



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

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No. NERPC/SE (O)/OCC/2020/177-214

Dated: 06th April, 2021

To,

1. Managing Director, AEGCL, Bijuli Bhawan, Guwahati – 781 001
2. Managing Director, APDCL, Bijuli Bhawan, Guwahati – 781 001
3. Managing Director, APGCL, Bijuli Bhawan, Guwahati – 781 001
4. Director (Generation), Me. PGCL, Lumjingshai, Short Round Road, Shillong – 793 001
5. Director (Distribution), Me. ECL, Lumjingshai, Short Round Road, Shillong – 793 001
6. Director(Transmission), Me. PTCL, Lumjingshai, Short Round Road, Shillong – 793 001
7. Managing Director, MSPDCL, Secure Office Bldg. Complex, South Block, Imphal – 795 001
8. Managing Director, MSPCL, Electricity Complex, Keishampat, Imphal – 795 001
9. Director (Tech.), TSECL, Banamalipur, Agartala -799 001.
10. Director (Generation), TPGCL, Banamalipur, Agartala -799 001.
11. Chief Engineer (WE Zone),Department of Power ,Govt. of Arunachal Pradesh, Itanagar- 791111
12. Chief Engineer (EE 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. Engineer-in-Chief (P&E), Department of Power, Govt. of Mizoram, Aizawl – 796 001
15. Chief Engineer (P), Department of Power, Govt. of Nagaland, Kohima – 797 001
16. CGM, (LDC), SLDC Complex, AEGCL, Kahilipara, Guwahati-781 019
17. Group General Manager, NTPC, Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
18. ED, NERTS, PGCIL, Dongtieh-Lower Nongrah, Lapalang, Shillong -793 006
19. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
20. ED (Commercial), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
21. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad,Haryana-121003
22. Vice President (Plant), OTPC, Badarghat Complex, Agartala, Tripura - 799014
23. GM, NERLDC, Dongtieh, Lower Nongrah, Lapalang, Shillong -793 006
24. Member Secretary, ERPC, 14 Golf Club Road, Tollygunge, Kolkata-700033
25. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066
26. Chief Engineer (NPC), NRPC Complex, Katwaria Sarai, SJSS Marg., New Delhi - 110016

Sub: Minutes of 176th OCC Meeting.

Sir/Madam,

Please find enclosed herewith the minutes of 176th OCC Meeting held at “State Circuit House, Tawang” on the **22nd March, 2021** for your kind information and necessary action. The minute is also available on the website of NERPC, **www.nerpc.nic.in**.

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

Encl: As above

भवदीय / Yours faithfully,

B. Lyngkhoi
Director/ SE

Copy to:

1. CGM, AEGCL, Bijuli Bhavan, Guwahati - 781001
2. CGM, APGCL, Bijuli Bhavan, Guwahati - 781001
3. CGM, DISCOM, Bijuli Bhavan, Guwahati - 781001
4. Head of SLDC, Me.ECL, Lumjingshai, Short Round Road, Umjarain, Shillong – 793 022
5. Head of SLDC, Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791 111
6. Head of SLDC, Department of Power, Dimapur, Nagaland
7. Head of SLDC, Electricity Department, Govt. of Manipur, Keishampat, Imphal – 795 001
8. Head of SLDC, Department of Power, Govt. of Mizoram, Aizawl – 796 001
9. Head of SLDC, TSECL, Agartala – 799 001
10. Chief Engineer(Elect), Loktak HEP, Vidyut Vihar, Kom Keirap, Manipur- 795124
11. Addl. GM (EED), NTPC Ltd., Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
12. DGM (C&M), OTPC, 6th Floor, A-Wing, IFCI Tower -61, Nehru Place, New Delhi – 110019.



Director/ SE

North Eastern Regional Power Committee

MINUTES OF THE 176th OPERATION COORDINATION

SUB-COMMITTEE MEETING OF NERPC

Date : 22/03/2021 (Monday)
Time : 10:30 hrs
Venue : State Circuit House, Tawang.

The List of Participants in the 176th OCC Meeting is attached at **Annexure – I**

Shri A.K. Thakur, Member Secretary, NERPC welcomed the participants to the 176th OCC meeting. He noted the presence of all utilities except P&ED Mizoram. He felicitated two noted members viz. Sh. Shikato Sema, Chairman TCC & Engineer-in-Chief, DoP Nagaland and Sh. Chandan Sharma, CGM, SLDC, Assam who are superannuating in March'21. Further he also felicitated Sh. P.R. Jena, AGM(OS), NTPC upon his transfer to WR.

Thereafter Member Secretary requested Sh. B. Lyngkhoi, Director(O&P), NERPC to take up the agenda items for discussion.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 175th MEETING OF OPERATION COORDINATION SUB-COMMITTEE OF NERPC.

The minutes of 175th meeting of Operation Sub-committee held on 18th February, 2021 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2019/2674-2711 dated 01st March, 2021.

DoP Ar. Pradesh has requested for the following modifications in item No. C.18 “16 MVA ICT available at PGCIL, Nirjuli is rated 132/33 kV instead of 33/11 kV, which is required for 132/33 kV Sub-Station, Dokumpani, Arunachal Pradesh”

The Sub-committee confirmed the minutes of 175th OCCM of NERPC with the above modifications as no other comments/observations were received from the constituents.

ITEMS FOR DISCUSSION

B.1. ACTION TAKEN:

1. IMPLEMENTATION OF PROJECTS FUNDED FROM PSDF:

The status as informed in 176th OCC:

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) LOA issued. Requisition for 30% to be sent immediately. P-III (Substation equipment) NIT issued Station-wise status to be updated	Work completed in all respects. Final 10% to be disbursed.	-	TESG approved.	-
Nagaland	Completed in all respects. 10% requisition to be sent alongwith UC.	Work completed in all respects. Final 10% to be disbursed.	-	TESG approved	Lines identified. Under DPR preparation stage.
Mizoram	Completed. 10% remaining claim to be submitted ASAP.	Work completed in all respects. Final 10% to be disbursed.	To reply to TESG queries.	TESG approved	DPR submitted.
Manipur	Package-II: completed Package-I: WIP Delayed due to COVID situation Station-wise status to be updated.	Work completed in all respects. Final 10% to be disbursed.	LOA issued. Requisition to be sent for first tranche.	TESG approved	Lines identified. LDP for 132kV Imphal-Imphal and 132kV Jiribm-Jiribam proposed. Under DPR preparation stage.
	33kV System Integration with SLDC	In tendering stage			
	Reliable Communications for grid connectivity	In tendering stage			

Tripura	Work completed. 10% remaining claim to be sent ASAP. Station wise status to be updated.	60% requisition will be submitted by 31 st March'21.	Study results to be submitted alongwith DPR	TESG approved	Only single line 132kV 79Tilla to Budhjangn agar. DPR to be prepared.
Assam	LOA issued. WIP, delayed due to COVID situation Station-wise status to be submitted.	Work completed in all respects. Final 10% to be disbursed.	-	LoA issued	Lines identified. Under DPR preparation stage.
Meghalaya	MePTCL Completed in all respects. MePGCL – completed in all respects.	Project complete in all respects.	-	LoA issued.	WIP. Delayed due to COVID situation

Deliberation of the sub-Committee:

Director(O&P), NERPC stated that NIT for Meter, AMR portion of SAMAST for the five states of Arunachal Pradesh, Manipur, Mizoram, Nagaland and Tripura would be floated at the earliest.

The Sub-Committee noted as above.

Action: All state utilities/NERPC.

B.2. OPERATIONAL PERFORMANCE AND GRID DISCIPLINE DURING FEBRUARY, 2021

As per the data made available by NERLDC, the grid performance parameters for February, 2021 are given below:

NER PERFORMANCE DURING FEBRUARY, 2021

States	Energy Met (MU)		w.r.t. Jan,21 % inc (+) /dec (-)	Energy Reqr. (MU)		w.r.t. Jan,21 % inc (+) /dec (-)	% surplus (+) /shortfall (-) of energy In Feb,21
	Feb-21	Jan-21		Feb-21	Jan-21		
Ar. Pradesh	63.11	70.59	-10.60	63.39	70.9	-10.59	-0.44
Assam	671.91	732.1	-8.22	683.09	746.87	-8.54	-1.64
Manipur	74.27	90.78	-18.19	74.56	91.11	-18.16	-0.39
Meghalaya	176.59	209.84	-15.85	180.72	209.84	-13.88	-2.29
Mizoram	50.46	55.21	-8.60	50.76	55.54	-8.61	-0.59
Nagaland	61.04	69.18	-11.77	61.32	69.5	-11.77	-0.46
Tripura	159.2	172.68	-7.81	159.2	172.7	-7.82	0.00
Region	1256.58	1400.38	-10.27	1273.04	1416.46	-10.13	-1.29

States	Demand Met (MW)		w.r.t. Jan,21 % inc (+) /dec (-)	Demand in (MW)		w.r.t. Jan'21 % inc (+) /dec (-)	% surplus (+) /shortfall (-) of demand In Feb,21
	Feb-21	Jan-21		Feb-21	Jan-21		
Ar. Pradesh	144	149	-3.36	156	149	4.70	-7.69
Assam	1485	1461	1.64	1485	1461	1.64	0.00
Manipur	231	239	-3.35	231	239	-3.35	0.00
Meghalaya	377	376	0.27	377	376	0.27	0.00
Mizoram	132	128	3.13	132	128	3.13	0.00
Nagaland	149	134	11.19	152	134	13.43	-1.97
Tripura	241	228	5.70	241	228	5.70	0.00
Region	2664	2660	0.15	2680	2689	-0.33	-0.60

REGIONAL GENERATION & INTER-REGIONAL EXCHANGE IN MU

Month---->	Feb-21	Jan-21
Total Generation in NER (Gross)	1325.44	1166.43
Total Central Sector Generation (Gross)	1010.99	343.97
Total State Sector Generation (Gross)	314.45	1510.40
Inter-Regional Energy Exchange		
(a) NER-ER	228.78	268.31
(b) ER-NER	0	0
(c)NER-NR	0	0
(d)NR-NER	286.60	287.31
© Net Import	57.82	19

AVERAGE FREQUENCY (Hz)

Month---->	Feb-21	Jan-21
	% of Time	% of Time
Below 49.9 Hz	1.55	1.05
Between 49.9 to 50.05 Hz	89.53	86.50
Above 50.05 Hz	8.92	12.45
Average	49.99	49.99
Maximum	50.27	50.25
Minimum	49.97	49.93

Deliberation of the sub-Committee:

NER grid performance for the month of February'21 was presented by NERLDC. (Attached at **Annexure-B.2**)

The Sub-Committee noted as above.

C. ITEMS FOR DISCUSSION

C.1 Generation Planning (ongoing and planned outages)

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

Plants	Reservoirs level in meter	MU content	Present DC (in MU)	No of days as per current generation
Khandong + Kopili stg II	712.35	11	0.151	73
Kopili			0	Will be "0" until further intimation.
Doyang	315.5	14	0.623	22
Loktak	769.29	45	0.39	115

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

Deliberation of the sub-Committee:

NERLDC highlighted that due to unavailability of Kopili HEP, constituents should plan for procurement of power for proper portfolio management.

NERLDC also highlighted that proper planning of Hydro Generation needs to be done Based on number of days of water availability.

The Sub-Committee discussed and approved the proposed shutdown by Generating Stations as given in Annexure – D.2 which is available in NERPC website.

C.2 Outage Planning Transmission elements

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

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

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

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

The sub-Committee discussed and approved the transmission line outages proposed by Constituents for April, 2021 which is available in the website of NERPC.

C.3 Estimated Transmission Availability Certificate (TAC) for the month of February,2021:

NETC and POWERGRID have submitted the outage data for the month of February, 2021. So, the attributability of outage of the said elements will be finalized.

The Sub-Committee noted as above.

Action: NERPC & NERLDC

C.4 Restoration of Assets damaged at Kopili HEP due to failure of Penstock:

As per decisions in previous meeting(s):

- (i) Detailed ownership and scope of work finalized in the 168th OCC meeting.
- (ii) For permanent restoration NERLDC, NEEPCO, NERTS and NERPC would discuss and send common agenda for deliberation of NERPCTP.
- (iii) NEEPCO to submit DPR to CEA.

