



भारत सरकार/Government of India  
विद्युत मंत्रालय/Ministry of Power  
उत्तर पूर्वी क्षेत्रीय विद्युत समिति/North Eastern Regional Power Committee  
लपालांग शिलांग-793006/Lapalang, Shillong 793006

No. NERPC/SE(O)/PCC/2026/3672 - 3613 .

Date: 14-01-2026

सेवा में / To,  
संलग्न सूची के अनुसार / As per list enclosed.

**विषय/Sub: 87 वीं सुरक्षा समन्वय उप-समिति (पीसीसी) बैठक का एजेंडा-तत्संबंधी।/ Agenda of 87<sup>th</sup> Protection Coordination Sub-Committee (PCC) Meeting - reg.**

सर/मैडम,  
Sir/Madam,

कृपया अपनी जानकारी और आवश्यक कार्रवाई के लिए 19 जनवरी 2026 को एनईआरपीसी कॉन्फ्रेंस हॉल, शिलांग में आयोजित होने वाली 87वीं पीसीसी बैठक के एजेंडे के साथ यहां संलग्न देखें। कार्यसूची एनईआरपीसी की वेबसाइट [www.nerpc.gov.in](http://www.nerpc.gov.in) पर भी उपलब्ध है।

Please find enclosed herewith the agenda of the 87<sup>th</sup> PCC Meeting to be held at NERPC Conference Hall Shillong on 19<sup>th</sup> January 2026 for your kind information and necessary action. The agenda is also available on the website of NERPC: [www.nerpc.gov.in](http://www.nerpc.gov.in).

भवदीय / Yours faithfully,

(वी एन मुंशी/V N Munshi)  
निदेशक/ Director  
परिचालन/ Operation

Encl: As above

अभिभाषकों की सूची /List of Addressees:

1. Managing Director, AEGCL, Bijuli Bhawan, Guwahati – 781 001
2. Managing Director, APGCL, Bijuli Bhawan, Guwahati – 781 001
3. Managing Director, APDCL, Bijuli Bhawan, Guwahati – 781 001
4. Managing Director, MSPCL, Electricity Complex, Keishampat, Imphal – 795 001
5. Managing Director, MSPDCL, Secure Office Bldg. Complex, South Block, Imphal – 795 001
6. Director (Transmission), MePTCL, Lumjingshai, Short Round Road, Shillong – 793 001
7. Director (Generation), MePGCL, Lumjingshai, Short Round Road, Shillong – 793 001
8. Director (Distribution), MePDCL, Lumjingshai, Short Round Road, Shillong – 793 001
9. Director (Tech.), TSECL, Banamalipur, Agartala -799 001.

10. Director (Generation), TPGCL, Banamalipur, Agartala -799 001.
11. GM (Transmission), TPTL, Banamalipur, Agartala -799 001.
12. Chief Engineer (WE Zone), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
13. Chief Engineer (TP&MZ), Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791111
14. Chief Engineer (Commercial) -cum- CEI, DoP, Govt. of Arunachal Pradesh, Itanagar- 791111
15. Engineer-in-Chief, P&E Department, Govt. of Mizoram, Aizawl – 796 001
16. Engineer-in-Chief, Department of Power, Govt. of Nagaland, Kohima – 797 001
17. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
18. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad, Haryana-121003
19. Group GM, NTPC, Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
20. Vice President (Plant), OTPC, Badarghat Complex, Agartala, Tripura - 799014
21. ED, PGCIL/NERTS, Dongtieg-Lower Nongrah, Lapalang, Shillong -793 006
22. AGM (BD), NVVN, Core 5, 3rd floor, Scope Complex, 7 Institutional Area, Lodhi Rd., N. Delhi-3
23. Vice President, PTCIL, 2nd Floor, NBCC Tower, 15, Bhikaji Cama Place, New Delhi – 110066
24. Dy. COO, CTUIL, "Saudamini", 1st Floor, Plot No. 2, Sector-29, Gurugram, Haryana – 122001
25. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066
26. Chief Engineer, NPC Division, Central Electricity Authority, New Delhi – 110066
27. Head & VP, (R&C), ENICL, IndiGrid, Windsor Building, Kalina, Santacruz (East), Mumbai- 98
28. ED, NERLDC, Dongtieg, Lower Nongrah, Lapalang, Shillong -793 006
29. CGM, AEGCL, Bijuli Bhawan, Guwahati – 781001
30. CGM, APGCL, Bijuli Bhawan, Guwahati – 781001
31. CGM, DISCOM, Bijuli Bhawan, Guwahati – 781001
32. Head of SLDC, Dept. of Power, Govt. of Arunachal Pradesh, Itanagar – 791111
33. CGM, (LDC), SLDC Complex, AEGCL, Kahilipara, Guwahati-781 019
34. Head of SLDC, MSPCL, Imphal – 795001
35. Head of SLDC, MePTCL, Lumjingshai, Short Round Road, Shillong – 793 001
36. Head of SLDC, P&E Deptt. Govt. of Mizoram, Aizawl – 796 001
37. Head of SLDC, Dept. of Power, Govt. of Nagaland, Dimapur – 797103
38. Head of SLDC, TSECL, Agartala – 799001
39. Chief Engineer (Elect), Loktak HEP, Vidyut Vihar, Kom Keirap, Manipur- 795124
40. DGM (O&M), OTPC, Badarghat Complex, Agartala, Tripura – 799014
41. AGM Regulatory & Commercial, NER II TL, 10<sup>th</sup> Floor, Berger Tower, Noida sector 16B-201301
42. Director, NETC, 2C, 3rdFloor, D21Corporate Park, DMRC Building Sector 21, Dwarka, Delhi-77.



(वी एन मुंचा/V N Muntha)  
निदेशक/ Director  
परिचालन/ Operation



**AGENDA FOR  
87<sup>th</sup> PCCM**

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

## **North Eastern Regional Power Committee**

### **Agenda for**

#### **87<sup>th</sup> Protection Coordination Sub-Committee Meeting**

**Date:** 19/01/2026 (Monday)

**Time:** 11:00 hrs.

**Venue:** NERPC Conference Hall, Shillong

#### **A. CONFIRMATION OF MINUTES**

##### **1. CONFIRMATION OF MINUTES OF THE 86<sup>th</sup> PROTECTION SUB-COMMITTEE MEETING OF NERPC.**

Minutes of the 86<sup>th</sup> PCC Meeting held on 11<sup>th</sup> December, 2025 at NERPC Conference Hall, Shillong was circulated vide letter No.: NERPC/SE (O)/PCC/2025/3289-3339 dated 30<sup>th</sup> December 2025.

***No comments were received from the constituents***

***Sub-committee may confirm the minutes of the 86<sup>th</sup> PCCM***

<b>B. ITEMS FOR DISCUSSION</b>
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**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–

<b>Description</b>		<b>Constituent</b>	<b>Responsibility</b>	<b>Timeline</b>
<b>Audit</b>	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	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	All users	Annual audit plan to be	Annual

	audit plan		submitted to RPC by <b>31<sup>st</sup> October</b>	
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Background: In 60<sup>th</sup> PCCM the following points were discussed-

Member Secretary NERPC informed that third party protection audit has to be generally conducted by the utilities on their own. However, the 3<sup>rd</sup> party audit will be carried out by team constituted by NERPC at selected substations based on the criticality, analysis and requirement. In this regard, NERPC has already circulated an audit calendar and audit formats for reference of the constituents.

The nodal officers of respective State/Power Utilities have to fill the audit formats and submit to the NERPC secretariat within 1 week. The forum decided that compliance to audit reports will be followed up regularly in PCC meeting of NERPC.

Information regarding substations that have already been audited will be provided by States to NERPC & NERLDC. **Forum agreed that all users (132 kV and above) have to conduct Internal Audit annually and submit audit report to RPC with action plan for rectification of deficiencies within 30 days of Audit.**

Regarding audit plan of utilities, the forum requested the utilities to furnish the list of substations and audit (internal as well as third party) schedule for FY 2024-25. A google spreadsheet has been circulated to the constituents by NERLDC to provide the schedule of protection audit as well as date of last audit. The forum requested the constituents to update the spreadsheet.

#### ***Status of Internal/External audit (86<sup>th</sup> PCCM)***

Sr No	Utility/ Constituents	Internal Audit		External audit	
		Latest Status	report	Latest Status	report
1.	Ar. Pradesh	Audit of Daporijo done in October'25. Audit of	Report for Daporijo will be shared shortly	Planning and Tendering will be done for audit of all 9 SS (3 done by	NA

		Khuppi underway and Lekhi will be end of Dec'25 (Total Substation: 09)		NERPC). Bid document prepared and proposal has been put up to the government for funding approval.	
2.	Assam	80% of the substations done and 100% by dEC'25. (Total Substation: 82)	All the reports will be shared by Dec'25.	A letter has been written to AERC for tariff adjustment of the cost of audit. Communication underway with CPRI for audit of 20 SS, Budgetary offer yet to be received.	
3.	Manipur	completed (Total Substation: 17)	Report for 8 SS submitted to NERPC	17 SS to be done, Schedule to be decided, subject to law and Order situation. Audit of Yurembam ss, Ningthoukong ss and Imphal (PG) were done by NERPC in Aug'25	NA
4.	Meghalaya	Audit of 8 substations done, 9 substations left, will be done by the end of this year (Total Substation: 22)	Reports by end of Nov'25	Audit of 19 substations done, 13 by CPRI and 6 by NERPC	Report for 5 substations to be submitted by this month.

5.	Mizoram	Audit of 3 substations done, rest 10 will be done by Feb'26 (Total Substation: 13)		Under discussion at higher level for financial implications. Audit of Kolasib, Aizawl, Melriat (PG), Zuangtui and Luangmual were done by NERPC in October'25.	
6.	Nagaland	absent		absent	
7.	Tripura	3 done (Dhalabil, Mohanpur and Jirania), rest will be done on 35-40 days (Total Substation: 18)		ERDA has emerged lowest bidder for the audit, necessary procedures are being done for awarding the contract for auditing. In 1 <sup>st</sup> phase 9 substations will be audited.	
8.	Powergrid (NERTS)	22 Substations. Schedule given to NERLDC. Audit of 16 SS done	Report for 13 shared, 3 reports under review, will share shortly	Budgetary offer will be taken after SAS upgradation of Misa and Balipara.  Audit of 7 substations have been done by NERPC	

				so far.	
9.	NTL	Audit of P K Bari and S M Nagar to be done in March'26.		Feb, March'26	
10	KMTL	absent			
11	MUML/NBTL	For MUML - Jan'26 For NBTL - Dec'25		MUML- Planned in March'27 NBTL -done, reports to be shared by end of Dec'25	
12	NEEPCO (Total Substation: 10)	Internal audit plan for FY 2025-26 has been shared. Audit of Kopili done. Audit of thermal stations to start shortly. Audit of Khandong done	Audit report of Khandong to be submitted shortly	Audit of Kameng to be done by the end of Dec'25. Turial in Jan'26. AgBPS - tendering yet to be done. Kopili and Khandong generators have been recommissioned recently so they will be audited next year.	
13	OTPC . (Palatana)	Done in October'25	shared	Done in 2024	shared
14	NTPC . (BgTPP)	For FY 2025-26, to be on 19 <sup>th</sup> Dec'25		Done (by CPRI) during 2024. 3 audit recommendation compliance done and submitted to NERPC.	Complete Report shared. Action plan shared.
15	NHPC . (Loktak)	To be done in Dec'25		Done by PRDC in Sep'25	Report to be shared shortly
16	APGCL	No representative			

.					
17	TPGCL				
.					
18	MEPGCL	All done	All reports shared	Budgetary offer received from CPRI, CBIP and PRDC. Financial approval from higher authorities pending	
.					
19	Dikshi HEP (IPP)	Audit done in Nov'25.	Report shared report submitted to the state.	Feb'26	

***Utilities may update***

**B.2 Analysis and Discussion on Grid Disturbances which occurred in NER grid in December'25 in compliance with IEGC 2023:**

TABLE 8 : REPORT SUBMISSION TIMELINE

Sr. No.	Grid Event <sup>^</sup> (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

<sup>^</sup>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 December 2025 based on the draft report prepared by NERLDC.

