2010: "Islanding Schemes- (1) The Regional Power Committees shall prepare Islanding schemes for separation of systems with a view to save healthy system from total collapse in case of grid disturbance. (2) The Entities shall ensure proper implementation of the Islanding Schemes"

Pursuant to the above regulation, NERPC through an empowered committee, has finalized the Guwahati Islanding scheme and prepared the DPR. The DPR was presented in 23rd NERPC/TCC meeting to get approval for funding through PSDF.

In 196th OCCM, Member Secretary NERPC updated that the finalized DPR was discussed in 23rd NERPC meeting and issue of high cost was flagged. So, re-estimation of project cost will be done at the earliest.

In the 198thOCCM, AEGCL was requested to re-examine the cost estimates in the DPR and intimate the subcommittee.

In the 199th OCCM, AEGCL updated that the substations identified under the Guwahati islanding scheme are mostly devoid of OPGW connectivity with the SLDC and thus OPGW requirement is high. However, other OPGW suppliers are being consulted to reduce the cost implication.

After detailed deliberation, the forum decided that the empowered committee on islanding scheme will reassemble and explore the option of using existing fiber optic links, wherever present (on bandwidth sharing basis) and mull over the ways to reduce total cost of the islanding scheme. The report of the committee will be regularly discussed in the NeTEST meetings.

In the 200th OCCM, Director, NERPC stated that in the 24thNETeST meeting, Assam has informed that there are no OPGW links on existing lines covered under the proposed Guwahati Islanding Scheme.

It was suggested in the meeting that AEGCL may apply for PSDF funding under Reliable communication scheme state sector for installing OPGW and include these lines which are covered in the proposed Islanding scheme.

In 201st OCCM, Director, NERPC apprised the forum that an online meeting was organized to discuss the ways and means to reduce the cost of the proposed scheme. To further resolve the issues, an offline meeting will be organized with the concerned stakeholders soon.

In 202nd OCCM, MS, NERPC informed that physical meeting for Implementation of Guwahati Islanding Scheme will be conducted in the 2nd week of June 2023.

Deliberation of the sub-committee

AEGCL updated that consultation with different vendors is going on for revising cost estimates. Member Secretary NERPC stated that a physical meeting, comprising of all stakeholders, will be held soon by NERPC.

Sub-committee noted as above

Action: NERPC

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

Status as updated in 202nd OCCM-

Name of the state/utility	Submission of revised UFR list	Installation of UFRs and Implementation of revised settings	Status of mapping
Ar. Pradesh	Submitted	Stg-1 (49.4Hz) implementation in new feeders. UFRs have been procured and the same have reached the site. Installation to be completed by June'23	Coordination with M/S GE is ongoing. Shifting works underway. Mapping to be done after the work
Assam	Submitted	Installation Completed.	Done. NERLDC intimated that 132 kV Azara – Mirza line has been mapped in UFR SCADA display by Assam in place of 33kV Mirza feeder at Azara sub-station.
Manipur	Not submitted	No extra shedding required only Stage upward revision to be done. ADMS and UFR feeder segregation to be done for Stage-I by next OCCM	To be done
Meghalaya	Submitted	17 out of 17 feeders completed. Forum requested to share the points with RLDC SCADA	Done. NERLDC informed that the feeder load data (MW) and CB status data of Stage-1 UFR is suspect in Meghalaya UFR SCADA display
Mizoram	submitted	Completed	SCADA display has been made at SLDC but real time data is not reporting as no

			communication link is available for most of the substations where UFRs are installed. The SCADA display is to be shared with NERLDC.
Nagaland	Submitted	Completed, time delay(30sec) in tripping logic has to be removed	Completed
Tripura	Submitted	Stage-1(49.4Hz), Stage-2 (49.2Hz), Stage-3(49Hz) require installation of UFR. Stg I UFR installed but physical verification is yet to be done.	Mapping by May'23 for P K Bari and Ambassa. For Badarghat(33kV SS), mapping not possible as no RTU available

In previous OCC meetings, SLDC Mizoram intimated that visibility of most of the UFR enabled feeders is not available in SLDC SCADA as no RTUs are available at 33kV substations. The forum requested Mizoram to ensure the visibility of UFR enabled feeders connected at 132kV substations, which have RTUs and communication link, in the SCADA at SDLC. Mizoram agreed.

NERPC requested all the state utilities to send monthly UFR reports to NERPC and NERLDC in compliance with IEGC regulations.

Member Secretary NERPC exhorted the States to avail PSDF funding for establishing communication links for 66kV and above substations.

In 202nd OCCM, the forum noted that during the incident as mentioned in item C.8, UFR responses of the NER region is not satisfactory as UFRs operated at only 2 out of 7 states of NER. NERPC suggested that in line with regulation 5.2.n of the IEGC 2010, inspection of UFR of the states should be carried out at the earliest in order to ensure functionality of the same. Further, he suggested that UFR inspection may be clubbed with Protection Audits to save time. The forum agreed to the suggestion.

Further, NERLDC mentioned that Assam, Nagaland and Meghalaya are providing UFR report on monthly basis. Rest of the states are required to submit as per IEGC.

The forum suggested that all SLDCs must send monthly and event basis UFR operation reports to NERLDC and NERPC.

The forum also requested Assam and Meghalaya to correct the UFR SCADA display issues at the earliest.

Deliberation of the sub-committee

Installation and functioning of UFRs

i)NERLDC asked Manipur to segregate the feeders identified under ADMS and UFR. But No representative was present for Manipur to discuss the related issue.

ii) DoP Nagaland updated that the time delay has been removed for the UFR logic

iii) The forum exhorted DoP Arunachal Pradesh to install UFR stg 1 at the earliest. No representative was present for Arunachal Pradesh to discuss the related issue.

iv) Mizoram related issue could not be updated as no representative of Mizoram was present.

v) It was informed that SCADA display suspect data of Meghalaya has been resolved.

vi) Tripura assured that they shall provide the UFR installation details to NERLDC/NERPC. SCADA mapping shall be completed in 1-2 months.

vii) NERPC requested NERLDC to make priority wise schedule of UFR Audit in NER.

Mapping

i)AEGCL updated that mapping of 33kV Mirza feeder at Azara will be done within one week.

ii)NERLDC intimated that mapping issues related to stg I UFR have been completely rectified.

Member Secretary, NERPC, reiterated that all SLDCs must send monthly as well as event basis UFR operation reports to NERLDC and NERPC.

Sub-committee noted as above

Action: All state utilities

B.10(B) Operation of ADMS/UFR in North-Eastern region during very low frequency at 11:52 hrs of 15th May 2023 (NERLDC)

On 15th May 2023 at 11:51 hrs., generation loss of 7120MW was experienced in Rajasthan RE generation complex. This led to the frequency drop from 49.98 Hz to 49.40 Hz (Nadir Frequency) i.e a change of 0.581 Hz in around 9 seconds. During the said contingency, AUFLS (Flat Under Frequency Relay Stage-I and df/dt relays) have acted. The frequency recovered to 49.742 Hz after 23.560 seconds due to the combined automatic corrective actions viz. primary frequency response of generators and load shedding by Automatic Under Frequency Relays). Total quantum of region wise load relief obtained due to operation of AUFLS Stage-I and df/dt as reported by state/SLDC was around 4529MW (NR-1635MW, WR-1734MW, SR-911MW, ER-192MW, NER-57MW).

It is observed that actual load relief obtained (4529MW) was much less than the relief expected as per design quantum of AUFLS stg.1, which is 8988MW. It seems that feeders identified by the states / SLDCs for load shedding through flat AUFLS as well as df/dt actuated, need to be reviewed periodically for changes in connected demand and their seasonality/voltage dependence/frequency dependence and other factors. Periodic verification of healthiness and adequacy of df/dt and AUFLS scheme is very important for grid security.

As already decided in RPC forums, SLDCs need to monitor the feeders identified for providing load relief through AUFLS / df/dt in their respective SCADA systems and make the same data available to concerned RLDCs. Accordingly, SLDCs may be advised to take necessary corrective actions in case the average demand of any such identified feeder falls short of the quantum that was planned to be included within the scope of AUFLS and / or df/dt in the AUFLS scheme of the respective state. This may be taken up as a regular agenda by concerned RPCs in their monthly OCC meetings.

In 202nd OCCM, the forum observed non-operation of UFR in 5 out of 7 states and inquired about the reason for the same. NERLDC apprised that expected load shedding under Stg 1 for NER region is 170MW, while actual load shedding was 57 MW only.

Ar. Pradesh- UFR for stg.1 not yet installed

Manipur- no representative

Mizoram – UFR not operated. Will be checked by Mizoram

Nagaland- NERLDC apprised the forum that in the tripping logic of UFR, time delay of 30 second has been inserted. DoP Nagaland assured to remove the delay at the earliest

Tripura – Stg1 UFR has been installed but not yet operational.All other stages UFRs are yet to be installed.

After detailed deliberation, the forum requested the states to ensure functionality of UFR stg1 at the earliest and correct mapping of the feeders under the UFR.

UFR settings and quantum of shedding as decided in the 9th NPC meeting are as follow:

AUFLS	Frequency (Hz)	LoadreliefinMW					
		NR	WR	SR	ER	NER	Total
Stage-I	**49.4**	3900	3340	3150	1370	170	11930
Stage-II	**49.2**	3920	3360	3170	1380	170	12000
Stage-III	**49.0**	3950	3380	3190	1380	170	12070
Stage-IV	**48.8**	3970	3400	3210	1390	170	12140
Total(MW)		**15740**	**13480**	**12720**	**5520**	**680**	**48140**

Deliberation of the sub-committee

AD, NERPC intimated the forum about the expected/mandated load relief for each state as follow-

Name of State	Implemented Approved Load Shedding under AUFLS stg.1 operation (MW)	Actual Load Shedding under AUFLS stg.1 operation (MW)	%of successful operation
Assam	90	45	50
Meghalaya	25	12	48
Mizoram	5	5	100
Manipur	10	0	0
Nagaland	10	0	0
ArunachalPradesh	10	0	0
Tripura	20	0	0

The forum noted that the UFR operated in only three states, viz: Assam, Meghalaya and Mizoram. Remaining States were requested to ensure the functionality of UFRs at the earliest.

Moreover, on the question of unsatisfactory response from Assam and Meghalaya, the states pointed out the following reasons-

i)implemented load shedding on a feeder is same as the peak loading (throughout a day) of a feeder. So, operation of UFR in off-peak time will naturally lead to load shedding below expected value

ii)UFRs may not have operated in some of the designated feeders

After detailed discussion, the forum requested SLDCs to monitor loading on the UFR feeders and in case of large difference observed between average loading on the line and quantum that was planned for UFR scheme provide a report to NERPC and NERLDC.

Apart from it, NERPC requested SLDCs to calculate the expected vs actual UFR load shedding data during the low frequency event and same comparison data should be provided to NERPC and NERLDC after each event.

Sub-committee noted as above

Action: all state utilities

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 Clauseno.5.2(g) of Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010.

Schedule as agreed in the 202nd OCC meeting:

Region	Station	No. of Generators	Suggested Schedule		Duration (days)
			Test Start	Test End	
NER	OTPCL-Palatana	2 (by M/s Solvina)	Nov'22	Nov'22	To be done*
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)**

Regarding PFR testing at Palatana, OTPC intimated that the additional software logic block has been discussed with the NERLDC and logics have been finalized. The same will be discussed with NLDC and will be inserted in the machine controller during shutdown of individual machines after consent of NLDC is obtained. The PFR test will be conducted via the aforementioned in-built software logic blocksinthe control system. OTPC informed that test will be conducted tentatively in June'23 and July'23 for Unit-1 and Unit-2 respectively after completion installation of software logic block during shutdown of the said units.

Regarding PFR testing at Doyang HEP, GM, NEEPCO intimated that the testing will be done once the available water level becomes sufficient.

Deliberation of the sub-committee

i)Regarding PFR testing at Palatana, OTPC intimated that the additional software logic block has been incorporated in Unit I in the machine controller and PFR testing will be conducted for both units in July'23 after completion of Unit-2 logic incorporation.

ii)Regarding PFR testing at Doyang HEP, GM, NEEPCO intimated that the testing will be done after sufficient water level is available.

Sub-committee noted as above

Action: OTPC, NEEPCO

B.12. Regular Furnishing of Patrolling Report for all Important lines

There is a requirement of regular and proper maintenance of transmission lines. It is requested to carry out the patrolling activities as per ClNo.23(2), (3) & (4) of CEA Grid Standards Regulation,2010on 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 202nd OCCM, NERLDC informed that most of the States are regularly submitting the Patrolling report. However, few States like Arunachal Pradesh, Manipur and Mizoram are still not following the same. MS, NERPC strongly advised all SLDCs to seriously take-up the matter of regular line patrolling with their respective state utilities and submit the patrolling reports to NERLDC/NERPC on regular basis.

Deliberation of the sub-committee

After detailed deliberation Member Secretary exhorted all state utilities to undertake regular patrolling of the lines as per existing guidelines and furnish the report to NERPC/NERLDC on monthly basis.

In light of frequent tripping of the 132kV Dimapur-Kohima line, the forum requested DoP Nagaland to carryout intense patrolling of the line and rectify the root cause so that the line can be stabilized. DoP, Nagaland informed that vegetation clearance has been undertaken and shutdown has been planned to carry out Insulator replacement works.

Sub-committee noted as above

Action: OTPC, NEEPCO

B.13. Monthly Review of LGBR

PARTICULARS (Peak Demand in MW as per LGBR vs Actual)	Mar-23 (LGBR)	Mar-23 (Actual)	Apr-23 (LGBR)	Apr-23 (Actual)	May-23 (LGBR)	May-23 (Actual)
Arunachal Pradesh	153.31	172	153.93	154.980	153.24	165.000
Assam	1680.00	1670.32	1885.80	2013.100	2210.38	2219.000
Manipur	227.00	212.32	208.06	212.700	208.82	193.000
Meghalaya	354.00	373.99	366.18	335.859	353.29	353.000
Mizoram	119.27	128.82	122.72	126.870	121.68	122.000
Nagaland	155.00	156.4	147.66	150.100	153.70	150.000
Tripura (exc. Bangladesh)	250.00	263.9	322.32	337.500	315.12	345.000
NER DEMAND (exc. Bangladesh)	2686.32	2915	3073.35	3332	3271.14	3477

PARTICULARS (Energy Requirement in MU as per LGBR vs Actual)	Mar-23 (LGBR)	Mar-23 (Actual)	Apr-23 (LGBR)	Apr-23 (Actual)	May-23 (LGBR)	May-23 (Actual)
Arunachal Pradesh	71.99	77.54	71.30	74.28	79.10	77.13
Assam	862.52	837.76	813.63	913.960	1007.00	1028.950
Manipur	79.03	81.08	77.94	75.32	76.99	71.42
Meghalaya	191.76	193.22	175.14	192.69	178.75	194.55
Mizoram	55.48	53.45	53.42	49.06	55.90	50.97
Nagaland	66.11	70.54	70.83	65.83	77.28	75.45
Tripura (excl. Bangladesh)	118.05	122.97	151.41	149.91	147.37	163.74
NER DEMAND (exc. Bangladesh)	1473.94	1437.192	1413.67	1521.775	1622.39	1662.77

Deliberation of the sub-committee

The sub-committee noted the LGBR projected demand vis-à-vis actual demand as above.

The forum noted large deviation in projected demand and actual demand for the state of Tripura. SLDC Tripura intimated that peak demand in Tripura has increased drastically as cooling requirement has spiked due to unexpected increase in the frequency and intensity of heat waves in the state.

Sub-committee noted as above

B.14. Status of implementation of SPS in Assam Power System:

As per the minutes of Sub-group meeting held on 27.09.22, SPS for load reduction in capital area of Assam power system on tripping of 220 kV Azara-Sarusajai D/C or 220 kV Misa-Samaguri D/C was recommended for safe and reliable operation with the following tripping conditions:

Triggering condition 1: Tripping of 220kV Azara – Sarusajai D/C SPS action: Tripping of 132kV Kahilipara – Kamalpur and 132 kV Sarusajai – Kamakhya lines. For tripping of 132 kV Kahilipara – Kamalpur line, OPGW connectivity between Sarusujai and Kahilipara will be used to send the tripping signal for tripping Kamalpur feeder at Kahilipara.

Triggering condition 2: Tripping of 220kV Misa - Samaguri D/C SPS action: Tripping of 132kV Samaguri-Sankardevnagar Line.

AEGCL may update on the latest status regarding implementation status of the proposed SPS.

In 202nd OCCM, regarding tripping condition 1, AEGCL updated that BOQ has been prepared regarding procurement of communication equipment at Kahilipara. The same has been put up for administrative approval. AEGCL further updated that hard wiring at substations will be done by the end of June'23.

Regarding tripping condition 2, AEGCL updated that the SPS has been commissioned at Samaguri substation on 10th May'23 (load disconnection of 50MW). However, the DT reception logic (DT signal to be sent from Misa end) has not yet been incorporated in the SPS. DGM, NERTS intimated that DT sent logic has been finalized at Misa end but no spare PLCC code is available at Samaguri end. He, therefore, requested

AEGCL to free up code3 or code 4 in order to receive the DT signal from Misa to Samaguri. AEGCL assured to do the work at the earliest.

Deliberation of the sub-committee

i)Triggering condition 1 (Tripping of 220kV Azara-Sarusajai DC or any one ckt): AEGCL updated that SPS has been implemented for the case of outage of one circuit, and for the case of outage of D/C, SPS will be implemented in two weeks time.

ii) Triggering condition 2 (Tripping of 220kV Misa Samaguri DC): AEGCL updated that the matter of freeing up of code 3 or code 4 has been discussed with PLCC team and the team is facing some issues. The forum requested AEGCL to plan a visit of PLCC engineers, in coordination with NERTS, to the Samaguri SS and resolve the matter at the earliest.

Sub-committee noted as above

Action: AEGCL

B.15. 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-Tuesang-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 Hon'ble 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-Tuesang-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 MVAR capacity at Meluri S/S will resolve the issue. Hence, the Kohima-Meluri-Kiphire-Tuesang-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.

In 200th OCCM, DoP Nagaland updated that proposal for installation of Bus Reactor will be proposed for PSDF funding and for upgradation of bay equipment at Mokokchung and Kiphire substations, funding will be requested from North Eastern Council (NEC).

In 201st OCCM, SE, DoP Nagaland intimated that installing 10MVAR reactor at Meluri substation is practically challenging owing to manpower and space issues. Instead, installing 5MVAR reactors at Kiphire and Kohima each can be looked into.

In 202nd OCCM, Sr. GM NERLDC intimated that installation of 5MVAR (or 10MVAr) reactors at Kiphire and Kohima has favorable effect on the voltage profile of the Kohima-Meluri-Kiphire link.

CGM, NERTS stated that the effects of reactors may be favorable owing to presence of weak source of reactive power in the region, which might not be the case with addition of new networks which are under construction under NERPSIP or state projects. He therefore suggested that to ensure long term stabilization of voltage profile of Nagaland power system, a system study has to be conducted incorporating the upcoming elements in the state.

NERLDC agreed to do the study and will present the study in next OCC meeting.

Regarding upgradation of Tuensang bay equipment from existing 66kV level to 132kV level, Manager, NERPSIP intimated that the upgradation work is under the scope of NERPSIP and tender will be awarded in the next one month. He further stated that the upgradation will be completed in next one year.

Deliberation of the sub-committee

NERLDC updated that after taking into consideration 7 upcoming lines(220kV and 132kV), which are projected to be commissioned within one year in the Nagaland power system under NERPSIP, system study does not support the requirement of any reactors at Kohima or Kiphire.

Regarding upgradation of Tuensang substation to 132kV level, NERPSIP updated that tender will be awarded by the end of June'23 and the work will be completed in the next one year.

Sub-committee noted as above

Action: NERPSIP

B.16. RPCs are requested to consider following agenda in the OCC/RPC meeting(s) topopularize and explain the PUShP portal to the constituents/stakeholders.

PUShP portal (For Flexibilization of PPA for Optimal Utilization of Resources and Reduction in cost of Power for Consumers) has been launched on 09thMarch, 2023by Hon'ble Minister of Power and NRE.

The Portal would be a single window system providing services to diverse domains ofall the entities involved and to reallocate and transfer the power in minimum time from one surplus entity to deficit entity. In recent past years, difficulties are observed in meeting the demand and some states do resort to power cuts, especially during April, May, September and October months the crisis is obser ved while other states have surplus power capacity. The States which have surplus power continue to bear the fixed charge burden without using it which leads to high cost of power to the consumers. Regional diversity makes some states surplus. Like Peak in Northern region is during summer whereas Peak in Southern region is during winter. Similarly, there is diversity in the time at which the peak occurs in the States. Such regional diversity in the load demand was not able to address even though the generation capacity is available in the country. The reasons behind were many like one-to-one Power Purchase Agreements, some procedural constraints, non-availability of easy match making arrangements etc.

This portal will provide a platform for optimal utilization of generating capacity and will resolve the above issues. The scheme will not disturb the existing arrangements rather an additional avenue shall be provided to stakeholders for optimal use of generating capacity. The scheme envisages paperless working for temporary allocation/transfer of power from surplus (Seller) entity to deficit (buyer) entity. The benefits of the portal also include Flexibilization of Power Purchase Agreement, Availability of power to DISCOMs, reduction in power cuts, reduction in fixed charge burden on the states having surplus power, Allocation /Transfer of Power at regulated tariff in a minimum time.

Key Benefits of the scheme: -

i. Flexibilization of Power Purchase Agreement

ii. Optimal Utilization of Power due to regional diversity and their increased availability.

iii. Availability of power to DISCOMs improves and reduction in power cuts.

iv. Meet the power demand of the country especially during the crisis situation in the month of April, May, September and October.

v. Reduction in fixed charge burden on the states having surplus power.

vi. Allocation /Transfer of Power at regulated tariff.

vii. Reallocation of power in minimum time with automated process.

viii. The scheme envisages a paperless working.

ix. None of the existing arrangements shall be disturbed, rather an additional avenue has been provided.

x. The portal envisages temporary allocation/transfer of power; subjected towillingness of seller and Buyer, confirmation of transmission corridor by concernedagencies and confirmation of payment security on portal by the new Buyer/Gencosbefore scheduling of such power.

