



सत्यमेव जयते

Agenda
for
80th PCCM

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

North Eastern Regional Power Committee

Agenda for

80th Protection Coordination Sub-Committee Meeting

Date: 19/06/2025 (Thursday)

Time: 11:00 hrs.

Venue: NERPC conference Hall, Shillong

A. CONFIRMATION OF MINUTES

1. CONFIRMATION OF MINUTES OF THE 79th PROTECTION SUB-COMMITTEE MEETING OF NERPC.

Minutes of the 79th PCC Meeting held on 19th May, 2025 at NERPC Conference Hall, Shillong was circulated vide letter No.: NERPC/SE (O)/PCC/2025/1023-1064 dated 3rd June 2025.

No comments were received from the constituents

Sub-committee may confirm the minutes of the 79th 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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Background: In 60th 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 3rd 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 (79th PCCM)

Sr No	Utility/ Constituents	Internal Audit		External audit	
		Latest Status	report	Latest Status	report
1.	Ar. Pradesh	Lekhi SS next month (Total Substation: 09)	Report of Chimpu shared for FY 2024-25.	Planning and Tendering will be done for audit of all 9 SS	NA

			Planning to be done for 205-26		
2.	Assam	For FY 2025-2026, audits to start from July'25. (Total Substation: 75)	Submitted for FY 2024-25. Planning to be done for 205-26	External agency being finalized for carrying out the audit	Submitted for phase 2017-2022. External audit of only Karimganj S/s is left
3.	Manipur	To be planned for FY 2025-26. (Total Substation: 08)	Submitted for FY 2024-25. Planning to be done for 205-26	8 SS to be done, Schedule to be decided, subject to law and Order situation. Audit of Yurembam ss and Ningthoukong ss may be done by NERPC team in May/June'25	NA
4.	Meghalaya	Internal audit of 132kV Substations completed for FY 2024-25. For FY 2025-26, audits will start from July'25 (Total Substation: 22)	Reports shared for FY 2024-25. Planning to be done for 205-26	Audit of 6 SS (Killing, EPIP I, EPIP II, NEHU, Mawlai and Mawphlang) done. For other substations, Offer received from PRDC (Cost Rs. 67 Lakh for 13 S/S). Offer awaited from CPRI (estimated cost Rs. 35 Lakh for 13 S/S). External party will be finalized considering the financial aspect. 3rd	Report shared

				party audit of Lumshnong may be done by NERPC in May/June'25.	
5.	Mizoram	For FY 2025-26, audits to start from June'25. Tentative plan shared with NERPC and NERLDC. (Total Substation: 10)	Report shared for FY 2024-25. Planning to be done for 205-26	List of external agencies awaited. Searching for parties to conduct audit. Audit of Kolasib, Aizawl, Melriat (PG), Zuangtui and Luangmual may be done in June'25 by NERPC.	NA
6.	Nagaland	For FY 2025-26, will update the plan shortly	Report shared for FY 2024-25. Action plan to be shared. Planning to be done for 205-26	Audit of 5 SS to be done in June'25 by NERPC. For rest, to be planned later.	NA
7.	Tripura	No representative (Total Substation: 18)	Shared for 13 SS for FY 2024-25. But, NERPC informed that the report is incomplete as all the formats have not been provided. TSECL to provide complete formats by April'25. Planning to be done for 205-26	No representative	NA

8.	Powergrid (NERTS)	Internal audit plan for FY 2025-26 has been shared.	Shared for FY 2024-25. Planning to be done for 205-26	External audit done for Misa & Salakati s/s by NERPC. For 2 substations, audit is being planned to be done by government agencies like CBIP and CPRI. Matter is under process. 3 rd party audit plan for all S/S will be shared shortly.	
9.	NTL	No representative	To be shared soon	No representative	
10	KMTL	completed the internal audit for 400/220 KV GIS Substation, New Kohima in July 2024. Internal audit for FY 2025-26 will be conducted tentatively during July'25.		Requested forum to suggest the External audit panel members.	
11	MUML/NBTL	Internal audit plan for 2025-26 has been shared	Internal Audit done for FY 2024-25. Planning to be done for 205-26	Forum advised to Plan for March'26	
12	NEEPCO	Internal audit plan for FY	All shared for FY 2024-25.	AGTCCPP done (by M/s ERDA Gujrat), report shared RC	

	(Total Substation: 10)	2025-26 has been shared	Planning to be done for 205-26	nagar done.ameng being planned, discussion with CPRI underway. Doyang in May 2025. Waiting for price offer.	
13	OTPC (Palatana)	For FY 2025-26, to be planned	Shared for FY 2024-25. Planning to be done for 205-26	Done	shared
14	NTPC (BgTPP)	For FY 2025-26, to be planned	Shared for FY 2024-25. Planning to be done for 205-26	Done (by CPRI)	Complete Report shared. Action plan shared.
15	NHPC (Loktak)	Protection team informed, to be done at the earliest for FY 2025-26	Internal audit to be done before June 2025	To be done after R&M of the plant. Order Placed.	
16	APGCL	Utilities to update status			
17	TPGCL				
18	MEPGCL	Audit of Stg III and stg IV to be done by Nov'25. Internal audit plan for all S/S for FY 2025-26 to be shared	Submitted for st I and stg II for FY 2024-25. Planning to be done for 205-26	External audits of all generating stations were done in 2021. Audit of Umiam Stg-I & Stg-IV planned during Nov'25. For other S/S, planning being done.	
19	Dikshi HEP (IPP)	*	*	*	*

Further deliberations of 79th PCCM

MS NERPC instructed that –

- the external audit reports of the utilities to be studied by PSAG sub-group and list of recommended actions to be finalised and presented in PCC meetings so that the regular update may be taken on work progress.
- He also instructed that inspections of UFRs (used in AUFLS scheme or islanding scheme) shall be carried out along with protection audit.
- Compliance of audit reports to be regularly monitored in the PCC meeting and to be put up as an agenda item.