**B.3 Status of submission of FIR, DR & EL outputs for the Grid Events for the month of Dec'2025:**

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 01-12-2025 to 31-12-2025 as on **09-01-2026** is given below:

Owner Name	Total No of FIR/DR/EL/TR to be submitted(SEND+REND)	FIR		DR		EL	
		Total Furnished in 24hrs %	Total furnished %	Total Furnished in 24hrs %	Total furnished %	Total Furnished in 24hrs %	Total furnished %
AEGCL	9	0%	100%	0%	100%	100%	100%
DoP, Nagaland	3	0%	100%	0%	67%	33%	67%
MePTCL	2	0%	100%	100%	100%	0%	100%
MSPCL	3	33%	33%	33%	33%	0%	33%
NEEPCO GENERATION	15	33%	100%	73%	100%	27%	100%
NEEPCO TRANSMISSION	3	67%	100%	67%	100%	0%	67%
NTL	1	0%	0%	0%	0%	0%	0%
P&ED, Mizoram	2	50%	100%	50%	100%	0%	100%
POWERGRID	8	63%	100%	63%	100%	38%	100%
TSECL	5	60%	100%	100%	100%	0%	100%

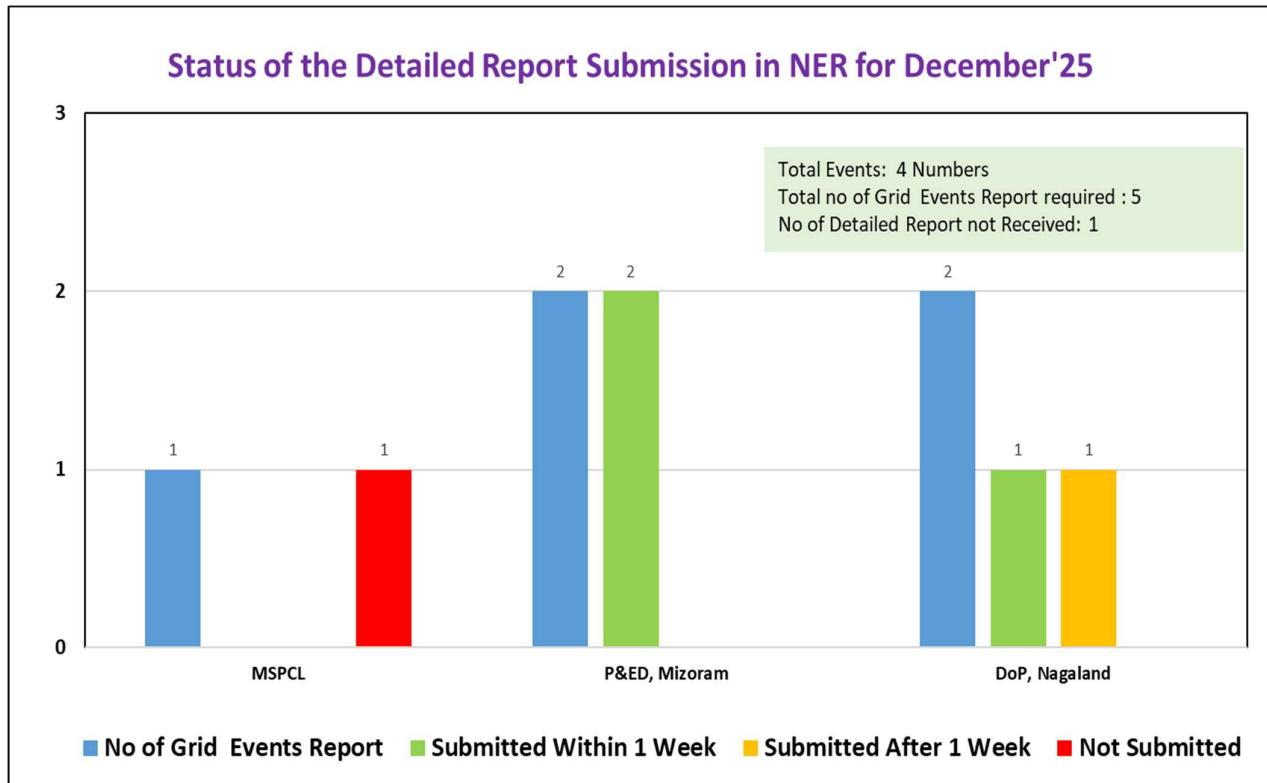
**Concerned Utilities** are requested to upload Disturbance Recorder (DR), Event Logger (EL) outputs for grid events along with a First Information Report (FIR) in Tripping Monitoring Portal (<https://tripping.nerldc.in/Default.aspx> ) for analysis purpose. In light of the cybersecurity measures implemented by Grid India to safeguard sensitive information, NERLDC has created the email address [nerldcs03@gmail.com](mailto:nerldcs03@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](mailto: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 **Dec, 2025** as on **12-01-2026** is shown below:



*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 Dec'25:**

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.

<b>Sl. No.</b>	<b>Name of Transmission Licensee</b>	<b>D= (Nc/Nc+Nf)</b>	<b>S= (Nc/Nc+Nu)</b>	<b>R= (Nc/Nc+Ni)</b>	<b>Remarks</b>
1	NETC	-	-	-	Submitted (No bay owned by NETC)
2	MUML	-	-	-	Submitted (No tripping during Dec'25)
3	NBTL	-	-	-	Submitted (No tripping during Dec'25)
4	NTL	<b>Not Submitted</b>			
5	KMTL	-	-	-	Submitted (No tripping during Dec'25)
6	POWERGRID	1	1	1	
7	DoP Arunachal Pradesh	-	-	-	Submitted (No tripping during Dec'25)
7	AEGCL	<b>1</b>	<b>0.5</b>	<b>0.5</b>	<ul style="list-style-type: none"> <li>On 6<sup>th</sup> Dec'25 &amp; 12<sup>th</sup> Dec'25, 100MVA, 220/132kV ICT#2 at Mariani tripped due to faulty 86LV relay contact – Issue resolved.</li> <li>On 8<sup>th</sup> Dec'25, 220 kV Amguri-</li> </ul>

					NTPS line tripped at Amguri end due to faulty Pole Discrepancy relay operation- Issue Resolved. • On 23 <sup>rd</sup> Dec'25, 100MVA, 220/132kV ICT#1 at Mariani tripped due to moisture ingress in the OSR relay-Issue resolved.
8	DoP Nagaland	<b>1</b>	<b>0.67</b>	<b>0.67</b>	On 26 <sup>th</sup> Dec'25, 132 kV Doyang-Sanis line tripped from Sanis end on operation of OC for fault beyond the line. Directionality issue of B/U relay at Sanis end.
9	MePTCL	1	1	1	
10	TPTL	<b>Not Submitted</b>			
11	MSPCL	<b>Not Submitted</b>			
12	Mizoram	<b>Not Submitted</b>			

Sl. No.	Name of Generating Company	D= $(N_c/N_c+N_f)$	S= $(N_c/N_c+N_u)$	R= $(N_c/N_c+N_i)$	Remarks

1	NTPC(Bgtpp)	1	1	1	-
2	OTPC(Palatana)	-	-	-	Submitted (No tripping during Dec'25)
3	NHPC (Loktak & Lower Subansiri)	<b>Not Submitted</b>			
4	MePGCL	-	-	-	Submitted (No tripping during Dec'25)
5	<b>NEEPCO</b>				
	Kameng	-	-	-	Submitted (No tripping during Dec'25)
	Panyor	-	-	-	Submitted (No tripping during Dec'25)
	Pare	-	-	-	Submitted (No tripping during Dec'25)
	Kopili	-	-	-	Submitted (No tripping during Dec'25)
	Khandong	1	1	1	-
	Doyang	<b>Not Submitted</b>			
	AGBPP	<b>Not Submitted</b>			
	AGTCCPP	<b>Not Submitted</b>			

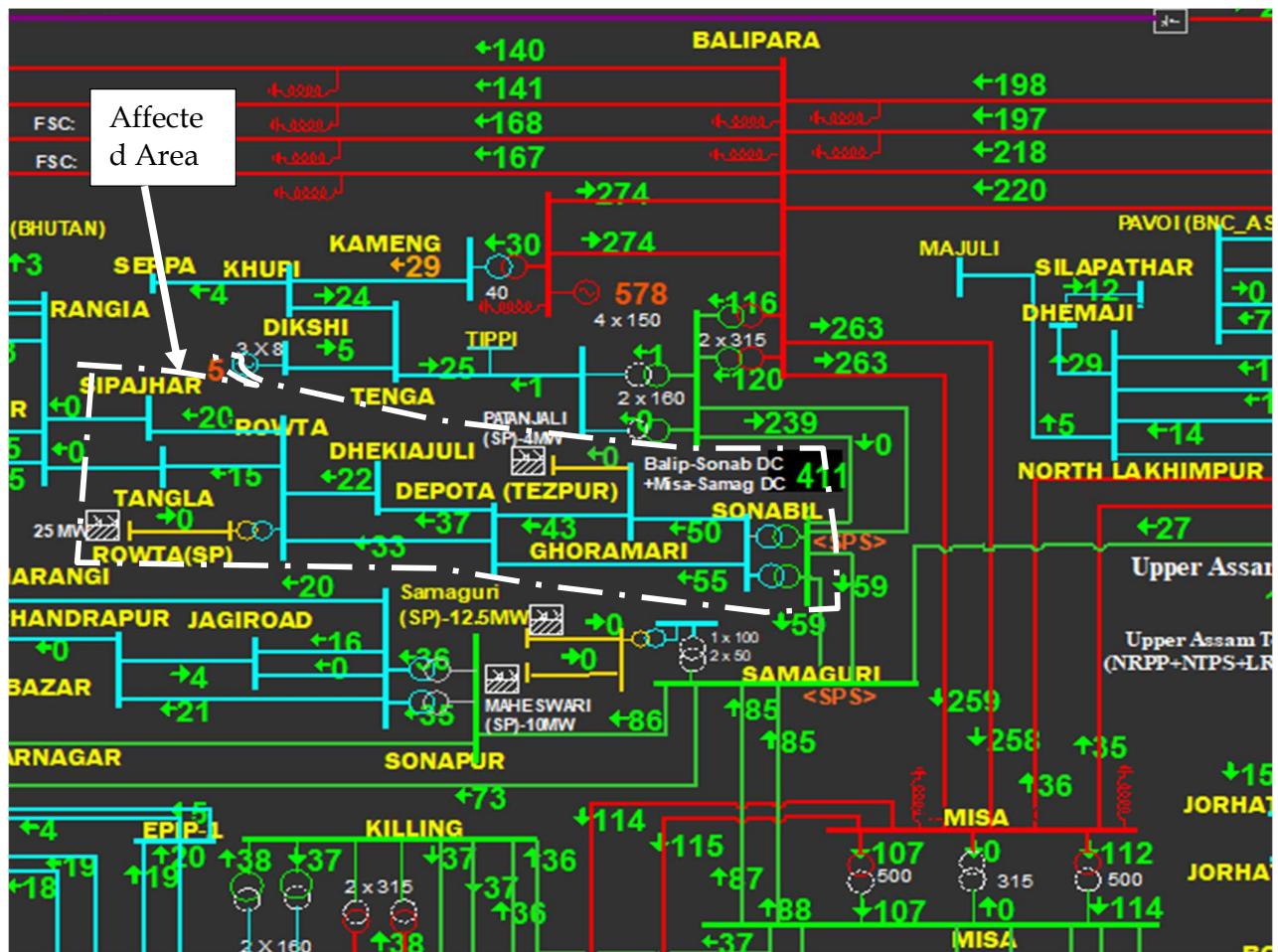
Therefore, all Users are requested to furnish and ensure performance indices (Dependability-D, Security-S, Reliability-R) with regards to the tripping of elements to NERPC & NERLDC positively by **12th** of every month for previous month indices in compliance with IEGC.