Deliberation of the sub-Committee:

DGM, NEEPCO informed that permanent restoration which was earlier proposed to be executed by NERTS will now be done by NEEPCO. The forum noted and requested NEEPCO to apprise the NERPCTP.

The Sub-Committee noted as above.

Action: NEEPCO.

C.5 Charging of 132kV Sihhmui S/S and related issues:

Decisions as per deliberation in previous meeting(s):

- Present condition of idle charging from Melriat end as anti-theft measure to remain in place.
- Charging of 132kV Sihhmui is essential and this would also enable utilization of 132kV Melriat-Sihhmui D/C. For this both NERTS and P&ED Mizoram to apply for charging clearance from NERLDC for a mutually convenient date at the earliest.
- NERTS-POWERGRID to apply afresh for charging clearance/First Time Charging and Trial operation certificate for 132kV Melriat-Sihhmui including bays at both ends after obtaining clarification from NERPCTP, CEA.
- NERTS to assist P&ED Mizoram for appeal process so that no burden is passed onto the state.

In 174th OCC meeting CGM(AM), NERTS informed that 3 nos CT have been supplied and 3 more nos are yet to be supplied for the swapped bays. The forum noted that it is essential to charge the 132/33kV Sihhmui Sub-station so that Mizoram can draw power. After detailed deliberation it was decided that in one week time frame both NERTS and P&ED Mizoram would apply for FTC of 132kV Melriat-Sihhmui D/C and 132kV Bus & ICT at Sihhmui respectively.

In 175th OCCM NERLDC informed the forum that P&ED Mizoram has not applied for FTC of 132kV Sihhmui Bus and ICT at Sihhmui yet. CGM(AM), NERTS informed that CT healthiness is being checked at Sihhmui and the application for FTC of 132kV

Melriat-Sihhmui shall be done by Feb'21. The forum requested NERTS and P&ED, Mizoram to apply for FTC of the elements at the earliest.

Deliberation of the sub-Committee:

The forum noted that energisation of 132kV Sihhmui S/Sn is essential and requested NERTS and P&ED Mizoram to charge 132kV Melriat-Sihhmui D/C and 132kV Sihhmui S/S at the earliest.

CGM(AM), NERTS stated that P&ED Mizoram is required to submit the necessary data for FTC to NERTS i.r.o. bays at Sihhmui. After detailed deliberation it was decided that NERTS shall apply for the FTC of bays pertaining to 132kV Melriat-Sihhmui D/C at Sihhmui and P&ED Mizoram shall apply for FTC of 132kV Sihhmui Bus and ICT simultaneously, so that 132kV Melriat-Sihhmui and 132kV Sihhmui S/Sn can be charged at the same time.

Member Secretary viewed the matter seriously about the delay of charging of Sihhmui S/S and urged upon NERTS to take action without further delay so that Mizoram can draw power from the substation.

The Sub-Committee noted as above.

Action: NERTS, P&ED Mizoram.

C.6 Charging of 33kV Khupi-Kimi line at 132kV:

The following were decided in the 54th PCC Meeting held on 22.01.2020 at Guwahati:

1. 132kV Khupi-Kimi line charged at 33kV presently, shall be converted to 132kV.
2. 132kV Seppa bay at Khupi to be used for 132kV Khupi-Kimi (Kameng).
3. Insulator, line inspection to be carried out by DoP, Arunachal Pradesh.

NEEPCO vide mail dated 31.08.2020 has expressed willingness to charge the line at 132kV level.

In this respect in addition to the completion of the above works at Sl.No.(1) to (3) the following are also pre-requisites:

- (i) Availability of Distance Protection at both ends
- (ii) Healthiness of PLCC system.

In 175th OCC meeting For 33kV Khupi-Kimi line Joint Inspection comprising of members from NERLDC, NEEPCO, DoP Ar. Pradesh and NERPC would be carried out in Mar'21.

Deliberation of the sub-Committee:

Director(O&P), NERPC stated that the inspection of line and Protection Audit of 132kV Khupi S/Sn would be carried out in Mar'21. He requested co-operation of NEEPCO, DoP Ar. Pradesh and NERTS for the same.

The Sub-Committee noted as above.

Action: NEEPCO, DoP Ar. Pradesh, NERPC.

C.7 Review of Automatic Under Frequency Load Shedding Relay Settings in NER:

In the 19th NERPC Meeting held on 28th& 29th Nov'18, it was approved to revise the stages of the operation of UFR from existing frequency band of 49.2 – 48.6 Hz (100MW) to 49.4 – 48.8Hz (170MW) in four stages viz., 49.4 Hz, 49.2 Hz, 49.0 Hz, 48.8 Hz. Also, the issue was deliberated, and constituents agreed for implementation of revised band of frequency and quantum of load shedding during the 148th OCC Meeting. Constituents are requested to update the latest status on the same.

In 174th OCC meeting Director(O&P), NERPC stated that during protection audit in Arunachal Pradesh the feeders can be identified for installation of UFR. He further stated that following actions need to be taken by the states i.r.o. implementation of UFR as per 19th NERPC meeting:

1. Identification of feeders for additional installation of UFRs
2. Review the existing locations of UFR installation w.r.t. loading and connectivity.

After detailed deliberation the forum requested all the state utilities viz. SLDC, STU to plan and inform the detailed plan in the next OCC meeting.

Deliberation of the sub-Committee:

State utilities updated the status of the identification of feeders and review of existing UFR locations as below:

Name of the utility	Time period
DoP Ar. Pradesh	By Mar'21
Assam	Submitted
Manipur	By Mar'21
Meghalaya	By Apr'21
Mizoram	By Mar'21
Nagaland	Submitted
Tripura	By Mar'21**

**AGM, TSECL informed that additional UFR has been installed to cater to requirements of Islanding Scheme-2 as suggested by NERPC. Further he informed that at P.K.Bari UFR locations have been changed. Forum requested TSECL to submit the detailed plan for UFR installation.

GM, NERLDC requested that revised settings should be immediately implemented in UFRs connected in present feeders.

Director(O&P), NERPC mentioned that necessary audit shall be done to ensure that the settings have been revised from 49.2-48.6 Hz to 49.4-48.8 Hz in all UFRs.

The Sub-Committee noted as above.

Action: all state utilities.

C.8 Mobile Substation for Emergency Restoration of EHV system in NER:

In NER, it has been experienced that there are outages of substation/Generating Station/EHV element /s due to natural calamities. Recent such example is outage of generating station namely Kopili HEP, NEEPCO due to fresh flood/failure of penstock. Further, for restoration of EHV systems in time, insurmountable constraints are faced by utilities like tough terrain, poor response from vendors for supply & services in NER especially in remote locations within stipulated period.

Hence it is suggested that mobile substation may be kept as regional spare for critical central sector stations where the affected station (suffering outage) in part can be bypassed under urgency and Incoming & Outgoing TLs be directly connected/terminated to TL Towers through the mobile station solution) till the main station is restored to its shape. The Mobile substation with bay modules will have the following facilities for emergency restoration of bays:

- a) 1 no. 220kV Bay with all EHV equipment & protection system
- b) 1no. 132kV Bay with all EHV equipment & protection system

Tentative Cost estimate is Rs.8.42 Crore (apx) excluding taxes & duties and F&I. The matter was discussed in 168th OCC where POWERGRID gave a presentation.

NERLDC & NERPC also stressed the need for mobile substation

In 174th OCC meeting SE, SLDC, Meghalaya opined that even though 400kV system is present 132kV level connectivity is essential for Meghalaya both for evacuation of Leshka generation and to cater the winter demand of Capital area. SE(SO&PSC), DoP Ar. Pradesh stated that capacity should be sufficient and portable enough to cater to the transfer of power in all cases. AGM, SLDC, Assam stated that enquired whether one 220kV bay and one 132kV bay would be sufficient or/not and how priority would be given for the usage by various utilities of NER. Regarding sufficiency of one bay CGM(AM), NERTS clarified that one 220kV bay can operate as line bay (Misa bay one circuit) and one 132kV bay can operate as line bay (Khandong bay one circuit). He further informed that the ICT as well as ICT bays are in good condition and the same

can be used during temporary restoration. After detailed deliberation the forum approved in-principle and referred the matter to TCC/RPC for approval.

In 175th OCCM Member Secretary, NERPC informed the forum that the 21st TCC/RPC had approved the Procurement of Mobile Bays with funding from PSDF, NEC etc. Thereafter NERTS was requested to present the action plan and DPR in the OCC forum for ratification. CGM(AM), NERTS stated that more than one vendors are being requested to submit their Budgetary Offer. The forum requested NERTS to positively submit the DPR by 24th February'21.

Deliberation of the sub-Committee:

Manager, NERTS intimated that offer has been received from ABB, however, detailed estimate has not been submitted. He also informed that offers from other vendors are still awaited.

Member Secretary, NERPC stated that DPR with tentative cost has to be submitted to PSDF at the earliest in order to restore Misa-Kopili-Khandong link before next lean hydro season.

The Sub-Committee noted as above.

Action: NERTS.

C.9 Availing of Palatana Merchant Power by beneficiaries:

In 175th OCC meeting Member Secretary, NERPC informed that in the 21st TCC/NERPC meeting all the states agreed to consider availing Merchant Power of Palatana as part of their firm share. In case some decided not to avail the same the other states would avail the corresponding share as per formula decided by MoP. He requested the beneficiaries to give their views.

CGM(Comml.), APDCL stated that the bilateral agreement of MTOA with OTPC is ending on 31st Mar'21. If the same is renewed and the merchant power is availed then Assam would be in surplus condition and would have to sell power in the market at discount to purchase cost. However, at present Assam is agreeable to take additional firm power from OTPC during peak time if the rate is competitive.

DoP, Nagaland and P&E Dept. Govt. of Mizoram have already confirmed to avail the above merchant power as per existing firm share.

The other states intimated that in one week time frame the decision would be conveyed.

Deliberation of the sub-Committee:

Director(O&P), NERPC informed the forum that Mizoram has already conveyed their assent for availing merchant power from OTPC.

DGM, SLDC, Assam informed that additional power from Palatana at RTC or long-term basis cannot be availed by Assam. However, the same if available during peak hours at competitive price, then power can be availed from Palatana GBPP.

SDO, DoP Nagaland informed that at present it has been agreed to avail additional 25MW power from Palatana on RTC basis. However, additional quantum has to be further discussed and decided upon by the Management.

Representatives from Arunachal Pradesh and TSECL informed that the matter is under examination by respective governments and decision would be conveyed at the earliest.

GM(Comml.), OTPC informed that MoP would allocate the power on RTC/long term basis. Also, plant cannot be scheduled for peak hours only, so RTC is only desired.

The Sub-Committee noted as above.

Action: DoP Ar. Pradesh, MeECL, DoP Nagaland, TSECL.

C.10 Preparation of Transmission Plan for 2026-27 and 2031-32:

For preparation of Transmission Plan for 2026-27 and 2031-32 CEA has requested that Load Generation Balance (Load vs dispatch of RE and conventional generators including ISGS) for the following scenarios or any other applicable scenarios are to be submitted:

- June – afternoon, evening, late night
- August – afternoon, evening, late night
- February - afternoon, evening, late night

Deliberation of the sub-Committee:

Director(O&P), NERPC requested all the state utilities to submit the projected data for 2026-27 and 2031-32 within one week.

The Sub-Committee noted as above.

Action: all state utilities.

C.11 Category-wise consumption of electricity in state/UTs:

The monthly category wise consumption data for 2019-20 and April'20 to Jan'21 has been urgently desired by Hon'ble MoS(Power). A sample is attached at **Annexure-C.11**. States may include any other category not mentioned explicitly in the sample.

Further in this regard, it has been advised by CEA that henceforth the monthly data of category-wise consumption of electricity in the States be discussed regularly in OCC with comparative analysis of the same for corresponding monthly data of previous year.

Deliberation of the sub-Committee:

Director(O&P), NERPC requested all the SLDCs to submit 2020-21 data at the earliest & henceforth submit the same on a monthly basis to NERPC. SE(SO&PSC), DoP Ar. Pradesh stated that the data is not readily available with SLDCs and same has to be requested from Distribution Wing. The forum requested NERPC to write to DISCOMs so that the data is made available to SLDCs periodically.

