North Eastern Regional Power Committee

Agenda For

185th OCC Sub-Committee Meeting

Time of meeting : 10:30 Hrs.

Date of meeting : 15th December, 2021 (Wednesday)

Venue : "Hotel Nandan", Guwahati.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 184th MEETING OF OPERATION SUB-COMMITTEE OF NERPC.

The minutes of 184th meeting of Operation Sub-committee held on 26th November, 2021 at Guwahati were circulated vide letter No. NERPC/SE (O)/OCC/2020/3052-3089 dated 07th December, 2021.

The Sub-committee may confirm the minutes of 184th OCCM of NERPC with suitable amendments as no other comments/observations were received from the constituents.

ITEMS FOR DISCUSSION

B.1 Implementation of Projects funded from PSDF:

The status as informed in 184th 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) Supply completed. P-III (Substation equipment) Submitted to government for tender finalization. LoA by Oct'21.	Work completed in all respects. Final 10% disbursement by Oct'21.	-	LoA placed on 23rd Sep'21. 30% requisition to be submitted.	-
Nagaland	Completed in all respects. 10% requisition to be sent alongwith UC.	Work completed in all respects. Final 10% release in process.	-	LoA placed on 23rd Sep'21.	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.	LoA placed on 23rd Sep'21. 30% requisition to be submitted.	Revised DPR including both 132kV Aizawl-Luangmual and 132kV Khamzawl-Khawiva to be submitted.
Manipur	Package-II: completed Package-I: total quantity of material yet to be received at site	Work completed in all respects. Final 10% to be disbursed.	WIP.	LoA placed on 23rd Sep'21.	Revised DPR for LDP of 132kV Imphal-Yurembam-III to be submitted.
	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.	60% funds received. Disbursement Oct'21.	Study results to be submitted alongwith DPR	LoA placed on 23rd Sep'21. 30% requisition to be submitted.	Under DPR preparation stage.
Assam	WIP. 60% amount to be disbursed at the earliest.	Work complete in all respects. 10% to be disbursed after receipt of funds from PSDF.	-	Requisition to be submitted for first tranche	Lines identified. Under DPR preparation stage.
Meghalaya	MePTCL – completed in all respects. MePGCL – Completed in all respects.	Project complete in all respects.	-	Requisition to be submitted for first tranche	WIP.

Members may please discuss.

B.3 Operational Performance and Grid Discipline during November,2021:

NERLDC will present the Operational Performance and Grid Discipline in November'2021.

NERLDC may please deliberate.

B.4 Generation Planning (ongoing and planned outages)

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

Plants	Reservoirs level in meter	MU content	Present DC (in MU)	No of days as per current generation
Khandong + Kopili stg II			**0.33**	
Kopili			**0**	Will be "0" until further intimation.
Doyang			**0.19**	
Loktak			**0.33**	

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

Members may please discuss.

B.5 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.

Members may please discuss.

B.6 Estimated Transmission Availability Certificate (TAC) for the month of September - October, 2021:

NETC and POWERGRID have submitted the outage data for the month of August, September 2021. So, the attributability of outage of the said elements may please be finalized.

Members may please discuss.

B.7 Mock Black Start Exercise:

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

Plant Name	Performed On	Due Date	Schedule of Testing as per 184th OCCM
AGBPP	.....	.....	after upgradation of DG under R&M
AGTTCCPP	09.04.2019	09.10.2019	Plant wise tentative schedule to be furnished by NEEPCO
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	.....	.....	Machines not stabilised
Loktak HEP	10.12.2019	10.06.2020	To be informed

As per discussion in 177th OCC meeting on 22nd April 2021, schedule of Mock exercise at AGBPP and RHEP was to be finalized by NEEPCO after discussion with OEM. 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.

Members may please discuss.

B.8 Status of ADMS:

Status for Automatic Demand Management Scheme in 7 states of NER:

Name of the utility	SAT Completion	DoCO
DoP Ar. Pradesh	To be informed	To be informed
AEGCL/APDCL	07-12-2020	10-03-2021
MSPCL	30-11-2020	To be informed
MePTCL/MePDCL	31-08-2020	04-09-2020
P&ED Mizoram	26-02-2021	To be informed
DoP Nagaland	17-11-2020	
TSECL	24-12-2020	

In 184th OCCM Member Secretary i/c, NERPC requested SLDC Assam, SLDC Meghalaya to analyse the cost benefits of ADMS scheme so that the same may be presented to CERC/CEA.

Members may please discuss.

B.9 Violation of state wise TTC/ATC:

As per POSOCO KPI, NERLDC has to report the violation of import TTC/ATC of NER states in daily, weekly and monthly basis. It has been observed that most of the NER states are not N-1 secure causing violation of TTC/ATC limit although the actual drawal 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	180	5	175
	Peak			180	5	175
Assam	Off-Peak	220/132 kV,160 MVA ICT at BTPS	Other 220/132 kV, 160 MVA ICT at BTPS	1500	40	1460
	Peak			1580	40	1540
Manipur	Off-Peak	132kV Imphal MA-Imphal PG Ckt I	132 kV Imphal (MA)-Imphal (PG) II & III	210	5	205
	Peak			220	5	215
Meghalaya	Off-Peak	132 kV Umiam3 – Umiam1	132 kV Umiam-Umiam Umiam 1 II	230	10	220
	Peak			250	10	240
Mizoram	Off-Peak	132 kV Melriat-Silchar I & ORII	132 kV Aizawl Luangmual S/C	148	5	143
	Peak			152	5	148
Nagaland	Off-Peak	220/132 kV ,100 MVA Dimapur ICT	220/132 kV ,30 MVA Mokokchung ICTs	170	5	165
	Peak			180	5	175
Tripura	Off-Peak	132 kV SM-Nagar (TR) – SM Nagar (ISTS) S/C	132 kV PK-Bari (TR)- PK Bari (ISTS) S/C	310	6	304
	Peak			365	6	359

In 184th OCC meeting the following were decided:

(i) SLDC Tripura to assess the effect on ATC/TTC on Tripura due to tripping of Monarchak GBPP

(ii) In the event of any major shutdown(approved/emergency) the state periphery ATC/TTC shall be calculated by respective SLDC and communicated to NERLDC

Members may be please discuss.

B.10 Timely submission of Node-wise load and Unit wise generation data for Computation of NER TTC:

Node-wise load and Unit-wise generation data is required from all the utilities of NER for declaration of Regional TTC/ATC by RLDC three months in ahead in accordance with Clause No. 3.2 and 3.3 of Measures to relieve Congestion in Real-Time of CERC Regulations,2009. It has been observed that Arunachal Pradesh and Tripura are not submitting the data continuously since the last few months.