## B.6 GD at Sonabil & radially fed areas of Assam at 19:29 Hrs of 08-Jan-2026:

As is known, the Sonabil area of the Assam Power System is connected to the rest of the NER grid through 220 kV Balipara–Sonabil D/C and 220 kV Samaguri–Sonabil D/C lines.

Prior to the event, 220 kV Sonabil–Balipara-2 line had tripped at 19:19 hrs on 08-01-2026 due to conductor snapping.

At 19:29 hrs, SPS Criteria-1 operated due to high loading of 220 kV Sonabil–Balipara-1 line (approximately 240 MW / 630 A) at Sonabil, resulting in the opening of 220 kV Sonabil–Samaguri D/C as per the SPS logic. However, 220 kV Sonabil–Balipara-1 line also tripped at Sonabil, leading to a complete blackout of Sonabil and radially fed areas, with an approximate load loss of 100–105 MW.



As per PMU data available at NERLDC, no fault was observed in the system at 19:29 hrs. Therefore, the tripping of 220 kV Sonabil–Balipara-1 appears to be

unwarranted, resulting in the Grid Disturbance at Sonabil and the connected radial areas of Assam.

In view of the above, AEGCL is requested to clarify the reason for the tripping of 220 kV Sonabil–Balipara-1 line, as it appears to have occurred during the operation of the SPS at Sonabil. Further, AEGCL is requested to share the DR & EL data for all the associated trippings immediately for detailed analysis.

**B.7 Review of Revised System Protection Scheme (SPS) Document – North Eastern Region:**

As per Clause 16(2) of IEGC-2023, RLDC/NLDC, in consultation with the concerned RPC(s), is required to carry out periodic load flow studies, dynamic studies, and mock testing of operational SPS, at least once in a year, for review of SPS parameters and functions.

In line with the above requirement, a revised version of the System Protection Scheme (SPS) Document for the North Eastern Region has been prepared, incorporating all changes implemented in various SPS schemes after January 2025.

The draft SPS document was circulated to all NER utilities via email on 09 January 2026 for their review and comments.

All concerned utilities are requested to review the draft SPS document and furnish their comments/observations to NERLDC by 25 January 2026, so that the final SPS document may be issued by 31 January 2026.

**B.8 Regarding the review of the following SPS schemes in NER**

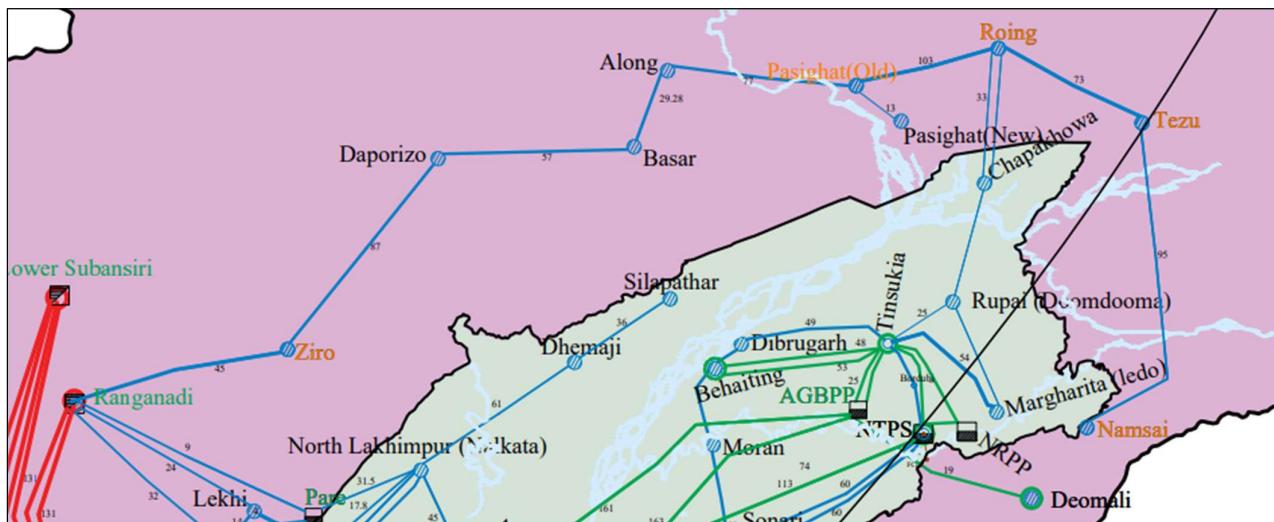
The requirement of the following schemes needs to be reviewed:

**I. SPS for reliable power supply to Arunachal Pradesh & Assam (through 132 kV Roing – Chapakhowa D/C line):**

**Triggering of Criteria 1:** On tripping of either 132 kV Tinsukia-Ledo or 132 kV Tinsukia-Rupai line with current exceeding **300 A** for 1.7 seconds in 132kV

Tinsukia - Rupai or 132 kV Tinsukia - Ledo line, 132 kV Chapakhowa - Roing D/C line will open at both substations along with 20 MVAR Bus Reactor at Roing (PG) substation and disconnection of 8-10 MW load from 132kV Rupai substation if overloading over 300 A exists for 2.9 sec.

**Triggering of Criteria 2:** Whenever the current in 132 kV Tinsukia-Rupai Line crosses 300 A for 2.9 seconds (which might happen during tripping/Outage of 132 kV Panyor LHPs – Ziro line), 8-10 MW load at Rupai S/S will be shed to mitigate the overloading of 132 kV Tinsukia-Rupai line.



In view of the prevailing grid conditions and subsequent to the commissioning of the 220 kV Kathalguri (AGBPP) – Namsai D/C lines, the above SPS has been kept in **OFF** condition, as the normal system configuration is presently adequate to ensure reliable power supply.

Further, during the **86th PCC Forum**, it was suggested to review the continued requirement of this SPS.

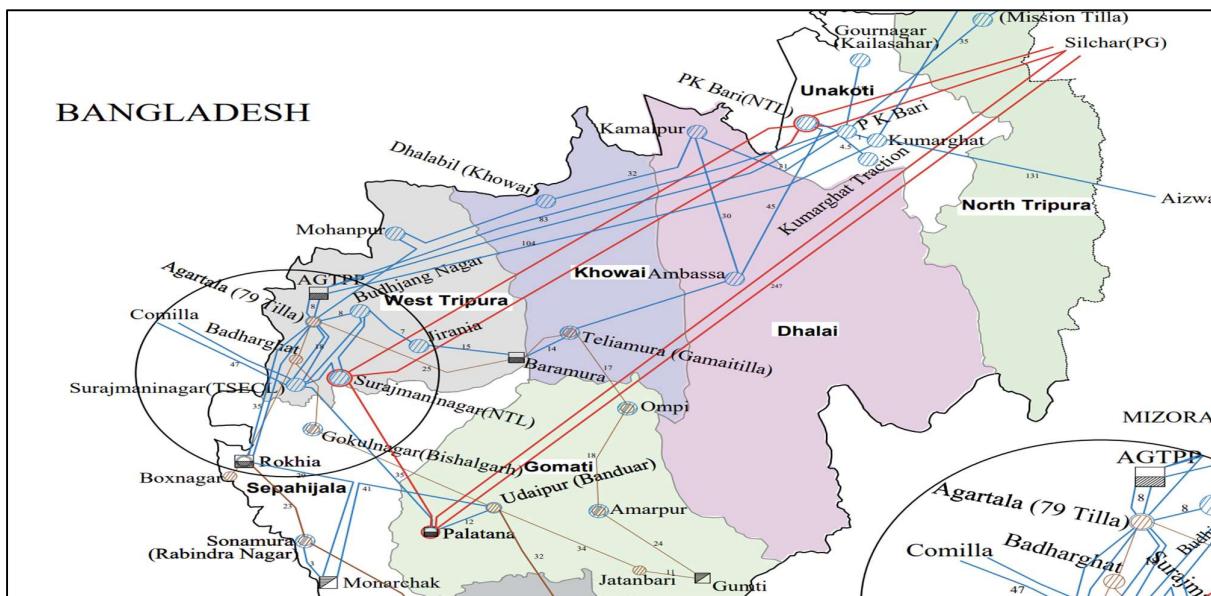
Based on system operation studies and operational experience, NERLDC observes that the said SPS may become necessary during high demand periods in Assam and Arunachal Pradesh, particularly in the event of any shutdown/tripping of the 132 kV Roing – Tezu – Namsai link.

Accordingly, it is recommended that the continued requirement of the said SPS scheme may be reviewed by the forum.

## II. SPS related to Outage/tripping of 400kV Palatana -Silchar D/C Line (when both modules of Palatana are in service):

### Tripping Logic:

Under Tripping/opening of both 400 kV Silchar-Palatana I & II lines, a signal will be generated at Palatana to trip HV side breaker of 2x125 MVA, 400/132 kV ICT at Palatana & Main and Tie CB of 400 kV Palatana - Surajmaninagar Line at Palatana end.



At present, 2 path available for the evacuation of generation from Palatana as follows:

**Path I:** 400kV Palatana – Silchar D/C Line

**Path II:** 400kV Palatana – Surajmaninagar (NTL) S/C – PK Bari (ST) D/C – 400 kV PK Bari – Silchar D/C Line

As per the present grid conditions, the above SPS has been kept in **OFF condition**, since the Palatana generation is N-1 compliant for tripping any 400 kV S/C in both the paths.

Based on system operation studies and operational experience, **NERLDC observes that the said SPS may be discontinued**, as the normal system operation is presently adequate to ensure reliable power supply.

However, in case of any long-duration planned outage of any paths incorporation of a similar type of tripping logic may be required for the outage period.

Hence, the said SPS scheme may be reviewed by the forum.

### **B.9 Mock Testing of System Protection Scheme (SPS) for FY 2025-26:**

As per Clause 16.2 of IEGC-23, for the operational SPS, RLDC or NLDC, as the case may be, in consultation with the concerned RPC(s) shall perform mock testing for reviewing SPS parameters & functions, at least once in a year. RLDC or NLDC shall share the report of such studies and mock testing including any short comings to respective RPC(s).