The Sub-Committee noted as above.

Action: all DISCOMS, all SLDCs, NERPC.

C.12 Third Party Protection Audit:

Status of the third-party protection audit conducted in views of Power Station of MePGCL on 09th/10th October'2020

Deliberation of the sub-Committee:

Director(O&P), NERPC handed over the Audit report to SE, MePGCL. The forum requested that the same maybe perused as reference in DPR preparation for R&U Phase-II.

The Sub-Committee noted as above.

Action: MePGCL.

C.13 R&U of Protection System:

Status of Renovation and Upgradation of Protection System in all power stations of MePGCL under PSDF scheme

Deliberation of the sub-Committee:

Director(O&P), NERPC clarified that the 21st TCC/NERPC has approved the second phase R&U of MePGCL stations. SE, MePGCL enquired about the modus-operandi for DPR preparation and subsequent approval process. The forum clarified that for schemes which require new elements approval of NERPCTP is required and separate DPR has to be prepared. For R&U of existing elements DPR has to be submitted to NLDC/NPC at the earliest.

The Sub-Committee noted as above.

Action: MePGCL.

C.14 Proper checking of isolator status before switching circuit breaker:

It is observed that on 19/02/2021, during returning of S/D of Silchar 1 bay at Misa, due to some observational mistake in SCADA, breaker was closed keeping the isolators open. Later new code was provided for opening & closing the bay once again for proper closing of the Bay. Hence it is requested to all concerned to check Isolator status before any operation of Circuit Breaker.

Deliberation of the sub-Committee:

NERLDC stated that isolator status must be checked by the utilities prior to closing of CBs as is the norm. The forum requested all the utilities to follow proper Operational Procedure.

The Sub-Committee noted as above.

Action: all utilities.

C.15 Calibration/replacement of defective panel meters of AGBPP:

E/S/D of 220 kV AGBPP – Mariani(PG) TL was availed by Powergrid from 11:41 Hrs on 08-03-2021. However after returning of the S/D by Powergrid, closing code was issued at 15:28 hrs and accordingly line was extended from Mariani(PG) at 15:49 Hrs. But synchronization at AGBPP was delayed for more than 1 Hr, stating voltage difference of their BUS (221kV) and the incoming line (195kV). On enquiry it was found that the voltage at Mariani(PG) was 223kV and Mariani(AS) was 220kV. Hence it is suspected that the indicating meters at AGBPP end are defective and needs calibration/replacement.

Deliberation of the sub-Committee:

NERLDC highlighted that open end volage of idle charged line cannot be less than charging end voltage as observed during the above-mentioned instance and so AGBPP end meters need calibration/replacement. The forum referred the issue to next PCC subgroup meeting for detailed discussions.

The Sub-Committee noted as above.

Action: all utilities.

C.16 Seeking NERLDC code for switching of important grid elements:

It is observed that few constituents are not taking NERLDC code for operation (Closing/Opening) of important grid elements under their own jurisdiction as well as Tr. Lines connecting State & ISTS S/S, reducing system security and reliability. Few Instances of such occurrence are as below:

1. Doyang U-1: 15:10 hrs of 09-03-2021 (Synchronized without code)

2. 132 kV Surajmaninagar – Comilla Ckt-2: 11:31 hrs of 03-03-2021 (Closed)
3. 32 kV Palatana – Udaipur: 18:22 Hrs (Opened) and 23:13 Hrs (Closed) of 04-03-2021
4. 132 kV Loktak – Ningthoukhong: 15:32 Hrs of 25-02-2021 (Closed at MSPDCL end)

As per Clause No-11.2 of NER Operating Procedure, NERLDC code is to be obtained for switching of important grid elements.

Deliberation of the sub-Committee:

The forum noted the seriousness of the matter and requested all the utilities to obtain code from NERLDC prior to switching of important grid elements.

The Sub-Committee noted as above.

Action: all utilities.

C.17 Addition of station DC Earth Fault signal in SCADA:

In the month of February'21, there were many instances of spurious tripping or tripping without indication, as mention below. In few of the mentioned cases, the cause of tripping is suspected to be “DC Earth Fault”. But as DC Earth fault signal is not included in the Sub-Station event logger or SCADA, such earth fault situations are not recorded in the system. Hence all constituents are requested to add “Station DC earth fault” signal in SCADA database.

Members may please discuss.

1. 800 kV HVDC Pole-2 on 12/02/2021 and 18/02/2021: No Details
2. Loktak Bus Bar protection operated on 13/02/2021: Suspected due to DC earth fault
3. LBB operated at 132 kV SM Nagar S/S on 14/02/2021: Corrective action taken by TSECL
4. 400 kV Balipara- Bongaigaon III & IV on 29/02/2021: Suspected DC Earth Fault

Deliberation of the sub-Committee:

NERLDC requested that the station DC E/F signal be added as additional digital point in SCADA. This would enable in proper monitoring of the grid with timely preventive maintenance. After detailed deliberation the forum decided to refer the matter to the next Standing Committee on Communication System Planning.

The Sub-Committee noted as above.

Action: NERLDC, NERPC.

C.18 Black Start & Restoration Procedure:

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

Plant Name	Performed on	Due Date
AGBPP	.....	.....
AGTTCCPP	09.04.2019	09.10.2019
RHEP	.....	.....
PareHEP	25.01.2020	25.07.2020
Kopili HEP	10.05.2019	NA
Khandong HEP	09.05.2019	09.11.2019
DHEP	12.06.2019	12.12.2019
Kameng HEP	.....	.....
OTPC	NA	NA
BGTPP	NA	NA
Loktak HEP	10.12.2019	10.06.2020

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. Therefore, mock black start exercises at all the generating stations is due as per dates mentioned in the above table. Procedure of Mock Black start at AGBPP was discussed and agreed in 166th OCC Meeting. AGBPP, RHEP and Kameng are requested to provide a suitable date for mock black start exercises at their respective power stations.

Deliberation of the sub-Committee:

After detailed deliberation the forum decided the following schedule:

Plant Name	Date/ Period for testing
AGBPP	June'21
AGTTCCPP	July'21
RHEP	Mar'21
Pare HEP	To be reviewed
Kopili HEP	NA
Khandong HEP	To be reviewed
DHEP	To be reviewed

Kameng HEP	After 10.04.2021
OTPC	NA
BGTPP	NA
Loktak HEP	To be reviewed

The Sub-Committee noted as above.

Action: all generators as above.

C.19 Reactive Power Capability Testing:

The previous Reactive Power Capability Testing has been conducted at various generating stations in NER as per procedure approved in 158th OCCM, on the dates mentioned in the following table:

Plant Name	Performed On
AGBPP	.....
AGTTCCPP	07.12.2019
RHEP	.....
PareHEP	.....
Kopili HEP	NA
KhandongHEP	.....
DHEP	.....
Kameng HEP	20.01.2021
OTPC	13.08.2019
BGTPP	30.09.2019
Loktak HEP	17.07.2020

AGBPP, RHEP, Pare HEP, Khandong HEP and DHEP are requested to provide a suitable date for Reactive Power Capability Testing at their respective power stations. The tests can also be conducted remotely by NERLDC as conducted at Loktak HEP.

Deliberation of the sub-Committee:

After detailed deliberation the forum decided the following schedule:

Plant Name	Date/ Period for testing
AGBPP	June'21
AGTTCCPP	July'21

RHEP	May'21
PareHEP	PG test report available
Kopili HEP	NA
Khandong HEP	End of Apr'21
DHEP	June'21
Kameng HEP	20.01.2021
OTPC	To be reviewed
BGTPP	To be reviewed
Loktak HEP	To be reviewed

*Reactive power capability test was performed at Pare HEP units during recent PG Test. The test report shall be shared by NEEPCO with NERLDC. NERLDC may conduct further reactive power capability test for all units at Pare HEP if the test report does not cover all aspects of the test as per approved procedure of reactive power capability test.

The Sub-Committee noted as above.

Action: all generators as above.

C.20 Monitoring of Performance of TARA devices:

All SLDCs of NER are requested to provide status of utilization of TARA devices installed at their respective states. The status of the same was last updated in 166th OCCM held on 6th March, 2020.

Deliberation of the sub-Committee:

DGM, SLDC, TSECL informed that out of the 8 nos of TARA devices installed in Tripura none are reporting. Further he stated that additional 2 devices are required and 2 devices for 132kV Silchar-PKBari D/C have to be shifted upon upgradation of the line.

EE, SLDC, Meghalaya stated that states have to bear the recurring cost for GPRS system with no device reporting. The forum took strong note of the non-reporting of TARA devices and requested NERPC to invite CDAC to the next OCC meeting.

After detailed deliberation the forum decided to review and monitor state-wise performance of TARA devices on monthly basis.

The Sub-Committee noted as above.

Action: all SLDCs, NERLDC, NERPC.

C.21 Uniform segregation of 132kV lines and units to both 132kV Bus-A&B at Loktak HEP:

Switching scheme of 132 kV Loktak, NHPC is double main cum transfer scheme. As per operating procedures of NER, in case of two bus system, grid elements are to be segregated uniformly on different buses to maintain the security and reliability of the grid.

However, it was observed that all the 132 kV Jiribam (PG), Imphal(PG), Ningthoukong(MSPCL), Rengpang(MSPCL) and Unit-II & III were connected to 132 kV Bus-B and 132 kV Station Transformer & Unit-I were connected in 132 kV Bus-A which reduces the reliability of Loktak Power Plant along with NER Grid.

On dated 24th Feb'21, all the CBs connected to 132 kV Bus-A & B tripped resulting Grid Disturbance of category GD-1(Generation loss: 104 MW) at Loktak HEP and subsequently revived at 19:11 Hrs of 24th Feb'21. The cause of the tripping was reported to be Bus bar relay mal-operation due to DC earth fault.

NERLDC vide its letter dated 3rd Mar'21 to Loktak, NHPC requested to take up the issue of uniform distribution of feeders in both the buses after necessary checking to improve reliability & security of NER Grid.

Deliberation of the sub-Committee:

NHPC informed that segregation of elements in both buses has been completed and Bus-coupler O/C setting has been revised from 0.75 to 1.

The Sub-Committee noted as above.

ADDITIONAL AGENDA ITEM:

C.22 Implementation of SPS for charging of Bus Reactors at 400kV Surjamaninagar:

As per the charging instruction a study issued by NERDLC for charging of 420 kV, 125 MVAR Bus Reactor 1 and 2 at SM Nagar (ISTS) of NER-II TL it is quoted as:

“The Bus Reactors may be charged after commissioning of 400 kV Palatana - SM Nagar D/C to avoid Low voltage issues in Southern Part of NER Grid.

Otherwise, the following option can be made feasible for according permission for first time charging of the reactors.

As per System Study:

Pre-condition: 1) 400 kV Silchar (PG) – PK Bari (ISTS) I or II or both to be kept in service. 2) 400 kV SM Nagar (ISTS) – PK Bari (ISTS) I or II to be kept in service.

Under the condition of fulfilment of Pre-condition, charging 1 Bus Reactor out of 2x125 MVAR Bus Reactors at 400 kV SM Nagar (ISTS) leads to a voltage reduction of about 14 kV at 400 kV SM Nagar (ISTS). Charging the other reactor at 400 kV SM Nagar (ISTS) leads to a reduction of another 10 kV at 400 kV SM Nagar (ISTS).

It is to be noted that upon tripping of both circuits of 400 kV SM Nagar (ISTS) – PK Bari (ISTS) D/C and when 1 Bus reactor is in service at 400 kV SM Nagar (ISTS) Bus, the voltage at 400 kV SM Nagar (ISTS) bus drops by about 35 kV. Also, when 2 Bus reactors is in service at 400 kV SM Nagar (ISTS) Bus, the voltage at 400 kV SM Nagar (ISTS) bus drops by about 50 kV. This causes serious low voltage problems at SM Nagar Area of Tripura under tripping of 400 kV SM Nagar (ISTS) – PK Bari (ISTS) D/C.