Hence, all the NER utilities are requested to timely submit the data so that the NER-ER TTC/ATC can be computed with reliable load -generation data.

In 184th OCCM it was decided that the SLDCs shall present the monthly ATC/TTC in the OCC forum.

Members may please discuss.

B.11 Load Forecast Errror(RMSE) for NER constituents:

The median of Load Forecast Error in % (RMSE) for the NER states for Oct'21 is as follows:

States	Arunachal Pradesh	Assam	Manipur	Meghalaya	Mizoram	Nagaland	Tripura
RMSE	12.5	11	10	21	17	10.5	12

NERLDC may please deliberate.

B.12 Upgradation of 33kV CTR for Optimal Power Evacuation from 2x50MVA, 400/132/33kV Imphal(PG) Station:

Under System Strengthening Scheme of Pallatana and Bongaigaon Generation Plants, 2x50 MVA, 132/33 kV power transformers were installed in Imphal (PG) Sub-station. For optimal use of the installed capacity, MSPCL have constructed a 33 kV Multicircuitlines on Tower (4-Circuits) with Panther Conductor connecting to a separate 33 kV Bus at Yurembam(State) with moose conductor to draw around 80 MW.

However, the aspiration of MSPCL cannot be fulfilled due to installation of 33 kV CTs of ratio 300/1 amp which have drawal capacity of 15 MW approx. per feeder with anticipated overall drawal of 60 MW maximum from this 2x50 MVA132/33 kV Sub-station.

At a time, when some feeders are outaged, then the other feeders need to be loaded upto 20/25 MW which is not possible now due to limitation of CT. Hence the very purpose of installing 2x50 MVA is defeated. In fact, at present, one feeder supplying Core Imphal is connected at radial mode and it is expected the load growth in the feeder may go upto 20/25 MW in the coming peak winter and we may be constrained to resort to load shedding, which is not acceptable for the state as we have declared 24x7 power supply at least for Imphal.

MSPCL vide letter No. 14/6(PGCI)/GM(PD)/2019-MSPCL/1480-82 dated September 22,2021 has requested the Executive Director, NERTS, Power Grid Corporation of India Ltd to take up prompt action for upgradation of the 33kV CT ratio from 300/1 amp to 600/1 amp.

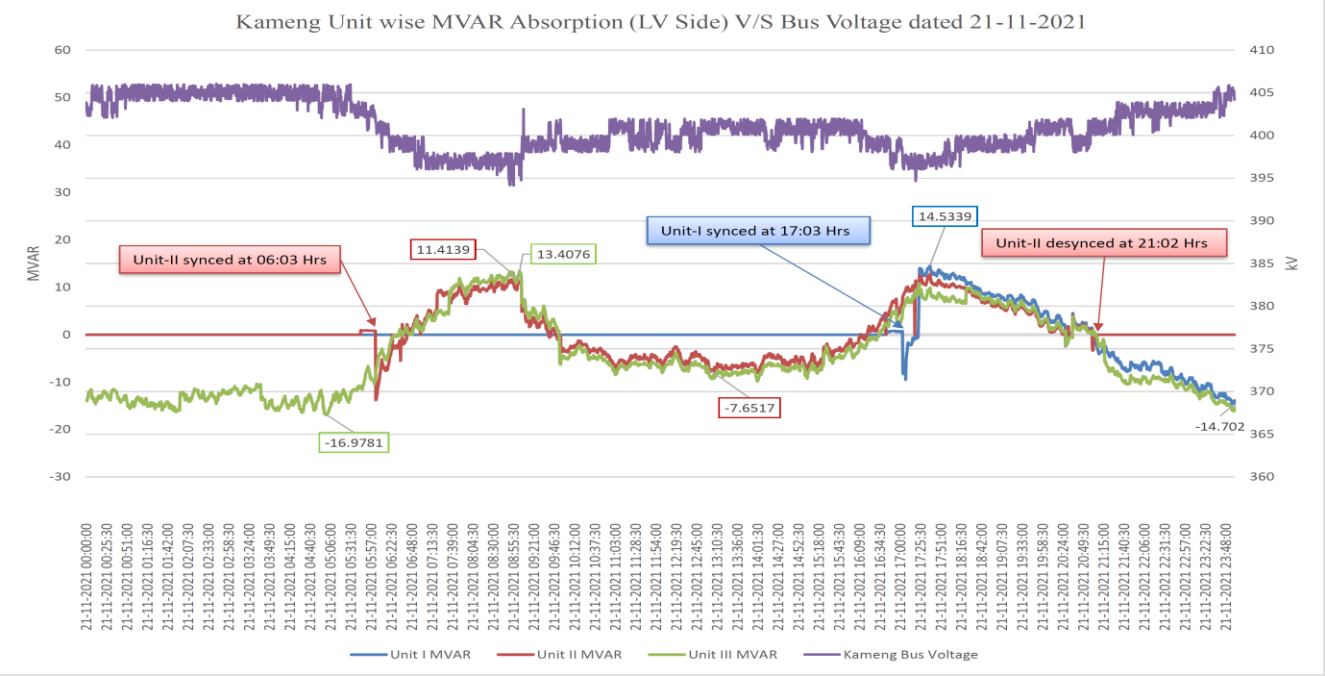
PGCIL is therefore requested once again to pay special attention to the up-gradation of the 33kV CT ratio from 300/1 amp to 600/1 amp at the earliest for optimal power evacuation from 2x50 MVA, 400/132/33 KV Imphal (PG) Sub-station.

In 184th OCCM it was decided that SLDC Manipur shall conduct a detailed study with assistance of NERLDC and revert back to the forum.

Members may please discuss.

AGENDA ITEMS FROM NERLDC:

B.13 Voltage and MVAR issues at 400kV Kameng S/Sn:



From the above graph, it is evident that during low voltage situation in 400 kV Kameng S/S, injection from Kameng Units is significantly on the lower side (around 15 MVAR each). Same is seen during Night hours as they absorb around 15 MVAR with each unit. This leads to low voltage (during peak hours) and high voltage (during night hours) scenarios. Kameng HEP is hereby requested to inject/absorb MVAR as per their Capability curve (may please refer to capability curve of KAMENG HEP in **Annexure-B.13**) for reliable operation of the Grid. As per capability curve, at rated Generation(150 MW) and p.f. (0.9 lag), a total of around 70 MVAR can be injected into the Grid which is not happening in the present scenario.