The list of the remaining ISTS scheme need to be tested are listed below:

<b>Sl. No.</b>	<b>Name of SPS</b>	<b>Operation in FY 2025-26</b>	<b>Tentative date of performing mock testing</b>
1	SPS related to reliable power supply to Arunachal Pradesh & Assam through the 132 kV Roing - Chapakhowa D/C line	-	SPS to be kept OFF (Scheme to be reviewed)
2	Overloading of any one of the 400/132kV, 2x360 MVA ICTs at Panyor Lower Hydro Power Station	-	<b>Performed</b> on 20 <sup>th</sup> & 25 <sup>th</sup> Nov'25 (Report shared with NERPC)
3	Related to the safe evacuation of power from BgTPP(NTPC) generation	-	<b>Performed</b> on 16 <sup>th</sup> Oct'25 (Report shared with NERPC)
4	Outage/tripping of 400 kV New Kohima – Imphal D/C Line	-	SPS scheme to be discontinued
5	Outage/ tripping of both circuits of 400 kV SM Nagar (NTL) -P K Bari (NTL) D/C Line	-	<b>Performed</b> on 14 <sup>th</sup> Oct'25 (Report shared with NERPC)
6	Outage/ tripping of both circuits of 400kV PK Bari (NTL) – Silchar (PG) D/C Lines	-	<b>Performed</b> on 13 <sup>th</sup> Oct'25 (Report shared with NERPC)
7	Outage/tripping of both 400/132 kV, 2x125 MVA ICTs at Palatana	-	<b>Performed</b> on 5 <sup>th</sup> Dec'25 (Report yet to be finalised)
8	Outage/tripping of 400kV	-	SPS to be kept OFF

	Palatana -Silchar D/C Line when both modules of Palatana are in service		(Scheme to be reviewed)
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The list of the remaining state scheme needs to be tested are listed below:

<b>Sl. No.</b>	<b>Name of SPS</b>	<b>Actual Operation/SPS mock testing</b>	<b>Tentative date of performing mock testing</b>
1	Overloading of 220 kV BTPS - Salakati D/C Line	-	<b>As per 82<sup>nd</sup> PCC</b> , AEGCL is not agreeing to test without actual load shedding, as this may require disconnection of multiple hard wirings. Forum agreed with the proposal and requested AEGCL to prepare SOP for mock testing.
2	Outage/tripping of 220 kV Azara-Sarusajai D/C Line	-	
3	SPS related to tripping of 220 kV Misa- Samaguri DC Line	-	
4	SPS at BTPS(Assam) substation related to overloading of any of the 2x160 MVA ICTs at BTPS(Assam)	-	<b>In 85th PCC</b> , AEGCL informed they are in coordination with APDCL to get permission of load shedding during the mock testing of the SPS at Assam.  Mock Testing of Sl No: 4 performed by AEGCL on <b>21st Dec'25</b> at BTPS. However, report is yet to

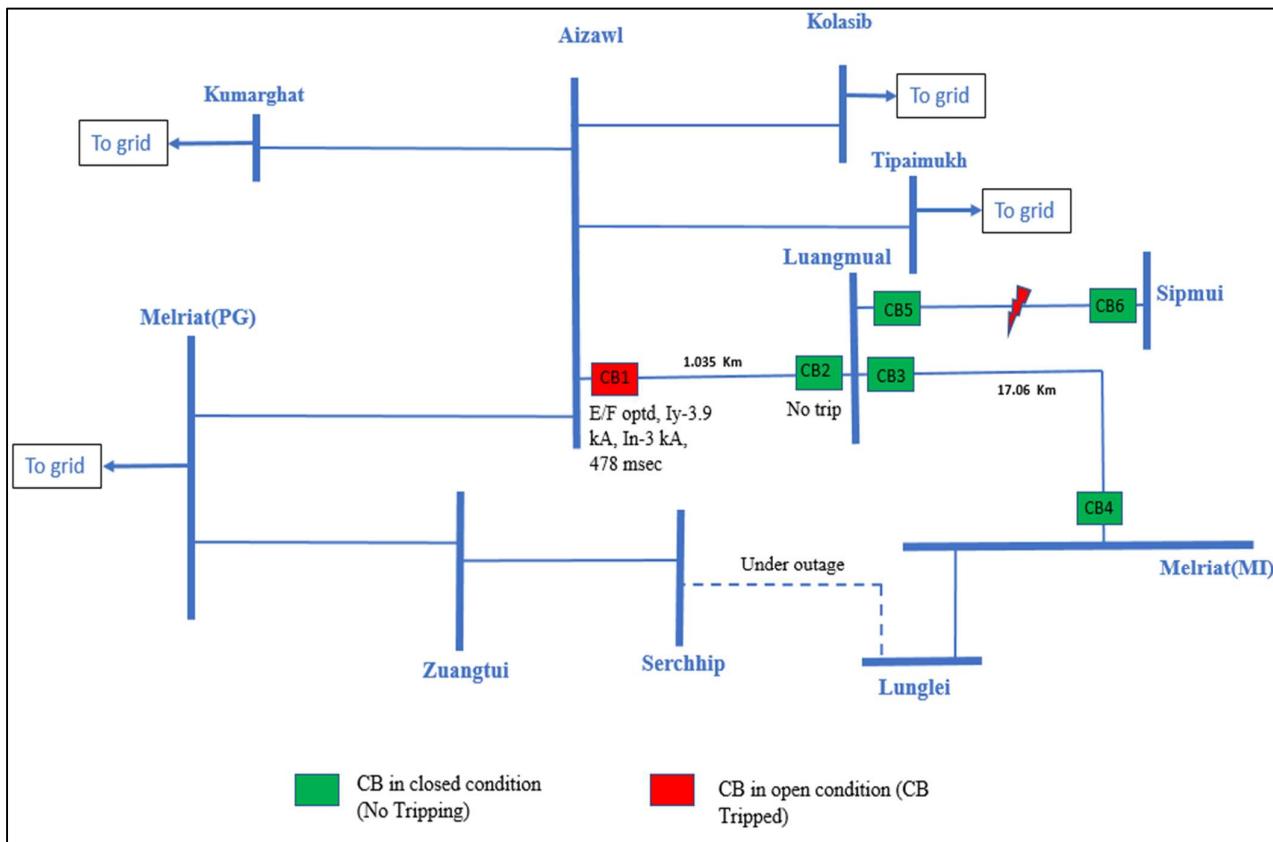
			be shared.
5	SPS related to Outage/tripping of any one circuit of the 132 kV Khliehriat (PG)- Khliehriat D/C line	-	<b>Performed</b> on 29 <sup>th</sup> Oct'25 (Report shared with NERPC)
6	SPS related to Outage/tripping of any one circuit of 132 kV Leshka -Mynkre- Khliehriat D/C Line	-	<b>Performed</b> on 4 <sup>th</sup> Dec'25 (Report shared with NERPC)

**Utilities are requested to share the draft SOP's for the mock testing of SPS scheme scheduled during Jan'26 or Feb'26.**

**B.10 Grid Disturbance in Luangmual, Melriat & Lunglei areas of Mizoram Power System on 4<sup>th</sup> Dec'25:**

Luangmual, Melriat & Lunglei areas of Mizoram power were connected with rest of NER grid through 132 kV Aizawl-Luangmual line. Prior to the event, 132 kV Serchhip-Lunglei line was kept open due to system requirement.

At 12:40 Hrs of 08-12-2025, 132 kV Aizawl - Luangmual Line tripped leading to GD at Luangmual, Melriat & Lunglei areas of Mizoram. Load loss of 39 MW occurred.



As per DR analysis, Y-N fault initiated at 12:40:32.663 hrs with  $I_y$ -3.9 kA,  $I_n$ -3 kA which was cleared within 478 msec from Aizawl end on operation of Backup E/F protection. There was no tripping from Luangmual end.

As informed by P&ED Mizoram, fault was in 132 kV Luangmual - Sipmui line.

132 kV Aizawl-Luangmual line tripped prior to clearing of fault by protection system of 132 kV Luangmual-Sipmui line.

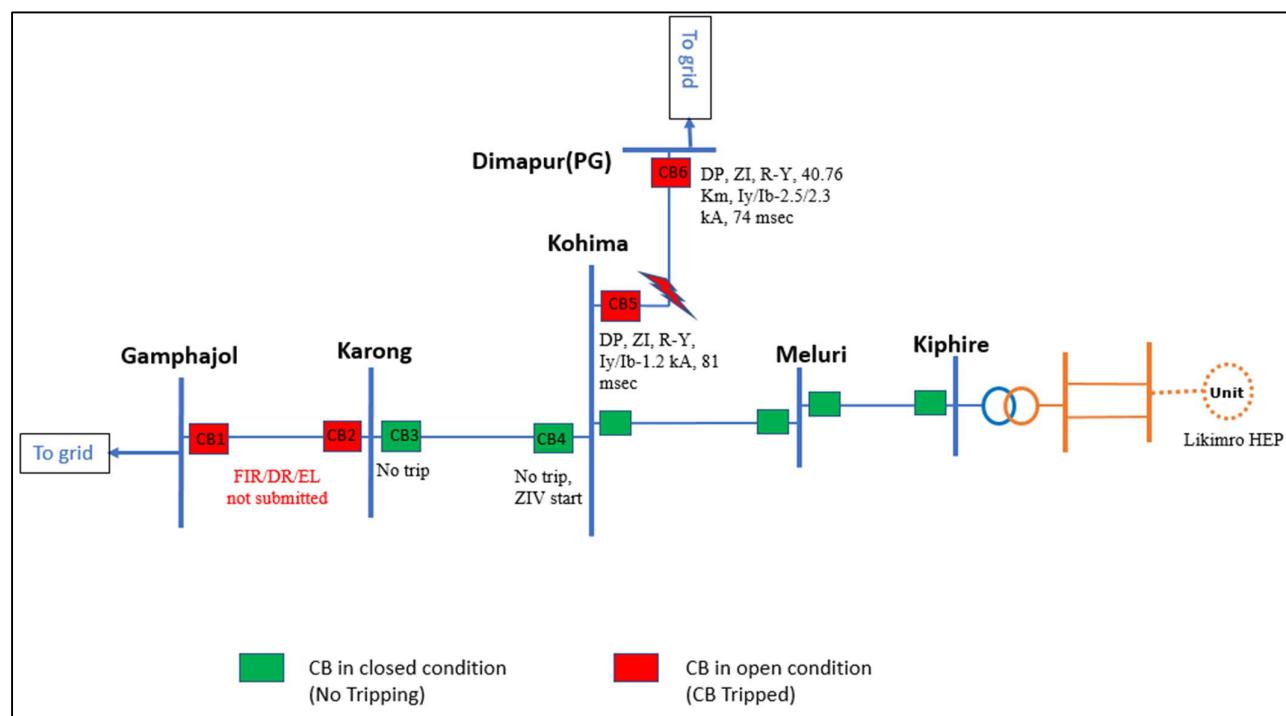
#### Action points for POWERGRID & P&ED Mizoram:

- Fault was cleared by tripping of CB1 prior to clearing of fault by protection system of 132 kV Luangmual-Sipmui line which needs to be checked.
- B/U E/F setting of 132 kV Aizawl-Luangmual line needs to be reviewed and coordinated with ZIII setting as per NERPC protection philosophy.
- P&ED Mizoram to share relay pickup details of 132 kV Luangmual - Sipmui line.

### **B.11 Grid Disturbance in Kohima, Meluri, Zhadima, Chiephbozou areas & Likimro HEP of Nagaland Power System & Karong area of Manipur Power System on 19<sup>th</sup> Dec'25:**

Kohima, Meluri, Zhadima, Chiephbozou areas & Likimro HEP generating station of Nagaland Power System and Karong area of Manipur were connected with rest of NER Grid through 132 kV Gamphazol -Karong line, 132 kV Dimapur-Kohima line & 132 kV Karong-Kohima line. Prior to the event, 132 kV Wokha- Chiephobozu line was under tripped condition since 13:26 hrs of 30.09.2025.