This necessitates the placement of a tripping logic at SM Nagar (ISTS) in which tripping of both circuits of 400 kV SM Nagar (ISTS) – PK Bari (ISTS) D/C will lead to tripping of both the Bus Reactors at 400 kV SM Nagar (ISTS) Bus. Also, upon tripping of both the Bus Reactors at 400 kV SM Nagar (ISTS) Bus, the tripping logic should trip one circuit out of 400 kV SM Nagar (ISTS) – PK Bari (ISTS) D/C.

Deliberation of the sub-Committee:

NERLDC stated that 2x125MVAR 420kV Bus Reactors are required to be charged at Surjamnagar because of grid necessity. The forum approved the SPS required to charge the 2 Bus Reactors.

The Sub-Committee noted as above.

Action: M/s STERLITE.

D. ITEMS FOR STATUS REVIEW

D.1 Status update of important grid elements under prolonged outage impacting system operation:

Sl. No	Element	Owner	Status as informed in the 175 th OCCM	Status as informed in the 176 th OCCM
1	132kV Rangia-Rowta	AEGCL	By Mar'21	By 31.03.2021
2	132kV Mariani – Mokokchung (out since April'2008)	AEGCL	-	Joint survey by Apr'21
3	FSC of 400kV Balipara – Bongaigaon-4(out since 02 nd Sep'20)	NERTS	By Mar'22	To be reviewed later on.
4	132kV Roing-Pasighat	NERTS	by Apr'21	2 piles completed. By 15 th May'21.

	(charged through ERS tower			
5	220kV Mariani-Mokokchung - I	NERTS	B/R bay used to charge the line. By 31 st March'21	By May'21

The Sub-Committee noted as above.

Action: AEGCL, NERTS.

D.2 Status of commissioning for Upcoming projects:

Sl. No	Name of the element	Utility	Status as informed in 175 th OCC meeting	Status as informed in 176 th OCC meeting
1	400kV Palatana-Surjamaninagar D/C	NERTS	By Mar'21	By Mar'21
2	400kV Silchar - P.K.Bari D/C	NERTS	By Feb'21	Charged on 06.03.2021. To be dropped
3	132kV AGTCCPP-PKBari D/C	STERLITE	By Feb'21	Charged on 09.02.2021. To be dropped.
3	132kV Monarchak-Surjamaninagar	TSECL	By March'21.	By July'21
4	PLCC for 132kV Loktak-Ningthoukong and 132kV Loktak-Rengpang	MSPCL	Included in R&U. By Mar'21	By June'21
5	Construction of 2 nd bay at Balipara for 220kV Balipara-Sonabil-2	AEGCL	LoA by Feb'21	Award delayed due to MCC.
6	Bay at 132kV Agia S/Sn for 132kV Agia-Nangalbibra-II	AEGCL	Bay ready at Agia and applied for charging by Assam. Meghalaya to apply for FTC as both the bays are owned by Meghalaya. MePTCL to co-ordinate for charging from both ends.	By Mar'21
7	Upgradation of 132kV Lumshnong - Panchgram line	MePTCL	PSDF approval awaited.	PSDF approval awaited. To prepare NIT documents.
8	Diversion of 132kV Bawktlang-Sihhmui	NERTS	By Mar'21	By Jul'21
9	PLCC for 132kV Karong-Kohima	MSPCL	To be updated	By May'21
10	400/220kV 500MVA ICT at Mariani	NERTS	completed	completed

11	132kV Loktak-Ningthoukong-II	MSPCL	Mar'21	Delayed due to RoW issues. By May'21
12	132kV Roing-Chapakhowa	NERTS	Negotiation on-going.	Retendering done. By Dec'21
13	132kV Rumpai-Chapakhowa & Chapakhowa S/Sn	POWERGRID	Dec'21	By Dec'21
14	Re-conductoring 220kV BTPS-Salakati D/C	NERTS	Bid to be opened by Feb'21	Exact status to be intimated in a week

The Sub-Committee noted as above.

Action: all utilities as above.

D.3 Testing of Primary Governor response of NER Generating units as per IEGC Cl.5.2(g):

Schedule as agreed in the 175th OCC meeting

Region	Station	No. of generators	Schedule	Duration (days)	Remarks
NER	NEEPCO Tuirial	2	Tentatively during Jun-Jul 2021	4	In high hydro
NER	NEEPCO-Monarchak	2	07 th Apr'21 to 13 th Apr'21	8	-
NER	NEEPCO-Kopili	1	Under long shutdown	2	-
NER	OTPCL-Palatana	2	In May'21	4	-
NER	NTPC Bangaigaon TPP	3	Last week of Apr'21 or May'21	6	-
NER	NHPC Loktak	3	22 nd Feb'21 to 27 th Feb'21	6	-

Deliberation of the sub-Committee:

Region	Station	No. of generators	Schedule	Duration (days)	Remarks
NER	NEEPCO Tuirial	2	Tentatively during Jun-Jul 2021	4	In high hydro
NER	NEEPCO-Monarchak	2	07 th Apr'21 to 13 th Apr'21	8	-
NER	NEEPCO-Kopili	1	Under long shutdown	2	-
NER	OTPCL-Palatana	2	In May'21	4	-
NER	NTPC Bangaigaon TPP	3	Last week of Apr'21 or May'21	6	-
NER	NHPC Loktak	3	22 nd Feb'21 to 27 th Feb'21	6	-

NERLDC requested to add Kameng HEP units in place of Kopili units for primary frequency response testing. Forum approved the same.

The Sub-Committee noted as above.

Action: NEEPCO, NHPC, NTPC, OTPC.

D.4 Palatana Units MVAR absorption/injection:

On 03.02.2021, Tap position of UAT-1 was increased from 3 to 4 on 03.02.2021 after the issue of high MVAR injection was informed by NERLDC. The same could not be done for UAT-2 as diverter switch for the same is not operational (as informed by OTPC via email dated 01.02.2021). Presently, GTG-1, STG-1 and STG-2 are seen to be absorbing MVAR in high voltage scenarios. However, GTG-2 is seen to be injecting MVAR most of the time (even in high voltage scenarios). Appropriate **setting** change of UAT-2 is to be done expeditiously. Also, till the rectification of UAT-2 diverter switch, OTPC is requested to take necessary corrective action so that net MVAR injection by OTPC plant becomes zero when bus voltage at Palatana is 400 kV.

In 175th OCC meeting, OTPC informed that during the shutdown of the units of Palatana in the upcoming months, the issue **of** diverter switch of UAT-2 will be rectified. NERLDC requested that till the time UAT-2 is rectified, net MVAR injection by the Palatana plant above 400 kV should be maintained zero when bus voltage at Palatana is 400 kV. ED, NERLDC requested OTPC to intimate the OEM so that absorption by the units will be according to the capability curve.

Deliberation of the sub-Committee:

OTPC informed that the works will be completed during Plant Shutdown

The Sub-Committee noted as above.

Action: OTPC.

D.5 Opening of One phase of Jumper at Tower No.2 of 132 kV PK Bari-PK bari line on 04th Feb'21

Joints were observed in all three phases of jumpers as per pictures shared by SLDC, Tripura. It is generally advised to avoid joints, as joints are the weak points and leads to formation of hotspots in due course of time. In view of importance of the mentioned line, proper checking and tightening of jumpers needs to be expedited at the earliest for safe & reliable operation of NER grid.

The 175th OCC forum requested TSECL to confirm if joints are present throughout the line or only at Tower No.2.

Deliberation of the sub-Committee:

TSECL agreed to revert back with exact details in the next meeting.

The Sub-Committee noted as above.

Action: TSECL.

D.6 Commissioning of second circuit of 220kV Balipara-Sonabil:

With the full evacuation of power (4x150MW) from Kameng HEP, overloading of 220 kV Balipara-Sonabil S/C has been escalated limiting the NER-ER transfer capability. Since the monsoon season is also nearing, it is important to expedite the commissioning of the second circuit of 220 kV Balipara -Sonabil S/C for safe evacuation of power from Kameng HEP without restricting the NER-ER TTC.

Deliberation of the sub-Committee:

After detailed deliberation the forum decided to monitor the progress under item No.

D.2

The Sub-Committee noted as above.

Action: AEGCL.

D.7 Status of 132kV Pare-North Lakhimpur D/C with one circuit LILO-ed at Nirjuli:

Sterlite Power is requested to share the updated status of commissioning of 132 kV Pare-North-Lakhimpur D/C with one circuit LILO-ed at Nirjuli for supply of power from Pare HEP to North-Lakhimpur area of Assam as presently North-Lakhimpur area is fed from one radial link of 132 kV Biswanath Chariali-Pavoi-Gohpur-North Lakhimpur.

Deliberation of the sub-Committee:

The forum noted that the RFP date for commissioning of 132kV Pare-N.Lakhimpur D/C is June'23. Regarding the handing over of upgradation works and LILO removal at Pare the forum referred the matter to the next NERPCTP for resolution.

The Sub-Committee noted as above.

Action: NEEPCO, NERPC.

D.8 Status of Actual Effective Thermal Capacity of Assam, Tripura:

The All India Demand Met is increasing rapidly since October 2020. The peak demand met had touched around 189 GW on 30.01.2021. It is also envisaged that the peak demand is likely to touch around 210 GW during 2021-22.

To cater to this increasing trend in demand, it has become essential to assess the actual availability of conventional generating stations. As per information available with CEA, around 15 GW capacity of conventional generating station was out of bar since last one year.

Ministry of Power, Govt. of India vide enclosed letter no: 5/1/2021-OM dated 10.02.2021 had written to Principal Secretary (Power), Govt of Assam and Principal Secretary (Power), Govt of Tripura to furnish the details of the actual effective thermal capacity which can be utilized to meet the power demand on National level and the State level.

It is requested to intimate the status regarding furnishing of the required details.

Deliberation of the sub-Committee:

The forum requested Assam, Tripura to submit the status at the earliest.

The Sub-Committee noted as above.

Action: APGCL, TPGL.

Metering Agenda:

D.9 Faulty SEM replacement and SEM installation at new locations:

100 SEMs and 20 DCDs had been procured. List for replacement offaulty SEMs and location for new SEM installation had been submitted by NERLDC vide earlier OCCMs. All locations as per the list could not be considered due to the requirement of SEMs for the Sterlite & KMTL on-going projects and hence some priority basis locations were decided, and work is under progress.

List for locations for distribution of DCD was also submitted vide earlier OCCMs and most of them had already been distributed.

In MoM of 40th CCM, NERTS provided the status of completion of SEM replacement/installation and DCD distribution. List attached at **Annexure-D.9**

Deliberation of the sub-Committee:

NERTS informed that the faulty SEMs have been replaced.

The Sub-Committee noted as above.

Action: NERTS

D.10 SEMs to be procured for STERLITE and KMTL on-going projects:

It was decided that additional 50 nos. of SEMs needed to be procured before completion of Sterlite & KMTL projects. However, that couldn't be done and SEMs required for those projects handed over from earlier procured 100 SEMs on need basis.

NERTS placed quantity variation order for procurement of 50nos. of SEMs and 10 nos. of DCDs based on the decision of the Forum. In 40th CCM, NERTS intimated that this procurement is expected to be completed by Feb 2021.

NERTS is also requested to provide the details of SEM & DCD diverted to Sterlite & KMTL projects.

Deliberation of the sub-Committee:

Chief Manager, NERTS informed that 50 SEMs & 10 DCDs are to be delivered by Apr'21 and additional order for 100 SEMs will be placed shortly.

The Sub-Committee noted as above.

Action: NERTS

D.11 Procurement of SEM/DCD laptop for future requirements:

In 170th OCCM NERLDC presented the estimation 125 nos. SEMs and 15 nos. CMRIs shall be required for future projects and maintaining spare. List of SEMs and CMRIs was presented by NERLDC. The forum also decided that procurement will be done on single tender basis from L&T to synchronize with the existing metering system

In 175th OCCM NERTS informed that the procurement process has been initiated and the target LoA date is Mar'21.

Deliberation of the sub-Committee:

NERTS informed that LoA would be placed by Apr'21 after CC approval.

The Sub-Committee noted as above.

Action: NERTS

D.12 SEM time drift:

Time drift more than 5mins observed in Biswanath Chariali Substation, SEM no. NP-9678-A, NP-8801-A, NP-7601-A (Pole-1), NP-5798-A (Pole-2) and other meters also having time drift. Requested to take necessary action as these SEMs are very important for accounting of Inter-regional exchanges.