Sub-committee may deliberate**B.2 Analysis and Discussion on Grid Disturbances which occurred in NER grid in May'25 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 May 2025 based on the draft report prepared by NERLDC (attached as annexure B.2).

NERLDC Agenda**B.3 Status of submission of FIR, DR & EL outputs for the Grid Events for the month of May'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 01-05- 2025 to 31-05-2025 as on **11-06-2025** is given below:

Owner Name	No of tripping	FIR			DR			EL		
		Total Furnished in 24hrs %	Total Furnished after 24hrs %	Total furnished %	Total Furnished in 24hrs %	Total Furnished after 24hrs %	Total furnished %	Total Furnished in 24hrs %	Total Furnished after 24hrs %	Total furnished %
AEGCL	27	0.00%	50.00%	50.00%	3.85%	88.46%	92.31%	11.54%	80.77%	92.31%
APGCL	0	No tripping during May'25								
DoP, Arunachal Pradesh	18	46.67%	53.33%	100.00%	60.00%	36.67%	96.67%	63.33%	30.00%	93.33%
DoP, Nagaland	10	0.00%	100.00%	100.00%	0.00%	100.00%	100.00%	12.50%	87.50%	100.00%
MePTCL	28	85.71%	10.71%	96.43%	82.14%	14.29%	96.43%	67.86%	28.57%	96.43%
MePGCL	11	9.09%	72.73%	81.82%	27.27%	54.55%	81.82%	9.09%	72.73%	81.82%
MSPCL	8	20.00%	60.00%	80.00%	50.00%	20.00%	70.00%	50.00%	20.00%	70.00%
P&ED, Mizoram	2	0.00%	100.00%	100.00%	100.00%	0.00%	100.00%	100.00%	0.00%	100.00%
TSECL	30	0.00%	63.33%	63.33%	36.67%	53.33%	90.00%	16.67%	73.33%	90.00%
NBTL	3	25.00%	25.00%	50.00%	50.00%	0.00%	50.00%	50.00%	0.00%	50.00%
MUML	0	No tripping during May'25								
KMTL	0	No tripping during May'25								
NEEPCO	4	-	-	100.00%	-	-	100.00%	-	-	100.00%
NHPC	3	66.67%	33.33%	100.00%	66.67%	33.33%	100.00%	66.67%	33.33%	100.00%
NTL	6	16.67%	83.33%	100.00%	5.56%	77.78%	83.33%	11.11%	72.22%	83.33%
OTPC	9	44.44%	55.56%	100.00%	100.00%	0.00%	100.00%	77.78%	0.00%	77.78%
POWERGRID	73	63.01%	28.77%	91.78%	71.23%	23.29%	94.52%	65.75%	31.51%	97.26%

FIR/DR/EL submission status of utilities having tripping of Generating Units as on 11-06-2025:

Owner Name	No of tripping	FIR			DR			EL		
		Total Furnished in 24hrs %	Total Furnished after 24hrs %	Total furnished %	Total Furnished in 24hrs %	Total Furnished after 24hrs %	Total furnished %	Total Furnished in 24hrs %	Total Furnished after 24hrs %	Total furnished %
NEEPCO	13	-	-	100.00%	-	-	92.30%	-	-	100.00%
NTPC	1	0.00%	0.00%	0.00%	100.00%	0.00%	100.00%	100.00%	0.00%	100.00%
OTPC	0	No Unit tripping during May'25								
NHPC	0	No Unit tripping during May'25								

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.nerlhc.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 nerlhcso3@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 nerlhcprotection@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.nerlhc.in/Default.aspx>)

All the utilities are requested to submit details of tripping of downstream feeder on monthly basis in the google spreadsheet prepared by NERLDC.

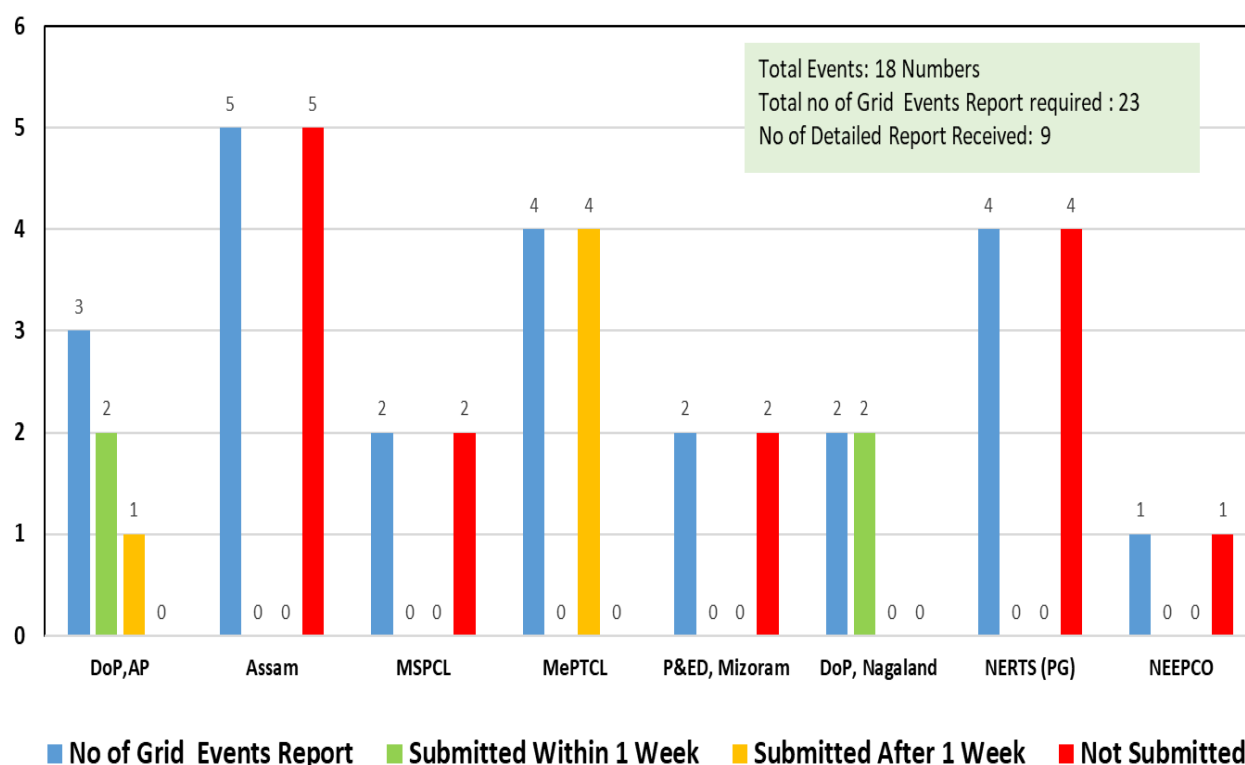
<https://docs.google.com/spreadsheets/d/1rlksf6KO9LgQQ6bwMRDmbwm906We1ysfR7KjrTxhG34/edit?gid=0#gid=0>

