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Agenda for 91st PCCM

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

North Eastern Regional Power Committee

Agenda for

91st Protection Coordination Sub-Committee Meeting

Date: 20/08/2026 (Thursday)

Time: 11:00 hrs.

Venue: NERPC Conference Hall, Shillong

A. CONFIRMATION OF MINUTES

1. CONFIRMATION OF MINUTES OF THE 90th PROTECTION SUB-COMMITTEE MEETING OF NERPC.

Minutes of the 90th PCC Meeting held on 23rd June, 2026 at NERPC Conference Hall, Shillong was circulated vide letter No.: NERPC/SE(P)/PCC/2026/1157-1198

Since, no comments were received from the constituents, the Sub-committee may confirm the minutes of the 90th PCCM.

B. ITEMS FOR DISCUSSION

B.1 Protection Audit of NER:

As per the protection code of IEGC 2023 following roles and responsibilities, related to the subject mentioned, of constituents have been defined–

Description		Constituent	Responsibility	Timeline
Audit	Internal Audit	All users (132kV and above)	Shall conduct internal audit of protection system	Annually
			Audit report to be shared with RPC	Within 30 days of Audit
			Action plan for rectification of deficiencies to be shared with RPC	Within 30 days of Audit
	Third party Audit	All users (132kV and above)	Shall conduct audit for each SS	Once in five years
			Shall conduct audit on advice of RPC	Within three months of advice of RPC
			Audit report to be submitted to RPC and NERLDC/SLDC	Within a month of submission of third-party audit report
			Action plan for rectification of deficiencies	Same as above
		RPC	Compliance to audit reports to be followed up regularly	Not specified
		RPC	After analysis of any event, shall identify substations where audit is required to be carried out	Conditional responsibility

	Annual audit plan	All users	Annual audit plan to be submitted to RPC by 31st October	Annual
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Status of Internal/External audit (90th PCCM)

Sr No	Utility/ Constituents	Internal Audit		External audit	
		Latest Status	report	Latest Status	report
1.	Ar. Pradesh	(Total Substation: 09) Internal audit of all S/S to be done for FY 26-27. Audits to start September onwards	FY 25-26: Report for Daporijo, Khupi and Tenga shared.	Planning and Tendering will be done for audit of all 9 SS. Proposal has been put up to the government for funding approval. (audit of 3 SS done by NERPC).	NA
2.	Assam	To be done for FY 2026-27. (Total Substation: 82)	All the reports shared for FY 25-26.	Tendering process underway, to be completed by next month. It is planned to conduct audit of 20 substations by next year. Using own funds for the audit	
3.	Manipur	Planning being done for next FY (2026-27). Proposal has been put up to higher authorities		17 SS to be done, Schedule to be decided, subject to funding approval and law and Order situation. Audit of Yurembam ss, Ningthoukhong SS and	NA

		(Total Substation: 17)		Imphal (PG) were done by NERPC in Aug'25. Manipur facing fund issue for 3 rd party audit.	
4.	Meghalaya	For FY 2026-27, to be planned shortly. (Total Substation: 22)	for FY 25-26 Reports to be finalized this Friday, will submit by end of this month	Audit of 19 substations done, 13 by CPRI and 6 by NERPC.	Reports submitted
5.	Mizoram	Audit of 4 substations done for FY 26-27. Rest of the audits will be taken up shortly. (Total Substation: 13)	Report yet to be shared.	Techno-commercial offer received from PRDC, proposal has been put up to E-in-C. Audit of Kolasib, Aizawl, Melriat (PG), Zuangtui and Luangmual were done by NERPC in October'25.	
6.	Nagaland	10 out of 11 SS done for FY 2025-26, Likimro left. For FY 26-27, a plan has been prepared, audits will start within 2 months.	Reports for 9S/s have been submitted for FY 25-26.	Quotation has been received from 3 firms. One firm has been chosen for conducting the audits. Order will be issued shortly. Timeline will be provided shortly.	
7.	Tripura	For FY 25-26, 16 done, two substations,	Reports shared for FY 25-26	9 done by M/s ERDA.	Pre-liminary report

		Manu and Amarpur have been recently commissioned under NERPSIP project and are yet to be handed over to the state. For FY 26-27, audit will be planned shortly. (Total Substation: 18)			shared, final will be shared shortly
8.	Powergrid (NERTS)	FY 2025-26 completed. For FY 2026-27, audit of 3 substations done.	Report for 16 S/s has been shared for FY 25-26.	Bid floated for audit of 13 substations. To complete the audits within one year. Total 9 SS done by NERPC.	
9.	NTL	Audit of P K Bari and S M Nagar to be done in March'26. (Utility absent)		Feb, March'26. (Utility absent)	
10	KMTL	Done	submitted	Done by M/s ERDA	Report submitted
12	NEEPCO (Total Substation: 10)	For FY 2026-27 Planning underway.	All reports submitted for FY 25-26	External Audit completed for 3 stations (AgBPS, Kameng and Turial) done.	Report of Kameng will be submitted as soon as

				Upcoming: Pare-July'26 PLHPS -Sept'26 AGTCCPP – done AGBPS – done Monarchak – Sep'26 Doyang- Sept'26	it is provided by M/s PRDC. Other reports will be shared in due course
16	APGCL	Plan shared		Tendering going on for audit of 3 stations, Namrup, Lakwa and Karbi-Langpi	
17	TPGCL	TSECL will write a letter to TPGCL on the matter		Status will be intimated in next meeting	
18	MEPGCL	All done for FY 25-26. For FY 26-27, to be planned shortly.	All reports shared for FY 25-26	Budgetary offer received from M/s CPRI, M/s CBIP and M/s PRDC. The audits will incur very high financial burden. It was requested to NERPC to conduct the audit of the generating stations. NERPC opined that they may consider conducting the audit of some stations based on criticality.	

NERLDC requested all utilities to update the status of internal and 3rd party protection audit for the FY 2026-27 in the google spreadsheet.

<https://docs.google.com/spreadsheets/d/1MB51hUo60dzmOrK179gQE9qPVHjScYe6fikY3u0c47k/edit?gid=0#gid=0>

Utilities may further update

B.2 Analysis and Discussion on Grid Disturbances which occurred in NER grid in June and July'26 in compliance with IEGC 2023:

TABLE 8 : REPORT SUBMISSION TIMELINE

Sr. No.	Grid Event [^] (Classification)	Flash report submission deadline (users/ SLDC)	Disturbance record and station event log submission deadline (users/ SLDC)	Detailed report and data submission deadline (users/ SLDC)	Draft report submission deadline (RLDC/ NLDC)	Discussion in protection committee meeting and final report submission deadline (RPC)
1	GI-1/GI-2	8 hours	24 hours	+7 days	+7 days	+60 days
2	Near miss event	8 hours	24 hours	+7 days	+7 days	+60 days
3	GD-1	8 hours	24 hours	+7 days	+7 days	+60 days
4	GD-2/GD-3	8 hours	24 hours	+7 days	+21 days	+60 days
5	GD-4/GD-5	8 hours	24 hours	+7 days	+30 days	+60 days

[^]The classification of Grid Disturbance (GD)/Grid Incident (GI) shall be as per the CEA Grid Standards.

The forum may deliberate upon the GD/GI/near miss events that occurred in June and July 2026 based on the draft report prepared by NERLDC.

The forum may deliberate

B.3 Status of submission of FIR, DR & EL outputs for the Grid Events for the month of Jun'2026 & Jul'2026:

In line with regulation 12 (1) of CEA Grid Standards Regulations and IEGC-23 provision under clause 37.2 (c), FIR and DR & EL Outputs for each grid events are required to be submitted by concerned utilities to NERLDC for detailed investigation and analysis.

Status of uploading of FIR, DR & EL outputs of tripping of transmission elements in Tripping Monitoring Portal for events from 01-06-2026 to 31-07-2026 as on **10th Aug'26** is given below:

Owner Name	Total No of FIR/DR/EL/TR to be submitted(SEN D+REND)	FIR		DR		EL	
		Total Furnished in 24hrs %	Total furnished %	Total Furnished in 24hrs %	Total furnished %	Total Furnished in 24hrs %	Total furnished %
AEGCL	167	0%	43%	4%	57%	4%	56%
APGCL	11	91%	100%	100%	100%	100%	100%
DoP, Arunachal Pradesh	42	71%	100%	81%	100%	81%	100%
DoP, Nagaland	45	58%	100%	40%	100%	47%	100%
MePGCL	12	8%	100%	8%	92%	17%	92%
MePTCL	43	77%	100%	100%	100%	93%	100%
MSPCL	66	67%	95%	56%	88%	35%	88%
MUML	3	33%	100%	67%	100%	100%	100%
NBTL	1	100%	100%	100%	100%	0%	100%
NEEPCO	100	79%	96%	85%	97%	70%	97%
NHPC	106	50%	92%	62%	96%	65%	97%
NTL	20	10%	30%	5%	40%	10%	40%
OTPC	15	73%	100%	73%	100%	73%	100%
P&ED Mizoram	29	10%	100%	41%	100%	41%	100%
POWERGRID	123	67%	98%	67%	98%	67%	96%
TPGCL	1	0%	0%	0%	0%	0%	0%
TSECL	32	78%	100%	69%	97%	72%	97%

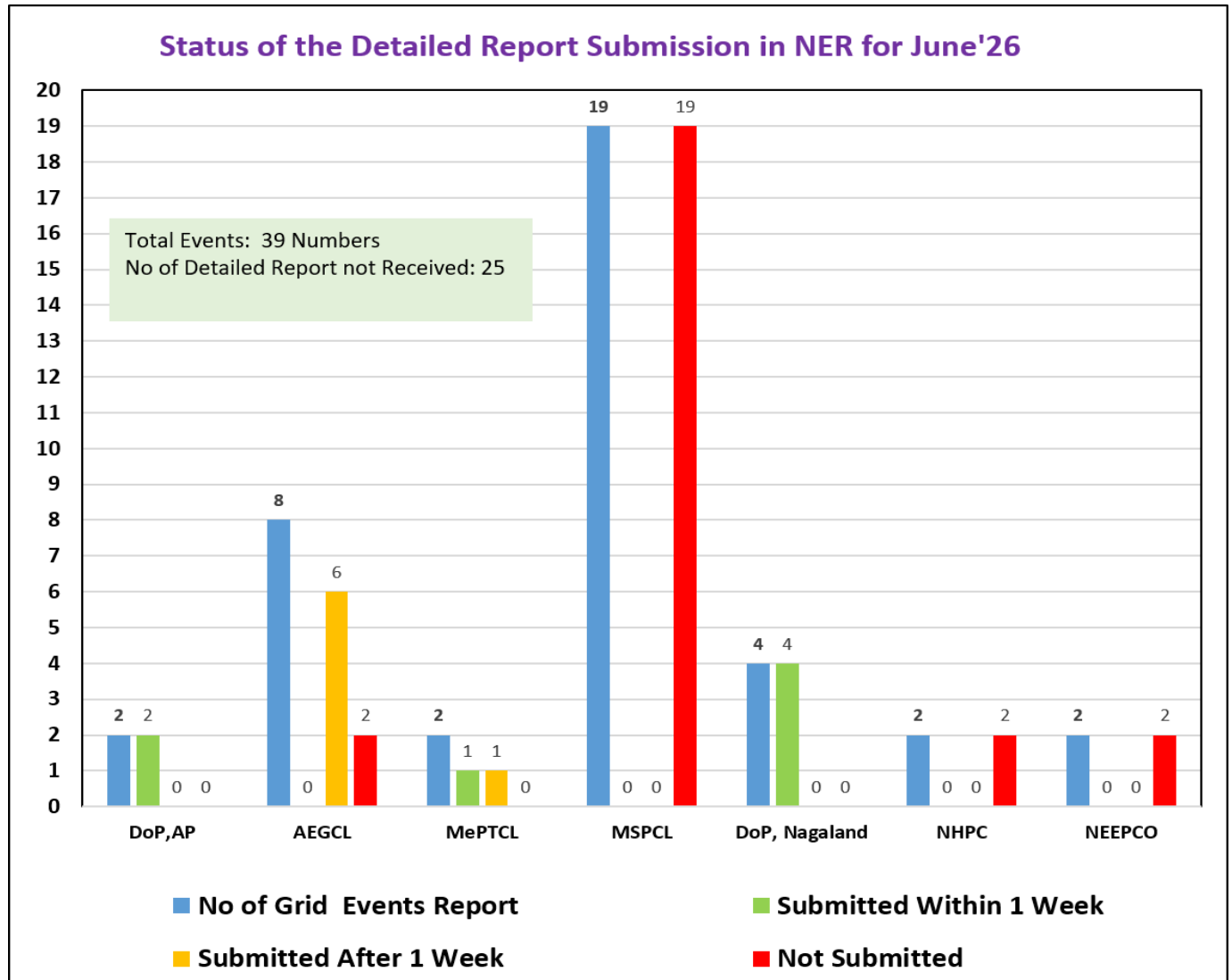
Concerned Utilities are requested to upload Disturbance Recorder (DR), Event Logger (EL) outputs for grid events along with a First Information Report (FIR) in Tripping Monitoring Portal (<https://tripping.nerldc.in/Default.aspx>) for analysis purpose. In light of the cybersecurity measures implemented by Grid India to safeguard sensitive information, NERLDC has created the email address nerldcso3@gmail.com. This new account has been specifically set up to facilitate the secure exchange of DR and EL files that have previously faced blockage when sent to nerldcprotection@grid-india.in.