Deliberation of the sub-Committee:

Chief Manager, NERTS informed that time drift of SEMs at Biswanath Chariali Substation has been corrected.

EE, SLDC, Meghalaya intimated that the DCD at Mendipathar is not capable of Time Drift correction. The forum requested NERTS to replace the same as per earlier decision of the forum.

The Sub-Committee noted as above.

Action: NERTS

D.13 Collection of SEM data:

1. Budhjungnagar (TSECL) end of 132kv Budhjungnagar (TSECL)-SM Nagar (Sterlite) line,
2. SM Nagar (TSECL) end of 132kV SM Nagar (TSECL)- SM Nagar (Sterlite),
3. PK Bari (TSECL) end of 132kV PK Bari (TSECL)- PK Bari (Sterlite) line,
4. Ambassa (TSECL) end of 132kV Ambassa (TSECL)-PK Bari (Sterlite) line

Data of the above mentioned newly charged lines not received from TSECL (SLDC, Agartala).

As per regulations SLDC, Agartala should take necessary action for sending the data to NERLDC. However, due to non-availability of DCDs in most of the Substations of Tripura SEM data is being sent to NERLDC by NERTS. Forum may find out suitable solutions for sending SEM data to NERLDC of the above-mentioned lines.

In 175th OCC meeting it was discussed that due to existing shortage of DCDs, same cannot be provided to Tripura for some time for new locations. This creates difficulty in getting SEM data from Budhjungnagar, Ambassa, PK Bari and SM Nagar. Matter was discussed and it was decided that during the interim period POWERGRID, NERTS will provide readings for all the SEMs installed at PK Bari S/s and SM Nagar S/s of Tripura and Sterlite will provide readings for all the SEMs installed at Budhjungnagar S/s and Ambassa S/s of Tripura.

Issues related to data collection at 132kV Ambassa S/s for Ambassa (TSECL) end of 132kV PK Bari (Sterlite)

SEM details at 132kV Ambassa (TSECL) S/S: SEM No. NP-9934-A, Make- L&T, CT Ration- 400/1, PT Ration- 132kV/110V was declared by TSECL as per the relevant format of FTC procedure for FTC purpose. Accordingly, the line was allowed to charge and presently is in service.

However, Sterlite informed that they are unable to send the SEM readings of Ambassa end (NP-9934-A) due to non-availability/ installation of the SEM.

132 kV Ambassa (TSECL) - PK Bari (Sterlite) is accounted as drawal point of Tripura and installation/healthiness of the SEM is most important. As gathered verbally from SLDC, Tripura the SEM was removed due to some CT issue, but any written confirmation is yet to be received. Tripura may explain.

Deliberation of the sub-Committee:

Chief Manager(AM), NERTS informed that at Ambassa 5A CT secondary is available and existing SEMs procured by NERTS can be connected to 1A secondary only. AGM,

TSECL intimated the forum that M/s STERLITE has procured SEM(5A Type B) which has same specification as(1A type A) as provided by CTU and same can be installed at Ambassa end. Further, TSECL informed that under ongoing upgradation works in Tripura, all CTs having 5A secondary shall be replaced with CTs with 1A secondary at Ambasa.

The forum agreed for installation of the 5A SEMs procured by M/s STERLITE after getting certification from CTU/POWERGRID at Ambassa S/Sn till the CTs are replaced with 1A secondary CTs by TSECL at the earliest. After installation NERLDC shall verify the reading by comparing with the other end reading.

The Sub-Committee noted as above.

Action: NERTS

D.14 Charging of 400kV Thoubal S/S:

MSPCL vide email dated 17.03.2021 had requested to keep 400kV Thoubal -Imphal D/C line charging till inauguration by Govt. of Manipur. In view of above the issue may be put for discussion in the upcoming OCC meeting.

Deliberation of the sub-Committee:

CGM(I/C), NERLDC stated that 400kV Thoubal was charged based on undertaking submitted by MD, MSPCL. Thereafter virtual inauguration was done on 15th Mar'21, with no firm date given for physical inauguration. He further suggested that the Station may be de-energized Till PTCC clearance is obtained.

GM(Trans.), MSPCL impressed the forum about the problems faced by MSPCL while first time charging of 400kV Thoubal S/Sn and stated the insurmountable difficulties in de-energizing and again charging prior to inauguration. He urged upon the forum to look into this matter favourably.

After detailed deliberation it was decided by the forum that extension of charged condition shall be allowed till 27th Mar'21. It was impressed upon MSPCL by the forum that the decision to grant extension should not be taken as acceptance and MSPCL should strive to submit PTCC clearance at the earliest.

The Sub-Committee noted as above.

Action: MSPCL, NERLDC

Date & Venue of next OCC meeting:

It is proposed to hold the 177th OCC meeting of NERPC on second week of April, 2021 at Guwahati. However, exact date and venue will be intimated in due course.

Annexure-I**List of Participants in the 176th OCC Meeting held on 22.03.2021**

SN	Name & Designation	Organization	Contact No.
1	Sh. Nangkong Perme, SE (E)	Ar. Pradesh	09436288643
2	Sh. Chandan Sharma, CGM, SLDC	Assam	-
3	Sh. Bimal Ch. Borah, DGM (OP)	Assam	09435119248
4	Sh. Rupanka Kishore Goswami, AGM (SLDC)	Assam	09613146565
5	Sh. Priyananada Singh, GM (Trans.)	Manipur	09612152014
6	Sh. H. Shangpliang, SE	Meghalaya	09863315362
7	Sh. T. Gidon, EE, SLDC	Meghalaya	06009094044
8	Sh. Y. Iakai, AEE	Meghalaya	09402133552
9	No Representative	Mizoram	
10	Sh. Rokobeito Iralu, SDO (Trans.)	Nagaland	09436832020
11	Sh. Achanger T. Aier, SDO (SLDC)	Nagaland	08732873898
12	Sh. Shuwato, JE (SLDC)	Nagaland	07005589689
13	Sh. M.S. Kele, MD, TSECL	Tripura	-
14	Sh. R. Debbarman, AGM	Tripura	09436122643
15	Sh. Anil Debbarma, DGM (SLDC)	Tripura	09612589280
16	Sh. Joypal Roy, DGM(E/M)	NEEPCO	08837200069
17	Sh. Nabarun Roy, CGM	NERLDC	09869080265
18	Sh. S.C. De, GM	NERLDC	09436335369
19	Sh. Abhilash Das, CM	NERLDC	09436463804
20	Sh. Sourav Mandal, DM	NERLDC	09402102354
21	Sh. U. Kataki, CGM (AM)	PGCIL	09435505418
22	Sh. Devaprasad Paul, Ch. Mgr (AM)	PGCIL	09435382360
23	Sh. Rodik Hmar, Sr. Manager (E)	NHPC	09402277414
24	Sh. Arup Ch, Sarmah, GM (Comml.)	OTPC	09871839502
25	Sh. Dinesh Laha, AM (OPR)	OTPC	08918720645
26	Sh. D.P. Batra, GM (O)	NTPC	08275045446
27	Sh. H.S. Sahu, GM (OS)	NTPC	09493193251
28	Sh. Pravat Ranjan Jena, AGM (OS)	NTPC	09437964960

29	Sh. A.K. Thakur, Member secretary	NERPC	-
30	Sh. B. Lyngkholi, Director (O&P)	NERPC	09436163419
31	Sh. S. Mukherjee, EE	NERPC	08794277306
32	Sh. Sadiq Imam, EE	NERPC	-
33	Sh. Shaishav Ranjan, AEE	NERPC	-

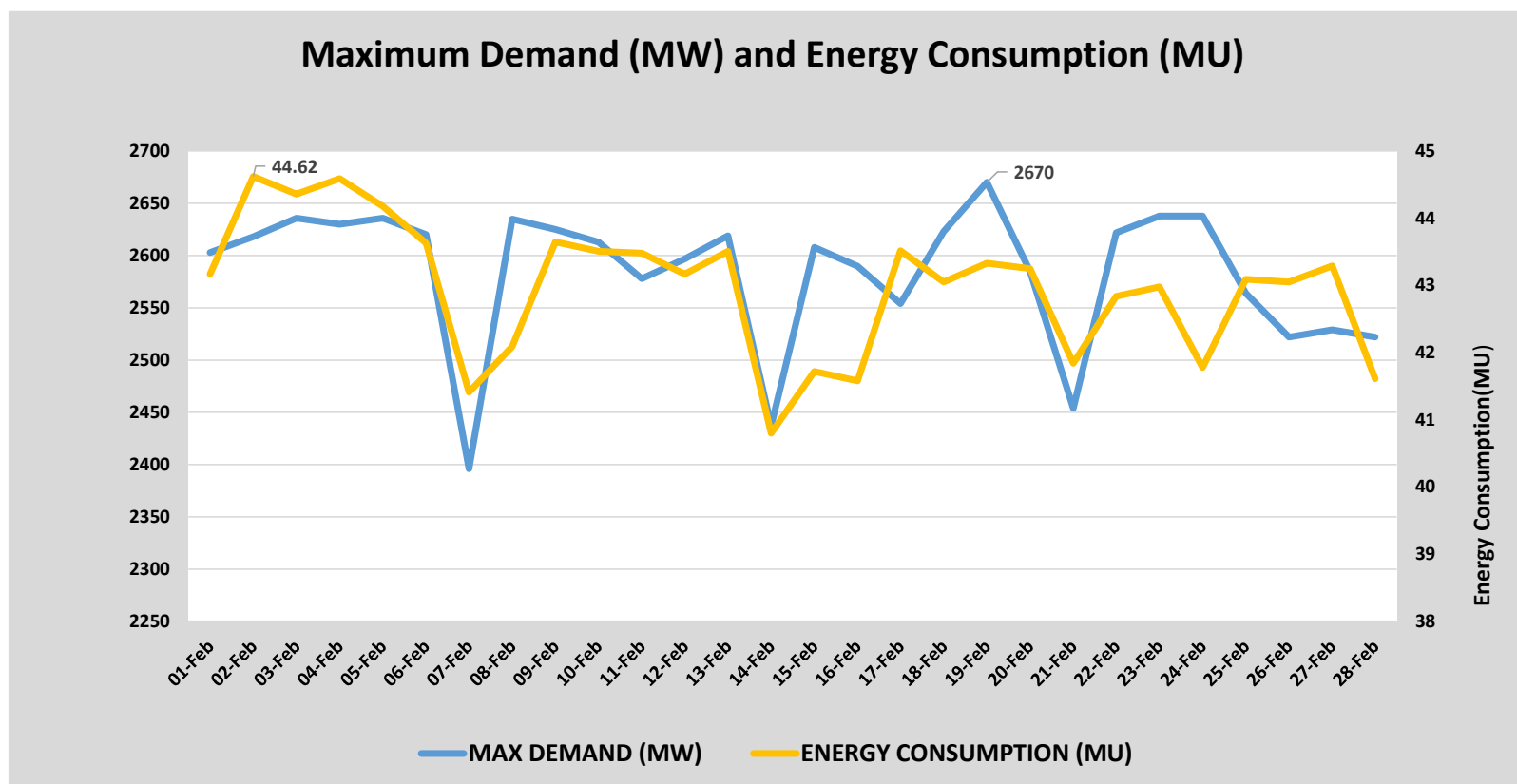


उ.पू.क्षे गिड प्रदर्शन
NER GRID PERFORMANCE

For the month February 2021

North Eastern Regional Load Despatch Centre
POSOCO, Shillong

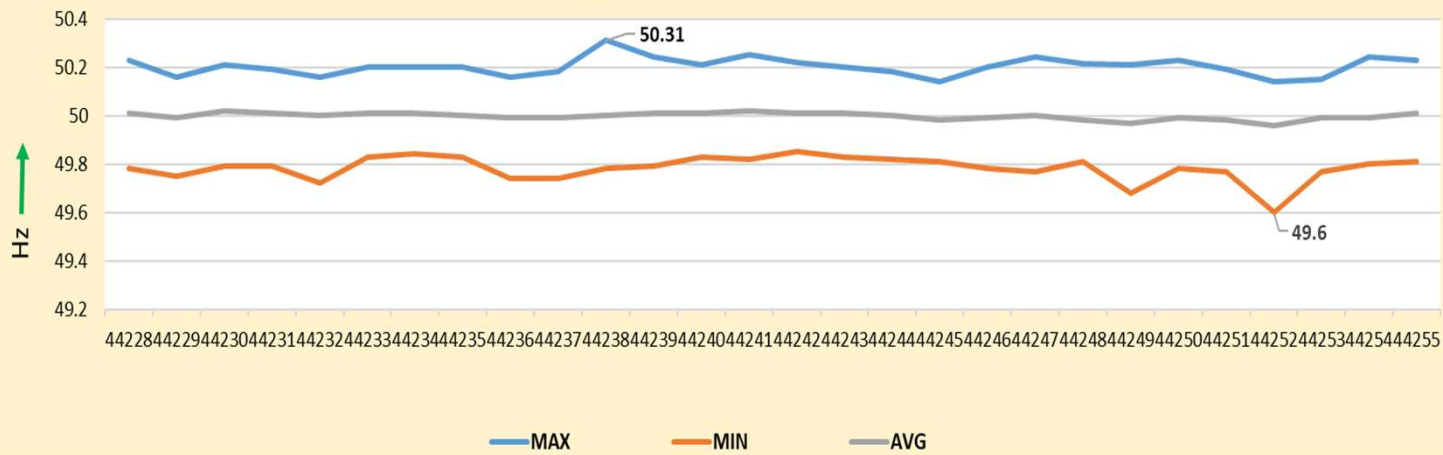
Maximum Demand and Energy consumption in NER: Feb' 2021