Members may discuss.

B.4 Submission of Flash Report and 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 same for the month of **May, 2025** as on **11-06-2025** is shown below:

Status of the Detailed Report Submission in NER for May'25



AEGCL, MSPCL, P&ED Mizoram, NERTS and NEEPCO have not submitted the detailed report of grid disturbance. Also, we have received 4 reports within one week of time and 5 reports after one week.

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 Non-operation of auto recloser in Important Grid Elements for transient faults in May 2025:

Sl. No .	Element Name	Tripping Date and Time	RELAY_A	RELAY_B	Auto-Recloser not Operated	Remarks from Utility
1	132 kV Dimapur - Doyang 1 Line	05-05-2025 09:57	DP, ZI, Y-B, FD: 15.24km, A/R Successful	DP, ZI, Y-B, FD:72.4 kms, A/R Not operated	Doyang(NEEPCO)	
2	132 kV Pare - Itanagar Line	05-05-2025 12:22	DP, ZI, Y-B, FD: 5.26 kms, A/R Not operated	DP, ZI, Y-B, FD: 22.674 kms, A/R Operated Sucessfully	Pare(NEEPCO)	
3	132 kV Badarpur - Karimganj Line	08-05-2025 03:34	DP, ZI, Y-E, FD: 26.97kms, A/R Successful	DP, ZI, B-E, A/R Not operated	Karimganj(AEGCL)	
4	400 kV Misa - Silchar 1 Line	08-05-2025 06:09	DP,ZI, B-E,FD: 130.85 KM, A/R Successful	DP, ZI, R-E,FD: 2.638 Kms, A/R Not operated	Silchar(POWERGRID)	
5	132 kV Hailakandi - Panchgram Line	10-05-2025 05:35	DP, ZI,R-E, A/R Successful	DP, ZII,R-E,FD: 19.8 KM, A/R Not operated	Panchgram(AEGCL); Carrier aided tripping absent in the line	
6	132 kV AGTCCPP -	12-05-2025 05:20	DP, ZI, R-E, FD: 76.95 Kms, A/R	DP, ZI, R-E, FD: 76.95 Kms , A/R	AGTCCPP(NEEPCO)	

Sl. No .	Element Name	Tripping Date and Time	RELAY_A	RELAY_B	Auto-Recloser not Operated	Remarks from Utility
	Kumarghat Line		Not operated	Operated Successfully		
7	220KV-MAWNGA P-BYRNIHAT (KILLING)-2	13-05-2025 11:36	DP, ZI, R-E, FD: 90.14 kms, A/R Not operated	DP, ZI, R-E, FD: 7.34 kms, A/R Not operated	Both ends (MePTCL)	
8	220 kV Misa - Samaguri 1 Line	13-05-2025 12:37	DP, ZI, R-E, FD: 9.55 KM, A/R Successful	DP, ZI, R-E, A/R Not operated	Samaguri(AEGCL)	
9	132 kV Ranganadi-Itanagar line	16-05-2025 19:39	DP, ZI, Y-E, FD: 25.11 km, A/R Operated Unsuccessfully (due to persistent fault)	DP, ZI, R-Y-E, FD: 31.9 km, A/R Not Operated	Itanagar (DoP, Arunachal Pradesh)	
10	132 kV AGTCCPP - PK Bari (TSECL) 1 Line	25-05-2025 16:17	DP, ZI, R-B, FD: 0.608 Kms, A/R Not operated	DP, ZI, R-B, FD: 84.60 Kms, A/R Successful	AGTCCPP(NEEP CO)	
11	400 kV Biswanath Chariali	27-05-2025 10:32	DP, ZI, Y-E, FD: 58.9KM,	DP, ZI, Y-E, FD: 175.6KM,	Ranganadi(NEEP CO)	

Sl. No.	Element Name	Tripping Date and Time	RELAY_A	RELAY_B	Auto-Recloser not Operated	Remarks from Utility
	- Ranganadi 1 Line		A/R Successful	A/R Not Operated		
12	132 kV Dimapur (PG) - Kohima Line	31-05- 2025 00:24	DP, ZI, B-E, FD: 18.174KM, A/R Not operated	DP, ZI, B-E, FD: 25.75KM, A/R Not Operated	Dimapur (PG), Kohima(DoP, Nagaland)	

Utilities may update

B.6 Submission of Protection Performance Indices by Transmission Utilities:

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.

As on 11.06.2025, **NETC, NTPC, OTPC, KMTL, DoP Nagaland, NEEPCO (Khandong, Doyang, Pare, Kameng), POWERGRID, MePTCL, MUML, NBTL and DoP Arunachal Pradesh** has submitted protection performance indices for the month of May'25.