NERLDC may please deliberate.

B.14 Frequent tripping of BgTPP units:

SL NO	Name of Unit	Outage		Revival		Reason	Indication	Closing Code
		Date	Time	Date	Time			
1	BGTTP - UNIT 2	11-11-2021	20:12	12-11-2021	00:06	Fault Tripped	Tripped due to High pressure furnace	Availed (600)
2	BGTPP - UNIT 1	30-11-2021	21:32	01-12-2021	02:20	Fault Tripped	Tripped due to flame failure	Not Taken
3	BGTPP - UNIT 1	05-12-2021	18:57	05-12-2021	20:16	Fault Tripped	Tripped due to flame failure	Not Taken
4	BGTPP - UNIT 3	06-12-2021	04:00	06-12-2021	21:53	Fault Tripped	Tripped on generator protection (Under excitation)	Availed (2021-22/12/2409)
5	BGTPP - UNIT 3	06-12-2021	22:56	07-12-2021	00:10	Fault Tripped	Turbine tripped due to very low steam temperature	Availed (2021-22/12/2418)
6	BGTPP - UNIT 3	07-12-2021	20:11	09-12-2021	05:42	Fault Tripped	Tripped on Class-A protection operation	Availed (2021-22/12/2563)

It has been observed that BgTPP Units tripped on multiple occasions in recent past (may please refer to the Table) and among all three units, particularly unit 3 is seen to be more prone to tripping. This frequent outage brings commercial burden to the beneficiaries as well as creates power shortages to the region specially in this lean hydro period. So, BgTPP may take all the possible measures to ensure the availability of the units.

Also, it may be seen from the table that on two occasions BgTPP has not taken the closing code from NERLDC before the synchronization of the machine to the Grid. This is in violation of NER Operating Procedure (Clause No-11.2). So, BgTPP is requested to give intimation and take necessary code from NERLDC C/R before switching of any Important Grid elements for smooth and reliable operation of the Grid.

NERLDC may please deliberate.

B.15 Non-availability of Black start Facility at Kopili Stg-II:

Black start facility is available in all the hydro inter-state generating stations of NER except for Kopili Stage II as per NERLDC records. In an integrated power system, disturbances of major / minor nature can occur under various contingencies. Such disturbances can result in collapse of a part of the system or sometimes entire system, requiring restoration of the affected system in the minimum possible time. In order to achieve the same, it is therefore necessary to have a well laid down restoration procedure under various conditions of partial black out and /or total black out of the system. Hence, generators with blackstart facility plays an utmost important role in quick restoration of the grid.

It may be noted that as per CEA, (Technical standards for Connectivity to the Grid) Regulations, 2007, Part-II, clause (1), sub clause (14) states as under:

"*In case of hydro generating units, self-starting facility may be provided. The hydro generating station may also have a small diesel generator for meeting the station auxiliary requirements for black start.*"

Khandong HEP and Kopili Stage II are connected in the same switchyard and however, blackstart facility is present in Khandong HEP which is capable of black starting its units and extend power to the nearby stations but the same does not exist for Kopili Stg II. Hence, NEEPCO is requested to explore the feasibility of blackstart facility at Kopili Stage II for aiding in speedy restoration of the grid.

NERLDC may please deliberate.

B.16 Load restriction in Meghalaya Power System due to planned outage of Khandong HEP & Kopili Stg-II:

The planned shutdown of Khandong HEP and Kopili Stage II has been approved from 04.01.2022 to 03.05.2022 in the 183rd OCCM for the following activities:

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

Due to the non-availability of Misa-Kopili-Khandong link and the shutdown being in the lean period, severe load restriction is envisaged in the Southern part of NER Grid, particularly in the state of Meghalaya.

As per system study conducted by NERLDC,it is observed that, with 42 MW power support from Leshka HEP and NIL generation from Khandong and Kopili Stage II units, a maximum of 250 MW load can be served to Meghalaya under N-1 contingency i.e. outage of one circuit 132 kV Umiam Stg-3-Umiam Stg-1. High loading has been observed in other circuit of 132 kV Umiam Stg-3Umiam Stg-1 (82 MW). The maximum served load may further reduced if the generation from Leshka HEP is reduced.

It may also be noted that as per minutes for Agenda Item No. 11 of 02nd meeting of NER Standing Committee on Transmission, the proposal of reconductoring of 132 kV Umiam Stg-3 – Umiam Stg-1 D/C alongwith uprating of requisite bay equipments by MEPTCL had been approved.

NERLDC may please deliberate.

B.17 9th International Conference on Power Systems, 2021:

The International Conference on Power Systems (ICPS) is a leading conference in the area of Power Engineering since its birth year 2004. It is a brainchild of academicians from India and Nepal. The 9th International Conference on Power Systems, 2021 (ICPS 2021) continues a series of the biennial conference and will be held at Indian Institute of Technology Kharagpur (IIT Kharagpur), Kharagpur, West Bengal India from 16th -18th December 2021.

The theme for ICPS 2021 is "**Developments towards Inclusive growth for Sustainable and Resilient Grid".**

A large number of Eminent Professors, Technocrats, Scientists, Administrators and Students from various parts of the World are expected to participate in the ICPS 2021. The tutorials on the relevant topics, keynotes by eminent persons, panel discussion, paper & poster presentations, and opportunities for industry/trade exhibits, with separate events for industry sessions. The programme will be held in virtual mode with online presentations for contributory papers and invited talks. Detail schedule can be accessed through the following link

http://www.icps2021.iitkgp.ac.in/schedule.html

The procedure for registration to the conference can be assessed at the below link:

http://www.icps2021.iitkgp.ac.in/docs/icps2021regprocedure.pdf

It is, therefore, requested that officials of all the NER powerutilities may participate in this premier conference thereby benefiting to learn and engage in awide array of topics relating to Power Systems.

In ICPS 2021, the first LDC Excellence award is also being conferred. As members of Load Despatch Community, wider participation is requested.

NERLDC vide its mail dated 8th Dec'21 has requested confirmation of participation by return mail from all the NER SLDCs.

NERLDC may please deliberate.