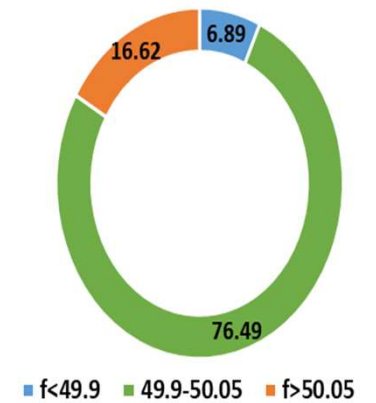
Frequency Profile



FREQUENCY PROFILE FEB 2021



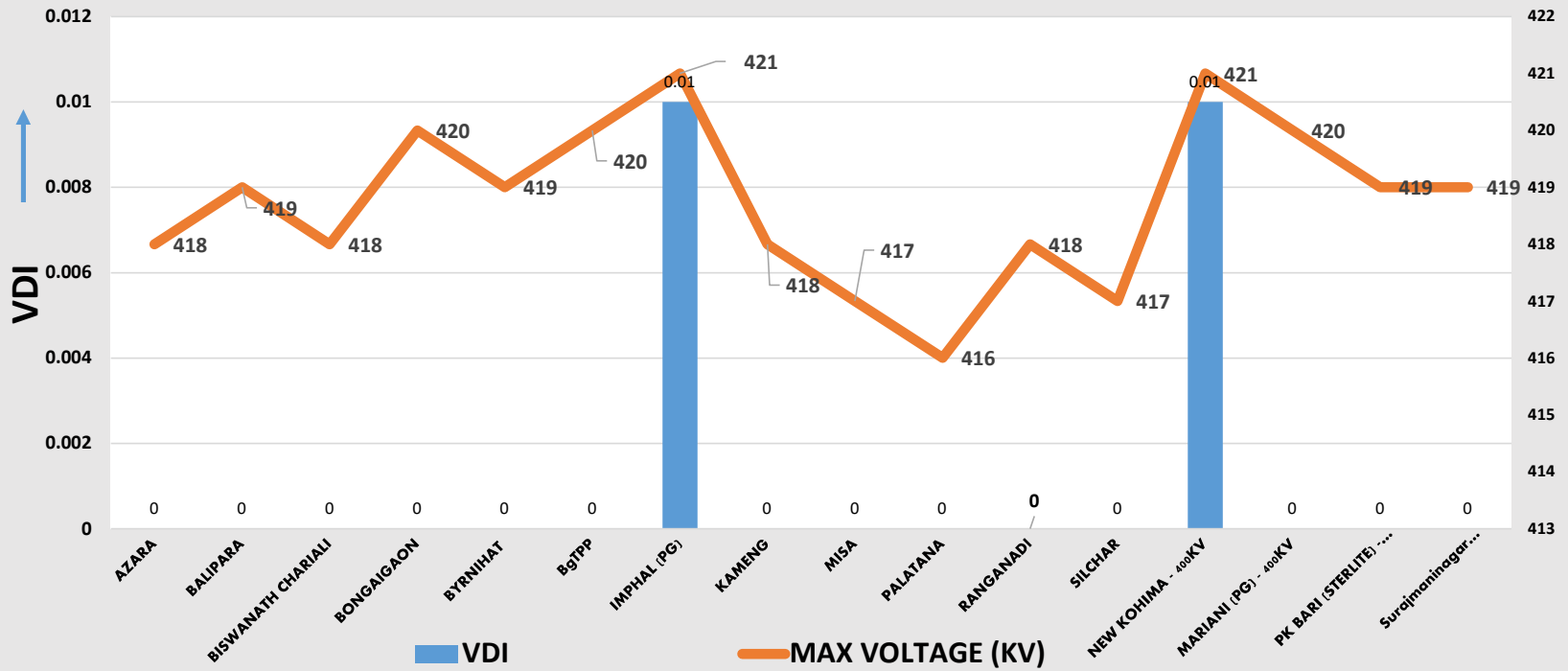
FREQ PROFILE FOR FEB'21





VDI (400 KV) FOR FEB 2021

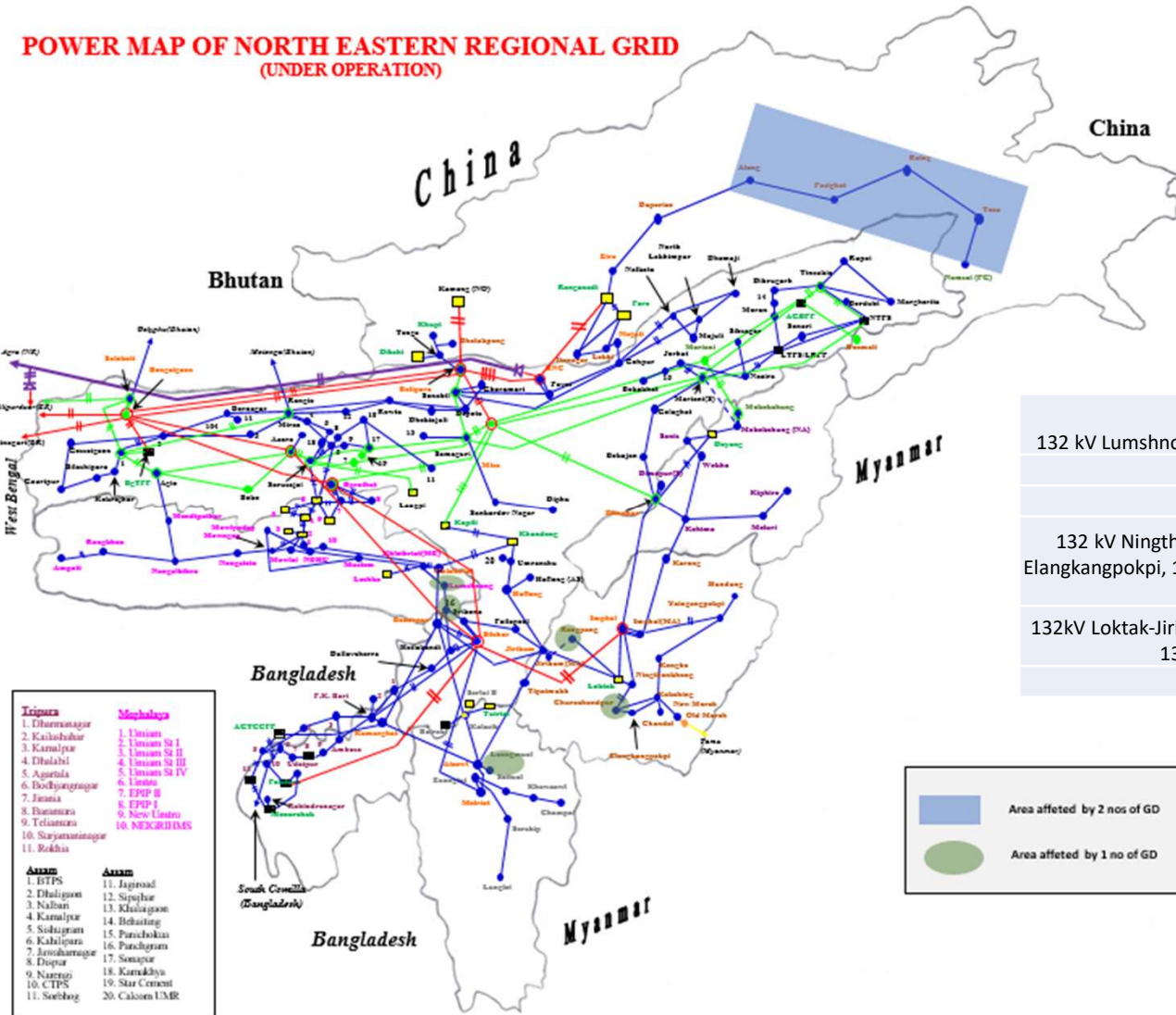
No. of 400 kV lines kept open for over voltage : 1





Grid Disturbance during Feb 2021

**POWER MAP OF NORTH EASTERN REGIONAL GRID
(UNDER OPERATION)**



No. of GD	7
No. of GI	5

132 kV Lumshnong - Panchgram line & 132 kV Hailakandi-Panchgram line	caused GD 1 times
132 kV Lumshnong - Panchgram line	caused GD 1 times
132 kV Aizawl-Luangmual line	caused GD 1 times
132 kV Ningthoukong - Churachandpur D/C, 132 kV Churachandpur - Elangkangpokpi, 132 kV Churachandpur - Kakching, 132 kV Elangkangpokpi - Kakching	caused GD 1 times
132kV Loktak-Jiribam, 132kV Loktak-Imphal, 132kV Loktak-Ningthoukhong, 132kV Loktak-Renggang, Loktak Unit-I, II & III	caused GD 1 times
132 kV Along-Daporijo line	caused GD 2times

- | Triprara | Mizoram |
|-----------------|-----------------|
| 1. Dharmanagar | 1. Umiam |
| 2. Kailashahar | 2. Umiam SI I |
| 3. Karapuz | 3. Umiam SI II |
| 4. Dhalabi | 4. Umiam SI III |
| 5. Agartala | 5. Umiam SI IV |
| 6. Dohjongrapur | 6. Umiam |
| 7. Jirania | 7. EPIP II |
| 8. Bhamoiria | 8. EPIP I |
| 9. Teliamura | 9. New Umiam |
| 10. Sarjamnagar | 10. NEGRHIMS |
| 11. Rokhia | |
-
- | Assam | Assam |
|----------------|-----------------|
| 1. ETPS | 11. Igroad |
| 2. Dhalgaon | 12. Sorigar |
| 3. Nalbon | 13. Khulapoon |
| 4. Karapuz | 14. Behaiting |
| 5. Soibam | 15. Panchohia |
| 6. Kailapuz | 16. Panchgram |
| 7. Jiriahnagar | 17. Sonapur |
| 8. Dapor | 18. Karabdyi |
| 9. Narengi | 19. Star Cement |
| 10. CTPS | 20. Calson UMR |
| 11. Soibhog | |



Availability of ISGS Hydro Generation

Plants	Reservoir Level in meters (as on 18/03/2021)	MU Content	Present DC (MU)	No of days as per current Generation
Khandong + Kopili STG II	712.35	11	0.151	73
Kopili	-	-	-	
Doyang	315.5	14	0.623	22
Loktak	769.29	45	0.39	115

175th OCC approved shutdown availing status

SUMMARY OF NER OUTAGE

MONTH	PLANNED IN OCC	APPROVED IN D-1	AVAILED IN REAL TIME	AVAILED VS PLANNED	AVAILED VS APPROVED	DEFERRED BY RLDC DUE TO SYSTEM CONSTRAINT
Feb-21	185	180	118	64%	66%	5