Sl. No.	Name of Transmission Licencee	D= (Nc/Nc+Nf)	S= (Nc/Nc+Nu)	R= (Nc/Nc+Ni)	Remarks
1	NETC	-	-	-	No bay owned by NETC
2	KMTL	1	1	1	
3	DoP Nagaland	0.917	0.846	0.786	

	Sanis	1	0.67	0.67	Unwanted tripping of 132 kV Doyang-Sanis line on 31.05.2025
	Wokha	1	1	1	
	Chiephebozou	0.67	0.67	0.5	Failed operation of 132 kV Chiephebozou-Zadhima line on 31.05.2025
	Zadhima	1	0.67	0.67	Unwanted tripping of 132 kV Zadhima-Chiephebozou line on 22.05.2025
	Kohima	1	1	1	
4	POWERGRID	1	1	1	
5	MePTCL	1	0.94	0.94	Unwanted tripping of 132 kV Lumshnong-Amrit line on 08.05.2025
6	MUML	-	-	-	No tripping during May'25
7	NBTL	1	1	1	
8	DoP Arunachal Pradesh	0.9	1	0.9	
	Along	0.5	0.67	0.4	Failed CB opening at Along end for 132 kV Basar line on 15.05.2025 & 23.05.2025
	Pasighat	1	1	1	
	Itanagar	1	1	1	
	Lekhi	1	1	1	

	Yachuli	1	1	1	
	Basar	1	1	1	
	Daporijo	1	1	1	
9	AEGCL	-	-	-	Not Submitted
10	NTL	-	-	-	Not Submitted
11	MSPCL	-	-	-	Not Submitted
12	P&ED Mizoram	-	-	-	Not Submitted
13	TSECL	-	-	-	Not Submitted

Sl. No.	Name of Generating Company	D= (Nc/Nc+Nf)	S= (Nc/Nc+Nu)	R= (Nc/Nc+Ni)	Remarks
1	NTPC	1	1	1	
2	OTPC	1	0.75	0.75	Unwanted Bus bar operation in 132 kV Bus-I at Palatana at 13:08 Hrs of 29.05.2025 (Fault was in 132 kV Surajmaninagar-Budhjungnagar line)
3	NEEPCO	1	0.73	0.73	
	Khandong	1	0.4	0.4	Unwanted tripping of 132 kV Khandong-Umrangshu line on 04.05.2025 & 06.05.2025

	Doyang	1	1	1	
	Pare	1	1	1	
	Kameng	1	1	1	
4	NEEPCO(AGBPP, AGTCCPP, Monarchak)	-	-	-	Not Submitted
5	MePGCL	-	-	-	Not Submitted
6	NHPC	-	-	-	Not Submitted

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.7 Time Drift issue of submitted Disturbance recorder during May 2025:

As per Regulation No. 17(1) of IEGC 2023- All users shall keep the recording instruments (disturbance recorder and event logger) in proper working condition.

As per Regulation No. 17(3) of IEGC 2023, the time synchronization of the disturbance recorders shall be corroborated with the PMU data or SCADA event loggers by the respective RLDC. Disturbance recorders which are non- compliant shall be listed out for discussion at RPC.

List of elements with time drift issue in the submitted DRs for May 2025 are as follows:

SL No	Element Name	Tripping Date and Time	SENDOWNER	RENDOWNER	Time synch
1	132 kV Ningthoukhong - Churachandpur 2 Line	27-05- 2025 12:00	MSPCL	MSPCL	Ningthoukhong: 1 Hr 50 mins time lead (13:50 Hrs)

SL No	Element Name	Tripping Date and Time	SENDOWNER	RENDOWNER	Time synch
2	132 kV Baramura - Jirania Line	29-05- 2025 00:10	TSECL	TSECL	Baramura: 1 Hr 2 mins time lag (23:08 Hrs) Jirania: 1 Hr 2 mins time lag (23:08 Hrs)
3	132 kV Khliehriat - Mustem Line	11-05- 2025 11:48	MePTCL	MePTCL	Khliehriat: 1 Hr time lead (12:48 Hrs)
4	132 kV South Comilla (Bangladesh) - Surajmani Nagar 1 Line	29-05- 2025 06:42	BANGLADESH	POWERGRID	Surajmani Nagar: 59 mins time lead (07:41 Hrs)
5	132 kV Palatana- Surajmaninagar Line	29-05- 2025 13:08	OTPC	POWERGRID	Palatana: 59 mins time lead (14:07 Hrs)
6	132 kV South Comilla (Bangladesh) - Surajmani Nagar 2 Line	29-05- 2025 06:42	BANGLADESH	POWERGRID	Surajmani Nagar: 58 mins time lead (07:40 Hrs)
7	132 kV South Comilla (Bangladesh) - Surajmani Nagar 1 Line	28-05- 2025 16:20	BANGLADESH	POWERGRID	Surajmani Nagar: 57 mins time lead (17:17 Hrs)
8	132 kV South Comilla (Bangladesh) - Surajmani Nagar 2 Line	28-05- 2025 16:20	BANGLADESH	POWERGRID	Surajmani Nagar: 57 mins time lead (17:17 Hrs)

SL No	Element Name	Tripping Date and Time	SENDOWNER	RENDOWNER	Time synch
9	132 kV Sarusajai - Umtru 1 Line	10-05-2025 19:20	AEGCL	MePGCL	Umtru: 44 mins time lead (20:04 Hrs)
10	132 kV Chiephobozou-Wokha Line	22-05-2025 16:42	DoP, Nagaland	DoP, Nagaland	Chiephobozou: 33 mins time lag (16:09 Hrs)
11	132 kV Sarusajai - Umtru 2 Line	30-05-2025 08:36	AEGCL	MePGCL	Umtru: 29 mins time lag (08:07 Hrs)
12	132 kV Sarusajai - Umtru 2 Line	30-05-2025 13:50	AEGCL	MePGCL	Umtru: 16 mins time lag (13:34 Hrs)
13	132 kV Kohima-Zadhima Line	31-05-2025 01:32	DoP, Nagaland	DoP, Nagaland	Zadhima: 16 mins time lead (01:48 Hrs)
14	132 kV Pailapool - Srikona Line	10-05-2025 03:15	AEGCL	AEGCL	Srikona: 15 mins time lead (03:30 Hrs)
15	132 kV Dharmanagar - P K Bari Line	11-05-2025 10:50	TSECL	TSECL	Dharmanagar: 15 mins time lag (10:35 Hrs)
16	132 kV Roing - Pasighat Line	23-05-2025 14:01	POWERGRID	POWERGRID	Pasighat: 13 mins time lag (13:48 Hrs)
17	132 kV Sarusajai - Umtru 2 Line	10-05-2025 19:14	AEGCL	MePGCL	Umtru: 12 mins time lag (18:47 Hrs)
18	132 kV Budhjangnagar (TSECL) - Surjamaninagar (TSECL) Line	05-05-2025 10:26	TSECL	TSECL	Budhjangnagar (TSECL): 2 mins time lag (10:24 Hrs) Surjamaninagar (TSECL): 9 mins