In 200th OCCM, Member Secretary, NERPC briefly explained the benefit of the Scheme and requested all concerned constituents to participate and fully utilize the portal. He also informed that further training or workshop can be organized (if necessary) in the coming days.

In 201st OCCM,Member Secretary NERPC exhorted the utilities to actively participate on the PUShP portal and avail the benefits provided by it. Also, the forum decided that any utility surrendering power on this platform should inform all other utilities in NE region about the same to help ensuring early requisition of the surrendered power.

In 202nd OCCM, the forum noted that in the NER region only Mizoram is participating in the portal.Member Secretary, NERPC stated that a special meeting with state Discoms will be organized by NERPC in order to sensitize them about the portal and associated benefits.

Deliberation of the sub-committee

The forum noted that Assam and Mizoram are participating on the PUSHP portal. Other states were urged to follow the same. State utilities requested NERPC to request NPC to organize an online workshop on the portal for further familiarization and clarification. Member Secretary NERPC agreed.

Sub-committee noted as above

Action: NERPC

B.17. Annual Maintenance Contract for ADMS:

The "Go Live" dates in ADMS implementation for NER states is as below:

Sl.No.	Name of SLDC	System "Go Live"
1	Meghalaya SLDC	04.09.2020
2	Manipur SLDC	24.11.2020
3	Nagaland SLDC	01.12.2020
4	Arunachal Pradesh SLDC	01.02.2021
5	Mizoram SLDC	01.03.2021
6	Assam SLDC	10.03.2021
7	Tripura SLDC	16.03.2021

It may be mentioned that ADMS scheme is having a three (3) year Warranty Period following which, there is a provision for an Annual Maintenance Contract after the Warranty Period. Given the regulatory mandate for compliance of ADMS and the benefits of its continued operation, it becomes imperative for a collective Annual Maintenance Contract which among other things would bring about a reduction in

the financial involvement vis-à-vis higher rates with separate / individual AMCs. Since the timelines mentioned are spread over a few months only, the SLDCs may deliberate on a collective Annual Maintenance Contract which can be approved (with same terms and conditions immediately on expiry of individual Warranty Periods) given the collective reduced charges and lack of expertise in maintaining the system.

In 200th OCCM, Director, NERPC informed that considering the regulatory mandate for compliance of ADMS and the benefits of its continued operation, all the State Utilities have agreed to have a combined AMC for ADMS during the 24thNETeST meeting for cost effectiveness vis-à-vis individual AMC. Member Secretary NERPC stated that AMC of the ADMS, after the warranty period, may not be covered under PSDF funding and States have to pay for the same. The State Utilities requested NERPC to take up with original vendor M/s Orbit Techsol India Private Limited regarding the matter.

In 201st OCCM, all the States requested NERPC to initiate tendering for combined AMC of ADMS for all thestates. Director, NERPC suggested that a tendering committee may be formed that will look into tendering and related work of the AMC. The forum agreed and decided that members would be nominated from all States, NERLDC & NERPC and coopted members if necessary.

In 202nd OCCM,Director, NERPC informed that nomination for constituting a committee for procurement of AMC of ADMS has been received from Meghalaya and Mizoram.

The forum requested other state utilities and NERLDC to nominate respective member for constituting the committee at the earliest.

Deliberation of the sub-committee

The forum noted that nomination details have been received from Assam, Mizoram and Meghalaya only. After detailed discussion the forum strongly urged remaining states and NERLDC to send nomination details at the earliest.

Sub-committee noted as above

Action: Arunachal Pradesh, Nagaland, Manipur, Tripura and NERLDC

B.18. Declaration of the following lines of Meghalaya as Deemed ISTS lines:

1. 220 KV Killing-Misa D/C line.
2. 132 KV Mendipathar-Agia S/C line
3. 132 KV Nangalbibra-Agia S/C line
4. 132 KV Khliehriat-Khliehriat (PG) line 2

It may be mentioned that 132 KV Umtru-Sarusajai D/C line, 132 KV Umtru-Kahilipara D/C line and 132 KV Lumshnong-Panchgram S/C line had earlier been declared as Deemed ISTS lines. The forum may please deliberate on inclusion of the above lines listed as Sl.no.1 to 4.

In 201st OCCM,MePTCL apprised the forum that the 220kV Killing-Misa D/C line and LILO of400 KV D/C Palatana-Bongaigaon at 400/220 KV Killing S/S as ISTS lines have already been approved as Deemed ISTS line in the 17thTCC/RPCmeeting. Member Secretary, NERPC stated that if deemed ISTS line is approved in RPC meeting based on study, State may file petition to Hon'ble CERC citing the relevant portion of the Minutes of the meeting.

Director, NERPC highlighted that after the sharing regulation of 2020, deemed ISTS certification by NERPC has been discontinued and the utility may directly approach implementing agency and CERC for inclusion under PoC tariff. However, for truing up of lines for 2014-19 tariff block, NERPC can consider for according certification as per the relevant regulations, pertaining to the said period. For certification, NERLDC was requested to ascertain the power flow pattern on the line for the relevant period in consultation with NLDC.

Member Secretary, NERPC asked MePTCL to approach the Implementing Agency i.e. NLDC to establish the power flow pattern on the lines in respect of tariff period covered under Sharing Regulations 2020.

In 202nd OCCM, MePTCL intimated that NERLDC has been requested to establish the power flow pattern on the 132kV Nagalabibra-Agia line for the period 2014-19, so that the ISTS status of the line can be verified and presented to Honorable CERC and truing up for the 2014-19 tariff block can be done.

Sr. GM NERLDC stated that the software tool, used for conducting such study, is possessed by NLDC and the study will be conducted in consultation with the same. He further sought clarification from the NERPC about the time frame for which the data on power flow should be submitted. He stated that the quarterly data is available with NERLDC. Forum suggested that study may be based on the data availability with NERLDC i.e.quarterly basis. The quarterly data for utilization of the lines should be averaged out for the whole year and finally year wise data for the five years (2014-19) can to be submitted.

Deliberation of the sub-committee

NERLDC intimated that the study to ascertain power flow on the 132kV Nagalabibra-Agia line for the period 2014-19 is underway. The forum requested NETC to approach CERC for further clarification on the matter.

Sub-committee noted as above

Action: NERLDC, NETC

B.19. Shutdown required M/s Sterlite

i) 132 kV Nirjuli-Lekhi & Nirjuli- Gohpur Transmission Line for crossing between Loc. 136-137 along with at location 132-133 of Nirjuli-Gohpur line on 17.06.2023 and 18.06.2023. The necessary power line crossing approval has already been obtained from POWERGRID.

ii) 132 kV S/C Ranganadi-Pare and Pare-Lekhi lines along with associated bays at Pare w.e.f. 20.06.23 to 30.06.23 (continuous shutdown). Shutdown of those bays and lines are required to straighten RanganadiLekhi/Nirjuli line disconnecting from Pare LILO and commissioning of new Pare-Nirjuli & Pare North Lakhimpur line.

Deliberation of the sub-committee

M/s Sterlite highlighted that outage of LILO section at Nirjuli (comprising of 132kV Nirjuli-Lekhi and Nirjuli Gohpur lines) is essential for completing the stringing of 132kV pare-Nirjuli-North Lakhimpur line.

After detailed deliberation (including telephonic conversation with SE, SLDC, Arunachal Pradesh) the forum approved the shutdown of 132kV Nirjuli-Lekhi and

Nirjuli Gohpur lines on 24.06.2023 (0600hrs to 1600hrs) subject to real time grid conditions.

For shutdown of 132 kV S/C Ranganadi-Pare and Pare-Lekhi lines along with associated bays at Pare the forum suggested M/s Sterlite to revise the schedule accordingly and reapply on D-3 basis to NERPC.

M/s Sterlite informed that they shall take this SD only after completion of above SD. Thus, it was proposed to take shutdown from 30-06-2023 to 10-07-2023.

NEEPCO requested that Pare-Itanagar D/C must be thoroughly checked jointly by NEEPCO and AP before availing this SD.

Sub-committee noted as above

Action: M/s Sterlite

B.20. Regarding implementation of Green Energy Open Access Rules,2022

As you might be aware that Green Energy Open Access Rules have been notified by the Ministry of Power (MOP) on 6th June 2022.Subsequently, Grid-India has developed the Green Open Access Registry (GOAR) portal on the Green Energy Open Access Rules, 2022 and the amendment thereof.

Hon'ble Minister of Power has taken a review meeting on 12.05.2023 with present and prospective Green Energy Open Access users to understand the various difficulties associated with green energy open access. Various regulatory aspects are also being monitored in connection with this rule at the highest level. In this regard, the RCM Division, MOP has sought periodic reports regarding the implementation of Green Energy Open Access Rules.

Therefore, All SLDCs are requested to kindly

1. Nominate one nodal person for co-ordination purpose.
2. Share the periodic details as per Annexure-1&Annexure-2:

   Timeline for data submission as per Annexure-2 is as follows:

   The weekly period will be from Monday to Sunday (say 1 to 7th)

   SLDCs to provide the data by next Monday (say 8th)

   RLDCs to provide consolidated data to NLDC by Tuesday first half (say 9th)

   NLDC will provide the data by Tuesday EOD to Ministry of Power (say 9th)

E-mail communication in this regard has already been sent to all SLDCs on 16th May and 17Th May,2023

Annexure-1

1	**Whether SERC has issued Regulations for Green Energy?**	Yes/ No
2	**Whether OA Regulations amended to provide GEOA to consumers above 100 kW**	Yes/ No/ NA
3	**No. of registered users**	
4	**No. of Green Open Access Applications received in a month**	
5	**No. of applications approved (to be applied within 15 days) in a month**	
6	**Quantum of transactions in a month**	
7	**Green Tariff- Component-wise cost where available**	

Annexure-2

For the period : .....

State Name	Banking Period	Banking Charges	Banking settlement period	Treatment of unutilized energy by RE generator	Quantum of Energy Banked by DISCOM on weekly basis (Mus)

As per 202nd OCCM, the forum requested all state SLDCs to provide details of Nodal officers to NERLDC and also provide the required data in the formats as provided. However, as per NERLDC, Nodal officers' details as well as the said data yet to be received from all state SLDCs.

Deliberation of the sub-committee

After detailed deliberation the forum strongly asked all state SLDCs to provide details of Nodal officers to NERLDC within one week and also provide the required data in

the formats as provided. Further the forum requested NERLDC to conduct a workshop with state SLDCs to explain the format and data which are required under Green Energy Open Access Rules, 2022.

Sub-committee noted as above

Action: all state utilities, NERLDC

C. NEW AGENDA ITEM

Agenda from SLDC AEGCL

C.1 Requirement of the import and export meter data of the ISTS lines connected with AEGCL

For the purpose of proper energy accounting and calculation of transmission loss of AEGCL, Assam SLDC is in requirement of the **import** and **export** meter data of the ISTS lines connected with AEGCL. It may be mentioned here that the ISTS meter data available in the NERLDC website is the **net** import/export. SLDC has enquired regarding this over phone with NERLDC, however it has been noted that the NERLDC itself receives the **net** import/export from the field personnel. Therefore, the forum is requested to kindly discuss the above and guide Assam SLDC to help facilitate the time block wise **import and export meter data separately** for each of the ISTS lines

Deliberation of the sub-committee

After detailed discussion, the forum advised SLDC Assam to discuss the matter bilaterally with MO wing of NERLDC in presence of APDCL for resolution of the issue.

Sub-committee noted as above

Action: AEGCL, APDCL

Agenda from NERLDC

C.2 Replacement of CT by availing emergency shutdown:

On 31.05.2023, AGBPP Kathalguri had requested for emergency shutdown of B-ph CT of 220kV Bus coupler Bay for replacement of a CT of a particular phase due to heavy oil leakage observed in the CT. However, the CTs of the other phases were also replaced without approval.

Again, on 05.06.2023, AGBPP availed shutdown of Y-ph CT of GT-6 on emergency basis for replacement of Y-ph CT due to heavy oil leakage. NERLDC approved the emergency shutdown of the element for carrying out replacement work of the defective CT. However, the CTs of the other phases were also replaced.

The shutdown procedure was not followed for both the instances which is highly undesirable.

NEEPCO is requested to avoid such practices and come through proper channel for replacements of elements that does not fulfil the criteria for emergency.

Deliberation of the sub-committee

After detailed discussion the forum requested AGBPP NEEPCO to refrain from such practices and provide complete details of work to be undertaken in shutdown period and apply through proper channel for replacements of elements that does not fulfil the criteria for emergency. NEEPCO agreed. NEEPCO assured that such practices would not be repeated in future.

Sub-committee noted as above

Action: AGBPP, NEEPCO

C.3 SF6 gas filling of Umrangshu bay at Halflong(PG) without prior intimation:

132kV Halflong – Umrangshu line tripped at 11:53 Hrs of 20.05.2023 on Distance Protection. The line was charged at 14:20 Hrs of 20.05.2023. The delay in charging was due SF6 Gas filling being done in Umrangshu bay at Halflong(PG) which was not informed to NERLDC. NEEPCO had also requested for a shutdown of 132kV Khandong – Umrangshu line for rectifying some metering issue which was postponed due to outage of 132kV Halflong(PG) – Umrangshu line.

NERTS is requested to follow proper procedure for such kind of activities.

Deliberation of the sub-committee

DGM NERTS clarified that Umrangsu bay at Haflong is a GIS based bay and the line tripped on SF6 Zone trip scheme which was mistakenly informed as Distance protection tripping. The delay was not caused for filling up SF6 gas but in finding out and resolving the issue.

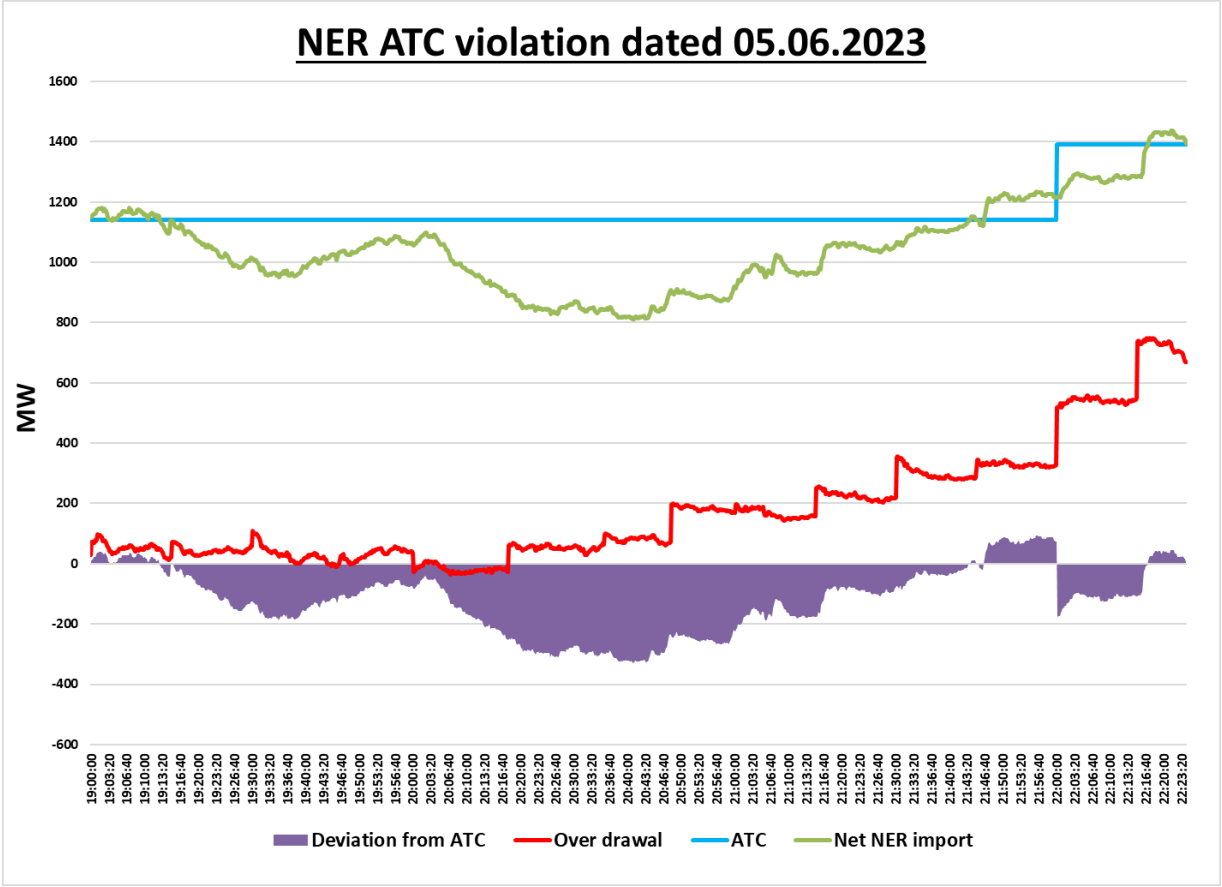
Sub-committee noted as above

C.4 Interregional ATC/TTC violation of NER grid:

It has been observed that at many instances, ER-NER inter-regional ATC as well as TTC violations occurred due to over drawl by states which is very alarming to the grid.

Such ATC/TTC violation in NER Grid during any unseen contingency may result in tripping of important inter-regional link & cause disturbances in the system.

In view of the above concern, all measures are to be taken beforehand to keep drawal strictly as per schedule and limit the interregional as well as intra-regional values within the respective ATC and TTC limits. In case of sustained violations RLDC/NLDC may impose congestion charges as per regulations.



Deliberation of the sub-committee

NERLDC mentioned that all measures are to be taken beforehand to keep drawl strictly as per schedule and limit the interregional as well as intra-regional values within the respective ATC and TTC limits.

NERPC impressed upon the forum that consistent over drawl in such a large quantum by the states, especially Assam and Tripura, should have triggered ADMS operation as per the set tripping logic. The Forum noted with seriousness the failure of ADMS in such cases.

After detailed deliberation the forum requested states to curtail deviations in case of TTC/ATC violations and ensure functionality of ADMS.

Sub-committee noted as above

Action: all state utilities

C.5 Outage of several 132 kV intra-state lines in Manipur Power System

The following intra-state lines in Manipur Power System are under outage as follows:

1. 132 kV Ningthoukhong-Churachandpur D/C since 14:50 hrs of 6th June 2023 on tower collapse
2. 132 kV Churachandpur-Kakching S/C since 12:21 hrs of 8th June 2023 on tower collapse
3. 132 kV Churachandpur-Elangkangpokpi S/C since 12:21 hrs of 8th June 2023 on tower collapse

Grid Disturbance had occurred on 8th June'23 in Churachandpur area due to tripping of 132 kV Churachandpur- Kakching S/C and 132 kV Churachandpur-Elangkangpokpi S/C lines on account of unavailability of 132 kV Ningthoukhong-Churachandpur D/C.

Power is yet to be restored in the Churachandpur and Thanlon areas of Manipur Power System causing severe disruption of power in these areas since 8th June'2023. MSPCL is requested to expedite the restoration of the lines at the earliest to ensure reliable grid operation.

Deliberation of the sub-committee

NERLDC updated the power interruption in the Churachandpur and Thanlon areas of Manipur Power System caused severe disruption of power in these areas since 8th June'2023.

Power was restored on 14th June'2023 via 1322 kV Ningthoukong-Churachandrapur D/C. Other lines also must be restored to improve reliability.

The agenda could not be further deliberated due to absence of representative from MSPCL.

Sub-committee noted as above

Action: MSPCL

C.6 Early Commissioning of Bus Reactor at Byrnihat (MePTCL)

During 23rd TCC & 23rd NERPC Meetings held on 18th & 19th November 2022 in Goa, NERLDC highlighted that voltage rise issue is witnessed at Byrnihat throughout the year and gets more severe during the lean hydro period leading to difficulty in grid operation. The 63 MVAR Bus Reactor at Byrnihat is under prolonged outage. Commissioning of Bus Reactor at Byrnihat will mitigate the high voltage problem.

As per deliberations of 23rd TCC & 23rd NERPC Meetings held on 18th & 19th November 2022 in Goa, Director (Trans), MePTCL requested intervention of forum for recommending balance funding (₹2.22 Cr) from PSDF in view of cost escalation during price discovery. After detailed deliberation the forum recommends PSDF Secretariat to reconsider the sanctioned amount in view of the higher price discovery during procurement.

As per minutes of 201st OCC Meeting held on 25th April, 2023, the following has been mentioned as the present status “Coordination issues with the vendor. WIP”

This is to reiterate that charging of the Bus Reactor at Byrnihat is very essential to maintain proper voltage profile in the NER Grid.

MePTCL is requested to update the latest status and expedite the installation process.

Deliberation of the sub-committee

MePTCL updated that work order has been placed and commissioning to be done by August’23.

Sub-committee noted as above

Action: MePTCL

C.7 Early Installation 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 202nd OCCM of NER, NEEPCO informed that the work will be completed by Dec'23 citing Logistics and Transportation issues. The LOA has been issued on 11.01.2022.

NEEPCO is requested to update the latest status and expedite Installation of 420 kV, 80 MVAr bus reactor at Ranganadi HEP.

Deliberation of the sub-committee

GM NEEPCO intimated the forum that the reactor has reached the site, however site readiness is under process as GIS work is underway at Ranganadi HEP (PLHEP). Further he updated that tentative date of commissioning of the reactor is by March'24.

Sub-committee noted as above

Action: NEEPCO

C.8 Commissioning of LILO of one circuit of 132 kV Biswanath Chariali-Itanagar D/C at Gohpur

132 kV Biswanath Chariali – Itanagar D/C has been approved by Joint Standing Committee of ER and NER on 03.01.2014. LILO of one circuit of 132 kV Biswanath Chariali (PG) – Itanagar at Gohpur was approved in 6th Standing Committee of NER held at Imphal on 03.10.16 & 17th NERPC meeting on 04.10.16. As we know, Pavoi,Gohpur,North Lakhimpur,Dhemaji and Majuli areas of Upper Assam Power System are only being fed from Biswanath Chariali, the system is not N -1 compliant at present. Hence, commissioning of the above-mentioned line would solve the problem, making the system redundant.