AGENDA ITEMS FROM NERTS:

B.18 Shutdown of Bay and Transmission lines at Dimapur:

Under the NERSS VIII, SS01 package awarded to M/s Shandong Taikai and M/s Godrej and Boyce, the 220/132 kV Dimapur substation is being upgraded from AIS to GIS Substation. Shutdown details attached at **Annexure-B.18**

The upgradation work of 132kV Feeders will be completed on 15.12.2021. Now we request for continuous shut down of 220kV Main Bus from 16.12.2021. Present bus is thorough for Misa-1 bay and Misa-2 bay. The activities during the requested shut down period are-

(I) de-stringing of main bus,
(II) dismantling of beam at one end adjacent to Misa-2 bay,
(III) erection of beam on intermediate column adjacent to Misa-1 bay,
(IV) stringing of bus for Misa-1 bay.

This activity will pave the way for:

i) upgradation work of Misa-2 bay,
ii) energization of 100 MVA ICT through Misa-1 bay.

220kV system will back to service through Misa-1 feeder after completion of bus sectionalizing work expected to be completed by 17:00 Hrs on 19.12.2021 or more sooner subject to working condition at site.

After completion of 220kV bus sectionalizing w.e.f. 07:00Hrs on 16.12.2021 to 16:00Hrs on19.12.2021, Shutdown of assets at dimapur as per the below mentioned schedule shall be required.

1. 220kV Misa-2 from 07:00 Hrs on 16.12.2021 to 16:00Hrs on 08.01.2022.
2. 220kV Misa-1 with 100MVA ICT from 07:00Hrs on 09.01.2022 to 16:00Hrs on 08.02.2022.

It is mentioned that 160 MVA ICT-I & II will be brought into service on or before 08.01.2022 simultaneously after charging of Misa-2 bay through 220kV Misa 2 feeder.

NERTS may please deliberate.

B.19 Shutdown of Bay and Transmission lines at Mokokchung:

Under NERSS VIII, Bay extension works for 220/132KV ICT III at Mokchung SS is in progress. The erection of the GIS is completed and the 132kV side bay is now ready for coupling with the existing 132kV Bus. In this regard, continuous shutdown of 132kV Bus at Mokokchung for Bus coupling activity of existing 132kV Bus with New 132kV side ICT III bay as per the following details:

S.No	Name of Element for SD	Proposed date of SD	Elements Effected
1	132kV GIS Bus	1.12.2021, 23:00Hrs to 3.12.2021, 06:00 Hrs	132kV Mokokchung-Mokokchung(State) I & II and 132kV sides of ICT I & II

NERTS may please deliberate.

AGENDA ITEMS FROM MeECL:

B.20 Segregation of Meghalaya Intra-State Power System:

Segregation of Meghalaya Intra State Power System during the coming days due to Shutdown of (i) Khandong P.S and (ii) Non Availability of Kopili-Khandong link.

MeECL may please deliberate.

C. ITEMS FOR STATUS

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

Sl. No	Element	Owner	Status as informed in the 184th OCCM	Latest status
1	132kV Mariani – Mokokchung (*out since April'2008*)	AEGCL	Estimate under preparation.	

2	FSC of 400kV Balipara – Bongaigaon-4(*out since 02nd Sep'20*)	NERTS	LoA placed. Completion by Apr'22	
3	132kV Roing-Pasighat (*charged through ERS tower*	NERTS	4/32 piles completed. By Mar'22	
5	Kameng Unit-III (*out since 29.07.2021*)	NEEPCO	In-service	
6	Kameng Unit-IV (*out since 18.08.2021*)	NEEPCO	By Dec'21	
7	Kopili Stg-II-25MW (*out since 01.09.2020*)	NEEPCO	Completed and charged on	
8	220kV Misa-Kopili D/C, 220/132kV ICTs at Kopili, 132kV Khandong –Kopili D/C(*out since Oct'19*)	NEEPCO/ NERTS	Dec'22	
9	132kV Srikona – Panchgram	AEGCL	Re-routing to be done	
10	400kV Imphal – Thoubal-I and 315MVA 400/132kV ICT at Thoubal	MSPCL	-	

Members may please update the status.

C.2. Status of commissioning for upcoming projects:

Sl. No	Name of the element	Utility	Status as informed in 183rd OCC meeting	Latest status
1	132kV Monarchak-Surjamaninagar	TSECL	By Mar'22.	
2	PLCC for 132kV Loktak-Ningthoukong and 132kV Loktak-Rengpang(existing lines)	MSPCL	NERPC to write to MD, MSPCL	
3	Construction of 2nd bay at Balipara for 220kV Balipara-Sonabil-2	AEGCL	By Feb'22	
4	Upgradation of 132kV Lumshnong – Panchgram line	MePTCL	NIT floated on 10th Nov'21.	
5	Diversion of 132kV Bawktlang-Sihhmui	NERTS	Dec'21	
6	PLCC for 132kV Karong-Kohima. PLCC at Kohima	DoP Nagaland	DoP Nagaland to revert back with the exact status.	

7	132kV Loktak-Ningthoukong-II	MSPCL	Delayed due to RoW issues. By July'22	
8	132kV Roing-Chapakhowa	NERTS	By Mar'22	
9	Re-conductoring 220kV BTPS-Salakati D/C	NERTS	By Mar'22	
10	420kV 80MVAR Bus Reactor	NEEPCO	LoA issued. Target date as per LoA to be intimated.	
11	220kV Killing - Mawngap	NERPSIP	RoW Ribhoi/ East Khasi Hills districts. By Dec'21	
12	220kV Samaguri – Mariani-II	AEGCL	Forest clearance awaited	
13	220kV Mariani(AS) – New Mariani	AEGCL	By Nov'21	
14	Reconductoring of 132kV Umiam Stg-III to Umiam Stg-I by HTLS	MePTCL	NIT floated on 10th Nov'21.	
15	132kV Melriat-Sihhmui D/C and 132/33kV ICT at Sihhmui	NERTS/P&ED Mizoram	132kV Melriat-Sihhmui D/C anti-theft charged. Entire charging of all assets by 15th Dec'21.	
16	132/33kV Tezpur S/Sn and 132kV Tezpur-Sonabil	NERPSIP	-	
17	PLCC/DTPC for 220kV Balipara- Sonabil	AEGCL	-	

Members may please update the status.

C.3 <u>Introduction of SPS in Leshka S/Sn of Meghalaya:</u>

Proposal to set up a SPS to limit the generation of Leshka on the account of tripping of one circuit of 132 kV Leshka – Khlieehriat D/C. NERPC stated that under NERPSIP 132kV Leshka-Khliehriat-II will be LILOed at 132/33kV Mynkre S/Sn. However, even after LILO of Leshka-Khliehriat-II at Mynkre, full generation of Leshka cannot be safely evacuated via the other circuit in case of N-1 contingency.