SL No	Element Name	Tripping Date and Time	SENDOWNER	RENDOWNER	Time synch
					time lag (10:17 Hrs)
19	132 kV Panchgram - Lumshnong Line	08-05- 2025 02:42	AEGCL	MePTCL	Panchgram: 2 mins time lag (02:40 Hrs) Lumshnong: 8 mins time lag(02:34 Hrs)
20	132 kV Palatana - Udaipur Line	29-05- 2025 13:08	OTPC	TSECL	Palatana: 8 mins time lag (13:00 Hrs)
21	132 kV Badarpur - Kolasib Line	12-05- 2025 06:50	POWERGRID	POWERGRID	Kolasib: 6 mins time lead (06:56 Hrs)
22	132 kV Badarpur - Kolasib Line	16-05- 2025 19:38	POWERGRID	POWERGRID	Kolasib: 6 mins time lead (19:44 Hrs)
23	132 kV Dharmanagar - P K Bari Line	31-05- 2025 11:08	TSECL	TSECL	P K Bari: 6 mins time lag (10:08 Hrs)
24	132 kV AGTCCPP - Kumarghat Line	12-05- 2025 05:20	NEEPCO	POWERGRID	Kumarghat: 5 mins time lag (05:15 Hrs)
25	132 kV Badarpur - Kolasib Line	12-05- 2025 05:52	POWERGRID	POWERGRID	Kolasib: 5 mins time lead (05:57 Hrs)
26	132 kV Panchgram - Lumshnong Line	11-05- 2025 05:39	AEGCL	MePTCL	Panchgram: 4 mins time lag (05:35 Hrs)
27	132 kV Agartala - Rokhia 1 Line	11-05- 2025 15:40	TSECL	TSECL	Agartala: 4 mins time lag (15:36 Hrs) Rokhia: 4 mins

SL No	Element Name	Tripping Date and Time	SENDOWNER	RENDOWNER	Time synch
					time lag (15:36 Hrs)
28	132 kV Imphal (MSPCL) - Yaingangpokpi 2 Line	24-05-2025 12:43	MSPCL	MSPCL	Imphal (MSPCL): 4 mins time lag (12:39 Hrs)
29	132 kV Panchgram - Lumshnong Line	30-05-2025 08:16	AEGCL	MePTCL	Lumshnong: 4 mins time lead (08:20 Hrs)
30	132 kV Panchgram - Lumshnong Line	10-05-2025 01:35	AEGCL	MePTCL	Panchgram: 3 mins time lag (02:32 Hrs)
31	132 kV Panchgram - Lumshnong Line	30-05-2025 13:31	AEGCL	MePTCL	Lumshnong: 3 mins time lead (13:34 Hrs)

Utilities should ensure that the submitted DR and EL files have correct time synchronisation for proper analysis purposes. Healthiness of GPS may be checked and time to be adjusted as per grid code.