RMSE of Load forecast for Feb'21

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

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

Where,

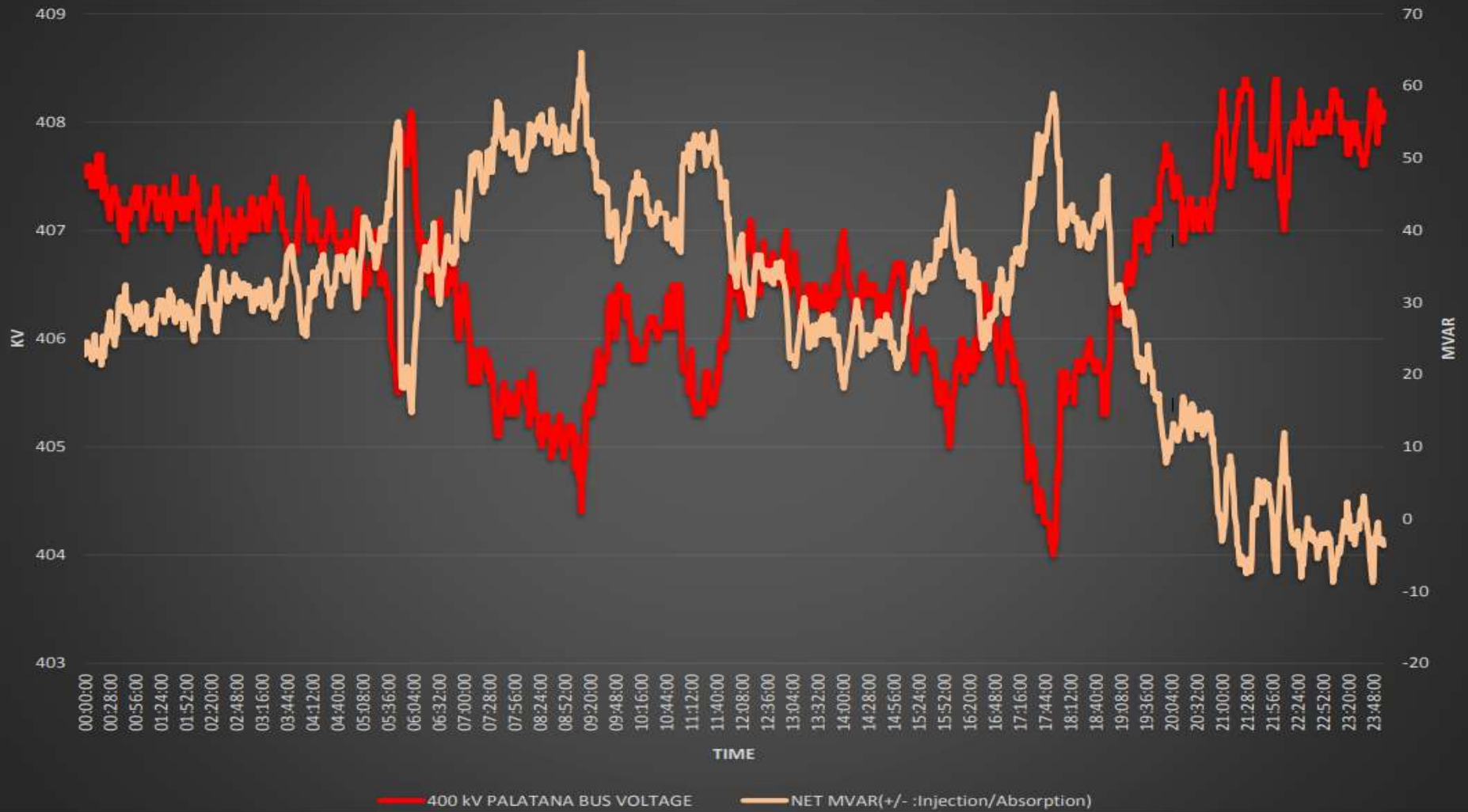
Predicted_i = Forecasted Value

Actual_i = Actual value

N = Total number of observations.

	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
Median	17	6	9	7	29	8	19

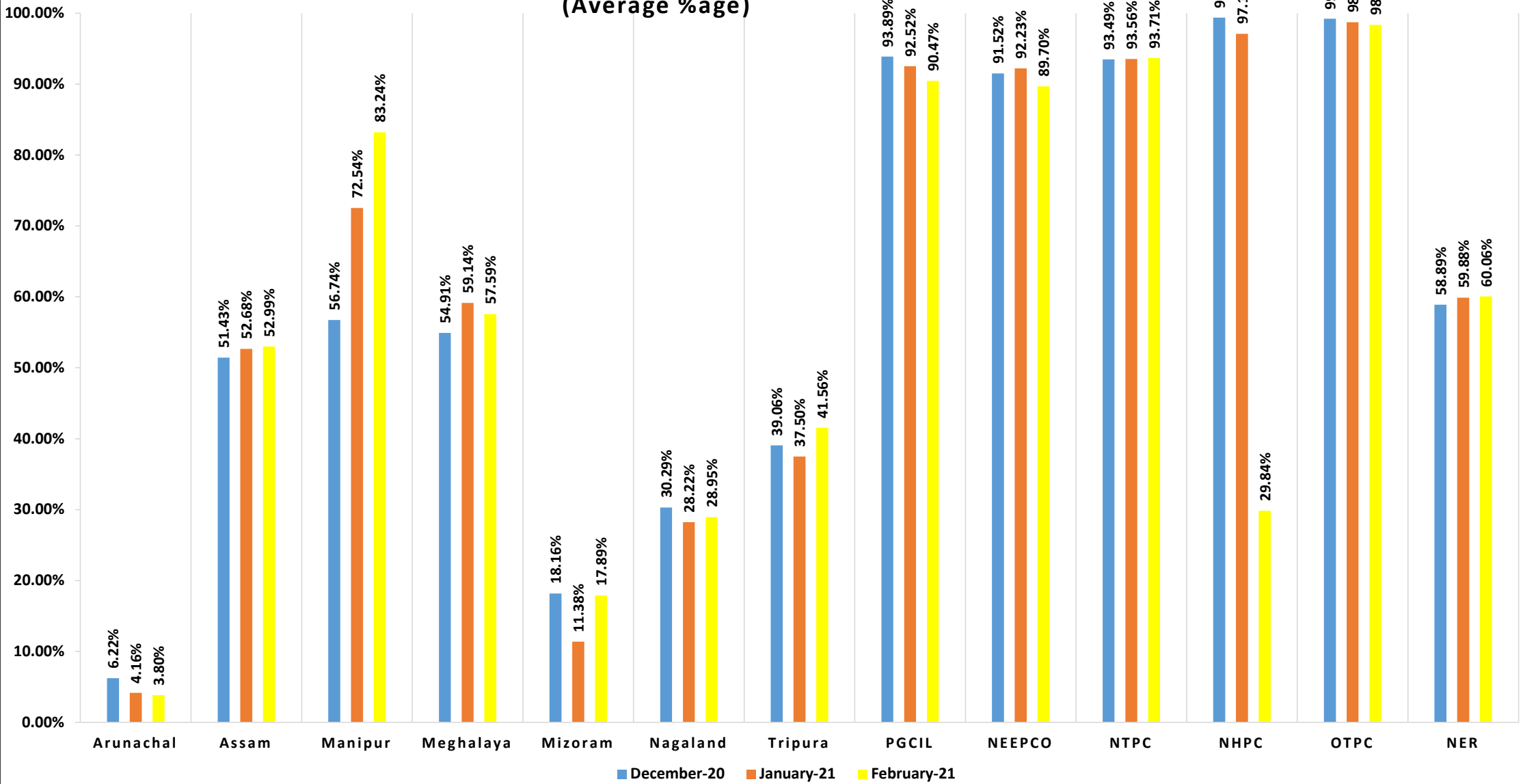
PALATANA NET MVAR w.r.t 400kV BUS VOLTAGE DATED 24-02-2021