In 184th OCCM EE, SLDC, MeECL informed that OEM reply is awaited.

MeECL may please intimate the status.

C.4 <u>Implementation of revised setting of Automatic Under Frequency Load Shedding in NER:</u>

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 and the constituents agreed for the implementation of revised band of frequency and quantum of load shedding during the 148th OCC Meeting.

As per the minutes of 174th OCCM, all the states were asked to identify the feeders for additional installation of UFRs and review the existing locations of UFR installations with respect to frequency and connectivity. It was also requested from the states to share the detailed plan for UFR installation. Hence, all the states are requested to expedite the implementation of revised UFR settings and share their respective updated UFR plan.

Status as per 184th OCCM:

Name of the state/utility	Submission of revised UFR list	Implementation of revised settings	Status of mapping
Ar. Pradesh	Submitted	To be done	To be done
Assam	Submitted	To be done	
Manipur	To be submitted	NA	
Meghalaya	Submitted	8 out of 12 feeders completed	
Mizoram	To be submitted	NA	
Nagaland	Submitted	4 out of 8 completed	
Tripura	Submitted	To be done	

SLDCs may please intimate the status.

C.5. R&U of Protection System (Phase-II) of MePGCL:

In 183rd OCC meeting SE, MePGCL informed that after MeECL Board Approval, MePGCL shall place the proposal for PSDF funding.

MePGCL may please intimate the status.

C.6. Rectification of DC EF at 132kV SM Nagar S/S:

Severe DC Earth Fault has been observed in both the DC sources due to which several unwarranted tripping has occurred at SM Nagar end. Present DC Voltage is as follows:
DC Source 1: +Ve = 4V, -Ve = -241V, DC Source 2: +Ve = 5V, -Ve = -239V
As such necessary action may be taken for rectification of the same.
The 184th OCC forum advised TSECL to immediately rectify the E/F and submit an Action Taken report to NERTS/NERLDC/NERPC by a week.

TSECL may please intimate the status.

C.7 Turning ON of SPS for Monarchak GBPP:

As per discussion in special meeting held on 20/02/2020, SPS devised at Monarchak and tested successfully on 01/05/2021 at 02:42 Hrs when line - 3 (132 KV Monarchak-Rokhia) tripped due to some line fault. SPS was operated, STG was out from grid, GTG not tripped and feeder-4 (132KV Monarchak - Udaipur) also not tripped due to overloading. Logic was devised as discussed and advised in special meeting on 20/02/2020. Total generation setting can be changed as per requirement. SPS is presently in disable condition and waiting the confirmation from SLDC Tripura to implement the SPS. Email containing all the details and logic diagram was sent to SLDC Tripura on 29/07/2021 with request to evaluate, confirm and clear the DC/schedule revision issue.

In 184th OCC meeting DGM, TSECL informed that the proposal is pending with the Board of TSECL and is expected to be cleared in a week.

Members may please discuss.

Metering agenda

C.8. SEMs to be procured for Sterlite and KMTL ongoing projects:

NERTS confirmed over mail regarding receipt of 50 Nos. SEM and 10 Nos. DCD at Misa Substation on 23.03.2021. NERLDC prepared a list of 30 nos. SEM and 07 nos. DCD on priority basis and sent to NERTS via mail on 29.04.21. As deliberated in 184th OCCM, installation/ replacement of SEMs and distribution of DCDs had been almost completed and the details as per record of NERLDC is attached.
SEM replacement at Palatana is yet to be completed and as per in 184th OCCM they have to avail shutdown for the same. DCD distribution to Tinsukia and Deomali are yet to be completed.

NERTS may please intimate the status.

C.9. Procurement of SEM&DCD/laptop for future requirements:

NERTS may intimate the status of procurement of:

(I) 125 nos. SEMs and 15 nos. CMRIs
(II) Additional 40 nos. of DCD

In 184th OCCM, NERTS informed that 125 nos. SEMs and 15 nos. DCDs delivered at Misa s/s and present stock at Misa s/s Stores are 125+8=133 Nos. SEMs and 15 Nos. DCDs.
As decided in 184th OCCM, NERTS shall procure the SEMs, DCDs on a single tender basis from M/s Schneider Electric India Pvt. Ltd.
Next phase of installation/ replacement of SEMs and distribution of DCDs may be done as per Second priority list as decided in earlier OCCMs. The list is attached(**Annexure-C.9**) for further discussion.

2nd priority list for replacement/ installation of SEMs:

SL. NO	UTILITY NAME	LOCATION/ SUBSTATION	OLD METER NO	METER TYPE	FEEDER NAME	REMARKS
1	MANIPUR	TIPAIMUKH	NP-8615-A		TIPAIMUKH END OF AIZAWL	DATA NOT SEND
2	MANIPUR	TIPAIMUKH	NP-8618-A		TIPAIMUKH END OF JIRIBAM	DATA NOT SEND
3	OTPC	PALATANA	NP-8382-A	LNT	PALATANA ICT-HV SIDE	MALFUNCTION
4	POWERGRID	MOKOKCHANG	NIL		220/ 132 kV MOKOKCHANG ICT 1 HV SIDE	NO STANDBY METER
5	POWERGRID	MOKOKCHANG	NIL		220/ 132 kV MOKOKCHANG ICT 2 HV SIDE	NO STANDBY METER
6	POWERGRID	SILCHAR	NIL		400/132 kV SILCHAR ICT-1 LV SIDE	NO BOTH MAIN & STANDBY METER
7	POWERGRID	SILCHAR	NIL		400/132 kV SILCHAR ICT-2 LV SIDE	NO BOTH MAIN & STANDBY METER
8	POWERGRID	SILCHAR	NIL		400/132 kV SILCHAR ICT-3 LV SIDE	NO STANDBY METER
9	POWERGRID	SILCHAR	NP-8661-A	ELSTER	SILCHAR END OF 132 KV MELRIAT-I	LINE METER
10	POWERGRID	SILCHAR	NP-8561-A	ELSTER	SILCHAR END OF 132 KV MELRIAT-II	LINE METER