At 11:16 Hrs of 19.12.2025, 132 kV Dimapur-Kohima & 132 kV Gamphazol - Karong lines tripped. Due to this tripping, radially connected Kohima, Meluri, Zadhima, Chiephebozou areas & Likimro HEP of Nagaland and Karong area of Manipur got isolated from rest of NER grid due to load generation mismatch in these areas. Load loss of 33 MW & generation loss of 6 MW occurred.



As per DR analysis, R-Y fault ( $I_r-2.5$  kA,  $I_y-2.3$  kA) in 132 kV Dimapur-Kohima line initiated at 11:13:56.652 hrs which was cleared within 74 msec from Dimapur end and within 81 msec from Kohima end on operation of DP, ZI. For 132 kV Karong-Kohima line, Z4 started at Kohima end and no tripping observed.

However, at the same time, 132 kV Gamphajol-Karong line tripped which seems unwanted.

### Action points for MSPCL:

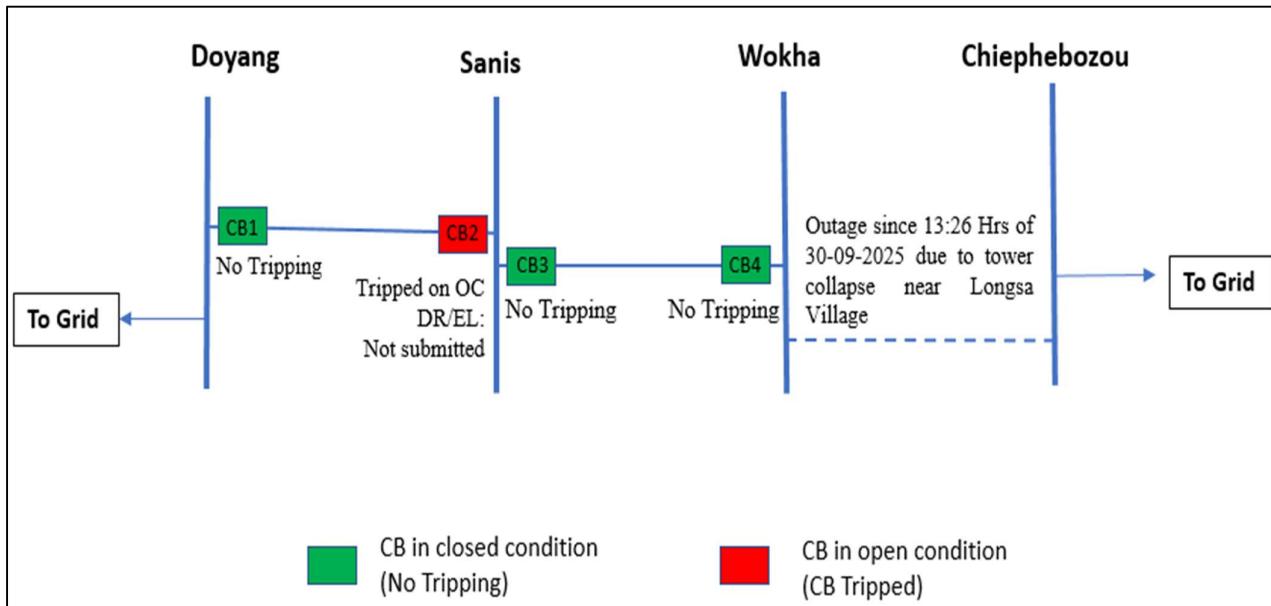
- Tripping of 132 kV Gamphazol-Karong line for fault beyond the line seems unwanted which needs to be checked.
- Share the DR & EL of 132 kV Gamphazol-Karong line for proper analysis.
- Time drift of 3 min observed at Kohima end for 132 kV Dimapur Line which needs to be rectified.
- Share Flash & Detailed Report for the Grid Events.

### **B.12 Repeated Grid Disturbance in Sanis & Wokha areas of Nagaland during Dec'25 & Jan'26:**

Sanis and Wokha areas of Nagaland Power System are radially connected with rest of NER Grid through 132kV Doyang-Sanis-Wokha line. 132 kV Wokha-Chiephobozu line was under outage since 13:26 hrs of 30.09.2025 due to tower collapse near Longsa village.

132 kV Doyang-Sanis line tripped 3 times during Dec'25 & Jan'26. The details of tripping are shown below:

Sl. No.	Name of element	Tripping Date & Time	Relay Indication End A	Relay Indication End B
1	132 kV Doyang-Sanis Line	26-12-2025 16:48	No tripping	Tripped on O/C
2	132 kV Doyang-Sanis Line	05-01-2026 13:10	No tripping	Tripped on O/C
3	132 kV Doyang-Sanis Line	06-01-2026 14:46	No tripping	Tripped on O/C



Before the event, Sanis & Wokha areas are radially feeding via 132 kV Doyang-Sanis- Wokha line. The fault location could not be concluded.

As per EL submitted by DoP Nagaland, at 14:45:19.830 hrs of 06.01.2025, fault detected in forward direction & I>1 relay pickup and cleared at 14:45:21.800 hrs within 1.97 sec which is inferred unwanted as fault was in reverse direction. (No tripping from Doyang end observed)

Protection issues observed:

- Tripping of 132 kV Doyang-Sanis line from Sanis end for fault beyond the line (reverse direction) seems unwanted.
- DR needs to be standardized as per recommendations in FOLD working group-3.
- Share Flash & Detailed Report for the Grid Events to avoid non-compliance of IEGC'23.

**Similar event occurred on 01.07.2025, 11.07.2025, 30.08.2025, 01.09.2025, 03.09.2025, 08.10.2025 & 28.11.2025 which is a matter of concern.**

As per 86th PCC minutes, directionality issue of B/U protection for CB2 yet to be rectified despite CT polarity checking by DoP, Nagaland. Forum directed DoP Nagaland to test the relay at the earliest.

Hence, DoP Nagaland to resolve the issue as it is causing repeated GDs in Sanis & Wokha areas.

DoP Nagaland to expedite restoration of 132 kV Wokha- Chiephobozu line at the earliest.

#### **B.13 Repeated tripping of Lower Subansiri Unit-2 during Dec'25 & Jan'26:**

Lower Subansiri HEP is a critical generation source for the North Eastern Regional power system.

It has been observed that Lower Subansiri Unit-2 tripped 15 number of times during Dec'25 & Jan'26 which is a matter of concern. The outage details are as follows:

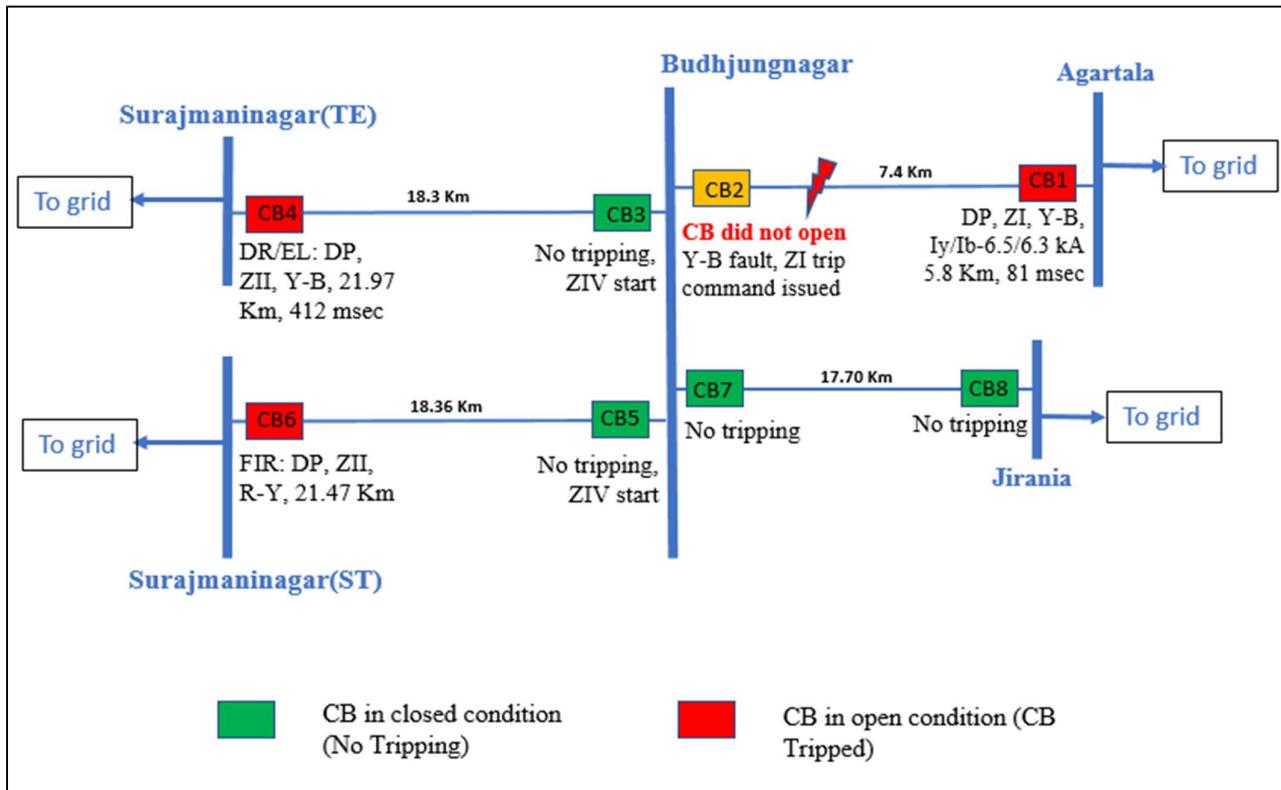
SL No.	Element Name	Owner	Tripping Date & Time	Reason
1	Lower Subansiri Unit 2	NHPC	23-12-2025 10:49	TRANSFORMER OIL FLOW LOW
2	Lower Subansiri Unit 2	NHPC	23-12-2025 17:45	Not Furnished
3	Lower Subansiri Unit 2	NHPC	24-12-2025 04:23	Unit auxiliary temperature high
4	Lower Subansiri Unit 2	NHPC	25-12-2025 06:04	AUXILIARY POWER FAILURE
5	Lower Subansiri Unit 2	NHPC	25-12-2025 09:12	Auxillary power supply failure
6	Lower Subansiri Unit 2	NHPC	25-12-2025 21:35	Governor Oil Pump trip
7	Lower Subansiri Unit 2	NHPC	26-12-2025 05:35	Governor pump fault
8	Lower Subansiri Unit 2	NHPC	26-12-2025 06:26	Bearing oil mist exhauster off
9	Lower Subansiri Unit 2	NHPC	27-12-2025 13:33	Tripped due to Mechanical trip
10	Lower Subansiri Unit 2	NHPC	29-12-2025 09:42	Cooling water pump tripped
11	Lower Subansiri Unit 2	NHPC	01-01-2026 07:09	Vibration system malfunction
12	Lower Subansiri Unit 2	NHPC	01-01-2026 19:32	Governor Oil pump Issue
13	Lower Subansiri Unit 2	NHPC	03-01-2026 08:45	MIV oil Tank level high
14	Lower Subansiri Unit 2	NHPC	04-01-2026 04:23	Not Furnished
15	Lower Subansiri Unit 2	NHPC	04-01-2026 23:55	Not Furnished

NHPC is requested to:

- Share a detailed root cause analysis and remedial measures taken for avoiding repeated tripping of Unit -2.
- Upload FIR/DR/EL in Tripping Monitoring Portal (<https://tripping.nerldc.in/>) for further analysis purpose.

#### **B.14 Multiple tripping at Budhjungnagar area of Tripura on 7<sup>th</sup> Dec'25:**

At 08:09 hrs of 07-12-2025, 132 kV Budhjungnagar-Surajmaninagar(TE), 132 kV Budhjungnagar-Surajmaninagar(ST) & 132 kV Agartala-Budhjungnagar Lines tripped.