132 kV Biswanath Chariali - Itanagar 1 Line and 2 Line was charged on 01.04.2021 and 02.04.2021 respectively, but LILO at Gohpur has not been completed yet. Commissioning of the LILO at 132 kV Gohpur substation would enhance the drawl capability of Gohpur, North Lakhimpur and Dhemaji area of Assam power system and also improve the voltage profile of these areas. NERLDC vide letter dated 06.06.23 to NTL highlighted the same.

As per minutes of 199th OCCM,NTL had informed in the meeting that LILO will be ready for commissioning after signing of the supplementary connection agreement with concerned utilities and that signing of connection agreement is pending with Arunachal Pradesh.

NTL is requested to expedite the commissioning for LILO of 132 kV Biswanath-Chariali-Itanagar II line at Gohpur for enhancing the reliability of the Gohpur, North Lakhimpur and Dhemaji area of Assam power system.

Deliberation of the sub-committee

M/s Indigrid (NTL) intimated the forum that the supplementary connection agreement has been signed by DoP Arunachal Pradesh and now it is pending with CTU. After the finalization of connection agreement by CTU, the termination works will start at Gohpur sub-station and shutdown of 132 kV Biswanath Chariali-Itanagar D/C will be required for 7 days. Commissioning of the LILO will be tentatively completed within 15 days after issuance of approval of CTU. Forum requested Assam to pursue the matter strongly as they would be most benefitted after the line is LILOed.

Sub-committee noted as above

Action: M/s Indigrid

C.9 Commissioning of 2nd circuit of 220 kV Mariani-Samaguri

After conversion of 220 kV Misa-Mariani (PG) and 220 kV Misa-Mariani (AS) to 400 kV Misa-Mariani D/C, the Upper Assam System has become vulnerable under N-1 contingency. Frequent generation backdown has to be carried out by the system operators to secure the system under N-1 contingency under condition of outage of any tie-line which connect the upper Assam system with the All-India Grid. Upper Assam gate-flow is being monitored and necessary backdown of gas-based generation carried out to maintain the same.

Early commissioning of 2nd circuit of 220 kV Samaguri-Mariani (AS is necessary to maintain N-1 reliability in Upper Assam Power System and reduce the need for frequent backing down of gas-based generation in Upper Assam System.

As per minutes of 202nd OCCM, SLDC Assam informed that the forest clearance is still waited for Samaguri- Khumtai section in 220 kV Samaguri-Mariani (AS) line and it has been pending since 182nd OCCM.

AEGCL is requested to expedite the commissioning and share the latest status for reliable system operation.

Deliberation of the sub-committee

AEGCL apprised that the 2nd circuit of 220kV Mariani-Samaguri line is to be LILOed at Khumtai and forest clearance for the Samaguri -Khumtai section is still pending. AEGCL informed that out of 146 km of total length of the line, 35 km passes from dense forest of Kaziranga.

As an alternative, it is planned to reroute the circuit and align with the other circuit (220kV Mariani-Samaguri ckt 1), for which survey is being done.

The agenda to be discussed in upcoming TTC/RPC meeting.

Sub-committee noted as above

Action: AEGCL

C.10 Utilizationof ICTs at 400/220 kV New Kohima Substation

The 2x500 MVA ICTs at 400/220 kV New Kohima substation have been commissioned on 13.11.20 but still the downstream system at New Kohima has not yet been utilised.

DoP Nagaland is requested to intimate the latest status of commissioning of 220 kV New Kohima (TBCB) – New Kohima D/C

Deliberation of the sub-committee

DoP Nagaland updated that work order for PLCC installation has been placed and the same will be completed within 6 months. NERPC intimated that since the line is less than 10 Km, Line differential protection has to be necessarily installed on the line before charging. He further highlighted that OPGW has to be installed on the line. After detailed discussion the forum asked DoP Nagaland to look into the matter of installation of OPGW and LDP on the line before charging of the same.

Sub-committee noted as above

Action: DoP Nagaland

C.11 Restoration of 400 kV Kameng Unit 1

400 kV Kameng Unit 1 is under long outage since 10th Dec'2022 for completion of E & C works. With the onset of the monsoon season, non-availability of the Unit will lead to water spillage in the Kameng river basin, causing underutilization of the Kameng HEP.

NEEPCO is requested to expedite the restoration work and revive the unit strictly as per the scheduled time.

Deliberation of the sub-committee

GM NEEPCO intimated that due to unavoidable reasons the E & C works have not been completed timely. Further he stated that the unit will be restored tentatively by 10th July'23.

Sub-committee noted as above

Action: NEEPCO

C.12 Charging of 33kV Khupi-Kimi line at 132kV

As per Recommendations of the 187th OCCM, following were to be implemented for charging of 132 kV

(A) Installation & Commissioning of PLCC and additional Wave Trap with accessories at Khupi (NEEPCO) - By Mar'22 Minutes of 188th OCC meeting held on 16th 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 188th OCCM

As per the minutes of 201st OCCM, only end equipment for OPGW communication was to be installed and it was informed that OPGW communication will be ready by 15th May'23.

As we know, 132 kV Tenga,Khupi and Dikshi areas of Arunachal Pradesh are connected radially by 132 kV Balipara-Tenga line and tripping of this line causes

frequent grid disturbances in these areas. From May'23 to present time, 4 number of grid disturbances have occurred due to tripping of 132 kV Balipara-Tenga line.
NEEPCO may update the latest status and expedite the charging of the same.

Deliberation of the sub-committee

The forum noted that only remaining works are-

i)OPGW commissioning by POWERGRID Comprehensive

ii) Installation of Line differential Relays by NEEPCO

NERTS intimated that OPGW stringing is almost complete and termination to FOTE panel is to be done, which will be completed by end of June'23

GM NEEPCO intimated that LDP has been procured and installation will be done after readiness of the OPGW end equipment. Further he stated that Vegetation clearance along the line will be undertaken after OPGW work completion. The whole work is expected be completed by 15th July'23.

Sub-committee noted as above

Action: PowerGrid Comprehensive, NEEPCO

C.13 Readiness of end bay equipment for re-conductored 220 kV BTPS-Salakati D/C

220 kV BTPS-Salakati D/C lines have been reconductored with HTLS conductor and now each circuit can carry the ampacity (1100A) as per HTLS Conductoring. However, it is being limited to carrying 800 A, or 304 MVA (289 MW at a power factor of 0.95) as the end bay equipments at BTPS and Salakati ends have a CT ratio of 800/1. Hence, the re-conducturing feature of the lines could not be utilized fully in present condition.

POWERGRID is requested to upgrade the end bay equipment to facilitate the maximum utilization of HTLS re-conductoring.

Deliberation of the sub-committee

DGM, NERTS intimated that Type testing of bay equipment of higher rating, will be conducted by end of June'23 and upgradation work will start by mid-July'23. He further stated that shutdown of each circuit will be required for 15days each.

NERLDC stated that SD may be allowed after KLHEP is revived by end of July'23.

Sub-committee noted as above

Action: NERTS

Agenda from MeECL

C.14 Request for exemption of ADMS triggered load shedding from DSM perspective.

At present, Meghalaya is facing a power crisis primarily due to low reservoir levels besides less net availability of power. This has among other things led to imposition of load shedding throughout the State. An analysis of the Deviation counts and the corresponding frequency for every 15-minute block starting from 00:00 hours of 01.05.2023 up to 24:00 hours of 31.05.2023 amounting to 2976 time-blocks revealed the following in respect of ADMS operation:

ADMS operation was required for 12.6 % of the time for overdrawal according to the new DSM Regulations (340 instances or 11.42 % of the time) and around 1.12 % of the time (35 instances) from the frequency (< 49.90 Hz) operation perspective. Moreover, ADMS is only a pilot project involving only five 33/11 KV substations and only twenty-two (22) 11 KV feeders, and an increase in the number of ADMS triggered signals would have an effect on circuit breakers from frequent operations and more so in light of the ongoing Load Shedding requirement.

The matter was brought to the notice of MePDCL for exploring options to mitigate the situation. In the interim period, it was requested to kindly consider exemption of ADMS triggered tripping from operation when there is overdrawal greater than 20% of the schedule for the time being till the power scenario for Meghalaya improves. If agreed, this would leave only ADMS operation for any overdrawal at a frequency of less than 49.90 Hz as per relevant mandates of the Indian Electricity Grid Code and MSERC State Grid Code.

Deliberation of the sub-committee

After detailed discussion the forum agreed to the request of MEPTCL for exemption of ADMS triggered tripping from operation when there is overdrawl greater than 20% of the schedule for one month.

Sub-committee noted as above

Action: MeECL

C.15 Time frame for taking up and completion of works related to upgradation of 132 KV Badarpur and 132 KV Khliehriat (PG) substations from single main and transfer bus scheme to double main bus scheme by converting from AIS to GIS

Meghalaya had agreed for conversion of 132 KV Khliehriat #2 (State) bay from AIS to GIS under ISTS. In this regard, POWERGRID is requested to kindly state the time frame for initiating and completion of works mentioned above. In this regard, load flow studies are requested to be carried out by NERLDC in coordination with Meghalaya SLDC to assess the power system scenario prior to starting of the above work.

Deliberation of the sub-committee

DGM NERTS intimated that MEPTCL has formally agreed for conversion of 132kV Khliehriat # 2 bay from AIS to GIS under ISTS and after office memorandum is circulated by the CTU the work will be completed in 30 months. Regarding shutdown requirements he clarified that GIS work will be undertaken without disturbing the AIS bays and the shutdowns will only be required at the end of the work.

Meghalaya mentioned that the shutdown should not be taken during lean hydro season.

Sub-committee noted as above

Action: NERTS

Agenda form NERTS

C.16 Agenda for the proposed Shutdowns of Elements/Equipment:

A. Firmware Upgradation of Numerical IEDs: -

Numerical Protection IEDs are deployed for various protection requirements. Though the same are tested in the factory for different operating conditions, however, in some cases, issues related to performance during through fault / in-zone fault has been observed in different make Numerical relays.

The same gets analysed by respective OEMs and time to time, OEM recommends for upgradation of firmware for attending such issues.

It will improve the relay algorithm operation, Impedance selection reporting and configurations.

B. 132kV Khandong Khlerihat#1 TL Shutdown: Laying of OPGW by replacing Earth wire

132kV Khandong- Khlierihat-1 line commissioned in the year of 1999. Line passes through heavy rain/thunderstorm and lighting prone area.

Presently, considering the purpose of reliable communication, wherein the existing Earthwire is not in good conditions in many of the spans, the laying of OPGW by replacing Earth wire will require Shutdown as on when required to ensure safe and secure working condition.

In view of the same, there is requirement of outage of the aforesaid line for a period of 2 months i.e. July'23 – Aug'23 as on when required during the execution of the work in spans of earth wire is not in good condition.

C. Buccholz Trip Logic modification

Buccholz Device is a Body protection Unit of ICTs and Reactors. With its services utilized Pan- India it has been observed that several unwanted / spurious Tripping/ maloperations have been reported due to Buchholz Tripping on account of Ageing, during running of pumps & vibrations during earthquake.

For avoiding the unwanted tripping and maintaining the reliability of the system, it is planned to introduce Pickup Time Delay in Trip Output in Numerical relays to improve the overall stability of mechanical protection. Td= 200msec For Buccholz Trip & Alarm

As the above involves, modification of wiring in the auxiliary relays used, hence, the outage of ICTs and Reactors may be approved.

Deliberation of the sub-committee

After detailed deliberation the forum approved the shutdowns required under A and B above as system improvement works, while for the group C the forum asked NERTS to present similar examples from other regions and reports of CEA, if any, before it can be decided to be put under system improvement category.

Sub-committee noted as above

Action: NERTS

C.17 INSTALLATION OF TRANSMISSION LINE SURGE ARRESTOR

In North Eastern Region around 70% Tripping of Lines are mainly due to lightening. Again, more than 80% Lightning related tripping are in 132kV Lines. In order to arrest tripping of 132kV Transmission lines of NER during lightning; installation of TLSA was explored. The issue was deliberated in 127th OCC Meeting and POWERGRID gave a presentation on Transmission Line Surge Arrestor and stated that despite of counterpoise earthing and additional shield wire earthing of POWERGRID's Transmission Line in NER there are no. of Tripping of 132kV Lines during lightening. POWERGRID informed that they are going to install TLSA in 132kV Khandong - Khliehriat Line # 1, 132kV Badarpur - Khliehriat Line and 132kV Aizawl – Kumarghat Line on experimental basis and observe the performance of the Lines during lightening and if the performance improves NER should go for installation of TLSA in 132kV Lines. So far as cost is concerned, POWERGRID will recover from PoC Mechanism and States may explore for funding from PSDF for the same work. The OCC forum agreed and referred to next TCC/NERPC meeting. Subsequently, in 18th NERPC meeting, NERPC approved the recommendation of OCC.

The installation of TLAs accordingly carried out in following lines and performance found to be satisfactory as indicated below: -

Sr. No.	Name of Lines	No of TLAs	Year of installation	Tripping History			
				19-20	20-21	21-22	22-23
1.	132kV Salakati Gelephu	465	2021	9	20	0	0

2.	132kV Khlerihat Khandong#1	408	2022	0	0	13	0
3.	132kV Khlerihat Khandong#2	396	2019	1	0	0	0
4.	132kV Dimapur Doyang#1&2	318	2023	11	15	8	4

Note – Performance of TLA installation was regularly monitored in OCC forum.

Accordingly, based on satisfactory performance and approval of 18th NERPC meeting, procurement and installation of TLA has been already processed for following lines in Phase#1, considering more lightening related tripping as detailed below: -

Sr. No.	**Name of Lines**	**Year wise tripping**				**Total no. of towers in the line**	**TLA Planned**	
		19-20	**20-21**	**21-22**	**22-23**		**No. of towers**	**No. of TLA**
1.	132kV Badarpur Khlerihat	0	2	8	29	219	165	495
2	132KV Jiribam-Haflong	2	3	5	3	309	52	156
3	132KV Khleirhiat-Khlierhiat 1	1	1	2	6	30	30	90
4	132KV Khandong-Umrangso	1	1	3	0	32	12	36
5	132 Umrangso-Haflong	3	4	3	3	157	18	54
6	132KV Aizawl-Tipaimukh	9	12	15	14	213	58	174
7	132KV Aizawl-Kumarghat	3	4	9	5	379	53	159
8	132KV Aizawl-Kolasib	4	4	4	4	185	42	126
9	132KV Jiribam-Tipaimukh	1	2	2	4	249	54	162
10	132KV Jiribam-Loktak II	4	3	6	7	247	87	261
11	132KV D/C Silchar-Hailakandi I & II	3	7	7	3	109	42	252
12	132KV D/C Silchar-	2	2	1	1	69	17	102

	Badarpur I & II							
13	132KV D/C NBC-Pavoi I&II	3	4	1	2	53	17	102

Estimated cost for procurement & installation of TLA in said lines is approx. Rs. 12 Crore with cost booking under ADDCAP 2019-2024 tariff block. On approval same shall be taken up with CERC during truing up of petition of respective projects.

Further, it is to mention here that in 400kV lines also, lightening related tripping is being observed in 400kV Silchar Imphal D/c, 400kV Balipara Bongaigaon#1,2,3&4 and 400kV Kameng Balipara D/c, 400kV Silchar P K Bari D/c despite tower footing impedance values are within limits. Presently, performance of TLA for 400kV Lines is under evaluation and based on performance TLA installation shall be taken up in Phase#2.

Deliberation of the sub-committee

The forum noted the effectiveness of TLA in reducing lightening caused tripping. After detailed discussion the forum approved the proposal of installation of TLA on the mentioned lines by NERTS.

Sub-committee noted as above

Action: NERTS

C.18 Requirement of outage of 400kV Bongaigaon New Siliguri#1&2 for re-conductoring works and 400kV bays at Bongaigaon S/s for Bay upgradation works

Under NERSS XII, following works have been approved: -

1. Reconductoring of 400kV Bongaigaon New Siliguri#1&2

2. Bay upgradation of following bays related to 400kV Bongaigaon New Siliguri#1&2

- **a)** 400kV Main Bay of NSLG#1
- **b)** 400kV Main Bay of ICT#1
- **c)** 400kV Tie Bay of NSLG#1 – ICT#1
- **d)** 400kV Main Bay of NSLG#2
- **e)** 400kV Main Bay of BR#1

f) 400kV Tie Bay of NSLG#2 – BR#1

Bay upgradation work involves replacement of CT/CB/Isolators/CRP along with the reconductoring of Jack Bus portion also.

Accordingly, optimum outage requirement based on site condition was discussed in detail jointly with NERLDC/NERPC/NLDC during the special meeting on 06/06/23.

However, NERLDC informed that the outage is not agreed during high hydro season and suggested to avail the same after Sep'23.

It is pertinent to mention here that the completion schedule of the project is already over in Apr'23 due to various reasons and constraints of the region.

Presently, various executing agencies have already been mobilized at site after repeated persuasion but, the job could not be taken up due to non-allowing of the shutdown. Such situation is likely to cause demobilization of man and material by the agencies which will result further delay of the project beyond control. Thus, said situation needs to be avoided to avoid cost overrun of the project which will impact constituents financially.

It may kindly be noted that for efficient execution of upgradation work in brown field projects, optimization of outage of elements is to be ensured for which redundancy has to be compromised otherwise the execution of the project will get badly hampered.

In view of above, it is once again requested to the forum for providing the shutdowns as discussed during meeting dtd 06/06/23 immediately.

Deliberation of the sub-committee

After detailed discussion the forum approved the progress of the work and decided that it should be expedited.

Sub-committee noted as above

Action: NERTS, NERLDC

D. ITEMS FOR STATUS

D.1. Implementation of projects funded from PSDF:

The status as informed in 203rdOCCM:

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. Amount not received in the TSA account.	-
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-Luangmualand 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 for IT portion, no disbursement for Meter, AMR portion. 20% disbursement for IT portion after completion of 3rd milestone. 30% to be disbursed for Meter, AMR portion	Revised DPR for LDP of 132kV Imphal-Yurembam-III to be submitted by June'22.
	33kV System Integration with SLDC	In tendering stage			
	Reliable Communications for grid connectivity	In tendering stage			
Tripura	Completed. Final UC submitted on 04th May'22.	Final 10% requisition submitted.	Not relevant in present scenario with commissioning of ISTS lines. Issue dropped	10% successfully disbursed. 20% fund reversed back from vendor account. Will be resolved soon.	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.	-	90% works completed. Communication pending.	All works except OPGW done

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

Sl. No	Element	Owner	Status up to the 202ndOCCM	Latest Status
1	132kV Mariani – Mokokchung (*out since April'2008*)	AEGCL	Non clearance due to persisting funding issue	Non clearance due to persisting funding issue
2	132kV Roing-Pasighat (*charged through ERS tower*	NERTS	1st tower by May '23 while 2nd tower requires tendering, tentative completion by Nov'23	Completion by Nov'23
3	220kV Misa-Kopili D/C, 220/132kV ICTs at Kopili, 132kV Khandong –Kopili D/C(*out since Oct'19*)	NEEPCO/ NERTS	Item B.8 (Kopili-Khandong by September'23 and Misa-Kopili by June'23)	Item B.8 (Kopili-Khandong by September'23 and Misa-Kopili by July'23)
4	132kV Srikona – Panchgram	AEGCL	LOA issued on 18.02.2023, Work in progress, tentative completion within 8 months	LOA issued on 18.02.2023, Work in progress, tentative completion within 8 months
5	400kV Imphal – Thoubal-I and 315MVA 400/132kV ICT at Thoubal	MSPCL	RoW, litigation pending in court.	RoW, litigation pending in court.
6	63MVAR Bus Reactor at Byrnihat to be replaced with 80MVAR Reactor	MePTCL	Coordination issues with the vendor. WIP. Waiting for PSDF fund.	Work order placed, tentative commissioning by Aug'23

D.3. Status of commissioning for upcoming projects:

Sl. No	Name of the element	Utility	Status up to the 202nd OCCM	Latest Status
1	132kV Monarchak-Surjamaninagar	TSECL	RoW and Funding issue hampering the	Same status

			progress. To discussed in 24th TCC/RPC meeting	
2	PLCC for 132kV Loktak-Ningthoukong and 132kV Loktak-Rengpang(existing lines)	MSPCL	Under R&M by NHPC. July'23	
3	Commissioning of 220kV Balipara-Sonabil-2ckt 2	AEGCL	AEGCL- Ckt 2 bay at Sonaibil will be ready within one month as M/s is yet to do A/R integration. PGCIL-applied for PTCC clearance of the line.	Done
4	Upgradation of 132kV Lumshnong – Panchgram line	MePTCL	Work has started, tentative completion by June'23	By Aug'23. Refer to item B.8
5	PLCC for 132kV Karong-Kohima. PLCC at Kohima	DoP Nagaland	Awaiting sanction from PSDF	Work order Placed, to be commissioned by Nov'23
6	132kV Loktak-Ningthoukhong-II	MSPCL		
7	132kV Roing-Chapakhowa	NERTS	Foundation completed. 14kM Stringing left. Tentative charging by end of May'23.	Stringing completed. RIO clearance under way
9	420kV 80MVAR Bus Reactor	NEEPCO	Dec'23	Mar'23
10	220kV Killing – Mawngap	NERPSIP	Refer to item B.8. June'23	Refer to item B.8.
11	220kV Samaguri – Mariani-I	AEGCL	FC for Samaguri-Khumtai section is still awaited.	Same status
12	PLCC/DTPC for 220kV Balipara- Sonabil	AEGCL	Equipment procured, to be commissioned after rectification of SAS	Same status
13	220kV AGBPP –Namsai D/C	TBCB	Oct'25	Oct'25
14	Upgradation of 132kV Surjamaninagar-Surjamaninagar(ISTS), 132kV Bodhjungnagar-SMNagar, 132kV P.K.Bari-Ambassa,	TSECL	TSECL updated that DPR has been submitted and TESG has approved the same. The work will start as soon as the	Same status