11	POWERGRID	SILCHAR	NP-8662-A	ELSTER	SILCHAR END OF 132 KV BADARPUR-1	LINE METER
12	POWERGRID	SILCHAR	NP-8663-A	ELSTER	SILCHAR END OF 132 KV BADARPUR-2	LINE METER
13	POWERGRID	MISA	NIL		400/220 kV MISA ICT-2 HV SIDE	NO STANDBY METER
14	POWERGRID	BALIPARA	NP-8655-A	ELSTER	BALIPARA END OF 400kV BONGAIGAON FDR -1	LINE METER
15	POWERGRID	BALIPARA	NP-8653-A	ELSTER	BALIPARA END OF 400kV BONGAIGAON FDR -2	LINE METER
16	POWERGRID	BALIPARA	NP-8654-A	ELSTER	BALIPARA END OF 400kV BONGAIGAON FDR -3	LINE METER
17	POWERGRID	BALIPARA	NP-8585-A	ELSTER	BALIPARA END OF 400kV BONGAIGAON FDR -4	LINE METER
18	POWERGRID	BALIPARA	NP-8594-A	ELSTER	BALIPARA END OF MISA FDR-1	LINE METER
19	POWERGRID	MOKOKCHUNG	NP-4510-A	ELSTER	MOKOKCHANG END OF 220 KV MARIANI(NEW)-1	LINE METER
20	POWERGRID	MOKOKCHUNG	NP-4516-A	ELSTER	MOKOKCHANG END OF 220 KV MARIANI(NEW)-2	LINE METER

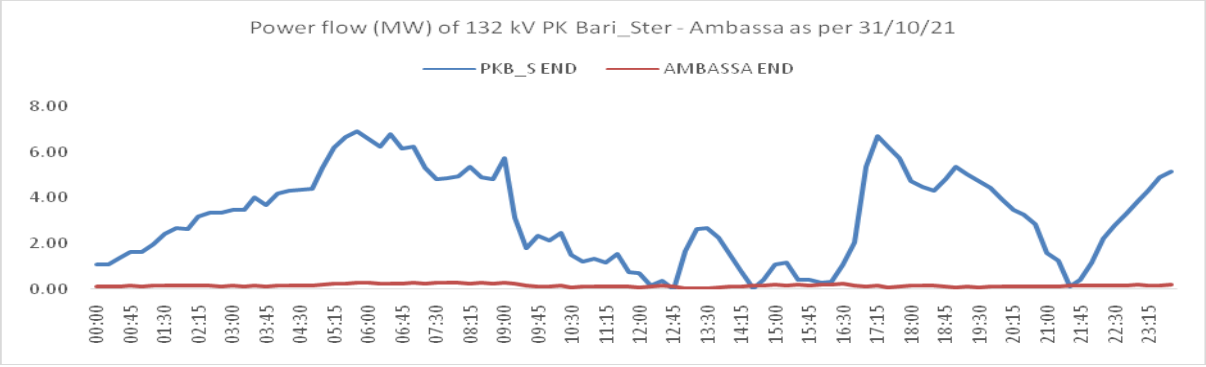
2nd priority list for distribution of DCDs:

SL. NO	UTILITY NAME	LOCATION/ SUBSTATION	REMARKS
1	ASSAM	MARIANI (AS)	NERTS NEW MARIANI SENDS DATA
2	ASSAM	HAILAKANDI	NERTS BADARPUR SENDS DATA
3	ASSAM	SRIKONA	NERTS SILCHAR SENDS DATA
4	ASSAM	PANCHGRAM	NERTS BADARPUR SENDS DATA
5	ASSAM	BOKAJAN	NERTS DIMAPUR SENDS DATA
6	ASSAM	PAVOI	NERTS BNC SENDS DATA
7	ASSAM	PAILAPOOL	NERTS JIRIBAM SEND DATA
8	MEGHALAYA	LUMSHNONG	NERTS KHLEIRIAT SENDS DATA
9	MEGHALAYA	KHLEIRIAT	NERTS KHLEIRIAT SENDS DATA
10	TRIPURA	PKBARI	NERTS KUMARGHAT SEND DATA
11	TRIPURA	SM NAGAR	NERTS SENDS DATA
12	TRIPURA	AMBASSA	STERLITE SENDS DATA
13	TRIPURA	BUDHJUNGNAGAR	STERLITE SENDS DATA

Considering the scarcity of DCDs as the 15 nos. were procured for new projects under pipelines, some DCDs may kept as spare as per the decision of Forum.

NERTS may please intimate the status

C.10. Erroneous reading of 132kV Ambassa end of PKBari-Sterlite line:



Ambassa (TSECL) end of 132 kV Ambassa- PK Bari Sterlite line meter (Type-B) procured by Sterlite and certified by CTU installed on 28.06.21. But the data received after installation of the meter found close to 0 (zero) reading. Despite several communications and discussions in OCCM, matter remains unresolved till date.

NERLDC may please deliberate.

C.11. Time mismatch between SEMs and ABT SEMs:

OTPC Main and check SEMs used for commercial purpose are L&T make, stand alone and sealed, the meters are battery supported (No GPS time), Our ABT SEMs are Schneider make and GPS synchronized.

OTPC plant is managing and monitoring SG on real time through ABT system. On analysis of previous few week DSM data it was observed that there is difference in Average Generation of ABT data vs SCM data which is causing Deviation though the AG is as per SG in ABT data. Mainly under injection penalty and over injection penalty i.e. as per ABT data no over injection/Under injection violation recorded however on DSM data over injection/Under injection violation recorded for few blocks.

NERLDC may suggest to explore possibility to synchronize OTPC Main and check SEMs and ABT SEMs.

In 184th OCC meeting it was decided that NERTS would visit Palatana GBPP by 30th Nov'21 to resolve the issue.

NERTS/OTPC may please intimate the status.

C.12. Regarding non-receipt of SEM data:

1. DCD was handed over to SLDC Nagaland in June 2021 for Sanis substation. Priority was given for DCD distribution to Sanis substation as it is a drawal point of Nagaland and Evacuation point of Doyang GS. But NERLDC yet to receive weekly SEM data from Sanis SS.
   In 184th OCCM, the forum requested DoP Nagaland to take up on priority the submission of SEM data.