Also, all utilities are requested to nominate a nodal officer responsible for the submission of FIR, DR & EL in Tripping Monitoring Portal (<https://tripping.nerldc.in/Default.aspx>)

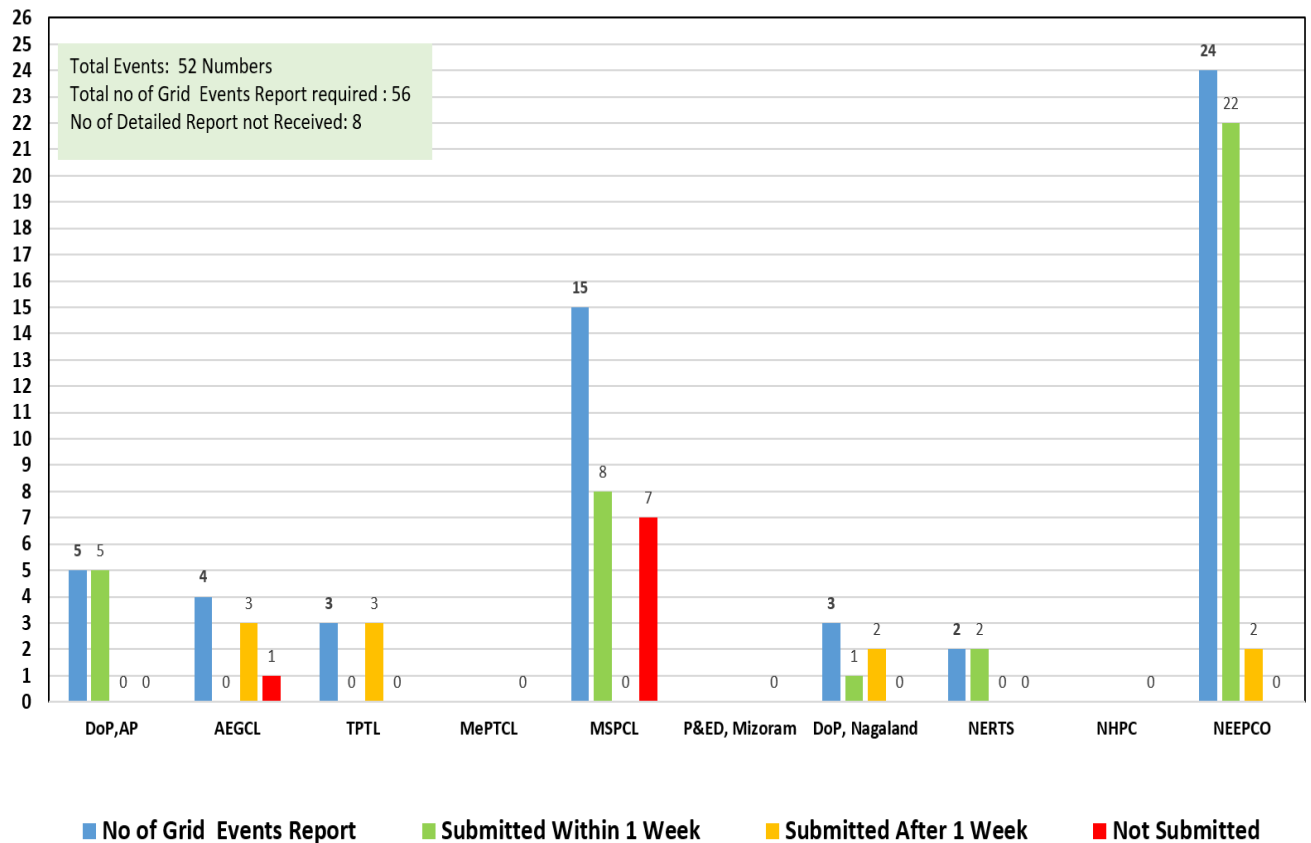
Members may discuss.

B.4 Submission of Detailed Report by User/SLDC as per IEGC-2023:

As per IEGC-2023, all User/SLDCs are requested to prepare and share **Flash Report** and **Detailed Report** with **NERLDC** and **NERPC** following any Grid Events as per the timeline mentioned in the cl 37.2(f). Status of submission of the Detailed Report for the month of **June'2026** & **July'2026** as on **12th Aug'2026** is shown below:



Status of the Detailed Report Submission in NER for July'26



All the utilities are requested to promptly share all the necessary information such as FIR, DR, EL and Reports (Flash Report & Detailed Report) as per the specified timeline mention in the Grid Code-2023.

Members may discuss.

B.5 Submission of Protection Performance Indices by Transmission Utilities for Jun'26 & July'26:

As per Regulation No. 15(6), Protection Code - Users shall submit the following protection performance indices of previous month to their respective RPC and RLDC on monthly basis for 220 kV and above (132 kV and above in NER) system by 12th of every month for previous month indices, which shall be reviewed by the RPC.

D Index= $(N_c / N_c + N_f)$

S Index= $(N_c / N_c + N_u)$

R Index = $(N_c / N_c + N_i)$

The submission status as on **11th July'2026** as tabulated below:

Sl. No.	Name of Transmission Licensee	Jun'26			July'26			Remarks
		D	S	R	D	S	R	
1	NETC	-	-	-	-	-	-	No bays owned by NETC
2	MUML	1	1	1	1	1	1	-
3	NBTL	1	1	1	1	1	1	-
4	NTL	Not submitted			Not submitted			-
5	KMTL	1	1	1	1	1	1	No tripping of elements recorded in Jun & Jul'26
6	POWERGRID	1	1	1	1	1	1	As per NERLDC, the indices values are less than 1 for Jun & July'26: 22-06-2026 13:48Hrs, the tripping of 132 kV Silchar - Melriat DC lines observed in ZII protection during fault at 132 kV Sihhmui - Zuangtui (old) line. 18:17 Hrs of 03-07-2026: The tripping of 132kV Panyor-Ziro line at Ziro during fault in the 132 kV Along-Pasighat line was unwanted.
7	MePTCL	0.85	1	0.85	1	0.9	0.9	3rd June'26 22:03 Hrs: Portection Issues at Mendipathar and Nangalbibra observed 30th July'26 06:44 Hrs: unwanted tripping of 160 MVA ICT-2 at Byrnihat
8	TPTL	1	1	1	Not submitted			-

Sl. No.	Name of Transmission Licensee	Jun'26			July'26			Remarks
		D	S	R	D	S	R	
9	DoP Nagaland	0.58	1	1	0.75	1	1	Reason not mentioned, Nf: 8 numbers (Wokha & Kohima) in Jun'26 Nf: 6 numbers (Sanis & Kohima) in July'26
10	DoP Arunachal Pradesh	0.91	1.00	0.91	1.00	0.92	0.92	<u>03-06-2026 02:45:</u> 132 kV Napit - Pasighat 1 Line A near-concurrent solid fault occurred on the Napit-Pasighat lines, involving an R-phase-to-ground fault on Ckt-1 and a Y-B-phase-to-ground fault on Ckt-2. The fault on Ckt-2 was cleared from both ends in Zone-1. However, the fault on Ckt-1 appeared to vanish intermittently and was ultimately cleared from the source ends, i.e., the Along end of the Along-Pasighat line and the Roing end of the Roing-Pasighat line, on Zone-2 operation. 09-07-2026 16:05: 132 kV Along-Basar Line During a fault on the 132 kV Bus of Along SS, Along-Basar line tripped at Basar end in Zone-1. Zone-1 operation at Basar appears unwanted. <u>13-07-2026 19:59 Hrs:</u> 132 kV Pasighat- Napit Line-2

Sl. No.	Name of Transmission Licensee	Jun'26			July'26			Remarks
		D	S	R	D	S	R	
								SPS operated on fulfilment of SPS conditions. However, SPS Switch was inadvertently kept in "ON" position and therefore the tripping at Pasighat end has been concluded as unwanted.
11	AEGCL	Not submitted			Not submitted			-
12	Mizoram	1	0.96	0.96	Not submitted			16-06-2026 09:11 hrs, the tripping of 132 kV Kolasib - Bairabi line at Kolasib recorded as unwanted.
13	MSPCL	Not submitted			Not submitted			-

Sl. No.	Name of Generating Companies	Jun'26			July'26			Remarks
		D	S	R	D	S	R	
1	NTPC(Bgtpp)	1	1	1	1	1	1	-
2	OTPC(Palatana)	1	1	1				-
3	MePGCL	1	1	1	1	1	1	-
4	TPGCL				Not submitted			-
5	Loktak (NHPC)	1	1	1	Not submitted			-
6	Subansiri (NHPC)	1	0.5	0.5	Not submitted			12th Ju'26: DC Supply failure 13th June: Due to improper PLC communication.
7	Kameng	1	1	1	1	1	1	No tripping of elements recorded in Jun'26

Sl. No.	Name of Generating Companies	Jun'26			July'26			Remarks
		D	S	R	D	S	R	
8	Panyor	1	1	1	1	1	1	-
9	Pare	1	1	1	1	1	1	-
10	Kopili	1	0.5	0.5	0	0	0	06-06-2026 15:22 Hrs: 220 kV Kopili - Missa 2 line. DT sent 20-07-2026 18:06: 220 kV Kopili - Missa 3 line, DT sent GE representative visited site for BCU troubleshooting, and the issue was rectified. Issue with configuration files.
11	Khandong	1	1	1	1	1	1	-
12	Doyang	1	1	1	1	1	1	As per NERLDC, the indices values are less than 1 for July'26 as BB protection operated on 06-07-2026 18:56 Hrs due to external faults.
13	AGBPP	1	1	1	1	1	1	Each tripping details needs to be included along with Indices values.
14	AGTCCPP	1	1	1	1	1	1	-
15	Monarchak	Not submitted			1	1	1	As per NERLDC, the indices values are less than 1 for July'26, as the tripping of STG at Monarchak observed during the GD at Udaipur

Sl. No.	Name of Generating Companies	Jun'26			July'26			Remarks
		D	S	R	D	S	R	
								on 07-07-2026 and 05:14 was unwanted.
16	Tuirial	1	1	1	1	0.958	1	05-07-2026 at 17:51 Hrs: Due to sudden tripping of transformer of other line, momentary voltage fluctuation happened in Kolasib-Tuirial line, as informed by Bawktlang S/S. 132 KV Bawktlang-line breaker auto-reclosed within 2 seconds of fluctuation in voltage at Bawktlang end.

Therefore, all Users are requested to furnish and ensure performance indices (Dependability-D, Security-S, Reliability-R) with regards to the tripping of elements to NERPC & NERLDC positively by **12th** of every month for previous month indices in compliance with IEGC.

Members may discuss.

B.6 SPS at Namsai for outage of 220 kV Kathalguri–Namsai D/C line:

Tripping of the 220 kV Kathalguri–Namsai D/C line may result in a significant voltage drop, leading to severe low-voltage conditions in the Arunachal Pradesh and Assam power systems. The concern regarding low-voltage conditions following the outage of the line was also highlighted earlier in connection with the request for idle charging of the line along with the 245 kV, 50 MVAR bus reactor at Namsai.

To mitigate the adverse voltage impact following the outage of the 220 kV Kathalguri–Namsai D/C line, NERTS has configured an SPS at Namsai on 31.05.2025, wherein the 245 kV, 50 MVAR bus reactor at Namsai is tripped immediately upon opening/tripping of both 220 kV Kathalguri–Namsai circuits at Namsai end.

In view of the above, NERPC is requested to accord approval to the implemented SPS scheme to ensure system voltage security and avoid severe low-voltage conditions at Namsai and the adjoining Arunachal Pradesh and Assam systems.

Members may discuss.

B.7 Revision of SPS Triggering Criteria at BTPS for overloading of 220 kV BTPS–Salakati (PG) Double Circuit:

At present, a SPS is in service for the 220 kV BTPS–Salakati (PG) Double Circuit to prevent overloading of the transmission lines. The existing SPS triggering logic is as follows:

When the current flow in either of the 220 kV BTPS (Salakati)–Salakati (PG) Circuit-I or Circuit-II exceeds 1000 A continuously for 1.1 seconds, an “SPS Operate” signal is transmitted from BTPS to Agia through the OPGW communication network. Upon receipt of the SPS operate signal at Agia, the 220 kV Agia–Chayagaon/Boko and 220 kV Agia–Mirza circuit breakers are tripped. This scheme is presently intended to prevent overloading of the 220 kV BTPS–Salakati (PG) transmission lines.