	132kV P.K. Bari-P.K.Bari(ISTS)		funds are disbursed.	
15	LILO of 132kV Leshka-Khliehriat-I at Mynkre and Mynkre SS and 33kV downstream at Mynkre.	NERPSIP	LILO ready, Substation WIP - June'23	June 23
16	220kV Tinsukia-Behiating D/C	NERPSIP	WIP - May'23 due to ROW	WIP - June'23 due to ROW
17	LILO of 132kV Kamalpur-Kamakhya& 132kV Kamalpur-Sishugram at Amingaon	NERPSIP	Completed. Ready for charging.	Completed. Ready for charging.
18	220kV Rangia – Amingaon D/C and 220/132kV 2x160MVA Amingaon S/S	NERPSIP	May'23 due to ROW	June'23 due to ROW
19	132kV Rengpang-Tamenglong and 132/33kV 4x6.67MVA at Tamenglong at Manipur	NERPSIP	May'23 due to ROW	June'23 due to ROW
20	132/33kV 2x20MVA Gamphazol at Manipur	NERPSIP	Test charged in Dec'22.	Test charged in Dec'22.
21	132/33kV West Phaileng S/S at Mizoram	NERPSIP	Ready for charging. Line WIP.	Ready for charging. Line WIP.
22	132/33kV 2x12.5MVA Marpara S/S at Mizoram	NERPSIP	May'23	June'23
23	132/33kV 2x12.5MVA Lungsen S/S at Mizoram	NERPSIP	May'23	June'23
24	132kV Lungsen-Chawngte S/C at Mizoram	NERPSIP	Ready for charging.	Ready for charging.
25	132kV Chawngte – S.Bungtlang S/S at Mizoram	NERPSIP	May'23	June'23
26	132kV W.Phaileng-Marpara S/C at Mizoram	NERPSIP	June'23 subject to RoW clearance in Pukzing village in Mamit district	June'23 subject to RoW clearance in Pukzing village in Mamit district
27	220kV Zhadima –		Ckt 1 charged in	Ckt 1 charged in

	Mokokchung at Nagaland	NERPSIP	Mar'23. Other ckt waiting for finalization of MoU	Mar'23. Other ckt waiting for finalization of MoU
28	LILO of 132kV Wokha – Kohima at 132/33kV New Kohima (Zhadima) at Nagaland	NERPSIP	Line ready, jumpering not yet done	Line ready, jumpering not yet done
29	132kV Wokha-Zunheboto – Mokokchung at Nagaland	NERPSIP	Stringing in 2 or 3 spans left, by June'23	Stringing in 2 or 3 spans left, by June'23
30	132kV Tuengsang – Longleng at Nagaland	NERPSIP	Line ready, Tuensang substation upgradation under progress	Line ready, Tuensang substation upgradation under progress
31	132/33kV Amarpur S/S at Tripura	NERPSIP	June'23	June'23
32	132/33kV Manu(new) S/S at Tripura	NERPSIP	June'23	June'23
33	132kV Dharmanagar-Kailashor	NERPSIP	May'23	
34	132kV Ziro-Yazali and 132/33kV Yazali S/S	POWERGRID-Comprehensive		
35	132kV Yazali – Palin and 132/33kV Palin S/S	POWERGRID - Comprehensive	132kV Yazali - Palin Line - Stage I Forest Clearance Obtained a) 3 foundation work completed. 132/33kV Palin S/s- a) CRB WIP. b) Electrical Works to be started.	Same status
36	132kV Palin- Koloriang and 132/33kV Koloriang S/S	POWERGRID - Comprehensive	132 kV Palin - Koloriang Line - No Forest Clearance Obtained a) Not Yet Charged. 132/33kV Koloriang S/s- a) CRB First Slab (to be completed within this month)	Same status
37	132kV Khonsa – Deomali and 132/33kV Khonsa S/S	POWERGRID - Comprehensive	132 kV Khonsa - Deomali Line - a) Foundation, Erection and Earthing	Same status

			WIP. 71/87 Foundation Complete 50/87 Erection Complete Target for completion: June 2023 132/33kV Khonsa S/s- a) CRB Finishing Work b) Cabling, Foundation, Retaining Wall WIP	
38	132kV Miao – Namsai and 132/33kV Miao S/S	POWERGRID - Comprehensive	132kV Miao - Namsai - a) No Work due to ROW issue at Miao. b) No Work due to sand boiling and ROW issue at Namsai. 132/33kV Miao S/s- a) Gravel Spreading b) Water Proofing for exposed area of Transit Camp first Floor c) Testing of Isolators Completed d) Electrification WIP e) Site Levelling WIP.	Same status
39	132kV Chimpu – Holongi and 132/33kV Holongi S/S	POWERGRID - Comprehensive	Ready for charging	Ready for charging
40	Lower Subansiri HEP	NHPC	Unit 1 and 2 by June'23	Dec'23
41	400kV Lower Subansiri-BNC line2	PGCIL	June'23	July'23
42	Conversion of MT to DM at (i)132kV Khliehriat, (ii)132kV Badarpur, (iii)132kV Nirjuli, (iv) 132kV Imphal	NERTS	Nirjuli - May'23 Imphal – Badarpur & Khlerihat – Cost estimate under preparation by CTUIL	Nirjuli- Done Imphal – Badarpur & Khlerihat – Cost estimate under preparation by CTUIL
43	Construction of Pare-N.Lakhimpur DC along with LIO at Nirjuli	Sterlite (TBCB)	Shutdown requested for 20th June to 30th June'23 to complete the work	To be completed by 10th July subject to grant of shutdown as

				requetsed
44	LILO of BNC-Chimpu ckt II at Gohpur	Indigrid	Signing of the agreement under process	DoP Arunachal signed the meeting
45	220kV New Shillong-NangalBibra(ISTS 220/132kV) TL	MEPTCL	Survey completed, tendering to start soon	Work order given to PGCIL for survey. PGCIL is yet to submit the survey report
46	400kV Bongaigaon-Nangalbibra (ISTS) DC (to be charged at 220kV initially)	Sterlite	Dec'23	Dec'23
47	HTLS reconductoring of 132kV Hailakandi-Dullavcherra	AEGCL	During 23rd TCC RPC meeting, the forum recommended for the upgradation and preparation of DPDR by AEGCL	
48	HTLS reconductoring of 132kV Panchgram-Hailakandi	AEGCL	Included in CEA 2030 Augmentation Scheme	
49	HTLS reconductoring of 132kV Srikona-Pailapool	AEGCL	Included in CEA 2030 Augmentation Scheme	

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 203rdOCCM)	
								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)	Nagal and	400/220kV, 2x500MVA	220	2	Commissioned	New Kohima (TBCB) – New Kohima (Nagaland)	LoA Feb'2021	Line stringing completed, PLCC works to be completed

							220kV D/c line		by Nov'23. For OPGW, PGCIL is requested to Install it. Matter referred to 24th TCC/RPC
3	Nangalbibra (TBCB)	Meghalaya	220/132kV, 2x160MVA	132	2	Under construction (Dec'23)	Nangalbibra (ISTS) – Nangalbibra (MePTCL) 132kV D/c (HTLS,800A) Line:about 5km	DPR prepared and survey completed. Tendering under finalization	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
a)	LILO of both circuits of Bongaigaon – Balipara 400kV D/c line at Rangia	400 kV, D/C	1. EPC Contract Award is expected byDec'2022. 2. Tender preparation is completed and is to be reviewed by AIIB	Mar'26 (36 months form date of Award)
II	**Khumtai**	400/220/132kV, 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	May'2026

			been award to M/S RS infra-PVT tech ltd.	
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 8thjune 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 BiswanathChariali – Itanagar 132kV D/c line(line works underISTSthrough 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	JV formation, between PGCIL and STU by Mar'23	12 months from Date of Award
a)	LILO of both circuits of Surajmaninagar (ISTS) – Palatana 400kV D/c lineatSurajmaninagar (TSECL) S/s	400kV D/c	All works except 400kV termination at Surjamaninagar(TSECL) by POWERGRID to be done. Balance works under separate contract.	LILO completed for 400kV ckt 2 (by PGCIL) without bay readiness, LILO has been charged.Total completion subjected to

				Sub-station readiness at Surajmaninagar
C	**NEEPCO (to be implemented by NEEPCO)**			
I	**Extension works at RanganadiHEPend**			
a)	420kV 80MVAR Bus Reactor at Ranganadi Generation Switchyard		LOA on 11.01.2022	Dec'23 (Logistics and Transportation issue)
II	**Extension works at PareHEP end**			
a)	Bypassing of LILO of Ranganadi - Naharlagun / Nirjuli at Pare HEP so as to form direct Ranganadi-Naharlagun / Nirjuli132 kV S/c line	132kV	Regarding bypassing of LILOat (a), work has been awarded in Dec, work to be completed in 4 months from LoA, The LILO portion is about2.2km & the cost estimates have been received byNEEPCO. Work awarded to M/s Sterlite	The work is being undertaken by M/s Sterlite. Shutdowns have been availed, tentative completion by July'23. Reconductoring of LILO portion is done
b)	Re-conductoring of LILO portion at Pare end (of Ranganadi - Naharlagun / Nirjuli 132kV S/c line) with HTLS (HTLS equivalentto ACSR Zebra) along with modification of 132kVbay equipment at Pare HEP	132kV		

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

SL. No.	Item for Discussion	Status as per 202ndOCCM	Latest Status
1.	Introduction of SPS in Leshka S/Sn of Meghalaya (Agenda No. C4 of 189th OCCM)	Communication with M/s Hitachi underway. M/s Hitachi not responding, NERTS to help bridge the communication gap	Same status
2.	Voltage and MVAR issues at 400kV Kameng S/Sn (Agenda No. C7 of 189th OCCM)	Discussion with OEM M/s BHEL is underway	Discussion with OEM M/s BHEL is underway. Member Secretary NERPC has written a letter

			to BHEL in this regard
3.	Difficulty in test synchronization at Ningthoukhong S/Sn (installation of line CVT) (Agenda No. C11. of 189th OCCM)		
4.	Outage of 400kV Imphal (PG) – Thoubal-I (Agenda B.15 of 184th OCCM)	RoW, litigation pending in court	RoW, litigation pending in court
5.	Charging of 33kV Khupi-Kimi line at 132kV: Recommendations of the 187th OCCM to be implemented: (a) Installation & Commissioning of PLCC and additional Wave Trap with accessories at Khupi (NEEPCO) - By Mar'22 Minutes of 188th OCC meeting held on 16th 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 188th OCCM)	End equipment for OPGW communication to be installed. The OPGW communication will be ready by 15th May'23	OPGW link to be ready by end of June. NEEPCO to complete LDP commissioning and vegetation clearance by 15th July 2023.
6.	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 190th OCCM.	Tender floated in the month of August'2022.	

7.	Grid Disturbance in Dhaligaon area of Assam Power System (C.18 of 191st OCCM)	Work for replacement and repairing of damaged earthing will start from 2nd week of May.	Work started.
8.	Occurrence of Multiple grid disturbance in Gohpur and radially connected areas of Assam Power System (C.10 of 194th OCC)	SEMmeters provided by PGCIL, both lines bays commissioned from AEGCL end. AEGCl scope of work done, Sterlite scope of work remaining	
9.	Status of Installation of TLSA in 400kV Silchar-Azara T/L & 400 kV Silchar-Byrnihat T/L (C.12 of 194th OCCM)	LoA placed, expected completion of the delivery by June'23	i)Supply of 80% of TLSA is completed, rest by the end of June'23 ii)Tendering process for finalization of the implementing agency shall be completed by July'23 iii)Accordingly, a detailed shutdown/work plan will be submitted to OCC forum in August iv)installation shall start in month of September'23
10.	PLCC & protection related issues at 132kV Tipaimukh S/s (C.15 of 194th OCC) & (C.8 of 197th OCC)	PLCC engineer to visit the SS. (MSPCL)	
11.	48V System reliability at Pasighat end (C.16 of 194th OCC)	May'23	June'23
12.	Construction of Anchor tower at location 433 by PGCIL and reconductoring of 220kV Mariani-Mariani SC with Moose conductors (B.16 of 196th OCCM)	Shutdown to be taken, WIP	Shutdown not yet provided.
13.	Commissioning of 400kV Bus-B at Ranganadi Power Station (C.14 of 192ndOCCM)	In 193rd OCCM, forum requested NEEPCO to put forth agenda for upgradation of 400 kV switchyard to GIS and implementation of 400 kV Bus–B together. To be done under R&M of the	To be done under R&M of the station, after 2027.

		station, after 2027.	
14.	Implementation of Bus Bar Protection at 132 kV Kahilipara (AEGCL) Substation (C.8 of 196th OCCM)	Estimate submitted for procurement of CT available with core for Bus bar protection.	Same status
15.	Furnishing of data as per Detailed Procedure on interim methodology for estimation of Reserves under CERC (Ancillary Services) Regulations, 2022(item C.4 pf 198th OCCM)	NERLDC thanked SLDC Nagaland for furnishing the data for estimation of reserves. Other NER states assured to provide the data at the earliest. NERLDC mentioned that the states may contact Manager NERLDC for clarifications (if any).	Same status
16.	TLSA installation on 132kV Leshka-Khleihriat DC	DPR submitted to PSDF secretariat	Same status
17.	400 kV GT-1 &Silchar 1 Tie Bay at OTPC is under outage from 31/12/2022. 400 kV GT-2 & 400/132 kV ICT 2 Tie Bay at OTPC is under outage from 10/02/2023	Faulty LBB relays, under procurement, tentatively restoration by end of June'23	Faulty LBB relays, under procurement, tentatively restoration by end of Aug'23
18.	Installation of Line differential protection in Rokhia-N.Rokhia line	CBs for LDP of Rokhia- N. Rokhia line has to be procured. Further, DPR prepared, Tender to be floated soon.	Tendering process underway,
19.	Upgradation of 132kV Jiribam-Loktak line. Upgradation of jumper conductor to suitable ampacity and installation of CT of ratio 800/1 at Loktak HEP		
20.	Reconductoring of Umiam stg I stg III, upgradation of CT ratio to 800/1	MePGCL to divert the suitable CT from other substations	MePGCL to divert the suitable CT from other substations
21.	Restoration of tower no. 3 and 12 of LILO of Nirjuli-Dikrong Transmission line to Lekhi Substation (B.23. of 193rd OCCM)	In 193rd OCCM, AE, SLDC Arunachal Pradesh reiterated that restoration work may go up to March'23subject to receding of water of Dikrong river. CGM(AM),NERTS reminded the forum that restoration of the original LILO section is	Tower locations in spate of floods. Works stalled. Expected completion by March 2024

		required before Dec'22 (or Jan'23) according to ultimatum given by Railways for diversion project. SLDC Arunachal Pradesh may intimate latest update.	
22.	Long Outage of 400/220 kV ICT-3 at Byrnihat S/S (B.22. of 202nd OCCM)	MePTCL stated that the vendor has provided the quotation and the same has been sent for approval of higher management	Work order placed, to be completed within 45 days if weather permits. (July end)
23.	Proposal of SPS Scheme to disconnect Bangladesh load on overloading of 132 kV Surajmaninagar (ISTS) - Surajmaninagar(TSECL) line. (C.3 of 202nd OCCM)	SLDC Tripura may update the status	Item referred to 24th TCC/RPC meeting

E. METERING ITEMS

E.1. Issues regarding SEM Data Processing:

a. Non-receipt of SEM data from 132 kV Pailapool Substation:

Weekly SEM data of 132 kV Pailapool (As) Substation is important for accounting of Assam drawl. However, SEM data from the said substation is not being received.
In 202nd OCCM, Assam representative informed that PGCIL has taken the DCD from 132 kV Pailapool Substation for rectification and will be delivered within 15 days.

Status may be reviewed.

Deliberation of Sub-Committee

PGCIL informed that rectified DCD has been already despatched and is in transit.

Sub-committee noted as above

Action: PGCIL

b. Non-receipt of SEM data from 132 kV Rengpang (Man) Substation:

Weekly SEM data of 132 kV Rengpang (Man) Substation is important for accounting of Manipur drawl. However, SEM data from the said substation is not being received. Issue with CMRI has been reported by the concerned substation.

Status may be reviewed.

Deliberation of Sub-Committee

Agenda could not be discussed as there was no representation from SLDC, Manipur

Sub-committee noted as above

E.2. 2. 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	TIME DRIFT
1	POWERGRID	400 kV MISA END OF SILCHAR 1	NP-9928-A	4 mins
2	POWERGRID	400 kV MISA END OF SILCHAR 2	NP-9929-A	7 mins
3	ASSAM	132 kV AGIA END OF NANGALBIBRA	NP-9920-A	6 mins
4	ASSAM	220 kV BTPS-NTPC 1	NP-9647-A	7 mins
5	ASSAM	220 kV BTPS-NTPC 2	NP-5318-A	8 mins

Status may be reviewed.

Deliberation of Sub-Committee

POWERGRID apprised the forum that time drift for sl no.1 &2 had been corrected. SLDC, Assam informed that they were yet to rectify the time drift for sl.no.3,4,5

Sub-committee noted as above

Action: SDLC, ASSAM

E.3. Procurement of SEMs for future requirements:

In 202nd OCCM, forum approved the proposal of procurement of 60 SEMs to fulfil the requirement for the upcoming transmission elements. Further the forum noted that the new meters, to be procured, should be compatible with the existing DCDs.

Deliberation of Sub-Committee

CTU informed the forum that procurement of 60 SEMs is in process. The procurement shall be as POWERGRID's standard practice. Required arrangement for meter data downloading shall be taken care during installation of IEMs. As suggested by forum, CTU agreed to make necessary arrangement at site for downloading the meter data with existing DCD during installation period.

Sub-committee noted as above

Action: CTU

Annexure - I

Annexure-I

List of Participants in the 203rd OCC Meeting held on 15.06.2023

SN	Name & Designation	Organization	Contact No.
1	**No Representative**	**Ar. Pradesh**	
2	Sh. Md. Maswood Naser, CGM, SLDC	Assam	-
3	Sh. Jayashree Devi, GM (M&PR), AEGCL	Assam	09854076553
4	Sh. Debashish Choudhary, DGM, AEGCL	Assam	0943573546
5	Ms. Toushita Jigdung, AGM, SLDC	Assam	09707135351
6	Sh. Himangshu Das,AGM,APGCL	Assam	09435477842
7	**No Representative**	**Manipur**	
8	Sh. L.Lymdem, SE(T&T), MePTCL	Meghalaya	09402301646
9	Sh. M.K. War, EE, SLDC	Meghalaya	09774012496
10	Sh. D.J.Lyngdoh, EE (SM), MePTCL	Meghalaya	-
11	**No Representative**	**Mizoram**	**-**
12	Sh. David Tungoe, SDO, SLDC,	Nagaland	08787776157
13	Sh. Shuwatho Katiry,JE,SLDC	Nagaland	07005584689
14	Sh.Debabrata Pal,Sr.Manager, TSECL	Tripura	09436500244
17	Sh. Joypal Roy, GM	NEEPCO	08837200069
18	Smt. Mamani Talukdar, DGM	NEEPCO	09435339690
19	Sh. N. Roy, ED	NERLDC	09869080265
20	Sh. S.C De, Sr.GM	NERLDC	09436335369
21	Sh. Sourav Mandal, Manager	NERLDC	09402102354
22	Smt. Kritika Debnath,Asst. Manager	NERLDC	09436930830
23	Sh. Ratul Sarma,Manager	NERLDC	09859011229
24	Sh. P.Kanungo, CGM (AM)	PGCIL	09436302823
25	Sh. Ankit Vaish, DGM	PGCIL	0940305725
26	Sh. Pranjal Gogoi, Chief Manager	PGCIL	06900030956
27	Sh. Raktim Konwar, Manager	PGCIL	09678682358
28	Sh. Sanjib Pal, SH-PME	OTPC	09436583737
29	Sh. Niranjan Rabha, AM	NETC	07002022736
30	**No Representative**	**NHPC**	-
31	Sh. M.Murali Mohan, DGM	NTPC	09440901781
32	**No Representative**	**KMTL**	
33	**No Representative**	**INDIGRID**	
34	**No Representative**	**STERLITE**	
35	Smt. Sangita Sarkar, Chief Manager	CTU	09560850202