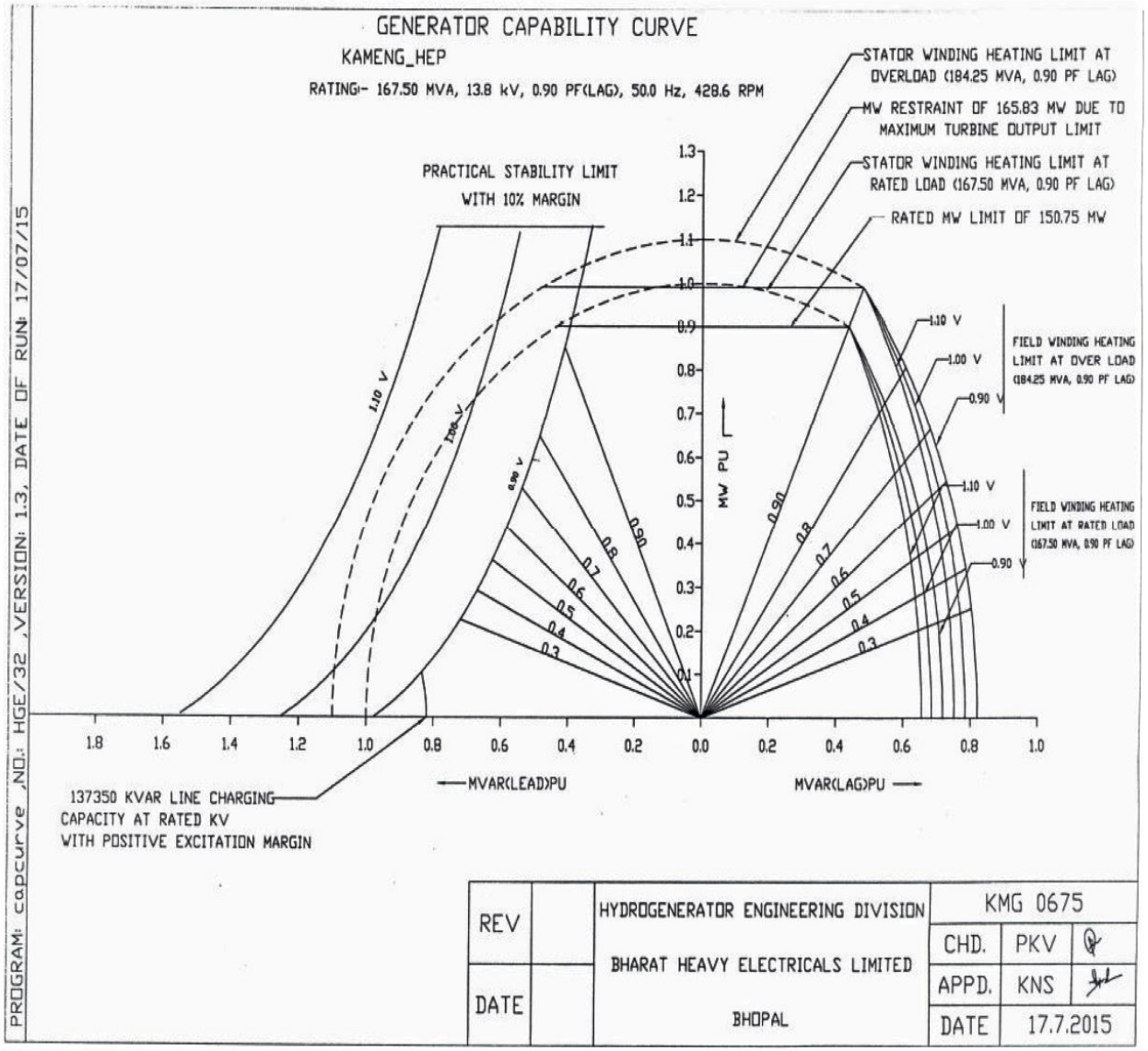
2. DCD was handed over to Udaipur substation on 01.01.2021. But weekly meter data is yet to be received by NERLDC after lots of communications and discussions in OCCM. Priority was given for DCD distribution to Udaipur substation as it is a drawl point of Tripura and Evacuation point of Palatana GS. The 184th OCC forum advised TSECL to resolve the matters at the earliest and if required NERPC will take them up with MD (TSECL).

NERLDC may please deliberate.

Any other item:

Date and Venue of next OCC

3.KAMENG HEP Capability curve

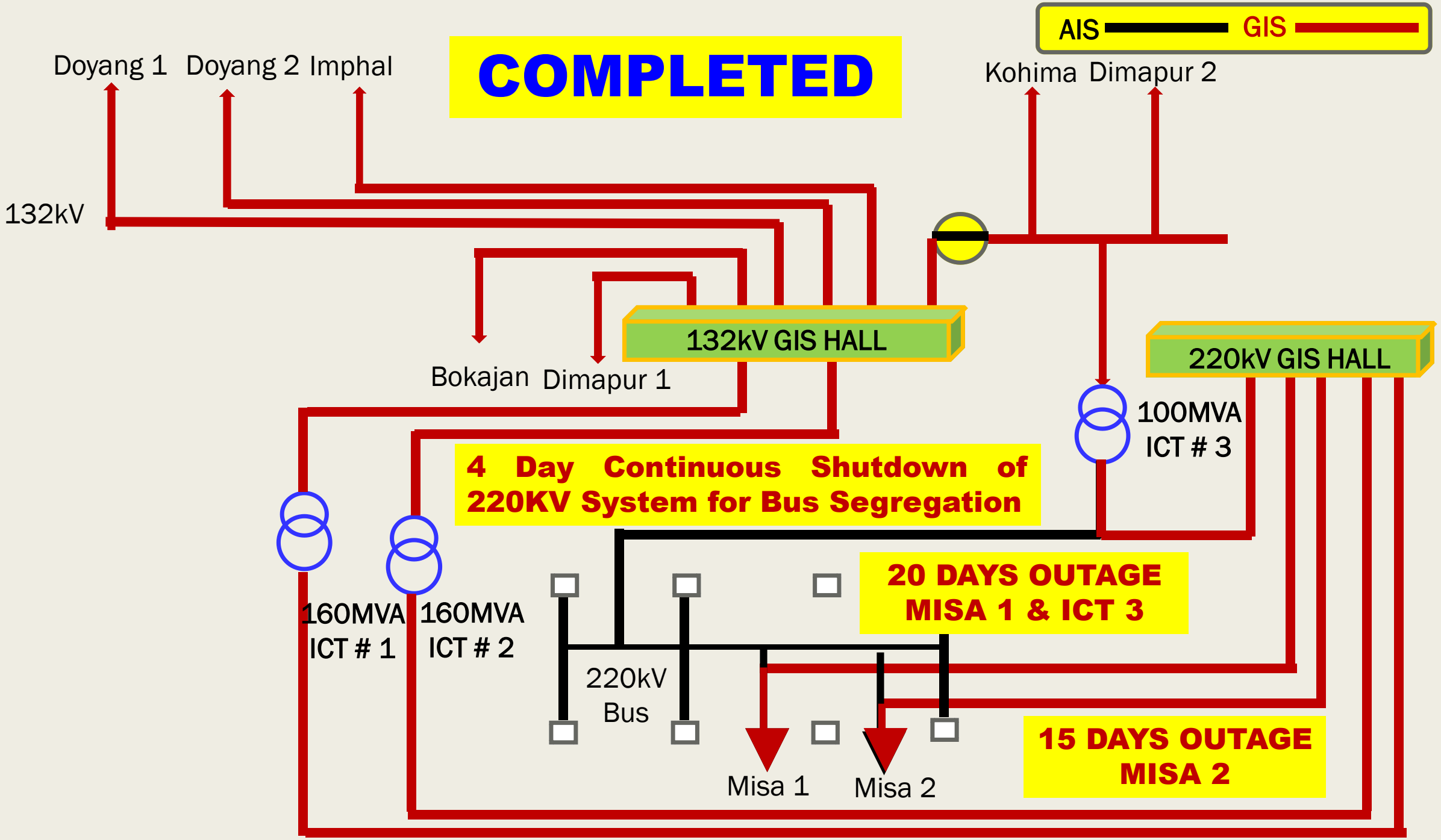


A PRESENTATION
ON
SHUT DOWN AND EXECUTION
OF
220/132KV DIMAPUR GIS SUBSTATION

STATUS AS ON 25.10.2021

SHUT DOWN OF 220KV PART

After Charging of entire 132KV System on GIS along with ICT # 1 & 2


AIS
GIS
COMPLETED
Doyang 1
Doyang 2
Imphal
Kohima
Dimapur 2
132kV
132kV GIS HALL
220kV GIS HALL
Bokajan
Dimapur 1
100MVA
ICT # 3
4 Day Continuous Shutdown of
220KV System for Bus Segregation
160MVA
ICT # 1
160MVA
ICT # 2
20 DAYS OUTAGE
MISA 1 & ICT 3
220kV
Bus
Misa 1
Misa 2
15 DAYS OUTAGE
MISA 2


Namaskar
TO YOU

Annexures-C.9

1. List of completed SEM replacement/new installation:

SL. NO	UTILITY NAME	LOCATION/ SUBSTATION	NEW METER NO	FEEDER NAME	REMARKS
1	ASSAM	HAFLONG	NE-0026-A	HAFLONG (AS) END OF HAFLONG PG	Installation completed on 27.06.2021
2	MIZORAM	ZUANGTUI	NE-0001-A	ZUANTUI END OF 132 kV MELRIAT	Installation completed on 05.11.2021
3	MIZORAM	LUNGMUAL	NE-0024-A	LUNGMUAL END OF 132 kV AIZAWL	
4	POWERGRID	NIRJULI	NE-0011-A	NIRJULI_PG TRF 1 HV SIDE	Installation completed on 18.08.2021
5	POWERGRID	NIRJULI	NE-0025-A	NIRJULI_PG TRF 2 HV SIDE	Installation completed on 20.08.2021
6	POWERGRID	MOKOKCHANG	NE-0012-A	MOKOK(PG) END OF MOKOK(NL) FDR-1	Installation completed on 08.11.2021
7	POWERGRID	MOKOKCHANG	NE- 0021-A	MOKOK(PG) END OF MOKOK(NL) FDR-2	
8	POWERGRID	SILCHAR	NE-0050-A	400/132 kV SILCHAR ICT-1 HV SIDE	Installation completed on 10.10.2021.
9	POWERGRID	SILCHAR	NE-0049-A	400/132 kV SILCHAR ICT-2 HV SIDE	
10	POWERGRID	SILCHAR	NE-0007-A	SILCHAR END OF 400 KV IMPHAL-1	
11	POWERGRID	SILCHAR	NE-0040-A	SILCHAR END OF 400 KV IMPHAL-2	
12	POWERGRID	SILCHAR	NE-0030-A	SILCHAR(PG) END OF 400kV PALATANA -1	
13	POWERGRID	SILCHAR	NE-0042-A	SILCHAR(PG) END OF 400kV PALATANA -2	
14	POWERGRID	MISA	NE-0022-A	MISA END OF 220kV MARIANI(PG)	Installation completed on 08.11.2021
15	POWERGRID	MISA	NE-0006-A	MISA END OF 220kV DIMAPUR FDR -1	
16	POWERGRID	MISA	NE-0023-A	MISA END OF 220kV DIMAPUR FDR -2	
17	POWERGRID	MISA	NE-0004-A	MISA 400/220kV 315MVA ICT-I (LV SIDE)	
18	POWERGRID	MISA	NE-0008-A	MISA 400/220kV 315MVA ICT-II (LV SIDE)	
19	POWERGRID	MARIANI	NE -0046-A	MARIANI(PG) END OF 220 KV MOKOK-1	Installation completed on 10.10.2021
20	POWERGRID	MARIANI	NP -9911-A	MARIANI(PG) END OF 220 KV MOKOK-2	
21	POWERGRID	MARIANI		MARIANI(PG) END OF 220kV MISA FDR	Line is discontinued after upgradation to 400 kV
22	POWERGRID	MARIANI	NE -0034-A	MARIANI(PG) END OF 220 KV KATHALGURI	Installation completed on 10.10.2021
23	ASSAM	SONABIL	NP-5795-A	SONABIL END OF 220 kV BALIPARA-1	Meter collected on 17.08.2021 and to be installed
24	MANIPUR	IMPHAL	NIL	IMPHAL TRF 1 FOR MANIPUR CONSUMPTION (HV SIDE)	Meters collected on 28.08.2021
25	MANIPUR	IMPHAL	NIL	IMPHAL TRF 2 FOR MANIPUR CONSUMPTION (HV SIDE)	Meters collected on 28.08.2021

2. List of completed DCD distribution:

SL. NO	UTILITY NAME	LOCATION/ SUBSTATION	NERTS Status as on Date	NERLDC REMARKS
1	ASSAM	DULLAVCHERA	Issued on 20.02.2021	Confirmed
2	MEGHALAYA	BYRNIHAT	Issued on 23.07.2021	Confirmed
3	ASSAM	UMRANGSOO (UMR)	Issued on 10.08.2021	Confirmed
4	NAGALAND	SANIS	Issued on 29.06.2021	Confirmed
5	MIZORAM	SIHMUI	Handed over on 06.11.2021	Confirmed
6	MANIPUR	THOUBAL	Handed Over on 07.09.2021	Confirmed
7	MANIPUR	TIPAIMUKH		Confirmed
8	AR. PRADESH	TENGA	Collected and handed over on 23.11.2021	