The 220 kV BTPS–Salakati (PG) Double Circuit has subsequently been reconductored with HTLS conductors, having a rated current-carrying capacity of 1100 A. In recent months, it has been observed that the combined loading of the 220 kV BTPS–Salakati (PG) Double Circuit has exceeded 460 MW, while the loading during peak hours has been consistently above 400 MW on a daily basis.

The increasing loading on the 220 kV BTPS–Salakati (PG) Double Circuit may primarily be attributed to the following factors:

1. Low generation from gas-based power plants in the NER, particularly the gas plants located in the Tripura power system including ISGS gas plants.
2. Non-availability of the Panyor Lower HEP.
3. Increase in demand in the NER region.

Under the present operating conditions, the high loading of the 220 kV BTPS–Salakati (PG) Double Circuit may result in the SPS triggering under certain N-1 contingency conditions, even though the line has been reconductored with HTLS conductors having a rated capacity of 1100 A. Such unnecessary SPS operation may lead to tripping of the 220 kV Agia–Boko and Agia–Mirza circuits and may adversely affect the overall system operation.

Considering the enhanced current-carrying capacity of the reconducted line, it is proposed that the existing SPS triggering threshold of 1000 A be revised to 1200 A, corresponding to approximately 110% of the rated current capacity of 1100 A. The existing time delay of 1.1 seconds may be retained without any change. Accordingly, the proposed revised SPS setting is:

Parameter	Existing Setting	Proposed Setting
Current threshold	1000 A	1200 A
Time delay	1.1 seconds	1.1 seconds

The above issue has already been highlighted by the NERLDC team to NERPC, POWERGRID, and the AEGCL protection team vide email dated 12th Aug'26. NERPC and POWERGRID have conveyed their concurrence over telephonic communication for taking necessary action in this regard.

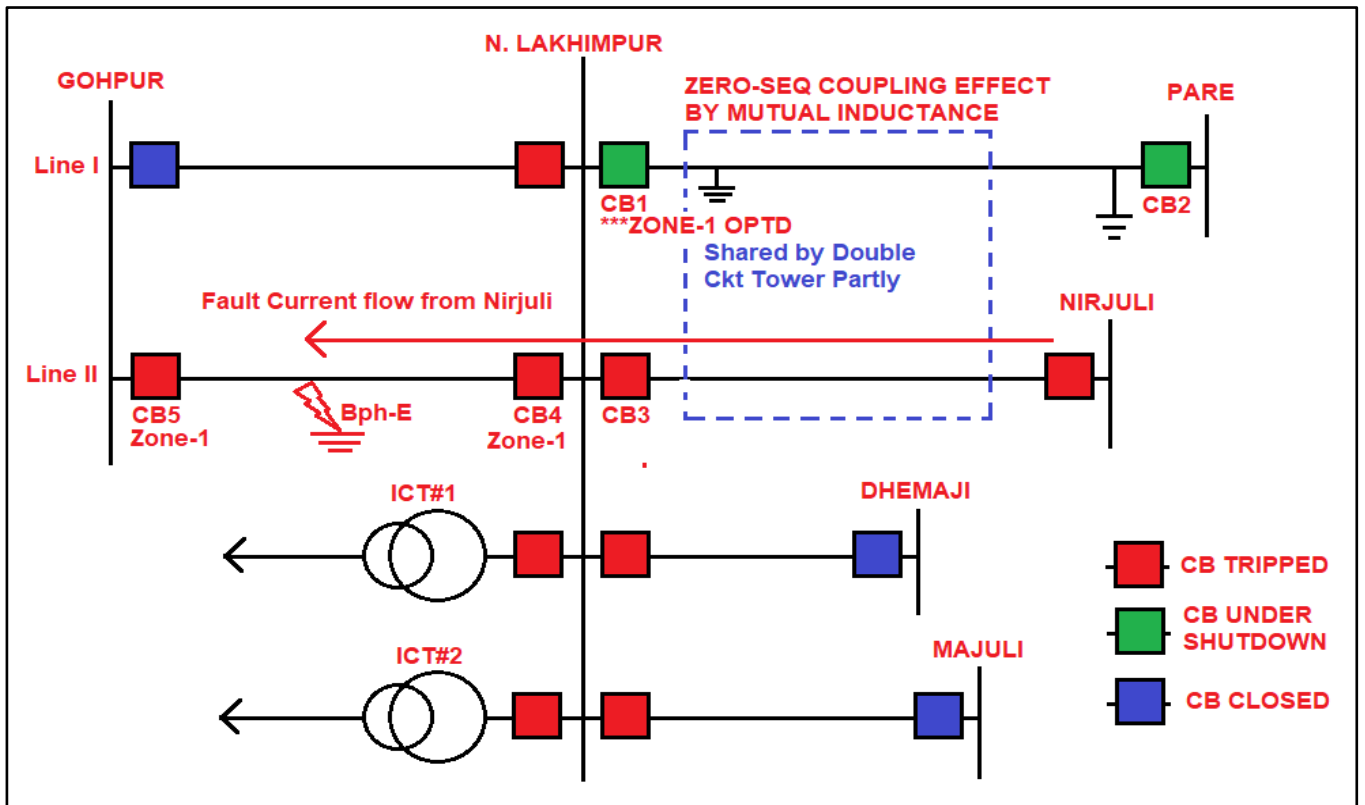
In view of the above, AEGCL is requested to kindly revise the SPS triggering current setting from the existing 1000 A to 1200 A at BTPS, while retaining the existing time delay of 1.1 seconds, at the earliest, so as to align the SPS setting with the present HTLS conductor rating and prevailing system operating conditions.

Members may discuss.

B.8 GD at North Lakhimpur area of Assam on 19th Jun'26:

The North Lakhimpur area of Assam is connected to the rest of the power grid through the 132 kV North Lakhimpur–Gohpur D/C lines, 132 kV North Lakhimpur–Nirjuli, and 132 kV North Lakhimpur–Pare transmission lines. The Majuli, Silapathar, and Dhemaji areas are connected **radially** through the North Lakhimpur substation.

At 09:12 Hrs of 19-06-2026, due to tripping of 132 kV North Lakhimpur - Gohpur D/C & 132 kV North Lakhimpur–Nirjuli, blackout at occurred at North Lakhimpur, Majuli, Dhemaji and Silapathar.



As per the Detailed report submitted by AEGCL: -

The sequence of events -

- i) The 132kV N. Lakhimpur – Pare Line and the 132kV N. Lakhimpur – Nirjuli line travels the majority of the distance sharing the double circuit towers. The flow of B phase fault current (together with generation of Zero-sequence current) from the fault feed from Nirjuli – N. Lakhimpur Bus – Fault location in Gohpur Line II, formed the necessary mutual coupling effect on the 132kV N. Lakhimpur – Pare Line (The Zero-sequence coupling effect was enhanced as the circuit was earthed at both ends.)
- ii) The Distance Relay at N. Lakhimpur end for the 132kV N. Lakhimpur – Pare Line issued a trip on Zone-1 Protection (No voltage present, as line was under shutdown and current was read by the relay due to mutual induction)
- iii) It is to be noted that, VT Fuse Fail will not block the distance protection in this case, as the I_2/I_1 ratio for the above case was not met. The phase angles of all the phases are same, hence, there is no I_2 or I_1 current formation. Only Zero-Sequence current is present

- iv) The relay issued at trip and “LBB Internal Initiation” was made “*high*”, the CB was already read “open” by the relay (Line under shutdown). The fault current continued flowing after the trip was issued by the relay. Hence, LBB Busbar trip was activated after a delay of 100ms.
- v) All the feeders connected to the 132kV Bus at N. Lakhimpur were hence tripped on LBB protection

Protection issues observed: Zero-Sequence Mutual Coupling effect leading to LBB Operation

Remedial Measures: The LBB busbar trip delay will be increased from 100ms to 200ms. The “*Mutual Compensation CT wirings*” will be carried out between the Pare and Nirjuli Panels. The LBB protection will be kept OFF when lines are under shutdown and earthed at both ends (for double circuit lines) at N. Lakhimpur end. *(The Pare Panels are not under AEGCL Jurisdiction)*

Hence, AEGCL is requested to make necessary changes in coordination with the MUML (Pare line bay owner at N Lakhimpur).

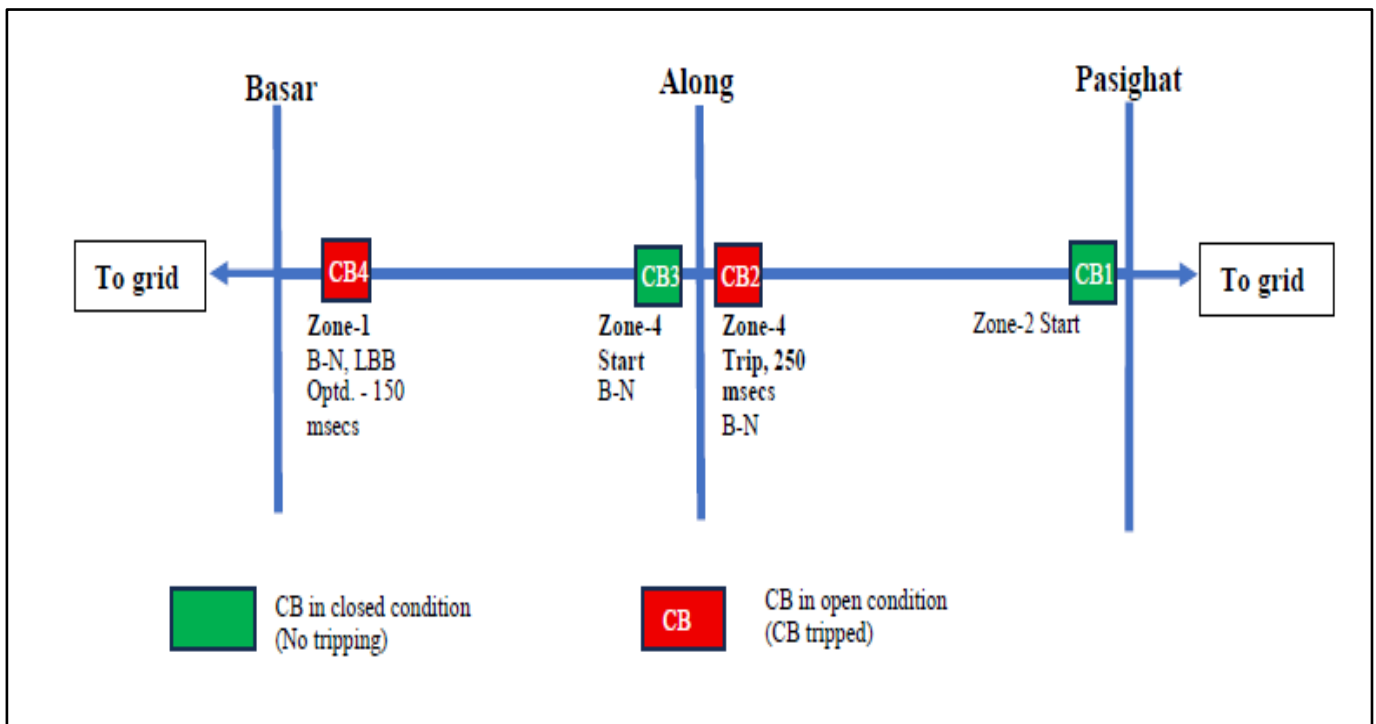
Additionally, AEGCL is requested to adhere to the mandates of IEGC’23 regarding the timely submission of DR & EL files and detailed event reports.

Members may discuss.

B.9 GD at Along area of Arunachal Pradesh 9th July’26:

At 16:05 hrs on 9th July 2026, in order to commission the 132 kV TBC Bay at Along Substation, the 89T isolator of the ICT Bay was closed with due permission from SLDC. At 16:05 hrs, an insulator on the 132 kV transfer bus ruptured, resulting in a B-phase-to-neutral (B-N) fault on the 132 kV bus at Along Substation.

The **132 kV transfer bus** at Along Substation was isolated, following which the substation was successfully re-energized through the main bus.



For the 132 kV Along-Basar line, Zone-4 Start was initiated at Along prior to tripping of the line from the Basar end by Zone-1 protection and subsequent LBB operation at Basar within 150 ms. The 132 kV Along-Pasighat line was isolated at the Along end by Zone-4 protection within 260 ms, resulting in the blackout of Along Substation. The Along-Pasighat line, however, remained energized from the Pasighat end.

Protection issues observed:

- Zone-1 operation at the Basar end for a fault on the 132 kV bus at Along Substation appears to be unwanted and requires investigation.
- At the Basar end, the B-phase pole opened within 80 ms following Zone-1 operation. However, the fault continued to be fed towards Along through the B-phase, resulting in LBB operation within 150 ms, followed by three-pole tripping. The reason for the failure of fault clearance following single-pole opening requires detailed investigation and appropriate corrective measures.
- The similar CB opening issue at Basar end of 132 kV Along – Basar line also observed at 09:30 Hrs of 4th August 2026.