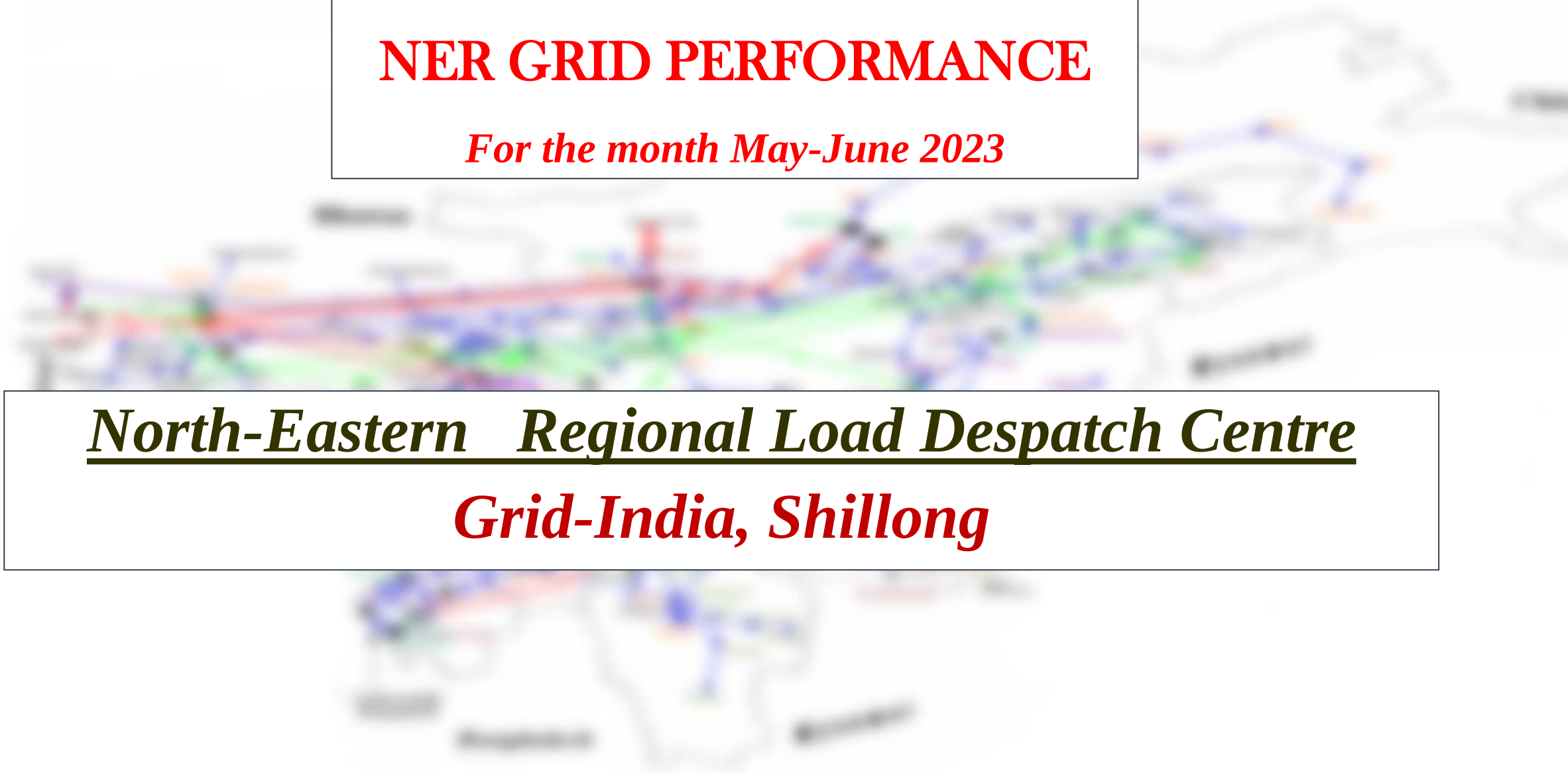
36	Ms. Chayanika Das, AM	NERPSIP	08486161373
37	Sh. K.B. Jagtap, Member Secretary	NERPC	09436163419
38	Sh. S.M. Aimol, Director	NERPC	08974002106
39	Sh. Shaishav Ranjan, DD/EE	NERPC	08787892650
40	Sh. Vikash Shankar, AD-I	NERPC	09455331756
41	Sh. Ashim Kr.Goswami, AD-II	NERPC	08638966481

Annexure B.1

उ.पू.क्षे ग्रिड प्रदर्शन

NER GRID PERFORMANCE

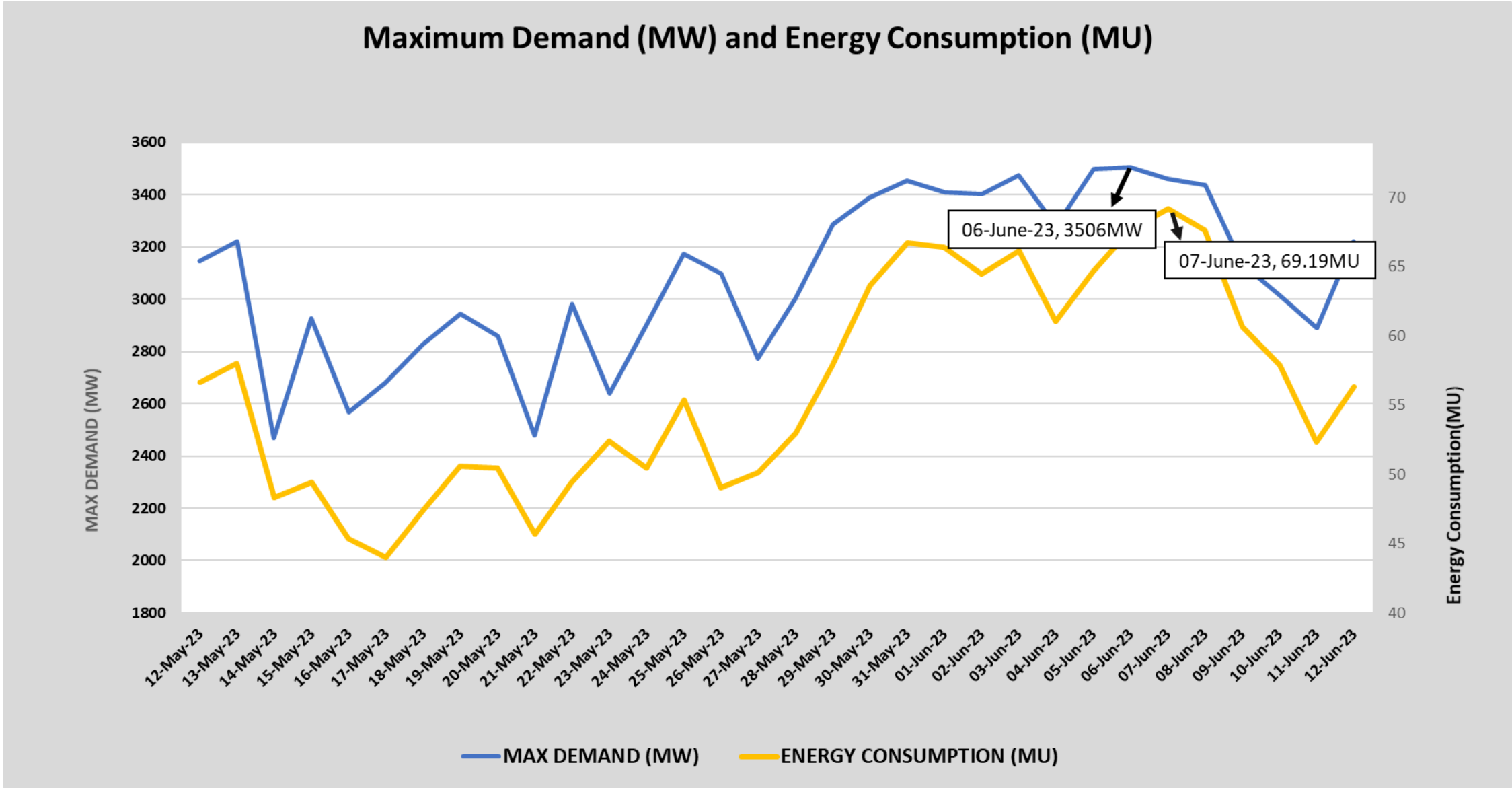
For the month May-June 2023



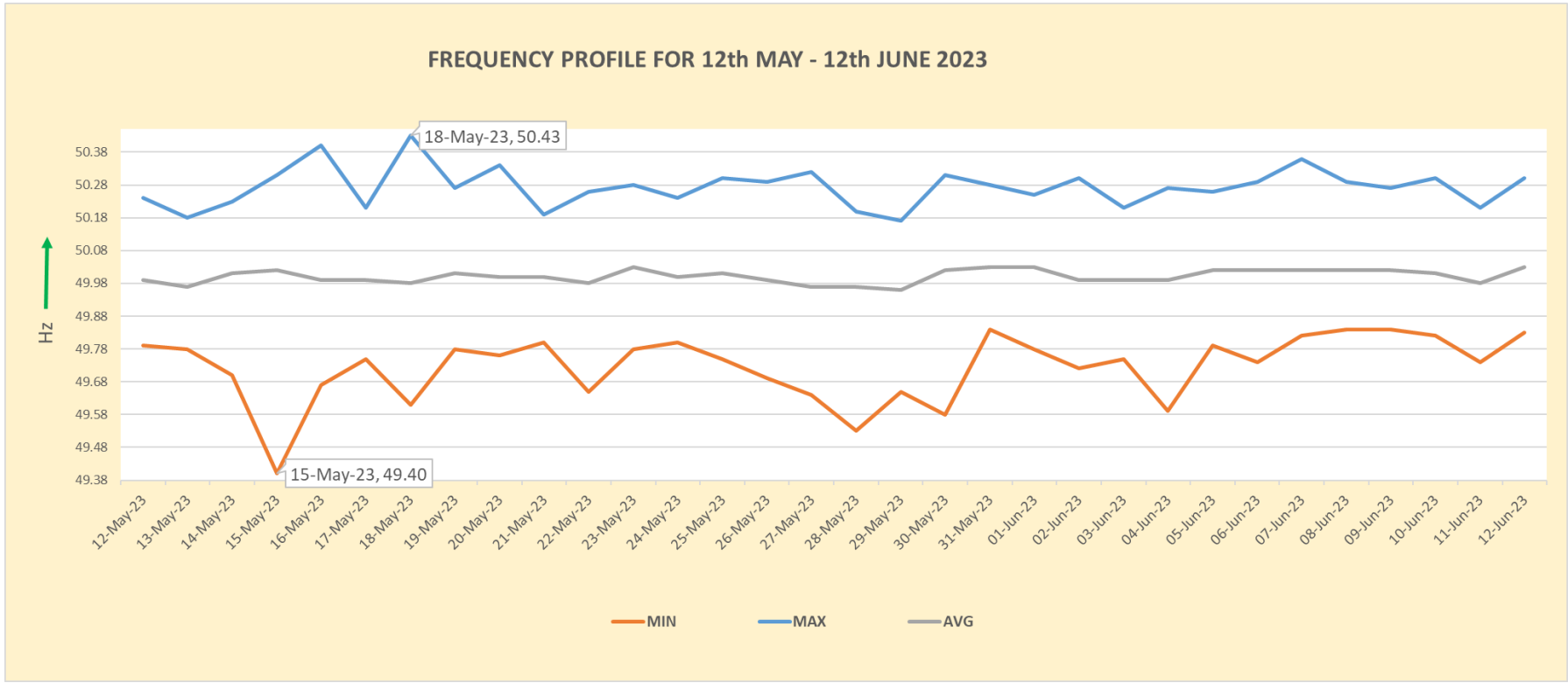
North-Eastern Regional Load Despatch Centre

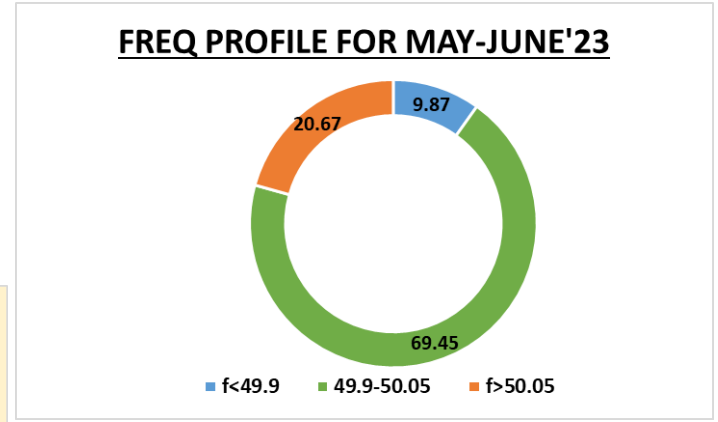
Grid-India, Shillong

Maximum MW and MU in NER: 12th May – 12th June 2023



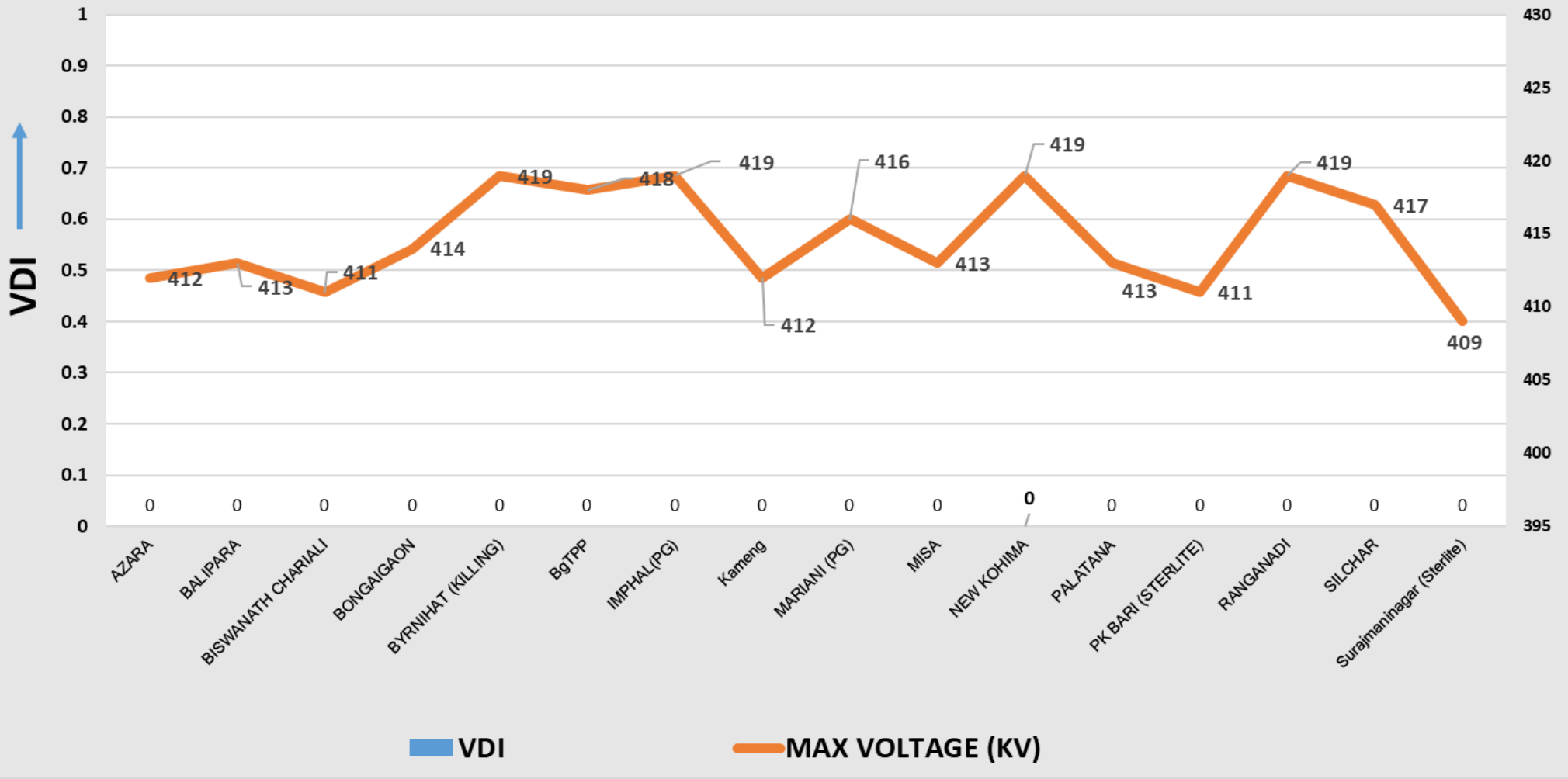
Frequency Profile



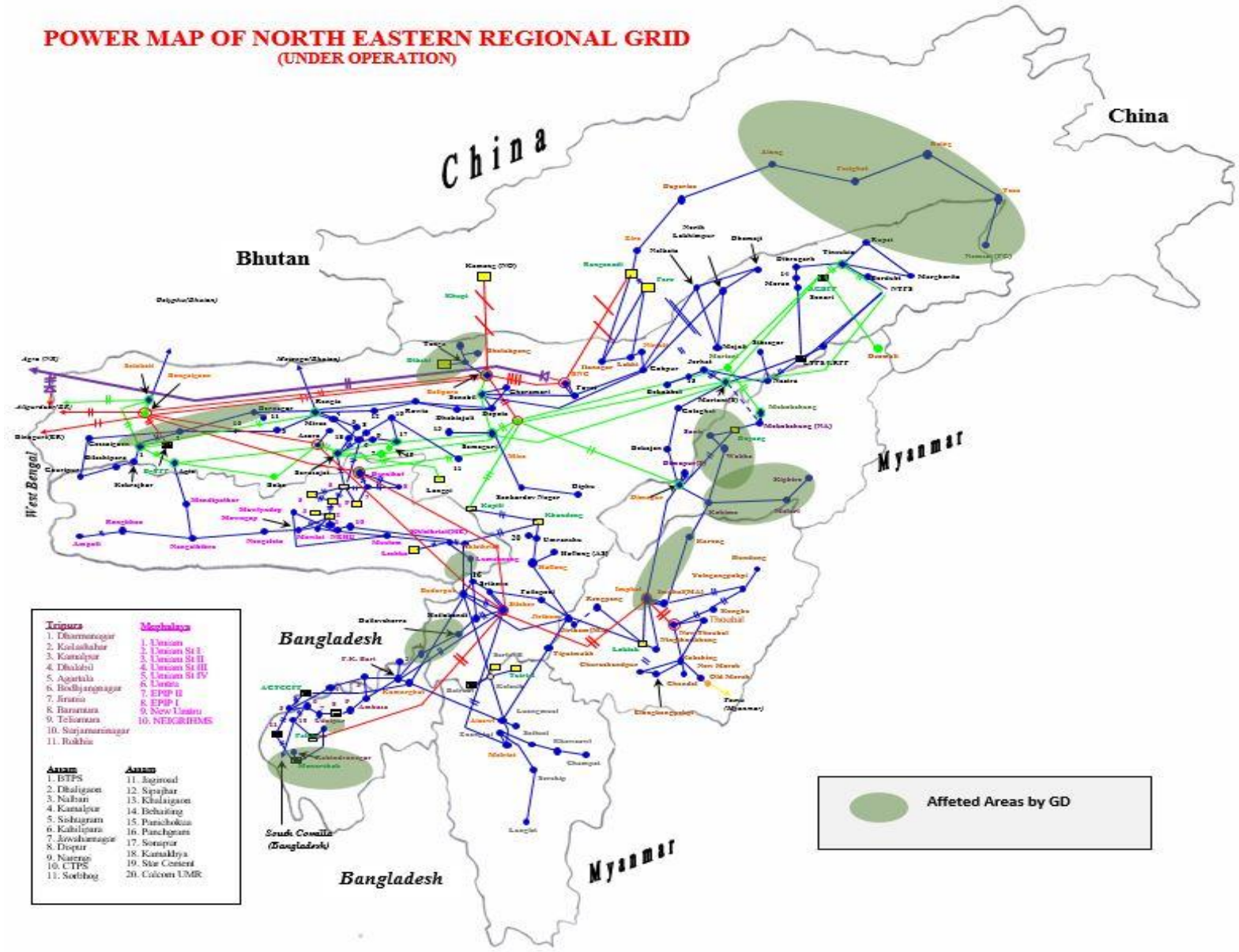


VDI (400 KV) FOR 12th May - 12th June 2023

No. of 400 kV lines kept open for over voltage : 0



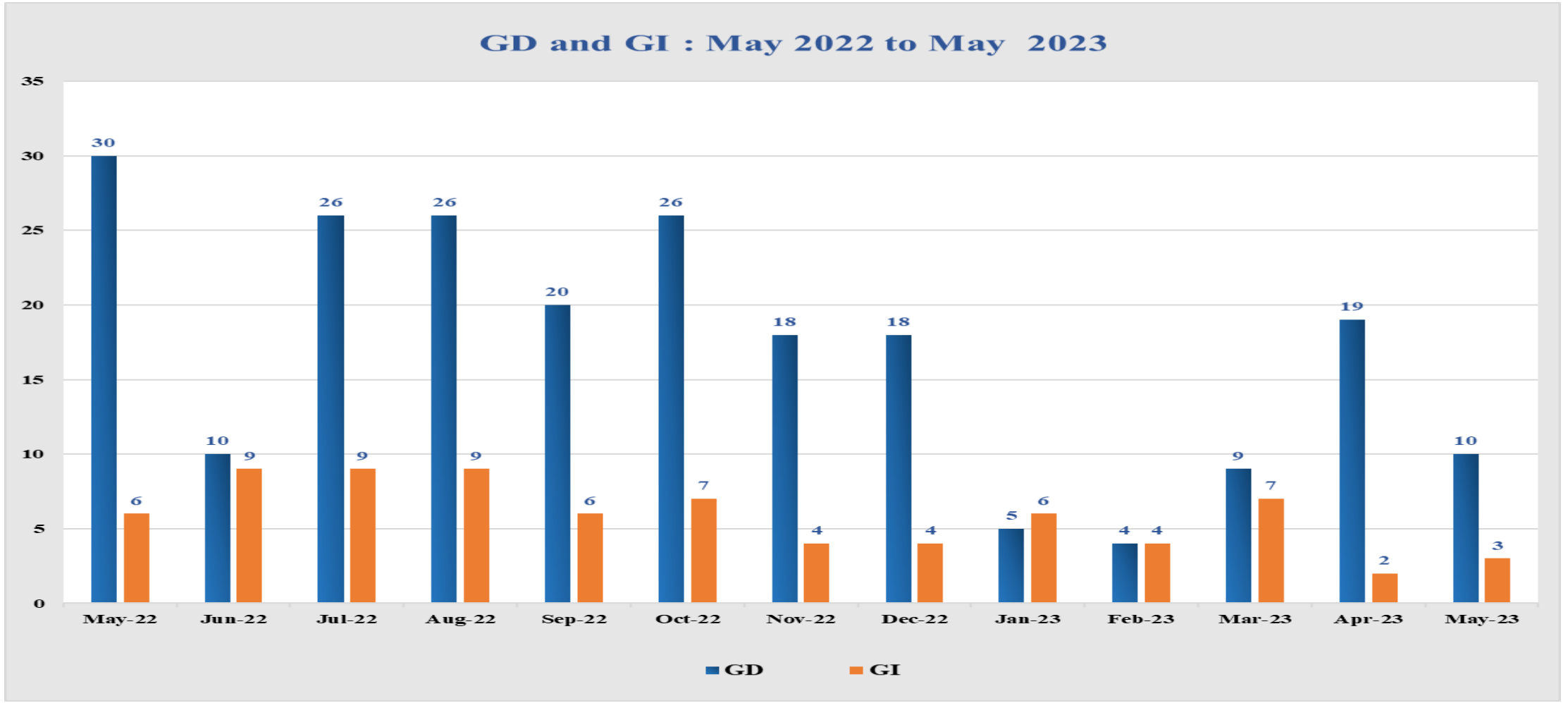
Grid Disturbance during MAY 2023



No. of GD	10
No. of GI	3

Sl. No.	Element	Number of times
1	132 kV Along - Daporijo Line	caused GD 1 time
2	132 kV Along - Pasighat Line.	caused GD 1 time
3	132 kV BTPS(AS) - Dhaligaon D/C Lines	caused GD 1 time
4	132 kV Balipara - Tenga Line	caused GD 1 times
5	132 kV Dharmanagar - PK Bari & 132 kV Dharmanagar - Dullavchera Lines	caused GD 1 time
6	132 Kv Dimapur-Kohima Line	caused GD 1 time
5	132 kV Palatana - Udaipur line 132 kV Monarchak-Udaipur line	caused GD 1 time
6	132 kV Doyang-Sanis line 132 kV Imphal (Yurebam) -Gamphazol- Karong	caused GD 1 time
7	132 kV Khleihriat-Lumshnong Line	caused GD 2 time