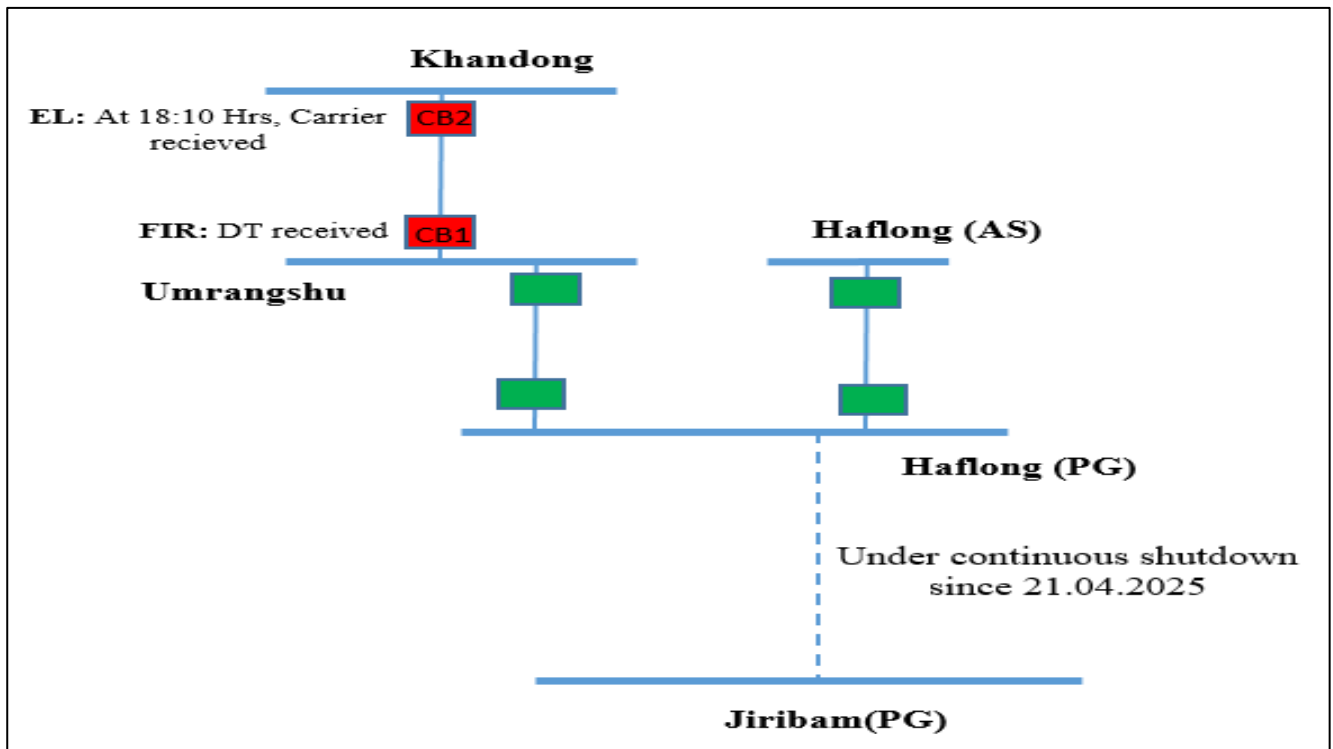
Members may discuss

B.8 Frequent tripping of 132 kV Khandong - Umranshu Line and Grid Disturbance in Umrangsho and Haflong Areas of Assam Power System on 4th May'25 & 6th May'25:

132 kV Haflong (PG)–Jiribam line has been under continuous shutdown since 21.04.2025. Consequently, the Umrangso, Haflong(PG) and Haflong (AEGCL) areas are currently being catered to solely through the 132 kV Khandong–Umrangsu line. On 04.05.2025 & 06.05.2025, 132 kV Khandong - Umranshu Line tripped leading to blackout at radially connected Umrangso, Haflong(PG) and Haflong (AEGCL) areas. Load loss of 11 MW observed for both events.

Following Observations:

For tripping on 04.05.2025



- As per the FIR from Umrangshu, the first tripping was recorded at 17:40 hrs due to a DT (Direct Trip) signal sent from the Khandong end to Umrangshu end.
- A second tripping occurred at 18:10 hrs, during an attempted line charging, due to a carrier signal received at Khandong from the Umrangso end.
- No DR files submitted from both ends which is a violation of Clause 37.2 (c) of IEGC-23.

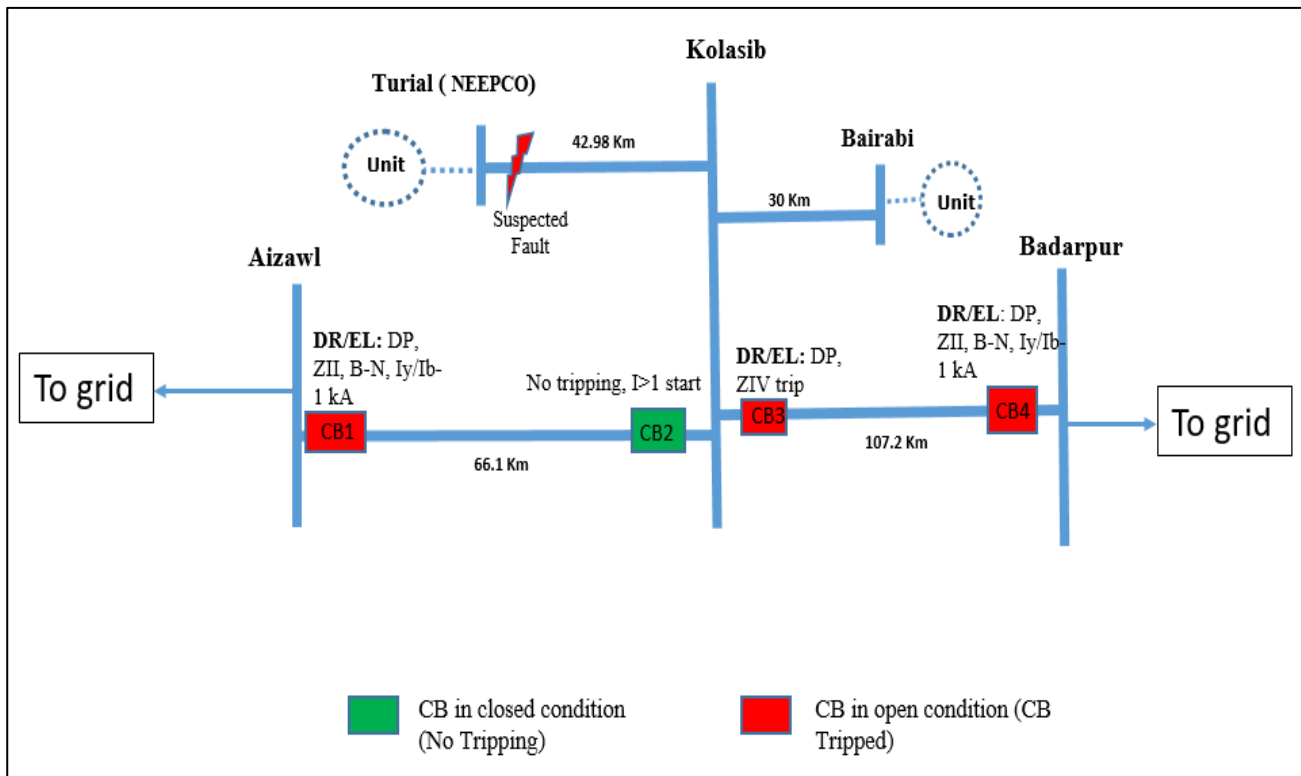
For tripping on 06.05.2025

- As per the information shared with the NERLDC Control Room, the 132 kV Khandong–Umrangso line was hand-tripped at the Khandong end.
- NEEPCO is requested to clarify the reason for this operational action.

AEGCL & NEEPCO may update the root cause and actions taken on the above-mentioned issues.

B.9 Grid disturbance in Kolasib, Turial and Bairabi area of Mizoram Power system on 12.05.2025:

At 05:52 Hrs of 12-05-2025, 132 kV Aizawl-Kolasib and 132 kV Badarpur-Kolasib lines tripped leading to loss of power in Kolasib, Turial and Bairabi area of Mizoram Power system.



As per DR analysis, B-N fault (Ib-1.1 kA, In-1 kA) initiated at 05:52:05.174 hrs which was cleared within 412 msec from Aizawl end on operation of DP, ZII. There was no tripping from Kolasib end.