Hence, DoP, Arunachal is requested to take corrective action at the earliest.

Members may discuss.

B.10 Unreliable Auxiliary Power Supply at Lower Subansiri HEP:

On 12 June 2026, Unit-3 of Lower Subansiri HEP tripped at 18:59 hrs due to tripping of its UAT. Subsequently, at 19:45 hrs, Units-1 & 2 along with 400 kV Subansiri-Biswanath Chariali Ckt-3 & Ckt-4 tripped, resulting in total blackout at Lower Subansiri HEP and generation loss of 694 MW. Unit-4 was already under forced outage.

Following the UAT failure of Unit-3, its auxiliary supply is being extended through the UAT of Unit-1 as a temporary arrangement. Further, the single 33 kV HT source available at Subansiri has been reported to be unreliable for station auxiliary supply.

In July'26, Unit-1 and Unit-3 tripping observed 13 and 16 times respectively.

Under the temporary arrangement, Unit-3 tripped 8 times during July 2026, particularly during outages of Unit-1/DG supply, indicating inadequate reliability and redundancy of the present auxiliary supply arrangement. The list of tripping and rough schematic diagram are attached in **Annexure I**

Hence, NHPC is requested to expedite replacement of the UAT of Unit-3 and clarify the existing and planned arrangements for reliable and redundant station auxiliary supply, including compliance with the applicable CEA requirements regarding provision of two independent HT sources. The long-term plan for ensuring reliable station supply at the 2000 MW Lower Subansiri HEP may also be shared.

B.11 GD Tuirial HEP of NEEPCO due to frequent tripping of the 132 kV Kolasib – Tuirial line' July26:

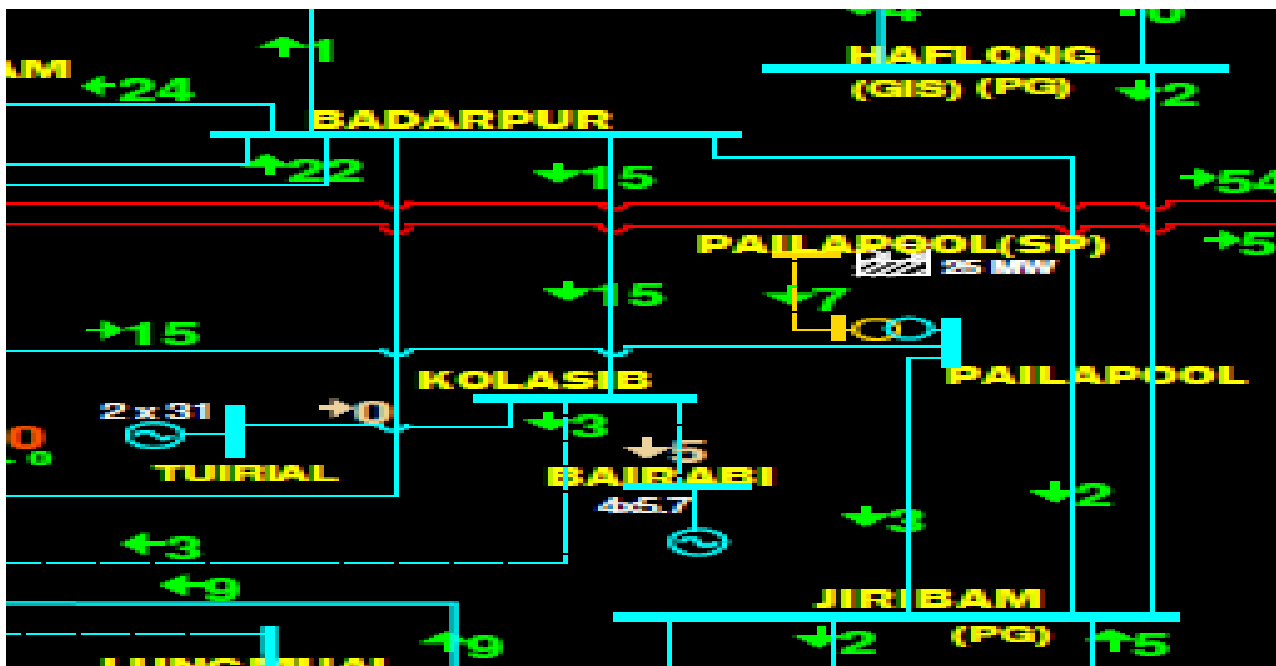
Tuirial HEP (2*31 MW) of Mizoram power system was connected with rest of NER grid through 132 kV Tuirial-Kolasib Line only.

In July'26, the tripping of the said line observed 22 times at Tuirial end as summarised below-

1. **Tripping at Tuirial end only:** 11 times, tripping occurred at Tuirial end only. Out of 11 times, 7 times fault was confirmed in the 132 kV Kolasib-Bairabi line, and 1 time fault was observed in the 132 kV Kolasib – Badarpur line.
2. **Tripping at Both the ends:** 6 times the CB tripped at Kolasib end only indicating the fault in the 132 kV Kolasib – Tuirial line itself.

3. **Details not verified:** 4 times in 26th – 28th July'26, the tripping confirmed at Tuirial end. But P&ED has not confirmed the tripping at Kolasib end. However, the DR data of the main relay showing EF pickup indicating likely the fault in the 132 kV Tuirial line itself.

This indicates a huge number of tripping occurred only at Tuirial end during fault beyond the line caused by the Highset EF protection enabled with Time delay of only 50 msecs only.



To avoid such high number of generating plant outage, NERLDC has proposing the following action points-

Action to be taken by P&ED, Mizoram:

1. Regular line maintenance to avoid outage of Tuirial generating plant.
2. Replace the backup relay at Kolasib for Tuirial line for which DR extraction is not possible. Hence, impacting the proper fault analysis.

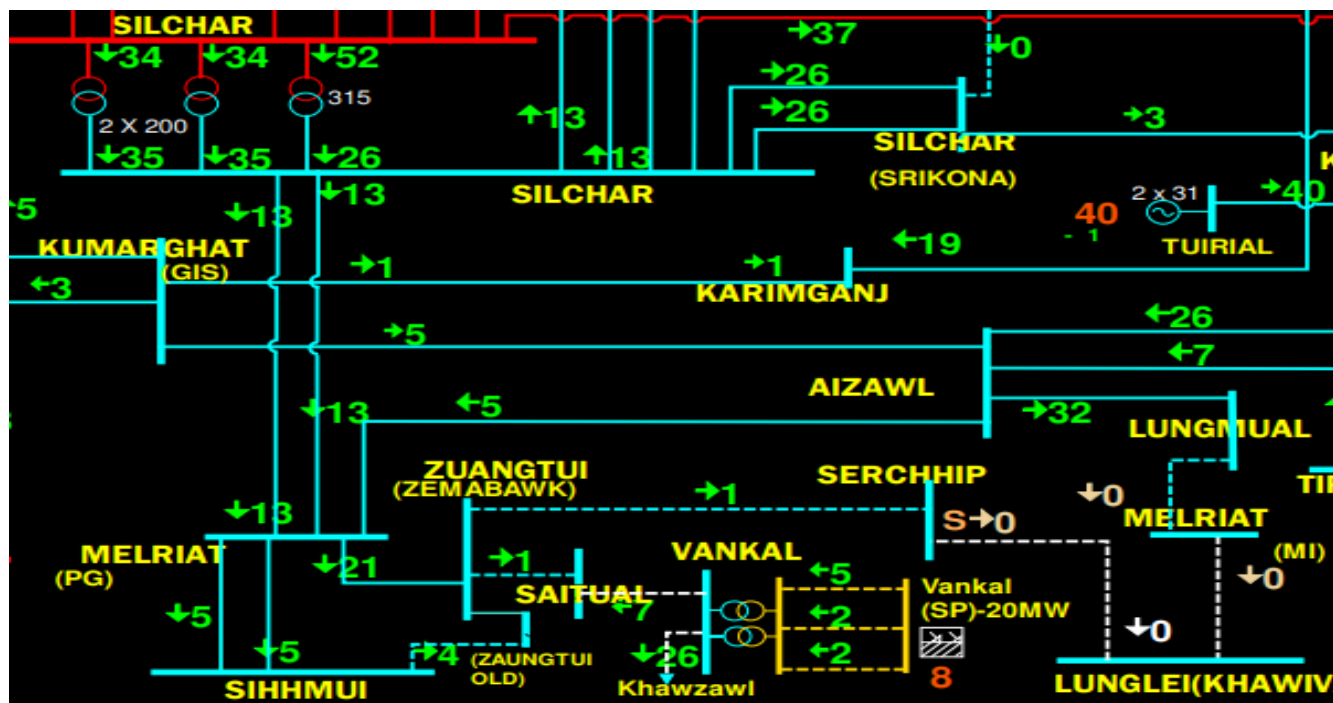
Action to be taken by Tuirial (NEEPCO):

1. Disable the Highset EF protection at Tuirial end in line with the NER Protection Philosophy.

Members may discuss.

B.12 Protection Issue at Sihhmui SS during Jun and July'26:

The Zuangtui(old) SS was radially connected from either of the 132 kV Zuangtui-Zuangtui(old) line or 132 kV Sihhmui – Zuangtui(Old) line.



Event I:

At 13:48 Hrs on 22nd June'26, during fault in the 132 kV Sihhmui – Zuangtui(old) line, the tripping of the 132 kV Melriat - Sihhmui 2 Line, 132 kV Silchar - Melriat 1&2 Line observed.

Detailed analysis:

R-N fault (Ir-2.5 kA, In-2.5 kA) occurred in the system at 13:48 Hrs due to fault in 132 kV Sihhmui-Zuangtui(old) line while attempting charging of the line. Fault was detected in ZI from Sihhmui end and issued trip command, however CB failed to open at Sihhmui end.

As a result, fault was continuously feeding from 132 kV Silchar - Melriat (PG)-Sihhmui link. Consequently, fault was cleared within 549 msec by tripping of healthy 132 kV Silchar - Melriat (PG) D/C lines on operation of ZII from Silchar end. 132 kV Melriat (PG) - Sihhmui II line tripped on ZII within 417 msec from Melriat (PG) end, however no tripping observed for 132 kV Melriat (PG)-Sihhmui I line.

Root cause informed by P&ED, Mizoram: As informed by P&ED Mizoram, Conductor between CT & Isolator of Zuangtui old bay at 132kV Sihhmui S/S got burnt.

Event II:

At 05:08 Hrs on 14th July'26, during fault in the 132 kV Sihhmui – Zuangtui(old) line, the tripping of the 132 kV Aizawl - Melriat (PG) Line observed.

Detailed analysis:

R-N fault (Ir-1.1 kA, In-1.1 kA) occurred in the system at 05:08 Hrs due to fault in 132 kV Sihhmui-Zuangtui(old) line at FD: 10.4 KM detected in ZI from Sihhmui end and issued trip command, however CB failed to open at Sihhmui end. The fault current was observed for 850 msecs from Sihhmui end.

The Aizawl end of 132 kV Aizawl (PG)- Melriat (PG) line tripped on operation of ZIII in 850 msecs.

Protection Issues observed:

1. Non opening or delayed opening of the CB at Sihhmui end of 132 kV Sihhmui – Zuangtui(old) line in ZI fault.
2. The distance relay setting may be reviewed for the 132 kV Sihhmui – Zuangtui(old) line. Also, CT polarity may be reviewed as well.
3. ZII coordination issues at Silchar end of 132 kV Silchar – Melriat (PG) DC lines.
4. ZIII coordination issues at Aizawl end of 132 kV Aizawl (PG)- Melriat (PG) lines.

Members may discuss.