Grid Disturbance/Incidences for last 12 Months



Projected Hydro Generation Availability

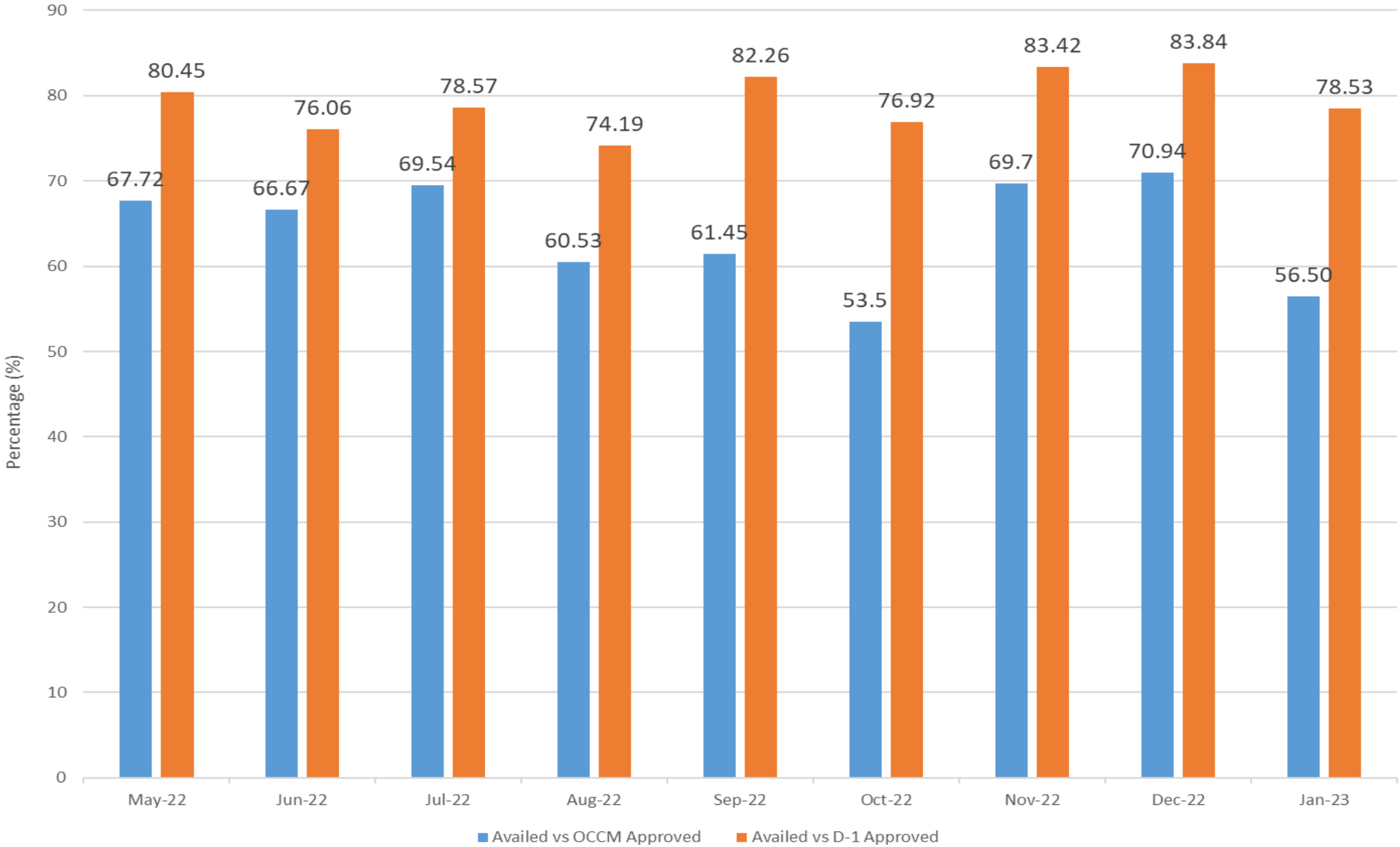
Plants	Reservoir Level in meters (as on 14/06/2023)	MU Content	Present DC (MU)	No of days as per current Generation
Khandong + Kopili STG II	-	-	-	-
Kopili	-	-	-	-
Doyang	306.80	1	0.14	20
Loktak	766.47	8	0.018	62

OCC approved shutdown availing status for the month of May 2023

SUMMARY OF NER OUTAGE						
MONTH	PLANNED IN OCC	APPROVED IN D-1	AVAILED IN REAL TIME	AVAILED VS PLANNED	AVAILED VS APPROVED	DEFFERED BY RLDC DUE TO SYSTEM CONSTRAINT
May-23	117	91	70	59.83%	76.92%	0

	OCC Approved	D-1 Approved	Availed	Not Availed	RLDC Deferred
NER	117	91	70	21	16
NERTS	50	39	29	10	8
ASSAM	50	41	34	7	5
MANIPUR	0	0	0	0	0
MEGHALAYA	4	3	2	1	0
NAGALAND	0	0	0	0	0
MIZORAM	3	3	2	1	0
TRIPURA	0	0	0	0	0
ARUNACHAL PRADESH	0	0	0	0	0
NETC	0	0	0	0	0
KMTL	0	0	0	0	0
NEEPCO	2	2	2	0	0
NTPC	1	0	0	0	1
OTPC	2	2	1	1	0
INDIGRID	2	0	0	0	2
NHPC	3	1	0	1	0

Approved Shutdown availing trend in percentage



RMSE of Load forecast for May'23

RMSE of the forecasted Demand by SLDCs Vs Actual Demand met as per SEM by SLDCs (as per IEGC c1.5.3):

$$RMSE = \sqrt{\frac{\sum_{i=1}^{N} (Predicted_i - Actual_i)^2}{N}}$$

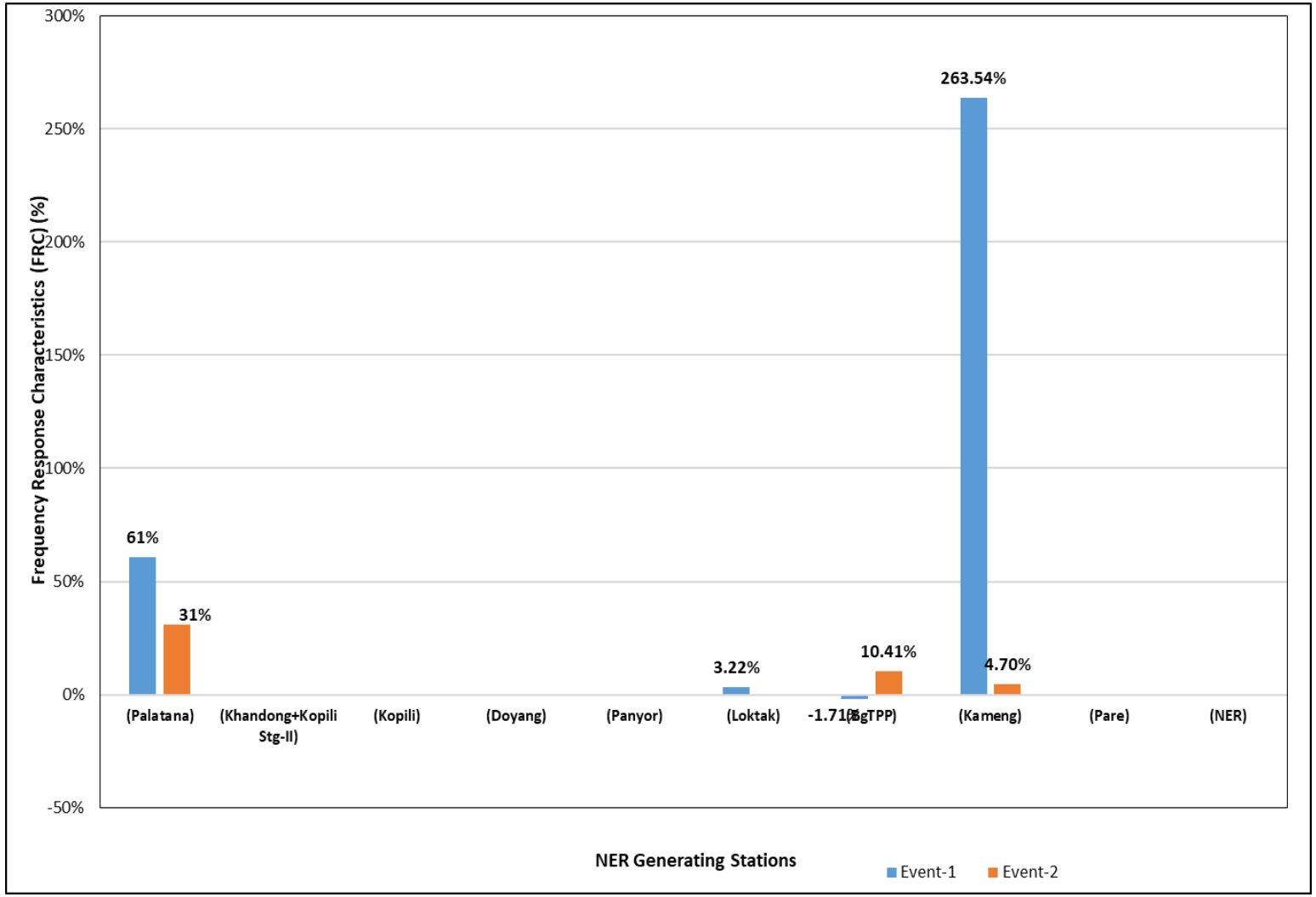
Where,
Predicted$_i$ = Forecasted Value
Actual$_i$ = Actual value
N = Total number of observations.

	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
Median	14	12	13	17	22	13	17

FRC of NER Generating Stations for the month of May, 2023:

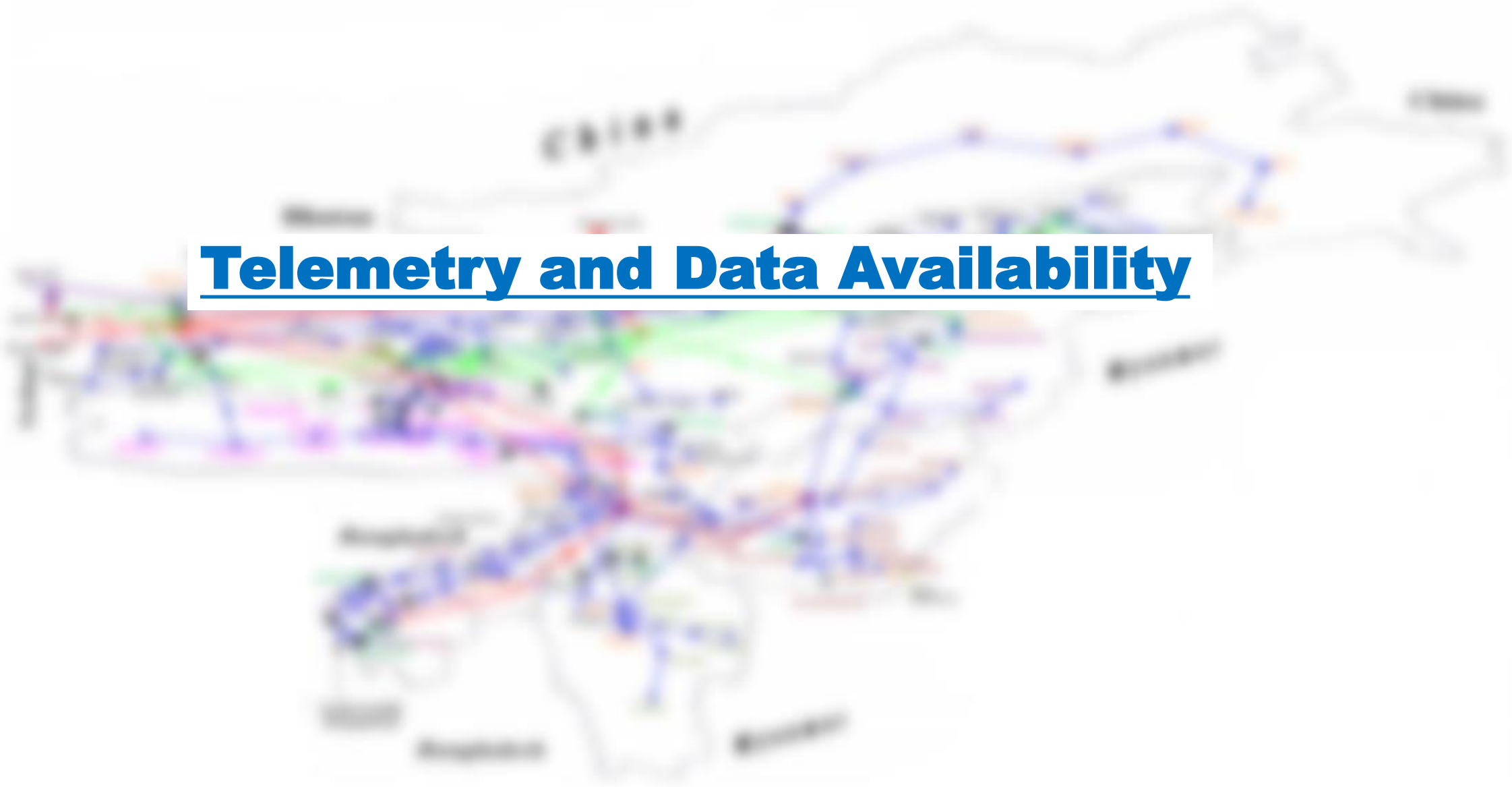
Event-1: Generation loss of around 1100 MW , 765 KV AJMER(PG)-PHAGI(RS) (PAPTL) CKT-1 ,765 KV FATEHGARH_II(PG)-BHADLA(PG) (FBTL) CKT-1, 765 KV AJMER-BHADLA_2 (PG) CKT-1 of Northern Region tripped on over-voltage, on dated 01st May, 2023 at 13:23 Hrs.

Event-2: Generation loss of around 7120 MW at Rajasthan of Northern Region , renewal generation complex due to multiple trippings, on dated 15th May, 2023 at 11:51 Hrs.



*Generation Stations not in service during the both the event.

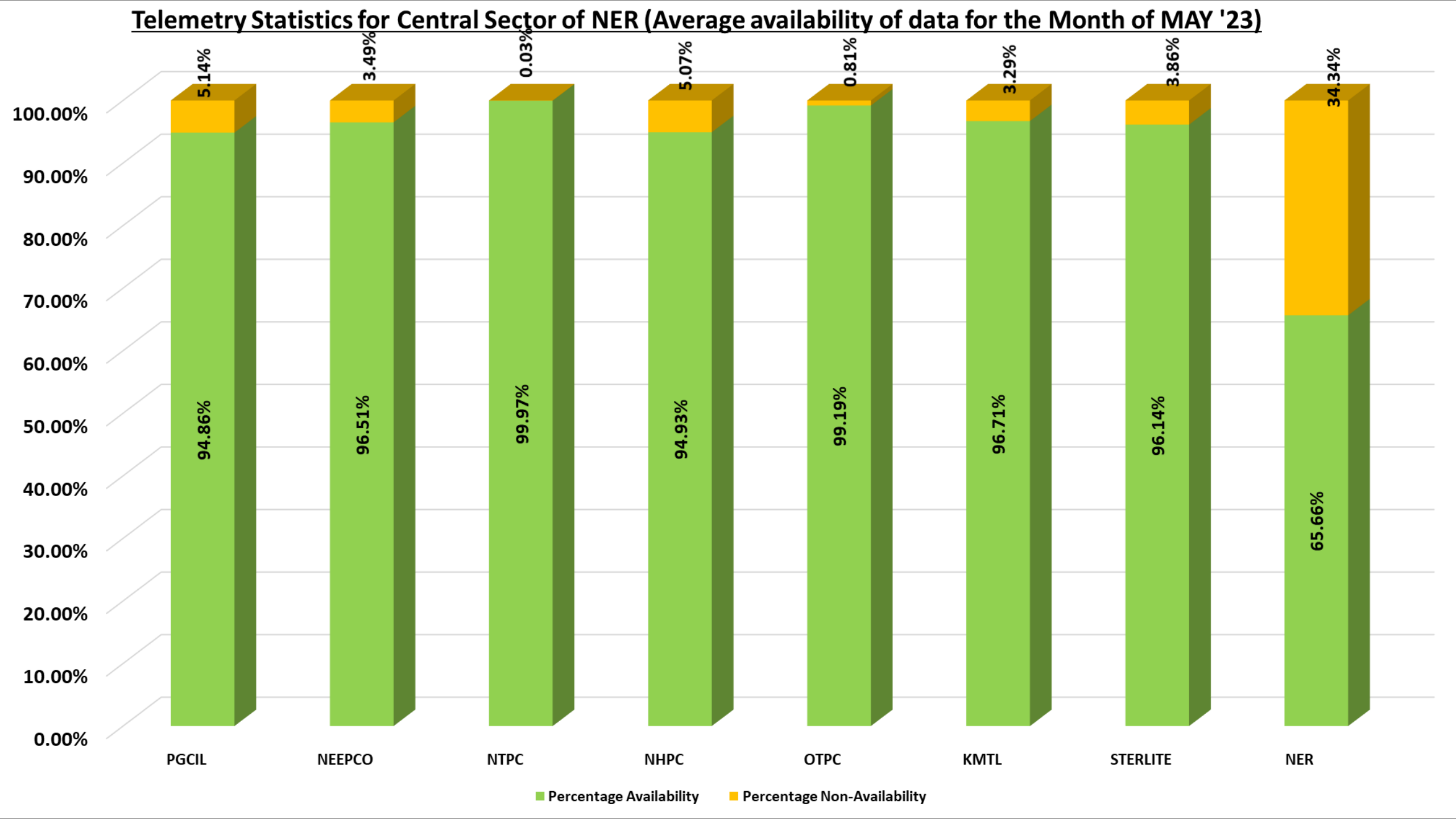
Telemetry and Data Availability



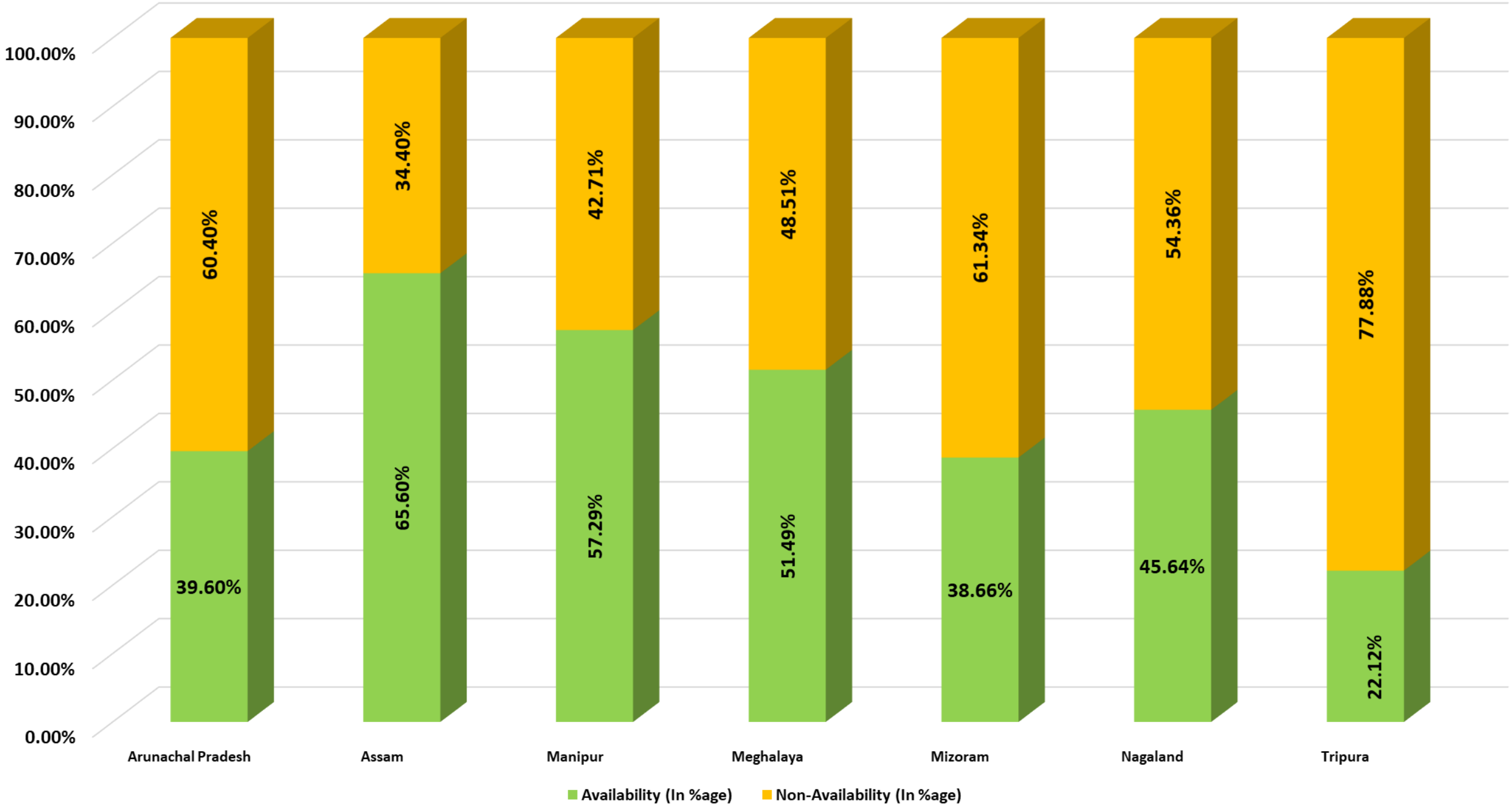
Telemetry Statistics for the Month of MAY 2023