For 132 kV Badarpur-Kolasib line, fault cleared within 511 msec from Badarpur end on operation of DP, ZII. ZIV operated from Kolasib end within 513 msec.

Following observations:

- Disturbance Recorder (DR) analysis confirms the fault was either in 132 kV Turial-Kolasib line or 132 kV Kolasib-Bairabi line or downstream of Kolasib substation.
- Protection system failed to isolate the fault due to which fault was cleared by tripping of healthy 132 kV Aizawl-Kolasib & 132 kV Badarpur-Kolasib lines. P&ED Mizoram needs to ensure healthiness of protection system of all elements including downstream elements.
- DR time drift at Kolasib end: 6 min for 132 kV Badarpur Line & 2 min for 132 kV Aizawl line which needs to be rectified.
- Non-submission of Flash report and detailed report by P&ED Mizoram which is a violation of Clause 37.2 (b) & 37.2 (e) of IEGC regulation 2023.
- In 79th PCC meeting, Forum asked P&ED Mizoram to provide relay setting of all the elements connected to Kolasib including downstream elements. Also, Mizoram to conduct relay testing for checking the healthiness for 132 kV

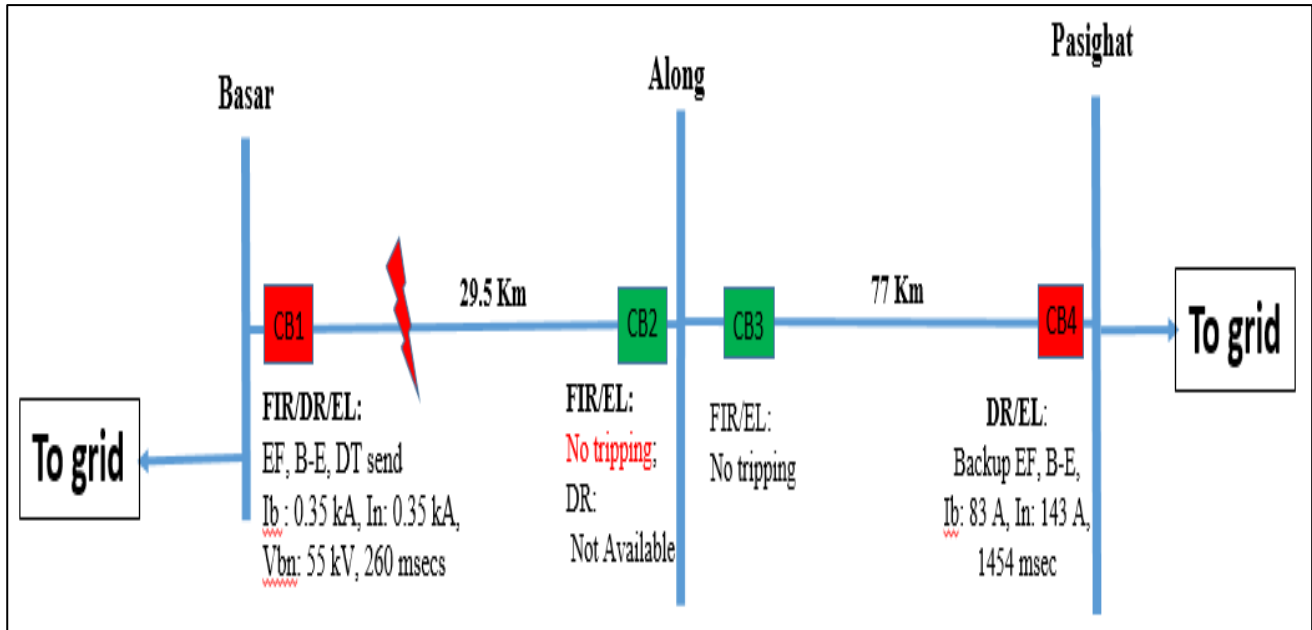
Kolasib – Tuirial and 132 kV Kolasib-Bairabi Line. Mizoram informed that relay testing will be done by May-June'25 during internal audit.

Similar incident occurred at 15:33 hrs of 05.05.2024, 15:28 hrs of 13.08.2024 and 14:24 Hrs of 20-03-2025 & 07.04.2025.

P&ED Mizoram may update the root cause of the event and update the actions taken on the above-mentioned issues.

B.10 Grid Disturbance in Along area of Arunachal Pradesh Power system on 15-05-2025:

At 04:31 hrs & 04:32 hrs of 15-05-2025, 132 kV Basar-Along & 132 kV Along-Pasighat line tripped respectively resulting in grid disturbance in Along area of Arunachal Pradesh power system. Load loss of 2.5 MW.



As per DR/EL analysis, high resistive B-N fault (Ib- 325 A, In-325 A) initiated at 04:31:35.760 Hrs in 132 kV Along-Basar line which was cleared within 260 msec from Basar end on operation of E/F protection (DT send). There was no tripping from Along end due to which fault was continuously feeding from Pasighat end of 132 kV Along line which was cleared within 1.45 sec on operation of B/U E/F from Pasighat end (IN>2 trip observed at 04:31:22.552 hrs)