As per DR analysis, Y-B fault ( $I_y$ -6.5 kA,  $I_b$ -6.3 kA) in 132 kV Agartala-Budhjungnagar line initiated at 08:08:21.055 hrs which was cleared within 81 msec from Agartala end on operation of DP, ZI. At Budhjungnagar end, fault was detected in ZI and trip command was issued. However, CB at Budhjungnagar end failed to open due to which fault was continuously feeding from SMnagar(TE) & SMnagar(ST) end. Consequently, fault got cleared within 432 msec by tripping of healthy 132 kV Budhjungnagar-Surajmaninagar(TE) & 132 kV Budhjungnagar-Surajmaninagar(ST) lines from remote ends on operation of DP, ZII.

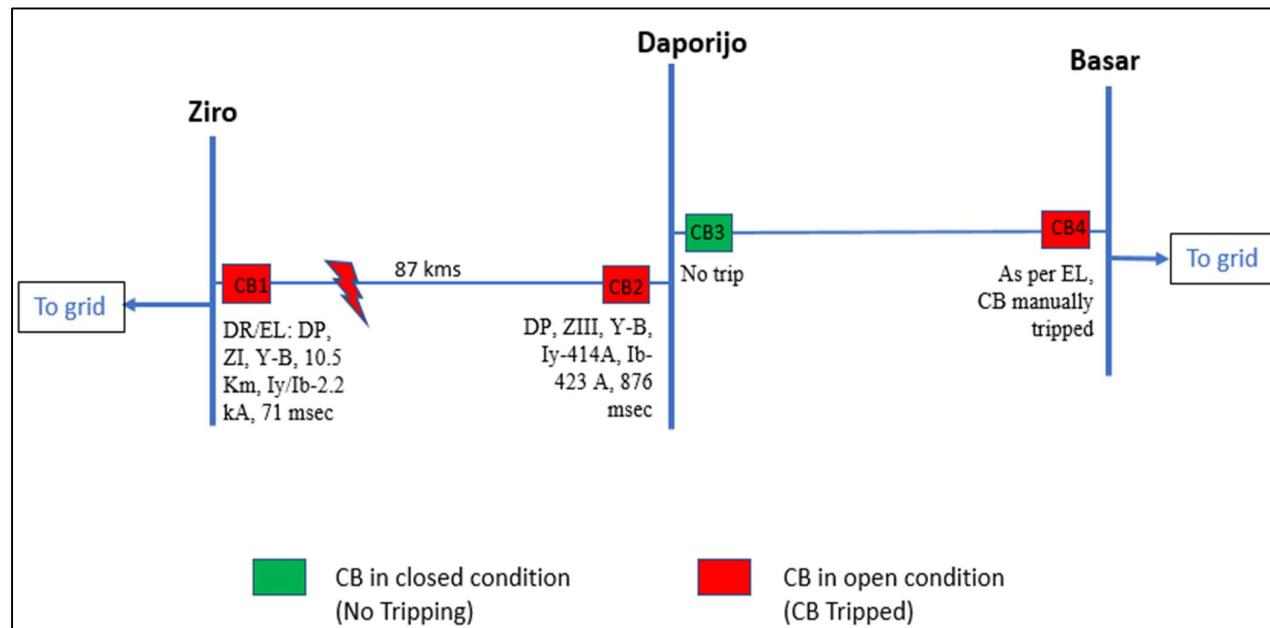
#### Action points for TSECL & IndiGrid:

- Reason for non-opening of CB at Budhjungnagar end for Agartala line.
- Share FIR/DR/EL of Surajmaninagar(ST) end (CB) for 132 kV Budhjungnagar line.
- Time drift of 1 Hr observed at Surajmaninagar(TE) end which needs to be rectified.
- Share detailed report of the event and remedial actions taken.

### **B.15 Grid disturbance in Daporijo area of Arunachal Pradesh on 4<sup>th</sup> Jan'26:**

Daporijo area of Arunachal Pradesh power system was connected with rest of NER grid through 132 kV Ziro-Daporijo line & 132 kV Daporijo-Basar line.

At 11:33 hrs of 04.01.2026, 132 kV Ziro-Daporijo line & 132 kV Daporijo-Basar line tripped leading to grid disturbance in Daporijo area of Arunachal Pradesh. Load loss of 1 MW occurred.



As per DR analysis, Y-B fault (Iy-2.2 kA, Ib-2.2 kA) in 132 kV Ziro - Daporijo line at a distance of 10.5 Km from Ziro end initiated at 11:33:47.259 hrs which was cleared within 71 msec from Ziro end on operation of DP, ZI. Fault cleared within 876 msec from Daporijo end on operation of DP, ZIII.

As per EL, 132 kV Daporijo - Basar line CB tripped manually from Basar end.

#### **Action points for DoP Arunachal Pradesh:**

- Share the reason of manually opening of CB at Basar end.
- Share root cause of the event and remedial measures taken.
- Share detailed report of the event.

### **B.16 Bus Bar Operation in 220 kV BTPS(AS) Main Bus-II on 9<sup>th</sup> Jan'26:**

At 17:28 Hrs of 09.01.2026, 220 kV BTPS (AS) Bus-II tripped due to operation of Bus Bar protection resulting in tripping of all the elements connected to 220 kV BTPS (AS) Bus-II are as follows:

1. 220 kV BTPS-Rangia II line
2. 220 kV BTPS-Salakati II line
3. 220 kV Agia-BTPS II Line
4. 220/132 kV, 160 MVA ICT II at BTPS (AS)
5. 315 MVA, 400/220/33 kV ICT II at BgTPP

As per PMU data of Salakati, no fault observed in the system which implies that BB operation at 220 kV BTPS (AS) Bus-II is spurious/unwanted operation.

**AEGCL to share the root cause of the event and ensure safety measures during any shutdown activities to avoid such spurious tripping in future.**

Also, AEGCL to share DR/EL and detailed Report for the mentioned Grid Event as mandated in IEGC'23.

#### **B.17 Change in Official Email ID for Protection-Related Communication**

The forum is informed that the existing email ID [nerpc@ymail.com](mailto:nerpc@ymail.com), which has been in use for communication related to protection and other protection-related matters, is being discontinued. In order to ensure secure, reliable, and streamlined official correspondence, it has been decided that all communications pertaining to protection, protection coordination and other Protection-related issues shall henceforth be carried out through the new official email ID [nerpc.protection@gov.in](mailto:nerpc.protection@gov.in).

All constituents and concerned stakeholders are requested to update their records accordingly and ensure that all future operation-related correspondence is addressed to the above email ID. Communications sent to the discontinued email ID may not be attended to.

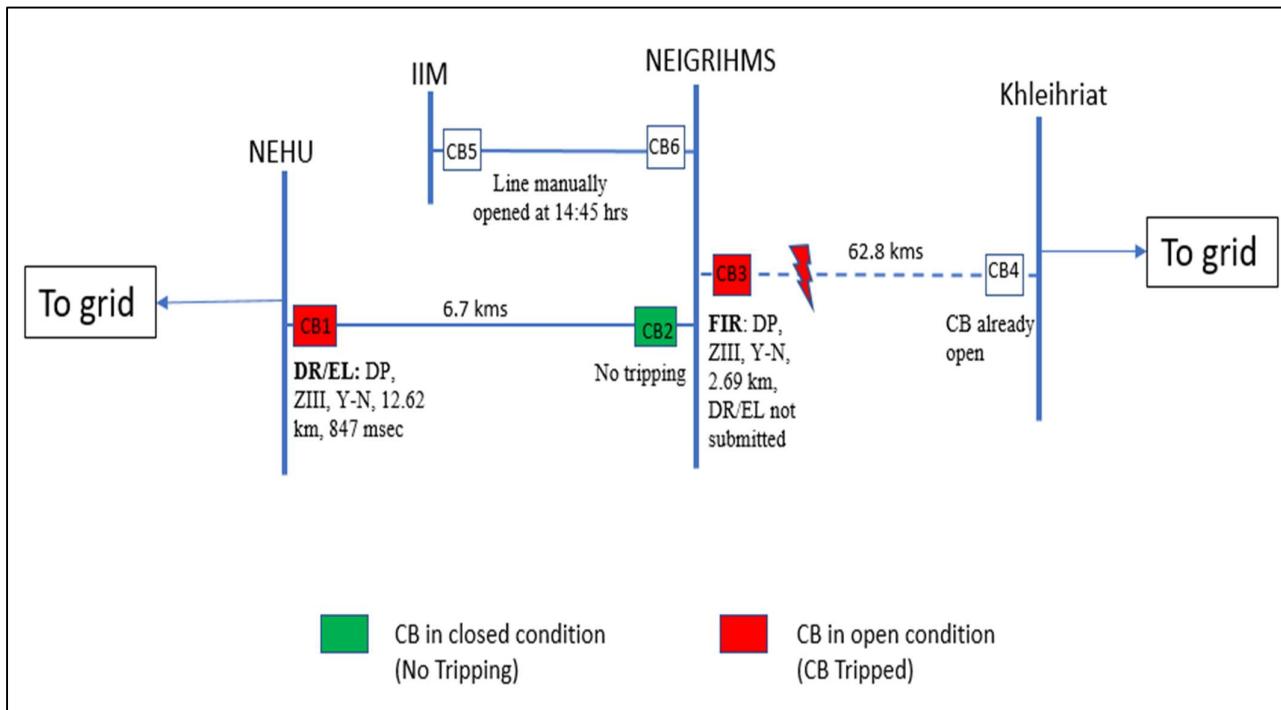
**This is information of the forum.**

### **C. FOLLOW-UP AGENDA ITEMS**

#### **C.1 Grid Disturbance in NEIGRIHMS & IIM areas of Meghalaya Power System on 6th Sept'25:**

NEIGRIHMS and IIM areas of Meghalaya Power System are connected with rest of NER Grid via 132 kV NEIGRIHMS-Khliehriat line and 132 kV NEIGRIHMS-NEHU line. Prior to the event, 132 kV NEIGRIHMS-Khliehriat line was under tripped condition since 14:29 Hrs of 06-09-2025.

At 14:41 Hrs of 06-09-2025, while charging attempt of 132 kV NEIGRIHMS-Khleihriat Line, 132 kV NEIGRIHMS-NEHU line tripped resulting in grid disturbance of NEIGRIHMS and IIM areas of Meghalaya Power System. Load loss of MW occurred.



As per DR analysis, at 14:27:26.076 Hrs, R-Y-B fault started in 132 kV NEIGRIHMS-Khleihriat line which was cleared within 582 msec from Khleihriat end on operation of DP, ZII. Fault cleared within 65 msec from NEIGRIHMS end on operation of DP, ZI. Ir-3.9 kA, Iy-4.07 kA, Ib-4.16 kA.

At 14:41 hrs, charging of 132 kV NEIGRIHMS-Khleihriat line was attempted and tripped in DP, ZIII, Y-N, FD: 2.69 Km from NEIGRIHMS end (DR/EL not submitted)

At 14:37:06.334 hrs, Y-N fault initiated and cleared within 847 msec from NEHU end on operation of DP, ZIII. No tripping from NEIGRIHMS end.

Root cause: Conductor snapped at T-Loc 42.

#### **MePTCL to take the following actions:**

- Review ZII time delay of CB4 and set as per protection philosophy.
- Share the reason why CB3 did not detect the fault in ZI and waited for ZIII time delay despite having fault at a distance of 2.69 km from NEIGRIHMS.
- Tripping of New Umtru Unit-1 seems unwanted. The same needs to be thoroughly investigated.