Sl. No.	Utility	Average Total Percentage	Instantaneous Maximum of Total percentage	Average Analog Percentage	Average Digital Availability	Average RTU Availability
1	PGCIL	94.86	98.33	94.44	95.07	93.20
2	NEEPCO	96.51	95.56	92.82	98.92	99.81
3	NTPC	99.97	100.00	99.97	99.97	99.97
4	NHPC	94.93	98.15	88.49	93.95	88.49
5	OTPC	99.19	100.00	99.97	98.83	99.97
6	KMTL	96.71	100.00	97.01	96.57	99.97
7	IndiGrid	96.14	100.00	94.63	96.78	99.00
8	Arunachal Pradesh	39.60	56.86	47.45	34.19	50.62
9	Assam	65.60	73.29	65.85	65.42	74.40
10	Manipur	57.29	72.22	59.75	55.83	63.20
11	Meghalaya	51.49	57.37	70.46	37.27	79.97
12	Mizoram	38.66	44.72	48.26	30.67	66.37
13	Nagaland	45.64	56.88	36.47	52.77	35.95
14	Tripura	22.12	24.91	29.69	16.73	33.84
	NER	65.66	70.36	66.58	65.06	68.44

Telemetry Statistics for Central Sector of NER (Average availability of data for the Month of MAY '23)



Telemetry Statistics for NER States(Average availability of data for the Month of MAY '23)



Thank You

Annexure B.2

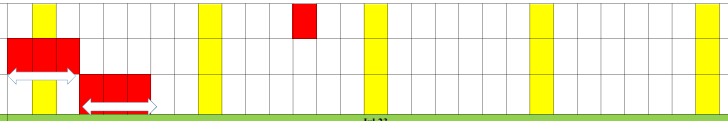
Shutdown Approved for the month of July 2023

SN	Name of Element	Jul-23	Time	Reason	Category	
	SHUTDOWNS PROPOSED BY PGCIL					
	132kV Transmission lines					
1	132kV Surjamninagar - Comilla # I TL	Consent received from Tripura / Consent required from NLDC	0700Hrs to 1700Hrs	AMP of Bay, Re-alignment of Bus Side Isolator, Re-installation of LA base insulators, SD Nature Defect Rectification of Line.	Normal Maintenance related shutdown.	SD may be availed. Consent from NLDC, India and SLDC Tripura may be taken before availing the shutdown.
2	132kV Surjamninagar - Comilla # II TL	Consent received from Tripura / Consent required from NLDC	0700Hrs to 1700Hrs	AMP of Bay, Re-alignment of Bus Side Isolator, Re-installation of LA base insulators, SD Nature Defect Rectification of Line.	Normal Maintenance related shutdown.	SD may be availed. Consent from NLDC, India and SLDC Tripura may be taken before availing the shutdown.
3	132 KV Palatana - Surjamaninagar(TSECL) TL	Consent received from Tripura / Consent required from NLDC	0700Hrs to 1700Hrs	SD Nature Defect Rectification of Line & Reconfirmatory Test of CB.	Normal Maintenance related shutdown.	SD may be availed. The load of South Comilla (Bangladesh) to be kept within 100 MW to keep the Tripura Power System reliable and secure. Also, before availing the shutdown, the Bangladesh SPS 2 related to tripping of 132 kV Palatana - Surajmaninagar TL to be kept in OFF condition.
4	132KV AIZAWL - KUMARGHAT TL		0800Hrs to 1600Hrs	AMP of Kumarghat bay at Aizwal	Normal Maintenance related shutdown.	SD may be availed. 132 kV Aizawl - Tipaimukh - Jiribam link, 132 kV Aizawl - Melriat line and 132 kV Aizawl - Kolasib -Badarpur link to be kept in service. Consent from SLDC Mizoram to be taken.
5	132 kV Badarpur - Kolasib TL	Consent received from Mizoram	0800Hrs to 1600Hrs	Infringement Clearing work at Loc- 191-192,231-232 and Birdguard Fixing at Loc-94 under Badarpur	Normal Maintenance related shutdown.	The SD may be availed subject to availability of 132 kV Aizawl-Kolasib, 132 kV Aizawl - Melriat line, 132 kV Aizawl - Tipaimukh-Jiribam link and 132 kV Aizawl - Kumarghat line. Consent from SLDC Mizoram required.
6	132 kV Karimganj - Kumarghat TL	Consent received from Assam	0800Hrs to 1600Hrs	For Infringement Clearing work at Loc-231-244 under Badarpur	Normal Maintenance related shutdown.	SD may be availed. 132 kV Badarpur - Karimganj line to be kept in service. Consent from SLDC Assam required.
7	132kV Badarpur - Khliehriat TL	Not Approved in 203rd OCCM	0800Hrs to 1600Hrs	For Firmware upgradation of Micom P442 distance relay at Badarpur & Khlerihat	Existing system improvement related shutdown.	SD may be deferred till restoration of Misa - Kopili - Khandong link.
8	132kV Khandong - Khliehriat - I TL	Intimation to NEEPCO	0800Hrs to 1600Hrs	OPGW installation work under reliable communication Scheme. Old OPGW wire to be replaced.	Existing system improvement related shutdown.	SD may be availed subject the availability of 132 kV Khandong - Khliehriat II TL and 132 kV Jiribam - Haflong - Umrangshu - Khandong link. Consent from NEEPCO to be taken
9	132kV Dimapur-Doyang - I TL	Intimation to NEEPCO	0900Hrs to 1600Hrs	Re-aglignment of Line Side Arcing Horn	Existing system improvement related shutdown.	SD may be availed. 132 kV Dimapur - Doyang II to be kept in service.
10	132kV Dimapur-Doyang - II TL	Intimation to NEEPCO	0900Hrs to 1600Hrs	Re-aglignment of Line Side Arcing Horn and Earthing of Double Peak tower at Locations 271-274	Existing system improvement related shutdown.	SD may be availed. 132 kV Dimapur - Doyang I to be kept in service.
11	132kV Silchar - Badarpur - 1		0900Hrs to 1600Hrs	Rectification of Bus Isolator and AMP of Bay equipments at Silchar end	Normal Maintenance related shutdown.	SD may be availed. Other circuit to be kept in service. Leshka generation to be maximized.
12	132kV Silchar - Srikona - 1	Consent received from Assam	1300Hrsto 1600Hrs	Rectification of Bus Isolater at Silchar end	Normal Maintenance related shutdown.	SD may be availed subject to availability of 132 kV Silchar-Srikona II
13	A/R of 132kV Dimapur-Doyang - I TL		0900Hrs to 1600Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for work in other circuit	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
14	A/R of 132kV Dimapur-Doyang - II TL		0900Hrs to 1600Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for work in other circuit	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
15	A/R of 132kV Khandong - Kopili - I TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
16	A/R of132kV Khandong - Kopili - II TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
17	A/R of132kV Badarpur - Khliehriat TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
18	A/R of132kV Khandong - Khliehriat - I TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
19	A/R of132kV Khandong - Khliehriat - II TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
		Jul-23			Category	
	220kV Transmission lines					
20	220 kV Misa-Samaguri #1 TL	Consent received from Assam	0800Hrs to 1600Hrs	AMP Work at Misa end	Normal Maintenance related shutdown.	Will be reviewed as 220 kV Balipara - Sonabil 2nd ckt and HTLS of 220 kV Azara - Sarusajai D/C is expected before the proposed date.
21	220kV New Mariani - Old Mariani(AEGCL)	Consent received from Assam / Intimation to NEEPCO	0700Hrs to 1600Hrs	Anchor tower stringing work	Existing system improvement related shutdown.	Considering N-1 contingency of 220 kV AGBPP - New Mariani (PG) line, Upper Assam Power Flow is to be maintained within 260 MW (during solar period) and 250 MW (during non-solar period). Consent from SLDC Assam and NEEPCO to be taken before availing the shutdown.
22	A/R of 220kV New Mariani - Kathalguri		0700Hrs to 1800Hrs	For PID Scanning works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
23	A/R of 220kV Old Mariani - Kathalguri		0700Hrs to 1800Hrs	For PID Scanning works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
24	A/R of 220kV Misa - Dimapur - 1 TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
25	A/R of 220kV Misa - Dimapur - 2 TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
26	A/R of 220kV Misa - Kopili - 1 TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
		Jul-23			Category	
	400kV Transmission lines					
27	400 kV Silchar - PK Bari-1 TL	Intimation to Indigrid	0800Hrs to 1600Hrs	For Firmware upgradation of Micom P442 distance relay at Silchar end	Existing system improvement related shutdown.	SD may be availed. 400 kV Silchar - PK Bari 2 TL and 400 kV Palatana - SM Nagar - PK Bari link to be kept in service.
28	400 kV Silchar - PK Bari-2 TL	Intimation to Indigrid	0800Hrs to 1600Hrs	For Firmware upgradation of Micom P442 distance relay at Silchar end	Existing system improvement related shutdown.	SD may be availed. 400 kV Silchar - PK Bari 1 TL and 400 kV Palatana - SM Nagar - PK Bari link to be kept in service.
29	400kV Bongaigaon - Balipara # 3 TL along with LR		0900Hrs to 1600Hrs	For Buchholz trip logic modification at Balipara & Bongaigaon	Existing system improvement related shutdown.	SD may be availed. Other 3 number of circuits between Bongaigaon and Balipara to be kept in service.
30	400kV Bongaigaon - Balipara # 4 TL along with LR		0900Hrs to 1600Hrs	For Buchholz trip logic modification at Bongaigaon	Existing system improvement related shutdown.	SD may be availed. Other 3 number of circuits between Bongaigaon and Balipara to be kept in service.
31	400kV Bongaigaon - Brynihat TL along with LR	NER-ER ATC/TTC to be revised / Consent received from Meghalaya	0900Hrs to 1600Hrs	For Buchholz trip logic modification at Bongaigaon	Existing system improvement related shutdown.	Under the condition of the shutdown of the element, NER-ER TTC/ATC will be revised. About 200 MW reduction is expected. The shutdown is subject to the expected load-generation pattern during the period of the shutdown as well as completion of 220 kV Balipara - Sonabil 2nd circuit.
32	400kV Bongaigaon - Azara TL along with LR	NER-ER ATC/TTC to be revised / Consent received from Assam	0900Hrs to 1600Hrs	For Buchholz trip logic modification at Balipara & Bongaigaon	Existing system improvement related shutdown.	Under the condition of the shutdown of the element, NER-ER TTC/ATC will be revised. About 200 MW reduction is expected. The shutdown is subject to the expected load-generation pattern during the period of the shutdown as well as completion of 220 kV Balipara - Sonabil 2nd circuit.
33	400kV Bongaigaon - Balipara # 1 TL along with LR		0900Hrs to 1600Hrs	For Buchholz trip logic modification at Balipara & Bongaigaon	Existing system improvement related shutdown.	SD may be availed. Other 3 number of circuits between Bongaigaon and Balipara to be kept in service.
34	400 KV Silchar-Palatana - 1 TL along with LR	Intimation to OTPC	0900Hrs to 1600Hrs	Rectification of 412 CB. Changing of mechanism box, PLCC End to End testing, Bird guard fixing in Wave Trap and For PSL modification of LR and testing	Existing system improvement related shutdown.	SD may be availed.400 kV Silchar-Palatana 2 to be in service. SPS related to tripping of 400 kV Silchar - Palatana D/C to be kept OFF. 400 kV Palatana - SMNagar - PK Bari - Silchar link to be kept in service.
35	A/R of 400kV Misa - New Mariani - 1 TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
36	A/R of 400kV Misa - New Mariani - 2 TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
37	A/R of 400 KV Balipara - Bongaigaon - 1 TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
38	A/R of 400 KV Balipara - Bongaigaon - 2 TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
39	A/R of 400 KV Silchar-Palatana - 1 TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode
40	A/R of 400 KV Silchar-Palatana - 2 TL		0700Hrs to 1800Hrs	Auto Reclosure Switch to be kept in Non-Auto Mode for OPGW Stringing Works	Existing system improvement related shutdown.	A/R may be kept in Non-Auto Mode

		Jul-23																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			Category	
	132 kV Badarpur SS																																			
41	132kV Main Bus at Badarpur																Not Approved in 203rd OCCM																0800Hrs to 1600Hrs	AMP of Main Bus	Normal Maintenance related shutdown.	SD may be deferred until Misa - Kopili - Khandong link is available and sufficient Internal Generation of Meghalaya is available.
	220 kV Mokokchung SS																																			
42	220/132kV 30MVA ICT-1 at 220kV Mokokchung																							Consent received from Nagaland									0800Hrs to 1600Hrs	For Buchholz trip logic modification at Mokokchung	Existing system improvement related shutdown.	SD may be availed. Other 2 ICTs at Mokokchung to be kept in service. Also, all tie lines of Nagaland State to be kept in service.
43	220/132kV 30MVA ICT-2 at 220kV Mokokchung																							Consent received from Nagaland									0800Hrs to 1600Hrs	For Buchholz trip logic modification at Mokokchung	Existing system improvement related shutdown.	SD may be availed. Other 2 ICTs at Mokokchung to be kept in service. Also, all tie lines of Nagaland State to be kept in service.
44	220/132kV 30MVA ICT-3 at 220kV Mokokchung																							Consent received from Nagaland									0800Hrs to 1600Hrs	For Buchholz trip logic modification at Mokokchung	Existing system improvement related shutdown.	SD may be availed. Other 2 ICTs at Mokokchung to be kept in service. Also, all tie lines of Nagaland State to be kept in service.
	220 KV Dimapur SS																																			
44	132 KV Bus -1 (will cause outage of Kohima & Dimapur-2 Feeder) at Dimapur																							Consent received from Nagaland									0800Hrs to 1600Hrs	Testing of Bus-Coupler Bay and SF6 leakage testing in 132kV Bus-I	Existing system improvement related shutdown.	SD may be availed.132 kV Karong-Kohima,132 kV Kohima-Chiephobozou and 132 kV Kohima-Wokha to be in service. Also, consent to be obtained from SLDC Nagaland as Dimapur(NA) will be fed via 132 kV Dimapur (PG) - Dimapur (NA) link 1 only
44	10 MVA ICT-3 at 220kV Dimapur																																CSD 0800Hrs to 1600Hrs	Reolacement of HV Bushing CT Terminal Plate	Existing system improvement related shutdown.	SD may be availed. Other 2 ICTs at Dimapur (PG) to be kept in service.
	400kV Bongaigaon SS																																			
45	400kV Bus Reactor # 5 Main Bay at Bongaigaon																																0900 Hrs to 1600Hrs	AMP of Bay Equipments	Normal Maintenance related shutdown.	SD may be availed subject to no outage of elements. ICT#2 is shares dia with 400 kV Bus Reactor # 5.
46	400kV ICT#2 & BR#5 tie bay at Bongaigaon																																0900 Hrs to 1600Hrs	AMP of Bay Equipments	Normal Maintenance related shutdown.	SD may be availed subject to no outage of elements.
47	400kV ICT#2 Main bay at Bongaigaon																																0900 Hrs to 1600Hrs	AMP of Bay Equipments	Normal Maintenance related shutdown.	SD may be availed subject to no outage of elements. ICT#2 is shares dia with 400 kV Bus Reactor # 5.
48	80MVAr Bus Reactor # 4 at Bongaigaon																																0900 Hrs to 1600Hrs	For Buchholz relay trip logic modification	Existing system improvement related shutdown.	SD may be availed. About 3 kV voltage change is expected at 400 kV Bongaigaon S/s
49	400kV 80MVAr Bus Reactor # 3 & 4 at Bongaigaon																																0900 Hrs to 1600Hrs	For Buchholz relay trip logic modification	Existing system improvement related shutdown.	SD may be availed. About 5 kV voltage change is expected at 400 kV Bongaigaon S/s
		Jul-23																																		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			Category	
	400kV Balipara SS																																			
50	400KV BUS REACTOR - 1 MAIN BAY at Balipara																																0800Hrs to 1600Hrs	AMP of Bay Equipments	Normal Maintenance related shutdown.	SD may be availed subject to no outage of elements. Bus reactor # 1 shares dia with ICT # 1 at Balipara
51	400KV BNC-3 MAIN BAY at Balipara																																0800Hrs to 1600Hrs	AMP of Bay Equipments	Normal Maintenance related shutdown.	SD may be availed subject to no outage of elements. BNC # 3 shares dia with Bongaigaon # 1 at Balipara.
52	400KV KAMENG - 2 MAIN BAY at Balipara																																0800Hrs to 1600Hrs	AMP of Bay Equipments	Normal Maintenance related shutdown.	SD may be availed subject to no outage of elements. Kameng # 2 shares dia with Bonaaigaon # 3 at Balipara.
53	315MVA 400/220KV ICT-1 at Balipara																																0800Hrs to 1600Hrs	AMP OF ICT	Normal Maintenance related shutdown.	SD may be availed subject to no outage of elements. Bus reactor # 1 shares dia with ICT # 1 at Balipara
	400kV Misa SS																																			
54	33 kV Tertiary Reactor #1 at 400kV Misa																																0800Hrs to 1600Hrs	Repairing of damaged conductor in Bay and rectification in C&R panel.	Normal Maintenance related shutdown.	SD may be availed
55	33 kV Tertiary Reactor #2 at 400kV Misa																																0800Hrs to 1600Hrs	AMP of Bay Equipments & Reactor	Normal Maintenance related shutdown.	SD may be availed
56	33 kV Tertiary Reactor #3 at 400kV Misa																																0800Hrs to 1600Hrs	AMP of Bay Equipments & Reactor	Normal Maintenance related shutdown.	SD may be availed
57	33 kV Tertiary Reactor #4 at 400kV Misa																																0800Hrs to 1600Hrs	AMP of Bay Equipments & Reactor	Normal Maintenance related shutdown.	SD may be availed
58	220 kV Main Bus-1 at Misa		Consent received from Assam, Nagaland & Meghalaya																														0800Hrs to 1600Hrs	Maintetnance of 220kV Main Bus-1 and equipments.	Normal Maintenance related shutdown.	SD may be availed. All the elements may be shifted to Bus 2. It may be mentioned to the OCC Forum that upon N-1 contingency of the other Bus, i.e. Bus 2, 220 kV Misa - Samaguri D/C, 220 kV Misa - Dimapur D/C and 220 kV Misa - Byrnihat D/C will out of service, thereby causing major reliabilty issues for Capital Area of Assam as well as for Nagaland Power System. Therefore, consent may be obtained from SLDC Assam, SLDC Nagaland and SLDC Meghalaya for availing the shutdown.
59	220 kV Main Bus-2 at Misa		Consent received from Assam, Nagaland & Meghalaya																														0800Hrs to 1600Hrs	Maintetnance of 220kV Main Bus-2 and equipments.	Normal Maintenance related shutdown.	SD may be availed. All the elements may be shifted to Bus 1. It may be mentioned to the OCC Forum that upon N-1 contingency of the other Bus, i.e. Bus 1, 220 kV Misa - Samaguri D/C, 220 kV Misa - Dimapur D/C and 220 kV Misa - Byrnihat D/C will out of service, thereby causing major reliabilty issues for Capital Area of Assam as well as for Nagaland Power System. Therefore, consent may be obtained from SLDC Assam, SLDC Nagaland and SLDC Meghalaya for availing the shutdown.
60	400 kV Main Bus-1 at Misa		Consent received from Assam, Nagaland & Meghalaya																														0800Hrs to 1600Hrs	Maintetnance of 400kV Main Bus-1 and equipments.	Normal Maintenance related shutdown.	Under the N-1 contingency of Main Bus 2 at Misa, flow in ICT II and ICT III will be zero, leading to very high flow in ICT I which will not be sustainable, thereby leading to tripping of ICT I. This will cause segragation of 400 kV and 220 kV at Misa S/s. Therefore, consent from SLDC Assam, SLDC Nagaland and SLDC Meghalaya may be obtained for availing the shutdown
	400kV Silchar SS																																			
61	315MVA 400/220KV ICT-3 at Silchar																																0900Hrs to 1200Hrs	For Buchholz relay trip logic modification	Existing system improvement related shutdown.	SD may be availed. 400/132 kV ICT 2 & 3 are to be in service.
62	63MVAr Bus Reactor - 2 at Silchar																																0900Hrs to 1200Hrs	For Buchholz relay trip logic modification	Existing system improvement related shutdown.	SD may be availed. About 2 kV voltage change is observed in Silchar S/s
63	132kV Bus-1 at Silchar																Not Approved in 203rd OCCM															0900Hrs to 1500Hrs	AMP of Bus and Jumper changing in Srikona-1 bay	Normal Maintenance related shutdown.	SD may be deferred until Misa - Kopili - Khandong link is available and sufficient Internal Generation of Meghalaya is available.
64	132kV Bus Coupler at Silchar																																0900Hrs to 1500Hrs	Panel wiring checking after removal of 132 kV PK Bari and Imphal bays	Existing system improvement related shutdown.	SD may be availed
65	200MVA ICT-2 at Silchar																																0900Hrs to 1600Hrs	Oil top up of ICT and AMP of Bays	Normal Maintenance related shutdown.	SD may be availed. 400/132 kV ICT 1 & 3 are to be in service.
66	400kV ICT-1 & Azara Tie Bay 402 at Silchar																																0900Hrs to 1600Hrs	AMP of Bay Equipment	Normal Maintenance related shutdown.	SD may be availed provided no outage of any element.