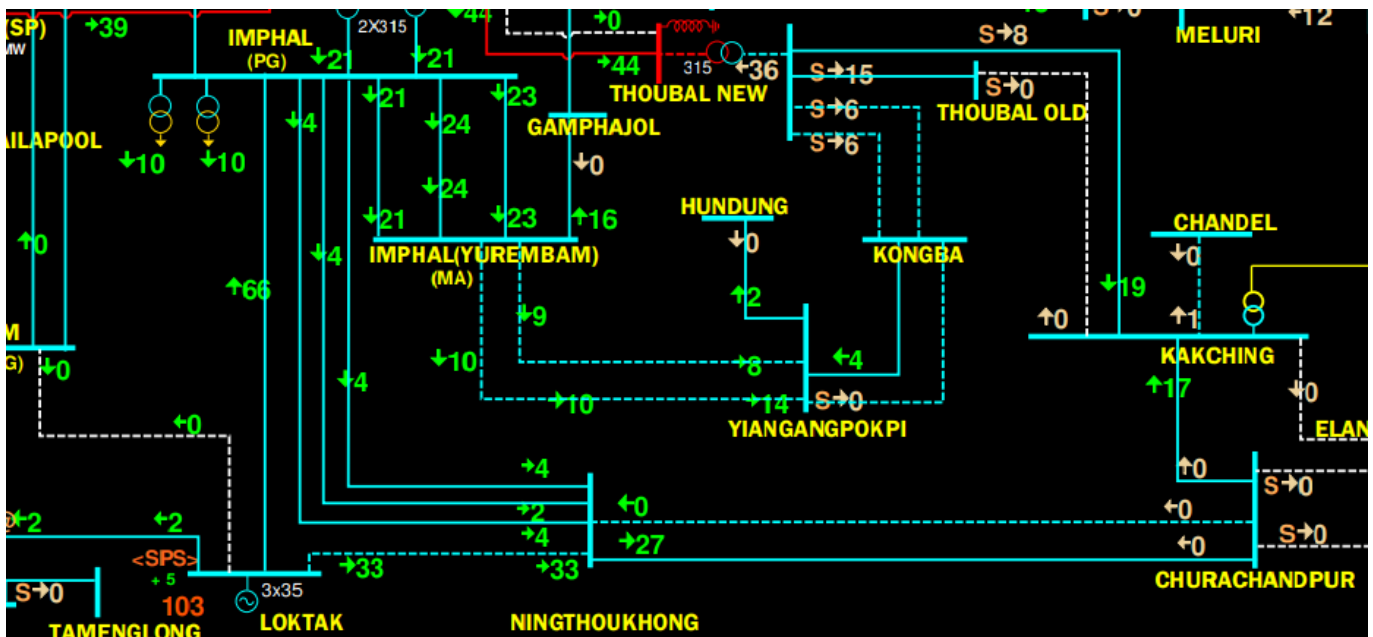
B.13 Protection Issues at the Ningthoukhong SS on 27th Jun'26:

Before the event, 132 kV Loktak – Ningthoukhong line was under tripped condition since 25-Jun-2026.

At 17:29 Hrs of 27th Jun'26,

Element Name	Line Length	Outage Duration (D.HH:MM)	Relay Indication		Remakrs
132 kV Imphal (PG) - Ningthoukhong 1 Line	27.5 KM	0.00:38	DP, ZIII, B-E, FD: 69.51 KM, 1.3 KA;	No Tripping; In>1	Fault beyond the line

			Cleared in 866 msec	started for 866 msec	
132 kV Imphal(PG)-Ningthoukhong 2 Line	32.5 KM	0.00:39	DP, ZII, B-E, FD: 45.63 KM, 1.6 kA; Cleared in 305 msec	No Tripping	Fault beyond the line
132 kV Imphal(PG)-Ningthoukhong 3 Line	32.5 KM	1.22:44	No Tripping; EF started for 960 msec; DPR not initiated	Earth Fault; L1- 3.61KA L2- 0.30KA L3- 0.36KA	Fault likely in the line closer to Ningthoukhong SS



The fruitful analysis could not be performed due to the non-submission of the DR at Ningthoukhong end.

Hence, MSPCL is requested to share the root cause of the tripping.

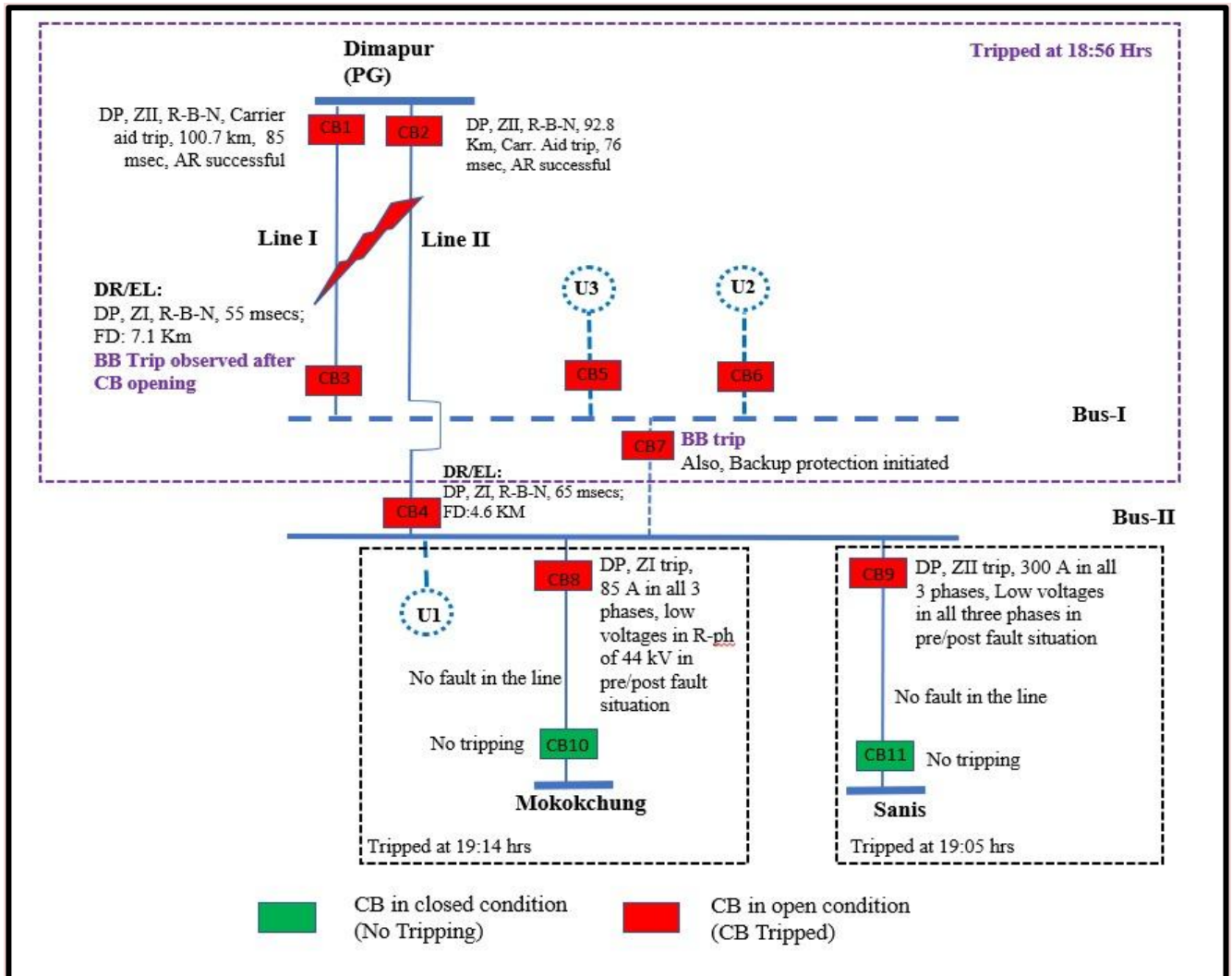
Members may discuss.

B.14 GD at Doyang HPS of Nagaland on 6th July'26:

Prior to the event of 18:56 Hrs:

Elements connected to Bus-I: 132 kV Dimapur-Doyang I line, Doyang Unit-2 & 3

Elements connected to Bus-II: 132 kV Dimapur-Doyang II, 132 kV Doyang-Sanis, 132 kV Doyang-Mokokchung lines, Doyang Unit-1 & 132/33 kV Transformer-1 at Doyang



Event Analysis:

At 18:56 Hrs on 06-07-2026, metallic R-B-N faults occurred almost simultaneously on both 132 kV Dimapur-Doyang I and II lines.

- On Dimapur-Doyang I, the fault was detected in Zone-II (Ir-2.1 kA, Ib-0.63 kA, In-2.79 kA) at the Dimapur end and cleared within 85 ms through carrier-aided tripping, while the Doyang end detected it in Zone-I and cleared it within 55 ms. Auto-reclosing (AR) was successful from the Dimapur end. Subsequently, at

18:56:29.221 Hrs, a Bus Bar trip command was issued for 132 kV Doyang Bus-I, resulting in the tripping of the Bus Coupler.

- On Dimapur–Doyang II, the metallic R-B-N fault (Ir-2.4 kA, Ib-5 kA, In-3.9 kA) was detected and cleared by Zone-I protection at the Doyang end within 65 ms, while the Dimapur end cleared the fault within 76 ms through carrier-aided protection. AR was also successful from the Dimapur end.
- Also, as per the DR of Bus Bar protection, ZA & ZB differential current of 494 A and 60 A observed during the initiation of the line fault. Hence, ZA tripping command issued by the relay caused the tripping of connected elements in the Bus I.

At 19:05 Hrs and 19:14 Hrs, two independent transmission line trippings originated from the Doyang end without any corresponding operation at the remote ends:

- At 19:05:46.410 Hrs, the 132 kV Doyang–Sanis line tripped on Zone-II protection from the Doyang end. Only. No fault present in the system. Low voltages in all the 3 phases observed.
- At 19:14:52.870 Hrs, the 132 kV Doyang–Mokokchung line tripped on Zone-I protection from the Doyang end. Low voltage observed in the R phase only.

As per the Detailed report submitted by Doyang (NEEPCO):

The UI m/c & UIII were in running/generating condition. 18:56 Hrs due to extremely bad weather thunder strike, the main bus bar differential operated due to transient fault. At the same time, all the bays connected in the Bus (Both) got tripped, including the bus coupler. Station supply also tripped (the elements UI m/c, DD-II feeder, Doyang- Sainis, Doyang -Mkg, Station supply are in Bus B). After some time, due to extremely bad weather, voltage jerks happened, and Doyang-Sainis, Doyang-Mkg, and Unit-I tipped.

Protection issues observed:

Doyang (NEEPCO) to update the following queries –

1. **Unwanted operation of BB protection:** Both the 132 kV Dimapur- Doyang 1- & 2-line faults were cleared rapidly by the primary protection schemes with successful auto-reclosing from the Dimapur end & Doyang end; however, a subsequent **Bus Bar protection operation at Doyang Bus-I** caused the **Bus**

Coupler to trip was unwanted. The root cause and remedial measures may be taken to avoid such unwanted BB operation.

2. **Low voltage Situation:** The tripping of Doyang–Sanis line and 132 kV Doyang–Mokokchung line from Doyang, with no fault in the system, indicating the need for detailed investigation into the protection operation at the Doyang end.

3. **Review of the Bus Coupler protection settings:** Backup OC initiated in the Bus Coupler. The same is not mandated as per the NER protection philosophy.

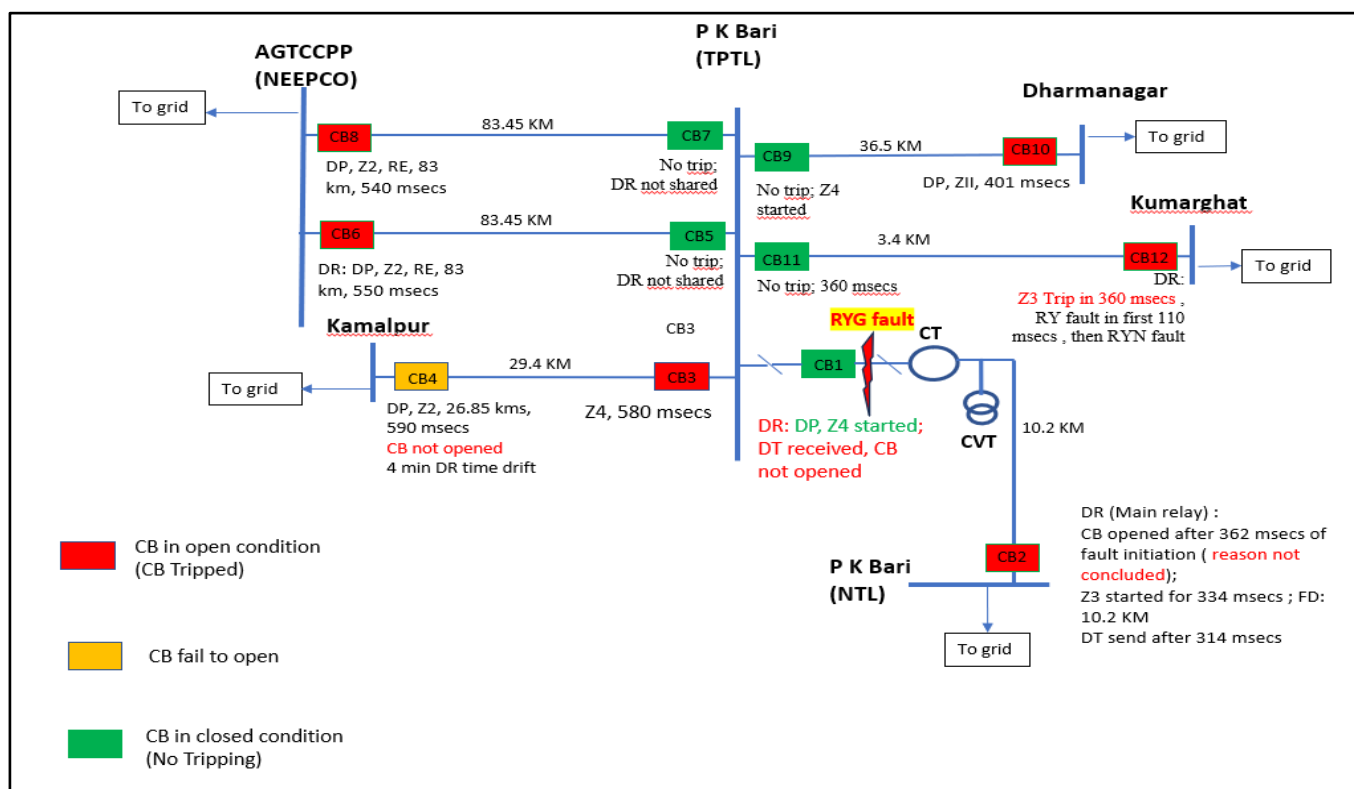
Hence, NEEPCO is requested share the root cause and corrective action for above mentioned points.