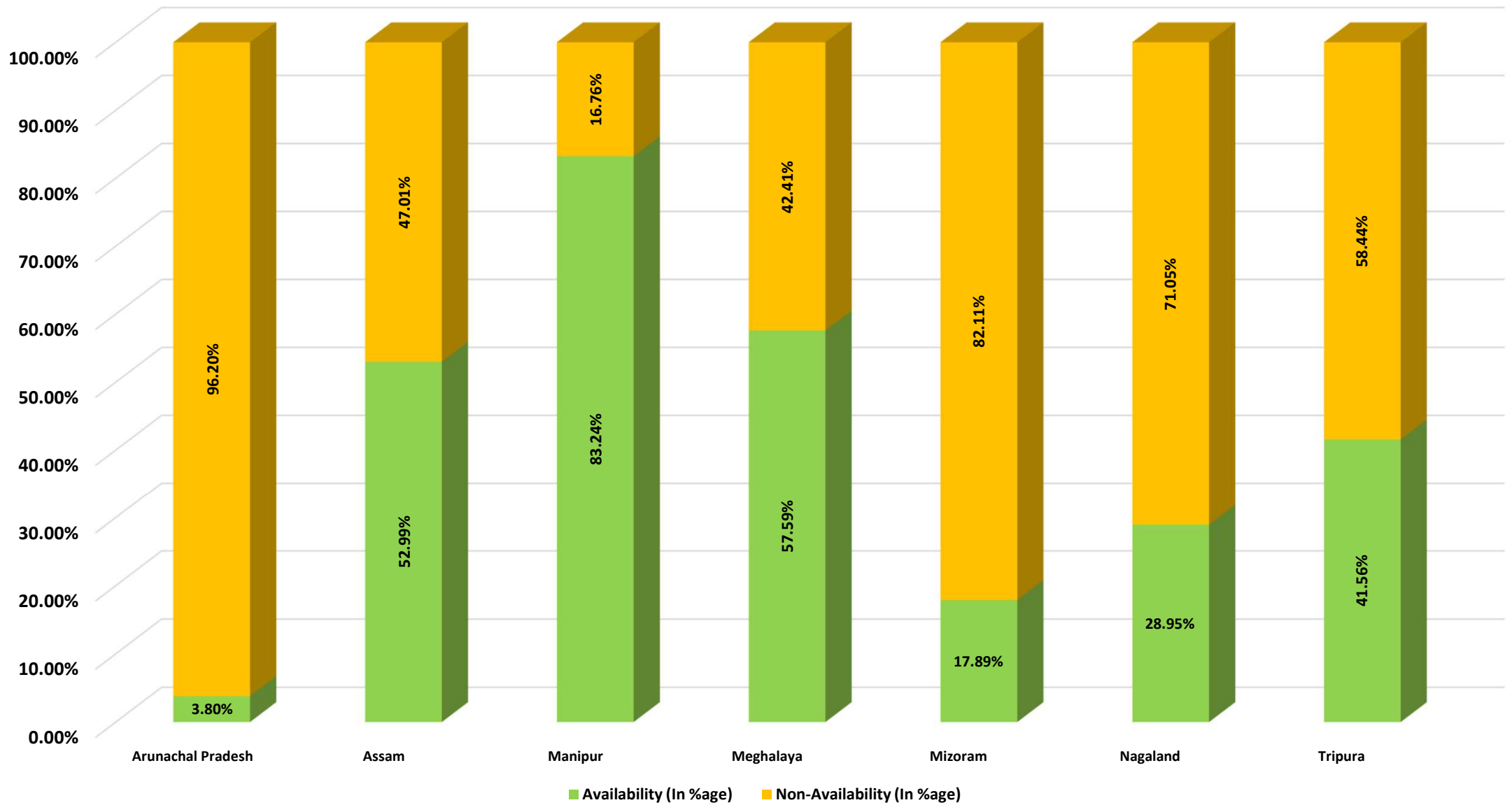


Telemetry and Data Availability

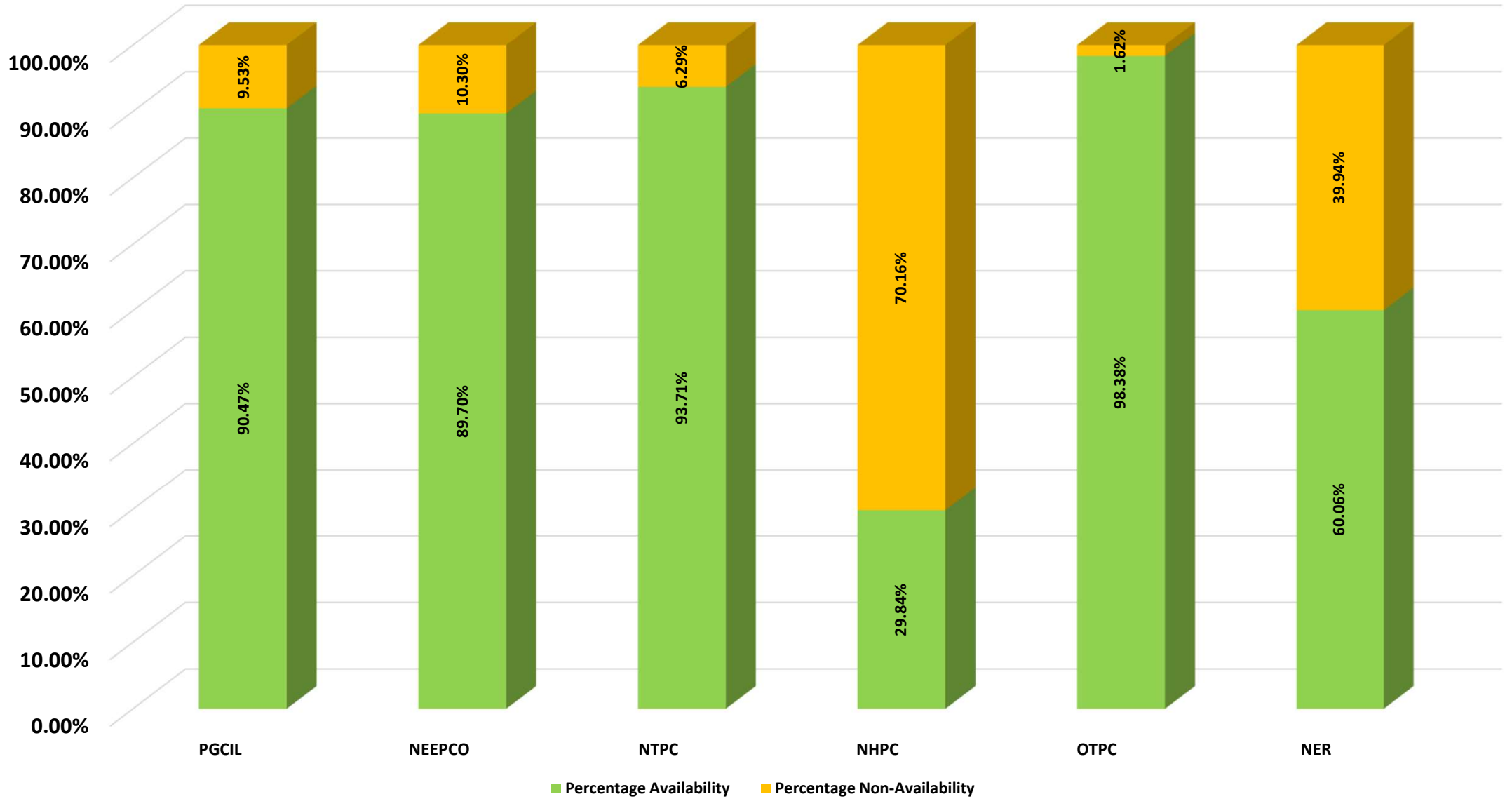
Comparison of Telemetry Availability Statistics (Average %age)



Telemetry Statistics for NER States (Average availability of data for the Month of Feb'21)



Telemetry Statistics for Central Sector of NER (Average availability of data for the Month of Feb'21)





Thank You



Monthwise category wise consumption for FY 2020-21 (April'20-Jan'21)

Sl No	Category	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21
	LT CATEGORY										
1	Jeevan Dhara	28.4	29.8	32.8	35.4	37.1	39.3	34.7	34.1	34.7	33.5
2	Domestic A	211.3	237.0	249.6	286.0	317.1	336.9	317.5	307.6	238.1	250.0
3	Domestic B	24.2	28.5	34.5	37.7	42.1	48.8	43.2	41.8	28.4	31.2
4	Commercial	51.4	42.1	48.5	54.6	55.7	60.8	64.4	65.5	58.4	56.4
5	General Purpose (Non Commercial & Non Domestic Users)	8.2	7.3	8.7	8.6	8.8	8.9	8.6	9.1	8.5	8.5
6	General Purpose (Govt. Primary & Secondary/ Higher Secondary Schools)					0.4	0.6	0.5	0.6	0.6	0.6
7	Public Lighting	1.5	1.2	1.6	1.5	1.6	1.6	1.5	1.4	1.5	1.7
8	Agriculture	4.6	3.1	1.4	1.4	1.3	1.4	1.2	1.3	1.1	1.8
9	Small Industries (Rural)	6.2	4.5	5.3	5.2	4.9	5.5	4.9	5.8	5.3	6.8
10	Small Industries (Urban)	2.3	1.4	2.0	2.2	2.6	2.4	2.5	2.5	2.3	2.7
11	Temporary Supply (Domestic)	0.0	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.0
12	Temporary Supply (Non-domestic)	0.3	0.2	0.3	0.2	0.2	0.9	0.3	0.8	0.4	0.6
13	Temporary Supply (Agriculture)	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.6
14	Electric Vehicle Charging Station (LT)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	HT CATEGORY										
15	Domestic	1.4	1.4	1.7	1.9	2.2	2.2	2.0	2.1	1.3	1.3
16	Commercial	23.7	16.1	21.2	24.9	23.7	28.3	30.5	32.1	25.3	23.7
17	Public Water Works	6.4	5.3	6.0	5.3	6.4	6.0	6.0	5.8	6.0	6.2
18	Bulk Supply(Govt.Education)	4.9	3.6	4.2	5.2	5.2	6.1	5.5	5.6	4.4	4.5
19	Bulk Supply(Others)	27.5	24.7	29.1	33.8	37.0	38.7	36.9	36.5	27.8	27.6
20	HT Small Industries	1.4	0.6	1.0	1.1	1.1	1.2	1.2	1.2	1.2	1.4
21	HT-I Industries (above 50 kVA to 150 kVA)	5.3	2.1	4.0	5.0	4.8	5.3	5.5	5.7	4.6	6.0
22	HT-II Industries above 150 kVA (Option I : TOD)	60.5	27.2	62.8	70.0	58.2	61.7	63.4	60.2	32.2	58.7
23	HT-II Industries above 150 kVA (Option II : Non TOD)					3.8	5.2	12.3	13.6	40.4	18.2
24	Tea, Coffee & Rubber	17.5	18.0	30.8	44.3	59.8	57.0	66.9	64.8	55.0	27.8
25	Oil & Coal	4.7	4.9	5.2	5.8	6.3	5.5	4.9	5.7	12.0	6.5
26	HT Irrigation (above 25kW) (30 kVA)	1.2	1.0	0.9	0.6	0.7	0.8	0.6	0.7	0.7	0.7
27	HT Temporary Supply	0.0	0.0	0.0	0.1	0.2	0.2	0.4	0.5	0.1	0.0
28	HT Electric Crematorium	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	HT Railway Traction	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	HT Electric Vehicle Charging Station	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	TOTAL	493.1	460.2	551.8	631.2	681.3	725.3	715.6	704.8	590.4	577.1

Note: The above data are unaudited & may be used for the purpose of trend analysis only

The status of SEM distribution list is attached herewith.

Sl. No.	SUBSTATION	Name of Substation responsible	Meter No.	Feeder Name	Meter Type	Remarks	Status
1	AZARA	Bongaigaon SS	NP-9456-A	AZARA END OF 400 KV BONGAIGAON	LNT	Approx 7 mins retard	Completed
2	AZARA	Bongaigaon SS	NP-9457-A	AZARA END OF 400 KV SILCHAR	LNT	Approx 6 mins retard	Completed
3	SARUSAJAI	Misa SS	NP-8489-A	132kv SARUSAJAI-UMTRU FEEDER	LNT	Approx 8 mins retard	
4	SARUSAJAI	Misa SS	NP-8492-A	S'SAJAI END OF 132kv UMTRU FDR-2	LNT	Defective meter	
5	DULLAVCHER-RA	Badarpur SS	NP-9438-A	DULLAVCHERRA END OF DHARMANAGAR FDR	LNT	Approx 6 mins retard	Completed
6	MISA	Misa SS	NP-8605-A	MISA END OF 220kv MARIANI(AS) FDR	ELSTER		
7	MISA	Misa SS	NP-8641-A	MISA END OF 220kv KOPILI FDR -1	ELSTER		The feeders are out of service. Shall be connected once the feeders come in service
8	MISA	Misa SS	NP-8603-A	MISA END OF 220kv KOPILI FDR -3	ELSTER		
9	MISA	Misa SS	NP-8636-A	MISA END OF 220kv KOPILI FDR -2	ELSTER		
10	HAFLONG	Haflong SS	NP-8656-A	HAFLONG(PG) END OF JIRIBAM FDR	ELSTER		Completed
11	MARIANI	Mariani SS	NP-8596-A	MARIANI(PG) END OF 220kv KATHALGURI FDR	ELSTER	Raw Data does not convert	
12	SILCHAR	Silchar SS	NP-8664-A	SILCHAR (PG) END OF 132kv SRIKONA (ASEB) FDR -1	ELSTER		Completed
13	SILCHAR	Silchar SS	NP-8665-A	SILCHAR (PG) END OF 132kv SRIKONA (ASEB) FDR-2	ELSTER		Completed
14	SILCHAR	Silchar SS	NP-8666-A	SILCHAR (PG) END OF 132kv HAILAKANDI-11 (D'CHERA) FDR	ELSTER		Completed
15	SILCHAR	Silchar SS	NP-8667-A	SILCHAR (PG) END OF 132kv HAILAKANDI-1(P'GRAM) FDR	ELSTER		Completed

16	SILCHAR	Silchar SS	NP-8563-A	SILCHAR END OF 132 KV PK'BARI-2	ELSTER		
17	KOHIMA	Dimnapur SS	NP-9703-A	KOHIMA END OF KARONG FDR	LNT	Erratic Reading	Completed
18	JIRIBAM	Jiribam SS	NP-8645-A	JIRIBAM(MAN) END OF JIRIBAM(PG)FDR	ELSTER	21 mins retard	Completed
19	JIRIBAM	Jiribam SS	NP-8623-A	JIRIBAM(PG) END OF BADARPUR FDR	ELSTER	12 mins retard	Completed
20	YUREMBAM	Imphal SS	NP-6951-A	YUREMBAM-KARONG FDR	LNT	Approx 10 mins advance	Completed
21	IMPHAL	Imphal SS	NP-8672-A	IMPHAL(PG) END OF LOKTAK-2 IMPHAL(PG)	LNT	Approx 9 mins retard	Completed
22	BGTPP	Bongaigaon SS	NP 9646-A	NTPC ICT-1 HV SIDE CHECK	LNT	Approx 16 mins retard	
23	LEKHI	Nirjuli SS	NP-9652-A	LEKHI END OF 132KV PARE FDR	LNT	Heavy Error	Completed

The status of DCD distribution list is attached herewith.

Sl.No.	Substation	State	Status
1	LEKHI	ARUNACHAL PRADESH	
2	AGIA	ASSAM	
3	AZARA	ASSAM	
4	BTPS	ASSAM	
5	SARUSAJAI	ASSAM	
6	TINSUKIA	ASSAM	
7	DULLAVCHERA	ASSAM	
8	KAHILIPARA	ASSAM	
9	YUREMBAM	MANIPUR	
10	UMTRU	MEGHALAYA	Completed
11	MENDIPATHAR	MEGHALAYA	Completed
12	BYRNIHAT	MEGHALAYA	
13	JIRIBAM	POWERGRID	Completed
14	DIMAPUR	POWERGRID	Completed
15	Agartala (79 Tilla)	TRIPURA	
16	Udaipur	TRIPURA	
17	Dharmanagar	TRIPURA	

NERTS intimated that the balance distribution shall be completed within Feb 2021.