	Name of Element	Jul-23	Time	Remarks	Category	
	Interregional/International					
67	400KV BINAGURI-BONGAIGAON - 1 TL	Consent required from NLDC	CSD 0800Hrs to 1800Hrs	Re- Conductoring work under NERSS - XII pakage	Construction Related Shutdown	SD may be availed. 400 kV Bongaigaon-Alipurduar DC and 220 kV Salakati-Alipurduar DC must be kept in service. Consent from NLDC may be obtained.
68	400KV BINAGURI-BONGAIGAON - 2 TL	Consent required from NLDC	CSD 0800Hrs to 1800Hrs	Re- Conductoring work under NERSS - XII pakage	Construction Related Shutdown	SD may be availed. 400 kV Bongaigaon-Alipurduar DC and 220 kV Salakati-Alipurduar DC must be kept in service. Consent from NLDC may be obtained.
69	A/R of 400KV BINAGURI-BONGAIGAON - 1 TL	Consent required from NLDC	0800Hrs to 1800Hr	Re- Conductoring work under NERSS - XII pakage	Construction Related Shutdown	A/R may be kept in Non-Auto Mode
70	A/R of 400KV BINAGURI-BONGAIGAON - 2 TL	Consent required from NLDC	0800Hrs to 1800Hr	Re- Conductoring work under NERSS - XII pakage	Construction Related Shutdown	A/R may be kept in Non-Auto Mode

SN	Name of Element	Jul-23	Time	Reason	Category	
	SHUTDOWNS PROPOSED BY ASSAM					
1	315MVA AT-2 AT MIRZA		0700Hrs to 1600Hrs	MAINTENANCE ACTIVITIES	Normal Maintenance related shutdown.	SD may be availed provided ICT 1 at Mirza, 220 kV Misa- Samaguri D/C, 220 kV Mariani - Samaguri line, 220 kV Balipara - Sonabil line, 220 kV Salakati - BTPS - Agia - Boko - Azara link are available.
2	220kV Mirza-Agia Line		0700Hrs to 1600Hrs	MAINTENANCE ACTIVITIES	Normal Maintenance related shutdown.	SD may be availed. 220 kV Agia - Boko - Mirza link to be kept in service.
3	220kV Mirza- Boko Line		0700Hrs to 1600Hrs	MAINTENANCE ACTIVITIES	Normal Maintenance related shutdown.	SD may be availed. 220 kV Agia - Boko and 220 kV Agia-Mirza to be in service.
4	220kV Mirza-Sarusajai 1		0700Hrs to 1600Hrs	MAINTENANCE ACTIVITIES	Normal Maintenance related shutdown.	The study suggests that the combined loading of 220 kV Misa-Samaguri D/C, 220 kV Balipara- Sonabil line, 220 kV Mariani-Samaguri line and Azara- Sarusajai ckt II is to be maintained below 430 MW in order to secure the capital area of Assam power system under the occurrence of N-1 Contingency.
5	220kV Mirza-Sarusajai 2		0700Hrs to 1600Hrs	MAINTENANCE ACTIVITIES	Normal Maintenance related shutdown.	The study suggests that the combined loading of 220 kV Misa-Samaguri D/C, 220 kV Balipara- Sonabil line, 220 kV Mariani-Samaguri line and Azara- Sarusajai ckt I is to be maintained below 430 MW in order to secure the capital area of Assam power system under the occurrence of N-1 Contingency.
6	132kV GOLAGHAT-MARIANI		8:00-16:00	CONRRIDOR CLEANING & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed. 132 kV Dimapur - Bokajan - Sarupathar - Golaghat link to be kept in service.
7	132KV GOLAGHAT-SARUPATHAR		8:00-16:00	CONRRIDOR CLEANING & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed. 132 kV Dimapur - Bokajan - Sarupathar link and 132 kV Mariani - Golaghat line to be kept in service.
8	132KV BOKAJAN-DIMAPUR		9:00-16:00	CORRIDOR CLEARANCE	Normal Maintenance related shutdown.	SD may be availed. 132 kV Mariani - Golaghat - Sarupathar - Bokajan link to be kept in service.
9	132KV BOKAJAN-SARUPATHAR		9:00-16:00	CORRIDOR CLEARANCE	Normal Maintenance related shutdown.	SD may be availed subject to availability of 132 kV Mariani -Golaghat - Sarupathar line and 132 kV Dimapur - Bokajan line.
10	220KV BTPS-RANGIA CKT 1		8:00-16:00	PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed subject availability of 220 kV BTPS-RANGIA CKT II. SPS at Rangia should be kept in ON condition.
11	220KV BTPS-RANGIA CKT 1		8:00-16:00	PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed subject availability of 220 kV BTPS-RANGIA CKT II. SPS at Rangia should be kept in ON condition.
12	220KV BTPS-RANGIA CKT 2		8:00-16:00	PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed subject availability of 220 kV BTPS-RANGIA CKT I. SPS at Rangia should be kept in ON condition.
13	220KV BTPS-RANGIA CKT 2		8:00-16:00	PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed subject availability of 220 kV BTPS-RANGIA CKT I. SPS at Rangia should be kept in ON condition.
14	132 kV Pailapool- Jiribam Line		9:00-16:00	Maintenance of line & corridor cleaning works	Normal Maintenance related shutdown.	SD may be availed subject to availability of 132 kV Srikona-Pailapool.Consent from Manipur to be obtained
15	132 kV Haflong(AEGCL) – Haflong(PGCIL) line		9:00-16:00	Maintenance of line & corridor cleaning works	Normal Maintenance related shutdown.	SD may be availed
16	132 KV HAILAKANDI-DULLAVCHERRA		9:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	Normal Maintenance related shutdown.	SD may be availed subject to availability of 132 kV Dullavcherra-Dharmanagar-PK Bari link.
17	132 KV SRIKONA-PAILAPOOL		9:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	Normal Maintenance related shutdown.	SD may be availed subject to availability of 132 kV Jiribam-Pailapool.
18	132 KV PANCHGRAM-HAILAKANDI		9:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	Normal Maintenance related shutdown.	SD may be availed.132 kV Badarpur-Panchgram line to be in service
19	132 KV PANCHGRAM-LUMSHNONG		9:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	Normal Maintenance related shutdown.	SD may be availed. 132 kV Khliehriat - Lumshnong line to be kept in service.Internal generation from Leshka to be maximised
20	132 KV HAILAKANDI-DULLAVCHERRA		9:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	Normal Maintenance related shutdown.	SD may be availed subject to availability of 132 kV Jiribam-Pailapool.
21	132 KV SRIKONA-PAILAPOOL		9:00-16:00	PREVENTIVE MAINTENANCE & CORRIDOR CLEANING WORK	Normal Maintenance related shutdown.	SD may be availed subject to availability of 132 kV Jiribam-Pailapool.
22	132 KV DULLAVCHERRA-DHARMANAGAR	Consent received from Tripura	9:00-16:00	PREVENTIVE MAINTENANCE & INSPECTION WORK	Normal Maintenance related shutdown.	Consent from SLDC Tripura is required. SD may be availed. 132 kV PK Bari - Dullavcherra line and 132 kV Hailakandi - Dharmanagar line to be kept in service.
23	132 KV DULLAVCHERRA-DHARMANAGAR	Consent received from Tripura	9:00-16:00	PREVENTIVE MAINTENANCE & INSPECTION WORK	Normal Maintenance related shutdown.	Consent from SLDC Tripura is required. SD may be availed. 132 kV PK Bari - Dullavcherra line and 132 kV Hailakandi - Dharmanagar line to be kept in service.
24	220 KV Tinsukia-Kathalguri Feeder no 1	Intimation to NEEPCO	9:00-15:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed. 220 kV Tinsukia-Kathalguri 2 to be in service.
25	220 KV Tinsukia-Kathalguri Feeder no 2	Intimation to NEEPCO	9:00-15:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed. 220 kV Tinsukia-Kathalguri 1 to be in service.
26	220 KV Tinsukia-NTPS Feeder		9:00-15:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed. 220 kV Tinsuka - NRPP - NTPS link to be kept in service
27	220 KV Tinsukia-NRPP Feeder		9:00-15:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed. 220 kV Tinsukia - NTPS line and 220 kV NTPS - NRPP line to be kept in service.
28	132KV BOKAJAN-DIMAPUR		9:00-16:00	CORRIDOR CLEARANCE	Normal Maintenance related shutdown.	SD may be availed. 132 kV Mariani - Golaghat - Sarupathar - Bokajan link to be kept in service.
29	132KV BOKAJAN-SARUPATHAR		9:00-16:00	CORRIDOR CLEARANCE	Normal Maintenance related shutdown.	SD may be availed subject to availability of 132 kV Mariani -Golaghat - Sarupathar line and 132 kV Dimapur - Bokajan line.
30	220kV Samaguri-Sonabil ckt-1		8:00-16:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed subject to availability of 220 kV Samaguri-Sonabil-2 line. RELIABILITY OF THE SYSTEM IS REDUCED.
31	220kV Samaguri-Sonabil ckt-2		8:00-16:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed subject to availability of 220 kV Samaguri-Sonabil-1 line. RELIABILITY OF THE SYSTEM IS REDUCED.
32	220kV Samaguri-Mariani ckt_2	Intimation to NEEPCO	8:00-16:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	Considering N-1 contingency of 220 kV AGBPP - Mariani (PG) line, Upper Assam Power Flow is to be maintained within 245 MW (during solar period) and 245 MW
33	220kV Samaguri-Mariani ckt_2	Intimation to NEEPCO	8:00-16:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	Considering N-1 contingency of 220 kV AGBPP - Mariani (PG) line, Upper Assam Power Flow is to be maintained within 245 MW (during solar period) and 245 MW
34	220 kV Samaguri- Jawaharnagar		7:00-15:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed subject to availability of 220 kV Sarusajai-Sonapur-Samaguri link, 220 kV Sarusajai - Jawaharnagar line and 220 kV Sarusajai-Azara DC.
35	221 kV Samaguri- Jawaharnagar		7:00-15:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed subject to availability of 220 kV Sarusajai-Sonapur-Samaguri link, 220 kV Sarusajai - Jawaharnagar line and 220 kV Sarusajai-Azara DC.
36	220 kV Samaguri- Sonapur line		7:00-15:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	SD may be availed subject to availability of 220 kV Sarusajai-Jawaharnagar-Samaguri link, 220 kV Sarusajai - Sonapur line and 220 kV Sarusajai-Azara DC.
37	220 kV Samaguri- Sonapur line		8:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	SD may be availed subject to availability of 220 kV Sarusajai-Jawaharnagar-Samaguri link, 220 kV Sarusajai - Sonapur line and 220 kV Sarusajai-Azara DC.
38	220KV AGIA-BTPS-I		9:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	The SD may be availed subject to availability of 220 kV BTPS -Salakati DC and 220kV Agia-BTPS 2 line.
39	220KV AGIA-BTPS-I		9:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	The SD may be availed subject to availability of 220 kV BTPS -Salakati DC and 220kV Agia-BTPS 2 line.
40	220KV AGIA-BTPS-II		9:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	The SD may be availed subject to availability of 220 kV BTPS -Salakati DC and 220kV Agia-BTPS 1 line.
41	220KV AGIA-BTPS-II		9:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	The SD may be availed subject to availability of 220 kV BTPS -Salakati DC and 220kV Agia-BTPS 1 line.
42	220KV AGIA-BOKO		9:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	SD may be availed. 220 kV Mirza - Boko line and 132 kV Agia - Mirza line to be kept in service.
43	220KV AGIA-BOKO		9:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	SD may be availed. 220 kV Mirza - Boko line and 132 kV Agia - Mirza line to be kept in service.
45	220KV AGIA-MIRZA		9:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	SD may be availed. 220 kV Agia - Boko - Mirza link to be kept in service.
46	220KV BTPS-NTPC-I	Intimation to NTPC	09:00:00 -12:00	Replacement of old check meters under SAMAST scheme:	Existing system improvement related shutdown.	SD may be availed.
47	220KV BTPS-NTPC-II	Intimation to NTPC	13:00-16:00	Replacement of old check meters under SAMAST scheme:	Existing system improvement related shutdown.	SD may be availed.
48	220kV AMGURI-NAMRUP	Intimation to NEEPCO	8:00-16:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	Considering N-1 contingency of 220 kV AGBPP - Mariani (PG) line, Upper Assam Power Flow is to be maintained within 275 MW (during solar period) and 225 MW (during non-solar period)
49	220kV AMGURI-NAMRUP	Intimation to NEEPCO	8:00-16:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	Considering N-1 contingency of 220 kV AGBPP - Mariani (PG) line, Upper Assam Power Flow is to be maintained within 275 MW (during solar period) and 225 MW (during non-solar period)
50	220KV MARIANI-AMGURI	Intimation to NEEPCO	8:00-16:00	CORRIDOR CLEARANCE & PREVENTIVE MAINTENANCE	Normal Maintenance related shutdown.	Considering N-1 contingency of 220 kV AGBPP - Mariani (PG) line, Upper Assam Power Flow is to be maintained within 230 MW (during solar period) and 225 MW (during non-solar period)
51	220KV SONAPUR-SARUSAJAI		8:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	SD may be availed subject to availability of 220 kV Sarusajai-Jawaharnagar-Samaguri link, 220 kV Samaguri - Sonapur line and 220 kV Sarusajai-Azara DC.



SN	Name of Element	Time	Reason	Category	
52	220KV SONAPUR-SARUSAJAI	8:00-16:00	CORRIDOR CLEANING	Normal Maintenance related shutdown.	SD may be availed subject to availability of 220 kV Sarusajai-Jawaharnagar-Samaguri link, 220 kV Samaguri - Sonapur line and 220 kV Sarusajai-Azara DC.
53	220KV AGIA-BTPS-I	CSD 06:00HRS OF 1.7.2023 TO 18:00 HRS OF 3.7.2023	REPLACEMENT OF OLD SAS PANEL WITH NEW SEIMENS PANEL	Existing system improvement related shutdown.	The SD may be availed subject to availability of 220 kV BTPS -Salakati DC and 220kV Agia-BTPS 2 line.
54	220KV AGIA-BTPS-II	CSD 06:00HRS OF 4.7.2023 TO 18:00 HRS OF 6.7.2023	REPLACEMENT OF OLD SAS PANEL WITH NEW SEIMENS PANEL	Existing system improvement related shutdown.	The SD may be availed subject to availability of 220 kV BTPS -Salakati DC and 220kV Agia-BTPS 1 line.

SN	Name of Element (Jul-23: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31)	Time	Reason	Category	
	SHUTDOWNS PROPOSED BY NAGALAND				
1	132kV Mokokchung - Doyang TL.	8:00-16:00	Testing of RTU communication status.	Normal Maintenance related shutdown.	SD may be availed subject to availability of 220 kV Mariani-Mokukchung D/C.
2	132kV Dimapur(PG) - Dimapur(DoP) Ckt-1 TL.	7:00-15:00	Replacement of old ACSR Panther with one and old disc insulator with polymer insulator at Dead end Tower/gantry within Dimapur(PG) sub-station premises.	Normal Maintenance related shutdown.	SD may be availed. Power to Dimapur (DoP) will be fed via a single circuit of 220 kV Dimapur(PG) - Dimapur(DoP) II TL
3	160MVA,220/132 kV ICT-2 AT DIMAPUR (PG)S/S	7:00-15:00	Replacement of old ACSR Panther with one and old disc insulator with polymer insulator at Dead end Tower/gantry within Dimapur(PG) sub-station premises.	Normal Maintenance related shutdown.	SD may be availed. Other 2 ICTs to be kept in service.

SN	Name of Element (Jul-23: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31)	Time	Reason	Category	
	SHUTDOWNS PROPOSED BY TRIPURA				
1	132 KV BUS BARAMURA	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed
2	132 KV P.K Bari - P.K Bari (ISTS)	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed. Bangladesh Load may be restricted within 120 MW.
3	132 KV Rokhia - Agartala I	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	Under N-1 contingency of 132 kV Rokhia - Agartala I, the generation of Rokhia and Monarchak is to be limited within the combined value of load of 132 kV
4	132 KV Monarchak - Udaipur	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed. Generation of Monarchak to be kept within 75 MW to limit the flow of 132 kV Monarchak - Rokhia line flow within 70 MW.
5	132 KV Ambassa - P.K Bari (ISTS)	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed
6	132 KV Rokhia - Agartala II	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	Under N-1 contingency of 132 kV Rokhia - Agartala I, the generation of Rokhia and Monarchak is to be limited within the combined value of load of 132 kV
7	132 KV SM Nagar - SM Nagar (ISTS)	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed. Bangladesh Load may be restricted within 120 MW.
8	132 KV Monarchak - Rokhia	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed. The Generation of Monarchak to be kept within such a value as the load of 132 kV Rabindranagar and allowable loading of 132 kV Monarchak -
9	132 KV Palatana - Udaipur	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed
10	132 KV Bodhjungnagar - SM Nagar (ISTS)	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed. Bangladesh Load may be restricted within 120 MW.
11	132 KV Dharmanagar - Durlavcharra	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed. 132 kV PK Bari - Dullavcherra line and 132 kV Hailakandi - Dharmanagar line to be kept in service.
12	132 KV P.K. Bari - Missiontilla (Dharmanagar)	09:00 - 16:00 Hrs	Routine maintenance	Normal Maintenance related shutdown.	SD may be availed. 132 kV Dharmanagar - Dullavcherra line to be kept in service.

SN	Name of Element (Jul-23: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31)	Time	Reason	Category	
	SHUTDOWNS PROPOSED BY MEGHALAYA				
1	220KV Killing-Misa Line-1	08:00 - 16:00 Hrs	Maintenance of Bay equipments	Normal Maintenance related shutdown.	SD may be availed subject to availablity of 220 kV Killing - Misa 2
2	132KV Nongalbibra-Agia II feeder	08:00 - 13:00 Hrs	Disc Changing T/Loc 147	Normal Maintenance related shutdown.	SD may be availed. 132 kV Agia - Mendipathar - Nangalbibra link to be kept in service.
3	132KV Khliehriat(Meghalaya)-Khliehriat(PG) line-II	10:00 - 16:00 Hrs	To attend to the hot spot on the R-phase line side isolator and bay maintenance works at Khliehriat SS, MePTCL.	Normal Maintenance related shutdown.	SD may be availed provide the other line is kept under service
4	220KV Misa-Byrnihat D/C line	09:00 - 16:00 Hrs	Checking of Disc insulators,clamps,connectors,jumpers,conductors,etc	Normal Maintenance related shutdown.	SD may be availed. 400/220 kV ICTs at Byrnihat S/s to be kept in service.
5	220KV Misa-Byrnihat D/C line	09:00 - 16:00 Hrs	Checking of Disc insulators,clamps,connectors,jumpers,conductors,etc	Normal Maintenance related shutdown.	SD may be availed. 400/220 kV ICTs at Byrnihat S/s to be kept in service.
6	220KV Killing-Misa Line-2	08:00 - 16:00 Hrs	Maintenance of Bay equipments	Normal Maintenance related shutdown.	SD may be availed subject to availablity of 220 kV Killing - Misa 2
7	132KV Umtru-Kahilipara line-I	09:00 - 17:00 Hrs	Installation of Synchronising trolley at Umtru Power Station	Normal Maintenance related shutdown.	SD may be availed
8	ICT-1 at Killing s/s	08:00 - 16:00 Hrs	Topping of Transformer Oil	Normal Maintenance related shutdown.	SD may be availed. ICT I at Killing to be kept in service
9	132KV Mendipathar-Agia feeder	09:00 - 14:00 Hrs	Jungle clearance at T/Loc 236 to 247	Normal Maintenance related shutdown.	SD may be availed. 132 kV Agia - Nangalbibra line and 132 kV Mendipathar - Nangalbibra line
10	132KV Umtru-Kahilipara line-II	09:00 - 17:00 Hrs	Installation of Synchronising trolley at Umtru Power Station	Normal Maintenance related shutdown.	SD may be availed
11	ICT-2 at Killing s/s	08:00 - 16:00 Hrs	Topping of Transformer Oil	Normal Maintenance related shutdown.	SD may be availed. ICT II at Killing to be kept in service

SN	Name of Element (Jul-23: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31)	Time	Reason	Category	
	SHUTDOWNS PROPOSED BY NEEPCO				
	AgGBPS				
1	GTG-4 at AgGBPS	CSD 00:00 HRS OF 24.07.23 TO 23:59 HRS OF 02.08.23	GCPP installation and 132 kV CB overhauling work	Normal Maintenance related shutdown.	SD may be availed. Information to all the constituents may be given.
2	132 kV Bus 1 at AgGBPS	7:00-16:00	GTG 4 Bay maintenance	Normal Maintenance related shutdown.	SD may be availed
3	132 kV Bus 2 at AgGBPS	7:00-16:00	GTG 4 Bay maintenance	Normal Maintenance related shutdown.	SD may be availed
4	STG-2 at AgGBPS	CSD 00:00 HRS OF 26.07.23 TO 23:59 HRS OF 02.08.23	Governor HMI upgradation	Normal Maintenance related shutdown.	SD may be availed. Information to all the constituents may be given.
5	132 kV Bus 1 at AgGBPS	7:00-16:00	STG 2 Bay maintenance	Normal Maintenance related shutdown.	SD may be availed
6	132 kV Bus 2 at AgGBPS	7:00-16:00	STG 2 Bay maintenance	Normal Maintenance related shutdown.	SD may be availed

SN	Name of Element (Jul-23: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31)	Time	Reason	Category	
	SHUTDOWNS PROPOSED BY INDIGRID				
1	A/R of 132KV-BISWANATH CHARIALI-ITANAGAR-1	09:30 HRS TO 17:30 HRS	A/R in non auto mode rquired for Installation of Additional Earthing	Normal Maintenance related shutdown.	A/R may be kept in Non-Auto Mode
2	A/R of 132KV-BISWANATH CHARIALI-ITANAGAR-2	09:30 HRS TO 17:30 HRS	A/R in non auto mode rquired for Installation of Additional Earthing	Normal Maintenance related shutdown.	A/R may be kept in Non-Auto Mode