Members may discuss.

B.15 GD at P K Bari area of Tripura 17th July 2026:

PK Bari area of Tripura Power System is connected with the rest of the NER grid through 132 kV AGTCCPP-PK Bari D/C lines, 132 kV PK Bari(NTL)-PK Bari, 132 kV PK Bari-Kumarghat, 132 kV PK Bari-Dharmanagar & 132 kV PK Bari-Kamalpur lines.

At 18:43 hours on 17-07-2026, all 132 kV lines connected to PK Bari (Tripura) substation tripped, resulting in the blackout of 132 kV PK Bari (Tripura) substation.



Root cause shared by TPTL: R-Phase Al tube link between 132kV CB and Line Isolator of 132kV P.K.Bari(ISTS)-P.K.Bari(TPTL) Line at P.K.Bari(TPTL) end got disconnected from CB as the connecting pad cracked open and resulted flashover.

Analysis:

Metallic fault of LLG observed in the system. First the fault was observed in R & Y phase for 111 msec then converted into RYG for 580 msec.

Protection/Operational issues observed:

As per TPTL,

- R-Phase Al tube link between 132kV CB and Line Isolator of 132kV P.K.Bari(ISTS)-P.K.Bari(TPTL) Line at P.K.Bari(TPTL) end got disconnected from CB as the connecting pad cracked open and resulted flashover.
- It was also observed that the “cct fail Z1” alarm is in raised condition for Bus-Bar Relay, which resulted non-operation of Bus-bar differential relay to isolate this fault

Additional Points from NERLDC-

1. **P K Bari (TPTL):** Non-operation of the Bus Bar protection at P K Bari (TPTL) & reason for tripping on DT received is not confirmed.
2. **P K Bari(NTL):** Initiation of ZIII observed. However, ZII not initiated; Unwanted DT sent from NTL end.
3. **Kamalpur:** CB not opened after issuing ZII trip command by the DPR needs to be reviewed.
4. **Kumarghat:** ZIII tripping in 361 msec needs to be reviewed;
5. DR standardization required at CB11.
6. Time drift observed for CB1 (10 min), CB3 (1 min), CB4 (4 min), CB9 (2 min), CB10 (5 min).

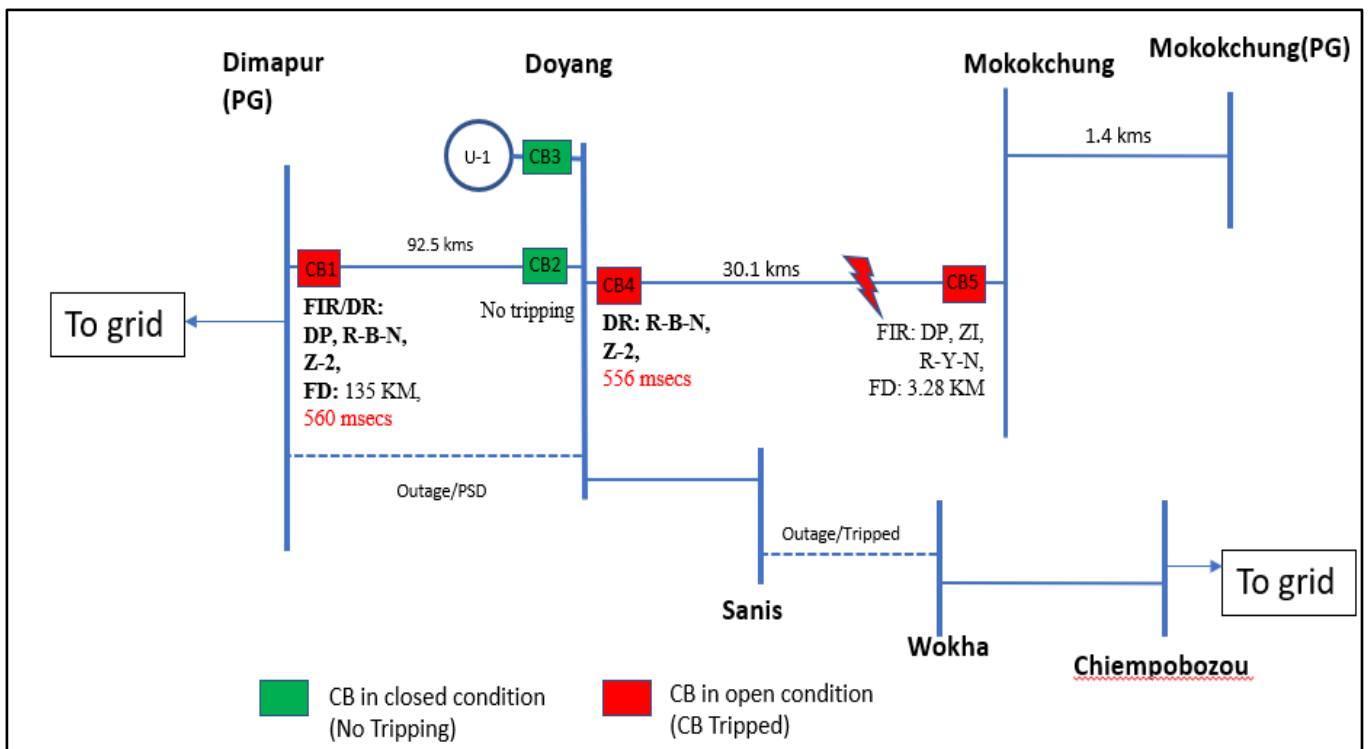
Members may discuss.

C. FOLLOW-UP AGENDA ITEMS

C.1 GD at Doyang Power Station of NEEPCO and Sanis area of Nagaland on 1st July'26:

Before the event, 132 kV Dimapur Doyang –II was under planned shutdown w.e.f. 09:44 Hrs of 01-07-2026. 132 kV Sanis-Wokha was under forced outage wef 06:43 Hrs of 01-07-2026.

At 15:37 Hrs, LLG, metallic fault in 132 kV Doyang – Mokokchung line cleared from Mokokchung end in ZI protection and Doyang & Dimapur (PG) end of Mokokchung & Doyang -1 line within 560 msecs on operation of ZII protection resulted into GD at Doyang & Sanis area. Load loss: 1 MW & Generation loss of 18 MW recorded. Power supply was extended to Doyang power station of NEEPCO & Sanis area of Nagaland by charging 132 kV Dimapur - Doyang ckt 1 at 16:22 Hrs 17:17 Hrs of 01-07-2026.



Protection issues observed:

The 500 msecs time delay for ZII is in line with the NERPC protection philosophy for ZII time delay.

Reviewing of the ZII time is required as there is no DTPC & PLCC does not supports Tele-protection, hence carrier aided protection was not operated at Doyang end of 132 kV Mokokchung line.

In the pre-PCC GD discussion meeting held on 14.08.2026, NERPC suggested to change Z2 delay at Doyang for Mokokchung line to 400 msec and at Dimapur (PG) to 600 msec for Doyang line.

PGCIL and NEEPCO may update on action taken.

C.2 Proposal for SPS for the 220 kV BTPS–Agia D/C Corridor:

(Ref Agenda B.10 | 90th PCCM | 23rd June 2026)

Due to delays in the commissioning of the upcoming 400 kV Sonapur and 400 kV Rangia substations in Assam, high loading is expected on the following transmission corridors:

- 400 kV Bongaigaon–Azara line
- 220 kV BTPS–Agia D/C
- 220 kV Balipara–Sonabil DC

System studies indicate that during periods of high demand in the North Eastern Region, particularly in the Assam power system, the combined loading of 400 kV Bongaigaon–Azara line and 220 kV BTPS–Agia DC may exceed 600 MW for longer duration.

Under such operating conditions, tripping of the 400 kV Bongaigaon–Azara line may result in critical loading of approximately 190 MW on each circuit of the 220 kV Agia–BTPS D/C line. Subsequent tripping of the 220 kV Agia–BTPS D/C line may lead to cascading outages in the Assam power system and may results into grid disturbances in both the Capital Region and the BTPS–Rangia area of the Assam power system.

To minimise the impact of the above contingency, a meeting was held on 29.05.2026 at the SLDC Assam office with officials from NERLDC, SLDC Assam, and AEGCL to deliberate on the implementation of a new System Protection Scheme (SPS) in the NER power system. The proposed SPS envisages automatic disconnection of approximately 45 MW of load at Agia and nearby substations whenever the loading

on the 220 kV BTPS–Agia D/C line exceeds 500 A. This scheme is intended to prevent overloading of the corridor and avoid the possibility of cascading outages during contingency conditions. The minutes of the meeting are enclosed as **Annexure-I**.

However, considering the criticality of the issue elaborated above, the SPS should only be viewed as an interim mitigation measure. As a long-term solution to ensure reliable and secure operation of the Assam power system, Assam is requested to accord priority to the strengthening of the 220 kV Agia–BTPS D/C line and expedite its implementation.

Deliberation (90th PCCM | 23rd June 2026):

Assam informed that the SPS will be implemented by mid-July'26.

AEGCL to update

C.3 Grid Disturbances at Lower Subansiri HEP on 12th and 13th June 2026:

(Ref Agenda B.14 | 90th PCCM | 23rd June 2026)

On 12th June 2026 and 13th June 2026 total black out occurred at Lower Subansiri HEP with tripping of all the running units and all the evacuating lines. The details of the above events are appended below.

Event -1 On 12th June 2026 at Lower Subansiri HEP:

At 18:59 hrs on 12th June 2026, Unit-3 tripped due to tripping of its Unit Auxiliary Transformer (UAT). Subsequently, at 19:45 hrs on 12th June 2026, Unit-1 and Unit-2, along with the associated evacuation lines, namely 400 kV Subansiri–Biswanath Chariali Ckt-3 and Ckt-4, tripped, resulting in Grid Disturbance and total black out at the Lower Subansiri HEP with generation loss of 694 MW. Prior to the above event Unit-4 at Lower Subansiri was under forced outage.

Sl No.	Element Name	Outage time	Revival Time	Reason	Remarks
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1	Subansiri Lower HEP - UNIT 3	12-06- 2026 18:59	-	Due to the tripping of UAT	Generation loss of 230 MW
2	400KV- BISWANATH CHARIALI- SUBANSIRI-3	12-06- 2026 19:45	12-06- 2026 20:55	Auxiliary supply failure at Subansiri &	Tripping of all the elements resulted into GD at Lower Subansiri with generation loss of 464 MW (Unit 1 & 2);
3	400KV- BISWANATH CHARIALI- SUBANSIRI-4	12-06- 2026 19:45	12-06- 2026 21:46	No tripping at Biswanath Chariali for Line-3 and DT received for line-4	
4	Subansiri Lower HEP - UNIT 1	12-06- 2026 19:45	12-06- 2026 21:32	Auxiliary supply	Total loss of Generation: 694 MW
5	Subansiri Lower HEP - UNIT 2	12-06- 2026 19:45	12-06- 2026 21:14	failure at Subansiri	

Event -2 On 13th June 2026 at Lower Subansiri HEP:

Again, on 13th June 2026 at 11:41 hrs, Unit-1 and Unit-2, along with 400 kV Lower Subansiri-Biswanath Chariali Ckt-3 and Ckt-4, tripped, resulting Grid Disturbance and total black out at the Lower Subansiri HEP with generation loss of 465 MW. Prior to the above event Unit-4 and Unit-3 at Lower Subansiri was under forced outage.

Sl No.	Element Name	Outage time	Revival Time	Reason	Remarks
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1	400KV- BISWANATH CHARIALI- SUBANSIRI-3	13-06- 2026 11:41	13-06- 2026 12:35	GIS breakers tripped due to unhealthy	Tripping of all the elements resulted into GD at Lower Subansiri with generation loss of 465 MW (Unit 1 & 2)
2	400KV- BISWANATH CHARIALI- SUBANSIRI-4	13-06- 2026 11:41	13-06- 2026 12:47	GIS controller at Subansiri; No tripping at Biswanath Chariali for Line-3	
3	Subansiri Lower HEP - UNIT 1	13-06- 2026 11:41	13-06- 2026 12:46	GIS breakers tripped due to unhealthy	
4	Subansiri Lower HEP - UNIT 2	13-06- 2026 11:41	13-06- 2026 12:43	GIS controller at Subansiri	

Action Required from Lower Subansiri HEP (NHPC):

1. Identify the root cause and report implement remedial measures to prevent recurrence of similar total blackout incidents.
2. Submit a detailed report for the Grid Events.
3. Expedite restoration of Unit-4, which has been under forced outage since 12.05.2026.
4. Expedite restoration of 400 kV, 80 MVAR Bus Reactor-1, which has been under forced outage since 20.05.2026.