- Time drift observed: 2 min at Khleihriat end for 132 kV NEIGRIHMS line; 4 min at NEHU for NEIGRIHMS line. Availability/healthiness of GPS needs to be ensured and time to be adjusted as per grid code.

#### Deliberation of 85<sup>th</sup> PCCM

MePTCL informed that for CB3 trans play was done and the relay again indicated zone 3 as the fault current was very low.

NERPC opined that since the Neighrims-Khliehriat line (62 Km) is preceded by NEHU-Neighrims line (6.7Km) the chances of simultaneous operation of the ZIII at Neighrims and NEHU ends are very high for low fault currents as happened in the present case and the GD may recur due to the issue. He, therefore suggested that DEF may be implemented in the Neighrims-Khliehriat line for early clearing of the highly resistive faults.

Forum requested MePTCL to implement the DEF on the Neighrims-Khliehriat line.

In 86th PCCM, MePTCL updated that the DEF will be implemented on the Neighrims-Khliehriat line by end of Dec'25.

#### ***MePTCL to update***

#### **C.2 Mapping of SPS in the SCADA Display for real time monitoring of all SPS:**

(Ref: Agenda C.1 86th PCCM | 11th December 2025)

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**

09-Jan-2026 15:36:56		SPS STATUS	
STATION	SPS	SPS ON/OFF	SPS OPTD.
BGTPP_NTPC	BGTPP U-3	ON	NRML
	SPS-2 Bangladesh	ON	NRML
	SPS-4 Bangladesh	ON	NRML
	SPS -2 HSR	OFF	NRML
	SPS -3 HSR	OFF	NRML
ZIRO_PG	ZIRO SPS	OFF	NRML
SARUSAJAI_AS	SARUSAJAI SPS	S OFF	S NRML
IMPHAL_PG	IMPHAL SPS	ON	NRML
SM NAGAR (ST)	SM NAGAR B/R -1 SPS	ON	NRML
SM NAGAR (ST)	SM NAGAR B/R -2 SPS	ON	NRML
PK BARI (ST)	PK BARI B/R -1 SPS	ON	NRML
PK BARI (ST)	PK BARI B/R -2 SPS	ON	NRML
TINSUKIA (AS)	TINSUKIA SPS	OFF	NRML
BONGA_AS	SPS Stage -1		NRML
	SPS Stage -2	ON	NRML
MONARCHAK	MONARCHAK	ON	NRML
KHLEIHIAT	KHLEIHIAT SPS	ON	NRML
LESKA	LESKA SPS	ON	NRML

Sl. No.	SPS under operation	SPS mapping status in SCADA (YES/No) as per 85 <sup>th</sup> PCCM
1	SPS related to outage of 220 Misamaguri D/C lines	NO AEGCL informed that the OEM supports taken for the RTU. Mapping will be done shortly

2	Related to outage of any one circuit of 220 kV Balipara-Sonabil D/C lines	NO AEGCL informed that the OEM supports taken for the RTU. Mapping will be done shortly
3	Outage of 220 kV BTPS (Salakati) – Rangia I & II Line	NO
4	Related to 132kV SM Nagar(ISTS) - SM Nagar line to prevent Overloading	NO Mapping already available at SLDC. NERLDC to coordinate with the SLDC Tripura.
5	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.

**All utilities are requested to update the status of Mapping of SPS in the SCADA Display.**

**C.3 Grid Disturbance in Rokhia and Mohanpur S/S of Tripura Power system on 18th Sept'25:**

(Ref: Agenda C.5 86th PCCM | 11th December 2025)

In 85th PCCM, Tripura informed that DCRM tests were conducted for Rokhia (Monarchak line bay) and Agartala (Rokhia Line 2 bay) and the test results show that there are some issues with the CBs. He further informed that DCRM tests will be conducted again and if the results are similar, the CBs will be replaced.

Forum also requested Tripura to rectify the LBB issue at Agartala.

Tripura informed TPTL is proving CB to Rokhia (TPGCL) for Monarchak feeder.

Also, at Agartala for Rokhia II-line CB contactor issue found. Hence, CB

In 86th PCCM, Tripura informed TPTL is proving CB to Rokhia (TPGCL) for Monarchak feeder.

Also, at Agartala for Rokhia II-line CB contactor issue found. Hence, CB replacement planned for Rokhia & Agartala and shutdown will be rewired for 3 days for the work. Forum requested TSECL to carry out the work at the earliest.

Regarding the LBB issue at Agartala, TSECL informed that the Bays of AGTCPP-Agartala lines belong to Powergrid and requested them to rectify the issue. Powergrid assured to look into the matter shortly.

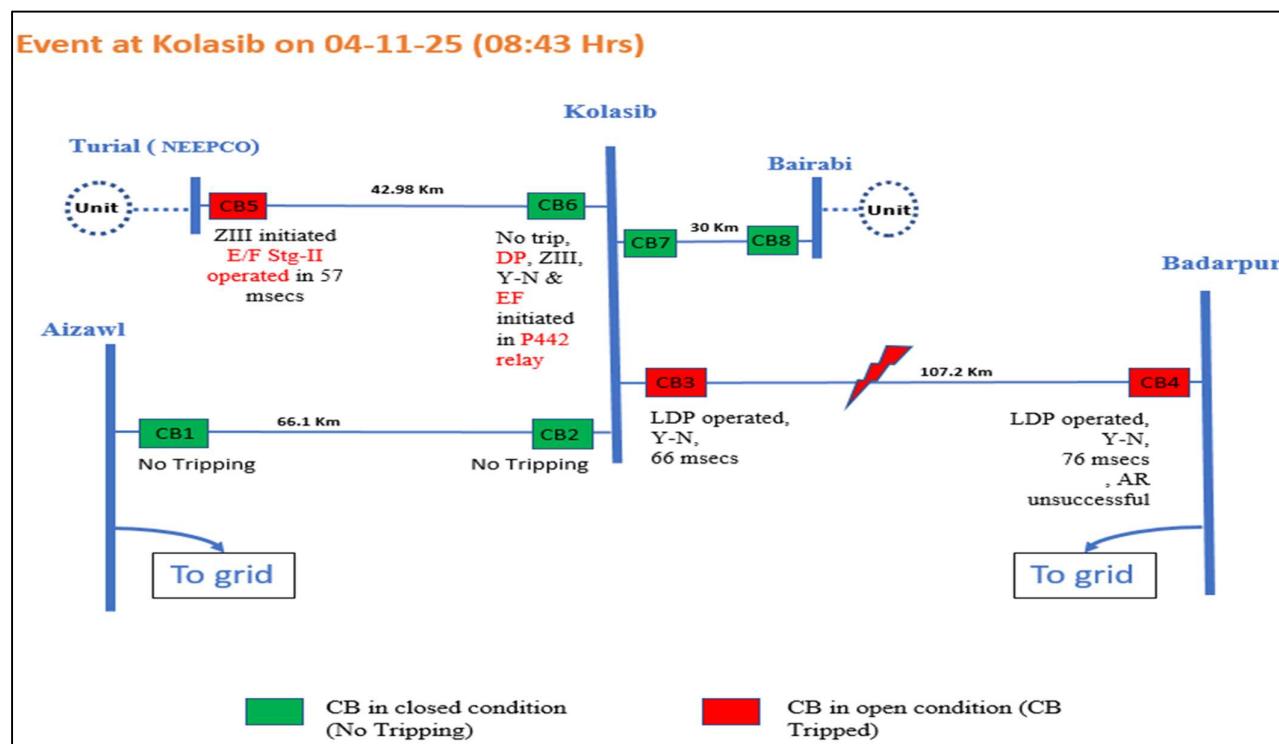
### ***Tripura and Powergrid to update***

#### **C.4 Repeated tripping of 132 kV Kolasib – Tuirial line during Nov'25:**

(Ref: Agenda B.9 86th PCCM | 11th December 2025)

132 kV Kolasib–Tuirial line tripped three times at 08:43 hrs & 09:31 hrs of 04.11.2025 & at 11:56 hrs of 09.11.2025 which resulted in grid disturbance at Tuirial HEP.

#### **Event 1: At 08:43 hrs & 09:31 hrs of 04.11.2025**



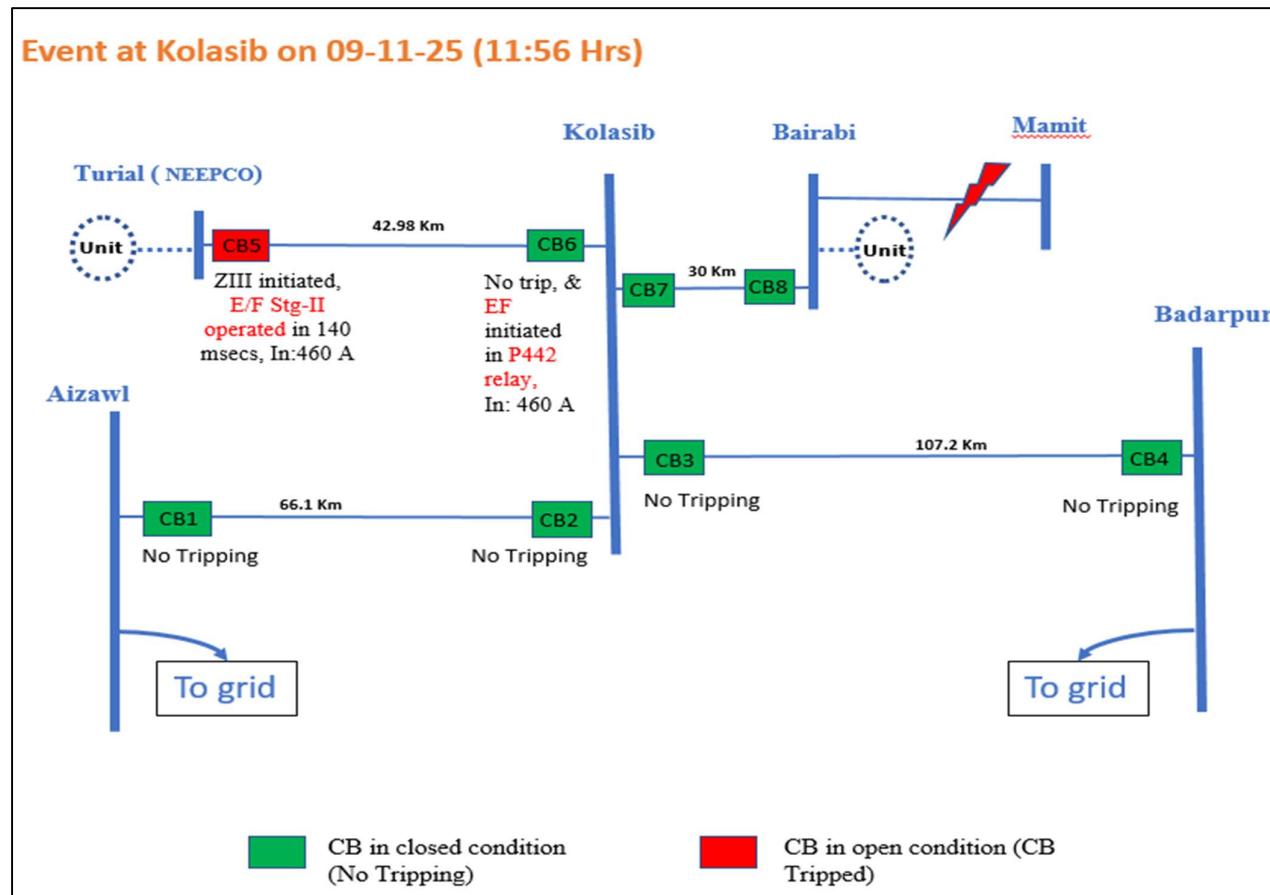
During these events, tripping of 132 kV Kolasib–Tuirial line was observed at the Tuirial end on High-Set Earth Fault (EF) protection within 50–60 msecs. The incidents occurred during Y-E faults in the 132 kV Badarpur–Kolasib line.

Clear directionality issues with the Main Protection Relay P442 at Kolasib were observed in both cases. Although the faults were on the Badarpur-Kolasib line (reverse direction for the Tuirial bay at Kolasib), the P442 relay at Kolasib detected the fault in forward direction, initiating:

- Z-III, Forward detection at 08:43 hrs
- Z-II, Forward detection at 09:31 hrs

The faults in 132 kV Badarpur-Kolasib line were eventually cleared from both ends through Line Differential Protection (LDP) within 60–70 msecs. The recently implemented EF element in the P442 relay also initiated during both events.

### Event 2: At 11:56 hrs of 09.11.2025



Tripping of the 132 kV Kolasib–Tuirial line was recorded at the Tuirial end on High-Set EF Backup Protection (P141) within 50–60 msecs, following a Y-E fault on the 132 kV Bairabi– Mamit line.

During this event, the Main Protection Relay P442 at Kolasib registered a Z-III initiation, indicating that the fault was beyond the protected line section. Since the

EF element was enabled in the P442 relay, it also initiated at Kolasib; however, no trip command was issued because the Tuirial end cleared the fault promptly within 50–60 msecs. This event further confirms the presence of a directionality issue in the P442 relay at the Kolasib end of the 132 kV Kolasib–Tuirial line.

***NERLDC shared a letter to higher authorities of the P&ED Mizoram & NEEPCO vide email dated 19-11-2025 attached as Annexure I.***

**Action points for NEEPCO and P&ED Mizoram:**

- Implement 200 msecs time delay in the Backup EF Highset protection at Tuirial HPS, as deliberated and agreed in the 85th PCC meeting held on 6th Nov'25.
- Review the star formation of the CT secondary circuits and the corresponding CT secondary connections to the P442 relay for the 132 kV Kolasib–Tuirial line bay at Kolasib Substation.
- Expedite the restoration of DR downloading functionality for the P127 relay at Kolasib as highlighted in the 3rd party audit findings.

**Deliberation of 86<sup>th</sup> PCCM**

Regarding tripping of Tuirial-Kolasib line from Tuirial end of EF stg II, the delay of 200msec, as instructed by the forum in 85th PCCMM has not been implemented yet as they are waiting for the external audit, to be conducted by CPRI in Jan'26, in which the matter will be analyzed by the auditing agency. Forum directed NEEPCO to implement the delay at the earliest. Regarding the tripping from Kolasib end (for Tuirial line) on reverse fault, P&ED, Mizoram highlighted the directionality of the DP ensured at the line side by making modification in the relay. Forum requested to ensure proper wiring of the CT star point at the earliest to avoid any maloperation in future. Forum requested the utilities to undertake the settings coordination study in the network in coordination with NERPC, NERLDC and M/s PRDC (for PDMS and PSCT).

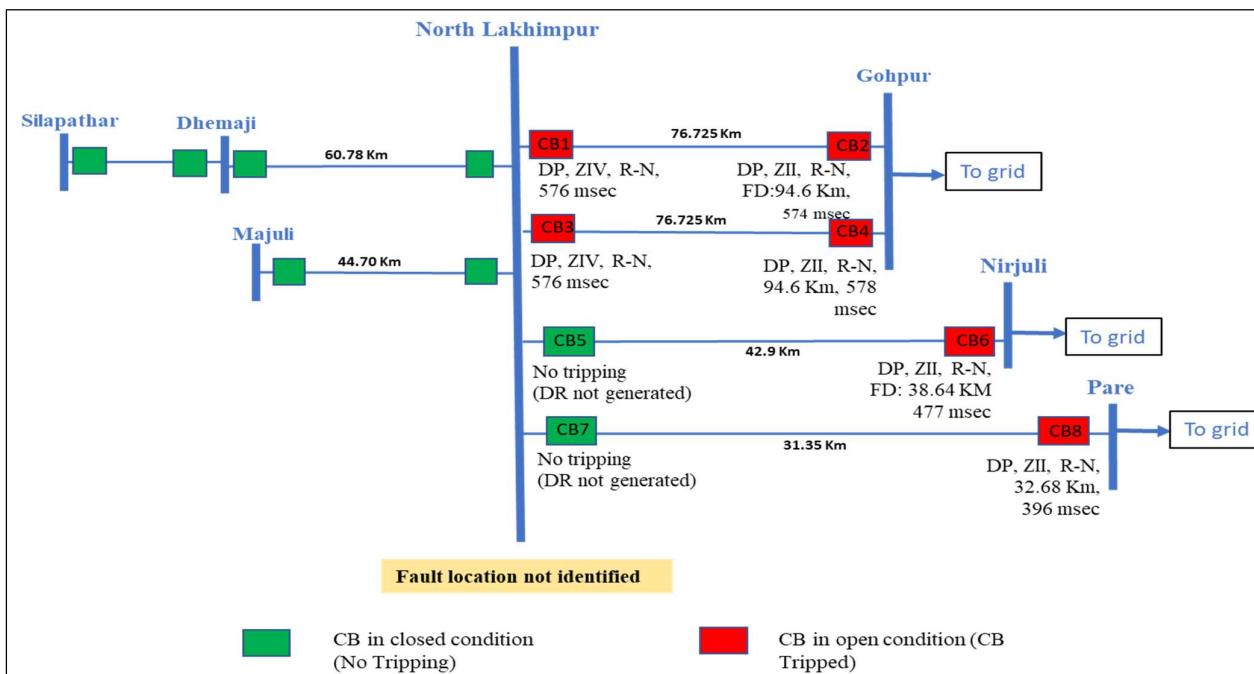
***Utilities may update***

**C.5 Grid disturbance in North Lakhimpur, Dhemaji, Silapathar and Majuli areas of Assam on 11<sup>th</sup> Nov'25:**

(Ref: Agenda B.13 86th PCCM | 11th December 2025)

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

At 07:09 Hrs of 11-11-2025, 132 kV North Lakhimpur-Gohpur D/C, 132 kV North Lakhimpur-Nirjuli and 132 kV North Lakhimpur-Pare lines tripped leading to blackout in North Lakhimpur, Majuli, Dhemaji and Silapathar areas of Assam power system. Load loss of 45 MW occurred.



### As per DR analysis:

- R-N fault of metallic nature.
- Gohpur end detected R-N fault ( $I_r=0.923$  kA,  $I_n=0.634$  kA) at a distance of 94.6 Km and cleared within 578 msec on operation of DP, ZII. North Lakhimpur end detected the fault in ZIV and tripped within 576 msec.
- Pare end detected the fault at a distance of 32.68 km and cleared it within 396 msec on DP, ZII which indicates that fault might be beyond the line. Nirjuli CB tripped within 477 msec on DP, ZII (ZIII started initially). No tripping from North Lakhimpur end and no DR generated.

It has been observed that fault current from Gohpur and Nirjuli abruptly increased after opening of Pare CB8 indicating that fault was still present in the system. Suspected fault in 132 kV North Lakhimpur S/S.

Hence, AEGCL is requested to share the root cause of the event.

Also, MUML is requested to address the issue of DR not generated at North Lakhimpur for 132 kV Pare & 132 kV Nirjuli lines.

In 86th PCCM, AEGCL informed that there was no fault in the Dhemaji or Majuli lines as well as the substation itself, and most probably it was in N-Lakhimpur - - Pare line of MUML. NELRDC informed that DRs were not available for CB5 and CB7 so complete analysis could not be done. NERPC intimated that as per the update provided by MUML through mail DRs were not generated as the CBs had not tripped and there might be some issues with the Zone IV settings which are being reviewed.

*The forum suggested that AEGCL and MUML should carry out relay testing for CB 5 and CB-7. Additionally, it was advised that the relay settings for CB-2 and CB-4, particularly the Zone-II settings, should be reviewed.*

### **AEGCL and MUML to update**

#### **C.6 Tripping of 220 kV Balipara Bus-I & II on 23<sup>rd</sup> Nov'25:**

(Ref: Agenda B.15 86th PCCM | 11th December 2025)

At 17:55 Hrs of 23.11.2025, 220 kV Balipara Bus-I & Bus-II tripped due to operation of Bus Bar protection as tabulated below:

Bays In BUS A	Bays in BUS B	Bays Tripped
HV 220 kV ICT#1 Bay-219	HV 220 kV ICT#2 Bay -220	All Feeders connected to <b>Bus-A and Bus-B</b>
LV 400 kV ICT#1 Bay- 202	LV 400 kV ICT#2 Bay-205	
Sonabil#2 Bay -204	Sonabil#1 Bay-203	

As per submitted DR/EL, metallic fault in R-N with Ir-2.4 kA, In-1.2 kA initiated at 17:55:27.384 Hrs cleared within 47 msec.

**Event log at 220 kV Balipara**

11/23/2025 17:55:33s	11/23/2025 17:55:27s	404000000	BALIPARA400 219 XFMR_P EDB_ICT1_P(PRIMARY) BB1 PROT. OPTD.	220_PWR
11/23/2025 17:55:33s	11/23/2025 17:55:27s	406000000	BALIPARA400 203 LD SONABIL_LINE_1 BB1 PROT. OPTD.	220_PWR
11/23/2025 17:55:33s	11/23/2025 17:55:27s	434000000	BALIPARA400 204 CB 20452(E_BLPRA SONBL2) LBB OPERATED	220_IAP
11/23/2025 17:55:33s	11/23/2025 17:55:27s	405000000	BALIPARA400 220 XFMR_P EDB_ICT2_P(PRIMARY) BB1 PROT. OPTD.	220_PWR
11/23/2025 17:55:33s	11/23/2025 17:55:27s	406000000	BALIPARA400 201 CB 20152_(BC) BB1 PROT. OPTD.	220_PWR

As per the Detailed report submitted by NERTS on 2<sup>nd</sup> Dec'25,

**Root cause :** Bus -B tripped (R-Ph) due to monkey intrusion resulting in the operation of Busbar relay (87B & 87CH) which eventually tripped all feeders(Bay 203, 220 and 205, 201 ) connected to Bus-B.

Along with Bus-B, the bays associated with Bus-A also got tripped due to operation of 96 A relays of respective bays

**Protection Issue:** As fault was in BUS B, only BUS B should have tripped. However, tripping command of 96A operation was extended to all the bays of BUS A as well. Wrong wiring and terminal connection led to continuous path between P3(zone-B trip bus) and P5(zone-A trip bus), thus shorting Zone-A and Zone-B trip Buses. The detailed report is attached as **Annexure II**.

**Remedial Measures:** Scheme correction was made and end-to-end continuity testing of trip buses of Zone A and B was checked to establish no looping of trip buses.

**NERLDC observations related to SPS at Sonabil:** Share the reason for non-operation of SPS at Sonabil during the tripping of the 220 kV Balipara-Sonabil I & II lines.

In 86<sup>th</sup> PCCM, regarding non-operation of SPS at Sonabil, NERTS to look into the DT transmission during BB operation from Balipara end. Also, regarding non sending of DT for 220 kV Sonabil feeder 2, matter maybe looked into by AEGCL as the CRP panels at Balipara end for ckt 2 is owned by AEGCL.

***AEGCL and Powergrid may update***

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