NHPC to update the status of the followings-

1. Replacement of DC Battery Bank
2. Replacement of Plant Inverter System
3. SCADA System Modernization
4. Replacement of Unit Auxiliary Transformers

NHPC to update

C.4 Frequent unwanted tripping of 400/132 kV Kameng ICT:

(Ref Agenda B.15 | 90th PCCM | 23rd June 2026)

400/132 kV Kameng ICT tripped multiple times since Apr'2026 causing grid disturbance in Khupi & Seppa areas of Arunachal Pradesh which is a matter of serious concern.

The details of the events are shown below:

Event 1: At 15:38 Hrs of 22nd April'26

Sl. No.	Element Name	Tripping Time	Relay Indication A	Relay Indication B	Analysis based on FIR/DR/EL
1	132 kV Tenga-Khupi Line	22-04-2026 15:38	DP, ZII, Y-N	Distance protection optd	Y-N fault (Iy-1.3 kA, In-1.3 kA) in 132 kV Tenga-Khupi Line initiated at 15:28:46.495 Hrs and cleared within 432 msec from Tenga end on operation of DP, ZII. Distance protection operated at Khupi end. At 15:29:03.515 Hrs, Kameng ICT tripped on E/F Stg-II within 69 msec
2	3X40 MVA, 400/132 kV ICT at Kameng	22-04-2026 15:38	E/F Stg-2 in HV side operated within 69 msec		

Event 2: At 09:57 Hrs of 30th April'26

Sl. No.	Element Name	Tripping Time	Relay Indication A	Relay Indication B	Analysis based on FIR/DR/EL
1	132 kV Khupi-Seppa Line	30-04-2026 09:57	E/F	No tripping (radial)	As per information from DoP Arunachal Pradesh, 132 kV

2	3X40 MVA, 400/132 kV ICT at Kameng	30-04- 2026 09:57	E/F Stg-1 in HV side operated	Khupi-Seppa line tripped on E/F from Khupi end. At 09:57 Hrs, Kameng ICT tripped on E/F Stg-I within 3.5 sec
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Event 3: At 17:24 Hrs of 10th May'26

Sl. No.	Element Name	Tripping Time	Relay Indication A	Relay Indication B	Analysis based on FIR/DR/EL
1	132 kV Tenga- Khupi Line	10-05- 2026 09:57	Auto Recloser successful from both ends		R-N fault (Ir-2.7 kA, In-2.8 kA) initiated at 17:23:08.367 hrs which was cleared within 73 msec from Khupi end on operation of DP, ZI. Fault cleared within 142 msec from Tenga end on DP, ZI. AR operated successfully after 1.6 sec from both ends. At 17:23:04.470 Hrs, Kameng ICT tripped on E/F Stg-II within 76 msec.
2	3X40 MVA, 400/132 kV ICT at Kameng	10-05- 2026 09:57	E/F Stg-2 in HV side operated within 76 msec		

Event 4: At 13:38 Hrs of 21st May'26

Sl. No.	Element Name	Tripping Time	Relay Indication A	Relay Indication B	Analysis based on FIR/DR/EL
1	132 kV Tenga- Khupi Line	21-05- 2026 13:38	DP, ZI, R-N, AR unsuccessful	DP, ZI, R-N, AR unsuccessful	R-N fault (Ir-1.5 kA, In-1.4 kA) initiated at 13:38:15.107 Hrs which was cleared within 81 msec from Tenga end on
2	3X40 MVA, 400/132 kV	21-05- 2026 13:38	E/F Stg-2 in HV side operated within 70 msec		

	ICT at Kameng			operation of DP, ZI. After around 1.5 sec, AR attempted however tripped on reclose. Fault cleared within 71 msec from Khupi end on operation of DP, ZI, AR attempted after 1 sec, however tripped during reclaim time. At 13:38:18.187 Hrs, Kameng ICT tripped on E/F Stg-II within 70 msec.
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It has been observed that HV side E/F operation of Kameng ICT seems to be correct as per the setting of $200 \times 8 = 1600$ A with time delay of 50 msecs. However, high current value of around 2.5-2.9 kA observed in 400 kV Star connected end of Kameng ICT.

The event discussed during the GD discussion online meeting held on 12th June 2026 as follows:-

The 400/132 kV ICT is an autotransformer having common neutral for the 400 kV and 132 kV windings. During an earth fault in the 132 kV system, neutral current may return through the common neutral of the ICT. Accordingly, where the E/F protection derives current input from the neutral bushing CT (ratio: 200/1 A), the relay may record the neutral current corresponding to the 132 kV-side earth fault. Hence, the forum suggested NEEPCO to take the Backup OC & EF relay settings using the inputs from the Bay CT's at the HV side (CTR: 500/1) to avoid such unwanted EF Highset operation.

Hence, NEEPCO is requested to take necessary corrective measures on the above-mentioned issues to prevent further occurrences.

Deliberation (90th PCCM | 23rd June 2026)

NEEPCO stated that the current for EF protection was taken from Neutral CT on the directions of the OEM. Forum suggested NEEPCO to take the Backup OC & EF relay settings using the inputs from the Bay CT's at the HV side (CTR: 500/1) to avoid such unwanted EF Highset operation. NEEPCO agreed to adhere to the changes and informed that it will be implemented within 20 days. Further he requested NERPC and NERLDC to provide pick up current settings for EF highset at the earliest. NERLDC assured that the settings will be communicated shortly.

Also, NEEPCO informed that the vendor of the P633 relay has been demerged into 2 different companies i.e., Schneider & GE Vernova and getting OEM support has become difficult. Also, he informed that the suggestion will be implemented after carrying out Simulation studies in consultation with the OEM.

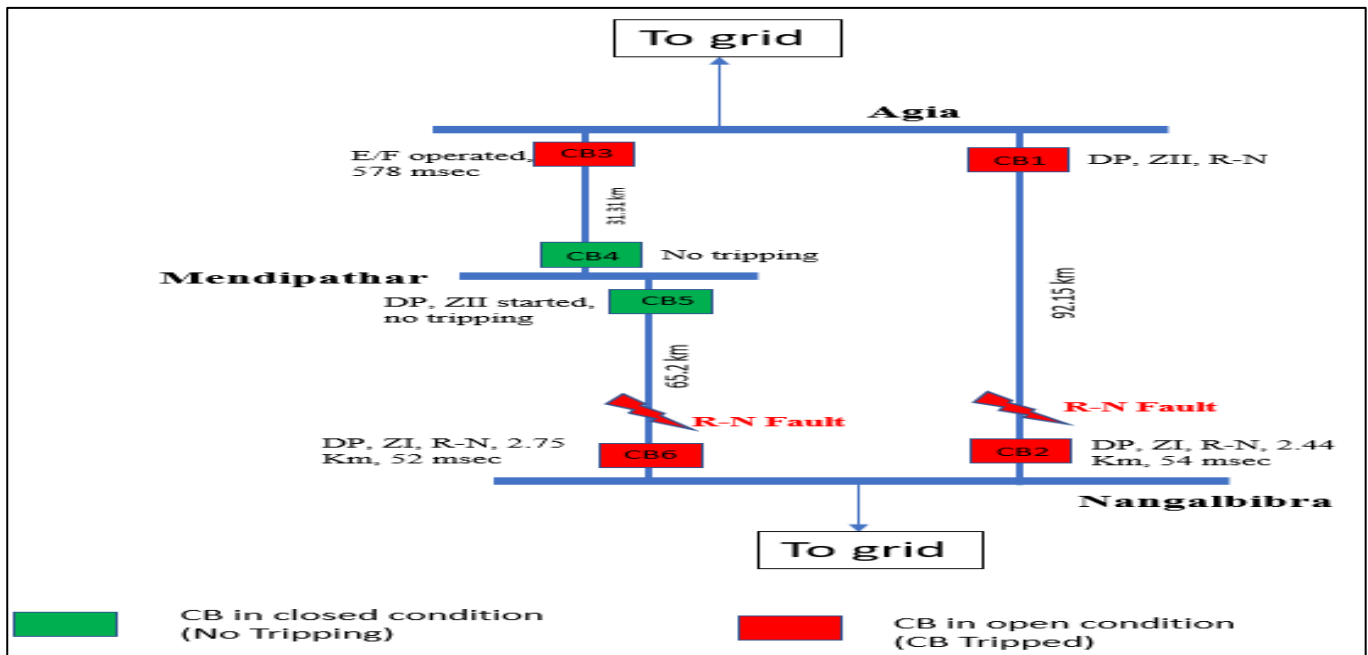
NEEPCO to update

C.5 Grid Disturbance in Mendipathar area of Meghalaya Power System on 4th June'2026:

(Ref: Agenda B.19 | 90th PCCM | 23rd June 2026)

Mendipathar area of Meghalaya power system was connected with rest of the grid through 132 kV mendipathar-Nangalbibra & 132 kV Agia-Nangalbibra lines.

At 02:12 hrs of 04-06-2026, 132 kV 132 kV Agia-Mendipathar, 132 kV Mendipathar-Nangalbibra & 132 kV Agia-Nangalbibra Lines tripped leading to grid disturbance in Mendipathar area of Meghalaya power system. Load loss of 16 MW occurred.



As per DR analysis, Solid R-N fault (Ir-1.2 kA, In-1.4 kA) appears to be in 132 kV Agia Nangalbibra line at a distance of 2.44 Km from Nangalbibra which was cleared from Nangalbibra end (CB2) on ZI within 54 msec. ZII operated at Agia end (CB1). There was a subsequent fault in 132 kV Nangalbibra-Mendipathar line which tripped on ZI at Nangalbibra end (CB6) with a fault distance of 2.75 Km. ZII/ZIII started at Mendipathar end (CB5), however, prior to clearing of fault from Mendipathar end (CB5), 132 kV Agia-Mendipathar line tripped on operation of Earth fault from Agia end (CB3) within 578 msec.

Root cause: Tripping occurred due to multiple lightning faults near Nangalbibra.

Action points for MePTCL:

- Backup E/F setting at Agia for 132 kV Mendipathar line (CB3) needs to be reviewed and coordinated with ZIII time delay as per NERPC Protection philosophy.
- ZII time delay at Mendipathar (CB5) for 132 kV Nangalbibra line needs to be reviewed and set as per protection philosophy.

Deliberation (90th PCCM | 23rd June 2026)

Forum directed MePTCL to undertake the following action points –

- Backup E/F setting at Agia for 132 kV Mendipathar line (CB3) to be reviewed and coordinated with ZIII time delay as per NERPC Protection philosophy.
- ZII time delay at Mendipathar (CB5) for 132 kV Nangalbibra line needs to be reviewed and set as per protection philosophy.

- Relay at Mendipathar for Nangalbibra line to be tested.
- MePTCL to provide the ZII settings and EF settings, as mentioned above, to NERPC and NERLDC at the earliest.

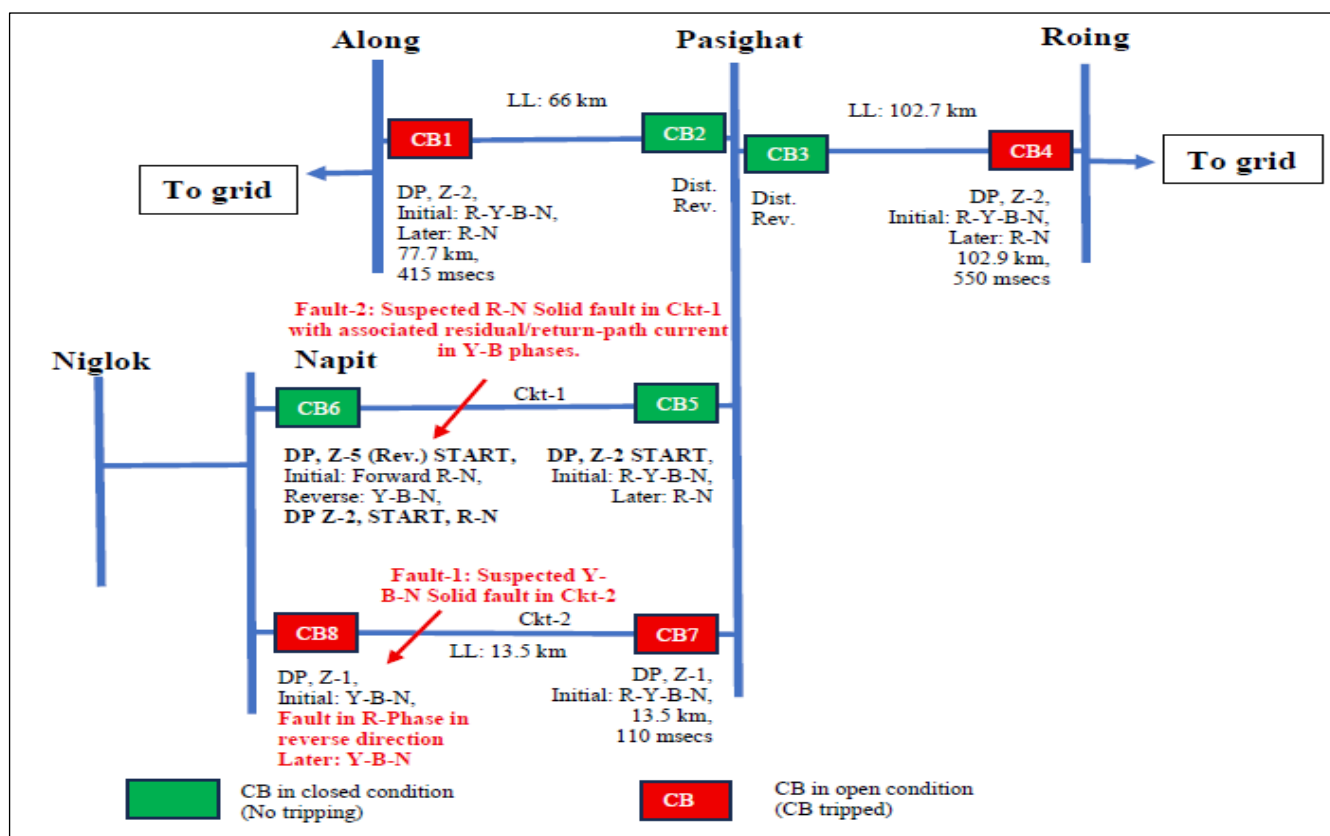
MePTCL to update

C.6 Grid disturbance in Pasighat area of Arunachal Pradesh on 3rd June'2026:

(Ref: Agenda B.20 | 90th PCCM | 23rd June 2026)

Pasighat, Napit and Niglok areas of AP Power System were connected with rest of NER Grid through 132 kV Along-Pasighat and 132 kV Roing-Pasighat lines.

At 01:42 Hrs on 03-06-2026, 132 kV Along-Pasighat and 132 kV Roing-Pasighat lines tripped. Due to tripping of these elements, Pasighat, Napit and Niglok areas of AP Power System were isolated from NER Grid and collapsed due to no source available in this area. Load loss of 8 MW occurred.



A three-phase-to-ground fault (R-Y-B-N) appears to have occurred in the system connected at Pasighat. The fault initially persisted as a multi-phase fault for approximately 170 msecs, after which it evolved into a predominantly R-phase-to-ground fault.

Fault was in 132 kV Pasighat-Napit lines which was cleared by Line-2 from both ends on Zone-1 operation. However, the fault was not cleared immediately from Pasighat end of line-1 due to which fault was feeding from 132 kV Along-Pasighat & 132 kV Roing-Pasighat lines. Consequently, 132 kV Along-Pasighat & 132 kV Roing-Pasighat lines tripped on ZII from Along & Roing end.

Action points for DoP Arunachal Pradesh:

- Delayed clearance of fault through 132 kV Pasighat-Napit Ckt-1 from Pasighat end was observed. Distance protection settings and scheme for 132 kV Pasighat-Napit I line needs to be reviewed.
- DR time drift needs to be rectified at Pasighat:

Time drift of **7 min** at Pasighat end of 132 kV Pasighat-Napit Ckt-1 line

Time drift of **9 min** at Pasighat end of 132 kV Pasighat-Napit Ckt-2 line

Deliberation (90th PCCM | 23rd June 2026)

Forum directed DoP Ar. Pradesh to check the distance protection settings at Pasighat end for the Napit ckt 1 and rectify the issue in coordination with NERPC and NERLDC. Further DoP Ar. Pradesh was instructed to rectify the DR time drift issue at Pasighat at the earliest.

DoP Ar. Pradesh to update

C.7 Nonoperation of Autorecloser in 400 kV NETC owned lines during May & June'26:

(Ref: Agenda B.21 | 90th PCCM | 23rd June 2026)

The list of the tripping events is tabulated below: -

Sl. No.	Name of Line Element	Tripping Date & Time	Revival Date & Time	Relay Indication		Remarks
				End A	End B	
1	400 kV Silchar-Palatana T/L	24-05-2026 04:32	24-05-2026 05:01	Silchar End: AFAS:M1: R-N, 60.762KM,	Palatana End: DP, ZI, R- E, 180.2	A/R Successful at Silchar end but

	(Ckt-II)			4.40KA, Zone-1 M2: R-N,60.979 KM, 4.35KA, Zone-1	KM, 1.436KA, 50 msecs	AR not attempted at Palatana end.
2	400 kV Silchar-Palatana T/L (Ckt-II)	03-06-2026 05:06	03-06-2026 05:46	Silchar End: AFAS:M1: R-,40.99KM, 7.22KA, Zone-1 M2: R-N,41.463 KM,7.4 KA, Zone-1	Palatana End: R-N, 205 KM, Zone-2, Carrier aided Tripping, 84 msecs	A/R Successful at Silchar end but AR not attempted at Palatana end.
3	400 kV Silchar-Byrnihat T/L (Ckt-II)	24-05-2026 01:13	24-05-2026 04:14	Silchar End: AFAS:M1: B-N,18.696KM, 8.64KA, Zone-1 M2: B-N,18.886 KM,8.52KA, Zone-1; DT Received	Byrnihat End: DP, ZII, B-E, FD: 249.9 KM,1.8 kA Carrier aided Tripping, 86 msecs; DT Send	A/R Successful at Silchar end but tripped on DT received but AR not attempted at Byrnihat end.

The nonoperation of Autorecloser in the above-mentioned lines are critical for the NER grid.

Hence, utilities are requested to take corrective action & as well ensure the healthiness of the at the lines.

Deliberation (90th PCCM | 23rd June 2026):

1. For issue with the 400 kV Silchar-Palatana II line, OTPC stated that there is some issue with the PLCC link because of which AR was blocked. He requested Powergrid to visit Palatana and help resolve the issue. Forum urged Powergrid to extend necessary assistance in this regard.
2. For 400 kV Silchar-Byrnihat line, forum directed MePTCL to look into the issue and revert through mail.

Concerned utilities to update

C.8 Mapping of SPS in the SCADA Display for real time monitoring of all SPS:

[\(Ref: Agenda C.1 89th PCCM | 21st April 2026\)](#)

NLDC has submitted the Guidelines on “Interfacing Requirements” after stakeholder consultation for approval of the Commission as mentioned in the Regulation 7.4, read with Regulation 14.2 of the Communication System for inter-State transmission of electricity) Regulations, 2017. On dated 19-Jan-2024, CERC approved the guideline on “Interfacing Requirements” prepared by NLDC in consultation with the stakeholder. As per the Guideline, real time telemetered is SPS Signal need to be monitored. The digital status shall be as per IEC standard. Digital Status for circuit breaker must be double point while isolator status can be either single point or double point as per end device. All users shall comply with interface requirements as specified and shall share interface details with respective Control Centre.

Sl. No.	Description	Analog Points	Digital Points	Protection Signal
1	SPS Signal		DIGITAL STATUS: Enable/Disable, Operated/No Operated (Condition/Logic Wise)	

Present Status of SPS mapping in SCADA Display

10-Apr-2026 17:54:24		SPS STATUS &		NER
STATION	SPS	SPS ON/OFF	SPS OPTD.	
BGTPP_NTPC	BGTPP U-3	☐	☐	
PALATANA_OTPC	SPS-2 Bangladesh	☐	☐	
	SPS-4 Bangladesh	☐	☐	
	SPS -2 HSR	☐	☐	
	SPS -3 HSR	☐	☐	
ZIRO_PG	ZIRO SPS	☐	☐	
SARUSAJAI_AS	SARUSAJAI SPS	☐	☐	
IMPHAL_PG	IMPHAL SPS	☐	☐	
SM NAGAR (ST)	SM NAGAR B/R -1 SPS	☐	☐	
SM NAGAR (ST)	SM NAGAR B/R -2 SPS	☐	☐	
PK BARI (ST)	PK BARI B/R -1 SPS	☐	☐	
PK BARI (ST)	PK BARI B/R -2 SPS	☐	☐	
TINSUKIA (AS)	TINSUKIA SPS	☐	☐	
BONGA_AS	SPS Stage -1	☐	☐	
	SPS Stage -2	☐	☐	
MONARCHAK	MONARCHAK	☐	☐	
KHLEIHRIAT	KHLEIHRIAT SPS	☐	☐	
LESKA	LESKA SPS	☐	☐	
SM NAGAR (TE)	SM NAGAR LOAD SPS	☐	☐	

Sl. No.	SPS under operation	SPS mapping status in SCADA (YES/No)
1	SPS related to outage of 220 Misa-Samaguri D/C lines	NO Mapping will be done shortly by last Week of March 2026
2	Related to outage of any one circuit of 220 kV Balipara-Sonabil D/C lines	NO Mapping will be done shortly by last Week of March 2026
3	Outage of 220 kV BTPS (Salakati) – Rangia I & II Line	NO Mapped till SLDC. SLDC to coordinate with NERLDC
4	SPS at Azara for Preventing Overloading of 400/220 kV, 2×315 MVA ICTs at Azara	NO

5	SPS related to overloading of any one of the 400/132kV, 2x360 MVA ICTs at Panyor Lower Hydro Power Station	NO
6	Outage/tripping of any one circuit of 132 kV Dimapur(PG)- Dimapur(NA) D/C Line	NO
7	SPS related to generation evacuation from Loktak HEP	NO As per NHPC, SCADA system is not available at Loktak. Mapping of SPS at Loktak HEP will take time & it will be completed after renovation work at Loktak plant.

It is to be noted that the SPS logic at Sonabil has recently been updated by AEGCL during 9th & 10th June 2026. In view of the criticality of SPS operation and system security, it is essential that all SPS-related status and trigger signals are made available at SLDC and NERLDC for continuous real-time monitoring and situational awareness.

Deliberation (90th PCCM | 23rd June 2026):

As informed by AEGCL, mapping will be completed by July'26 for Sl no -1,2,3 and 4 respectively.

AEGCL to update

C.9 Grid Disturbance at Kohima & radially connected areas Pfutsero, Meluri, Zhadima, Chiephobozou areas & LHEP generating station of Nagaland:

[\(Ref: Agenda B.12 | 89th PCCM | 21st April 2026\)](#)

Deliberation in 89th PCC meeting:

Event 1:

NERLDC apprised that in the DR of Kohima end it has been observed that there was intermittent pickup of ZII at Kohima end for instances of 310 msec & 150 msec by the Main relay of 132 kV Dimapur – Kohima line resulted into failure of timely operation of ZII at the Kohima end and hence ZII operation at Karong.

Forum instructed DoP Nagaland to –

1. Test the Main relay at Kohima for the 132 kV Dimapur – Kohima line.
2. Transplay the DR output for the tripping in the main relay to check the performance.

Event 2:

DoP Nagaland informed that the reason for no operation of protection system at Kohima end is being looked into. NERLDC apprised that the ZIV initiation at Kohima for Karong bay raises concern that the actual fault location must be somewhere near the Kohima SS.

Forum instructed DoP Nagaland to –

1. Ensure timely submission of DR and EL so that thorough analysis of GDs may be done
2. Find out the location of fault and investigate into non-operation of protection system at Kohima and provide report to NERPC at the earliest.

Forum also instructed Manipur to look into the issue of operation of ZII in 73 msec, which is not in compliance with the standard time delay of 350-500 msec. Regarding the revival of 132kV Chiephobozou -Wokha line, DoP Nagaland updated that tower restoration works are under way and the line will tentatively be revived by end of April'26.

C.10 Repeated tripping of 220 kV Misa-Kopili 2 & 3 Lines:

[\(Ref: Agenda 2.2 | 238th OCCM | 15th May 2026\)](#)

Deliberation in 238th OCC:

NEEPCO apprised the forum that there may be issues related to the BCU associated with the Kopili–Misa-2 and Kopili–Misa-3 lines. NEEPCO informed that the matter has already been taken up with M/s GE Vernova and representatives from the OEM are expected to visit by the last week of the month for detailed examination of the issue. NEEPCO further informed that, based on the observations during the visit, the status and further course of action would be intimated to NERPC and NERLDC. MS, NERPC directed that the matter may also be deliberated in detail during the upcoming PCC meeting of NERPC for further review and necessary action.

Action: NEEPCO to coordinate with M/s GE Vernova for detailed examination of the BCU issues associated with Kopili–Misa-2 and Kopili–Misa-3 lines and update NERPC and NERLDC. The matter shall also be deliberated in the upcoming PCC meeting of NERPC.

Deliberation in 90th PCCM | 23rd June 2026 (Agenda C.7):

NEEPCO informed that OEM will visit the site by July'26 end / Aug'26 first week

NEEPCO to update