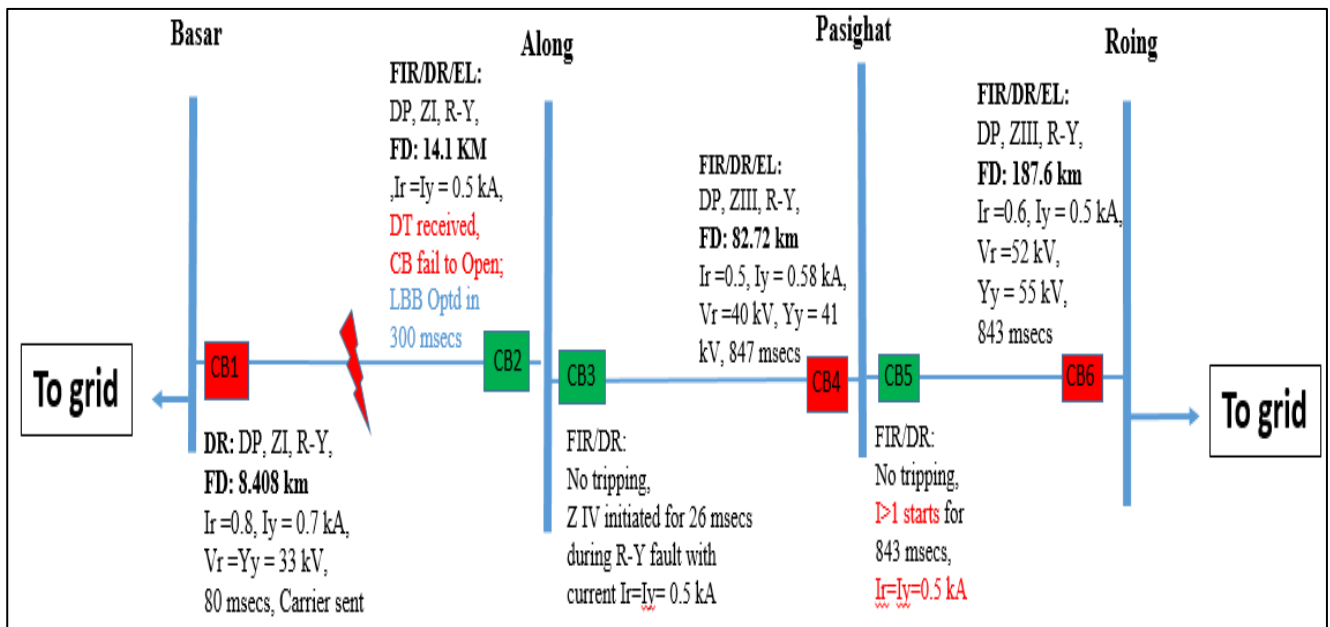
Following observations:

- Vegetation fault occurred in 132 kV Basar-Along line.
- Relay at Along for 132 kV Basar line (CB2) failed to detect the fault in the line (DR not available) resulting in clearing of fault by tripping of healthy 132 kV Along-Pasighat line from Pasighat end.
- B/U E/F protection at Basar end for 132 kV Along line needs to be reviewed.
- Both 67/67N operated & IN>2 trip operated at Pasighat end for 132 kV Along line. The same needs to be checked. IN>2 Trip command seems unwanted and the same needs to be disabled as per NERPC protection philosophy.
- Time drift of 1-2 minutes observed at Along for both the lines.

DoP Arunachal Pradesh may update the actions taken on the above-mentioned issues.

B.11 Grid Disturbance in Along, Pasighat, Napit & Niglol areas of Arunachal Pradesh Power system on 23-05-2025:

At 14:01 Hrs of 23-05-2025, 132 kV Basar-Along & 132 kV Roing-Pasighat lines tripped resulting in grid disturbance in Along, Pasighat, Napit & Niglok areas of Arunachal Pradesh Power system. Load loss of 11 MW occurred.



A dry tree fallen/ came in contact with R-Y phase of the 132 kV Basar-Along line resulted into operation of DP, ZI, R-Y, FD: 8.4 Km at Basar end within 80 msecs. However, CB fails to opens at Along end after issuance of trip command by distance protection relay in ZI and the fault continued to feed from Roing side till 843 msecs.

The fault cleared from Roing end of 132 kV Pasighat - Roing line after 843 msecs on operation of DP, ZIII, R-Y, FD: 187.6 Km.

Following observations:

- **Non operation of CB (CB2) at Along:** The distance protection at Along end issued the trip command. However, CB fails to open which is undesirable for the protection system at Along end. DoP, Arunachal Pradesh is requested to share the root cause for the CB failure & take corrective action to avoid reoccurrence in future.
- **LBB protection at Along SS:** The DR of 132 kV Basar - Along line at Along showing LBB Operation after 300 msecs. DoP, Arunachal is requested to confirm the non-operation LBB at Along SS during the CB stuck condition.
- **DT received at CB (CB2) at Along :** DR of Main relay showing DT received at Along end. However, no DT sent from the Basar end. DoP, Arunachal to check the possible interchange in Carrier & DT received signal at Along.
- **Non Directionality of OC protection at Pasighat (CB5):** Initiation of backup OC ($I > 1$ Start) protection in the Main Relay at Pasighat end of 132 kV Roing line during fault in 132 kV Basar- Along line seems unwanted. The same should be made Forward directional as per PROTECTION PROTOCOL OF NORTH EAST REGION.
- **DR time drift at Pasighat (CB5):** DR for main relay at Pasighat showing fault initiation time of 13:48:23.077 which indicates DR time drift of 12-13 minutes. The same need to be corrected by NERTS.
- **Review of ZIII reach of DPR at Roing (CB6):** Roing end showing ZIII tripping with fault distance of 187.6 Km which seems correct as per the PROTECTION PROTOCOL OF NORTH EAST REGION which says ZIII Reach - 120% of (the protected line + of the longest line at remote bus). The line length of 132 kV Pasighat - Roing line & 132 kV Along - Pasighat is 102.8 Km & 77 Km respectively. However the reach may be relooked for providing Pasighat end of 132 kV Along - Pasighat line preference to clear the fault in ZIII to avoid Grid Disturbance at Pasighat substation in future.

Similar incident occurred on 07.04.2024, 17.04.2024, 13.06.2024, 08.12.2024, 23.01.2025, 05.02.2025, 15.02.2025.

DoP Arunachal Pradesh & NERTS may update the actions taken on the above-mentioned issues.

B.12 Maloperation of SPS related to Bangladesh on 28th May'25:

At 16:20 Hrs of 28-05-2025, 132 kV Surajmaninagar-Comilla D/C lines tripped resulting in disconnection of Comilla load of 36 MW.

As per PMU signal at 400 kV SMnagar (ST) for Palatana line, there was no fault observed in the system.

As per DR received from Surajmaninagar end, Carrier was received and no fault observed in the system.

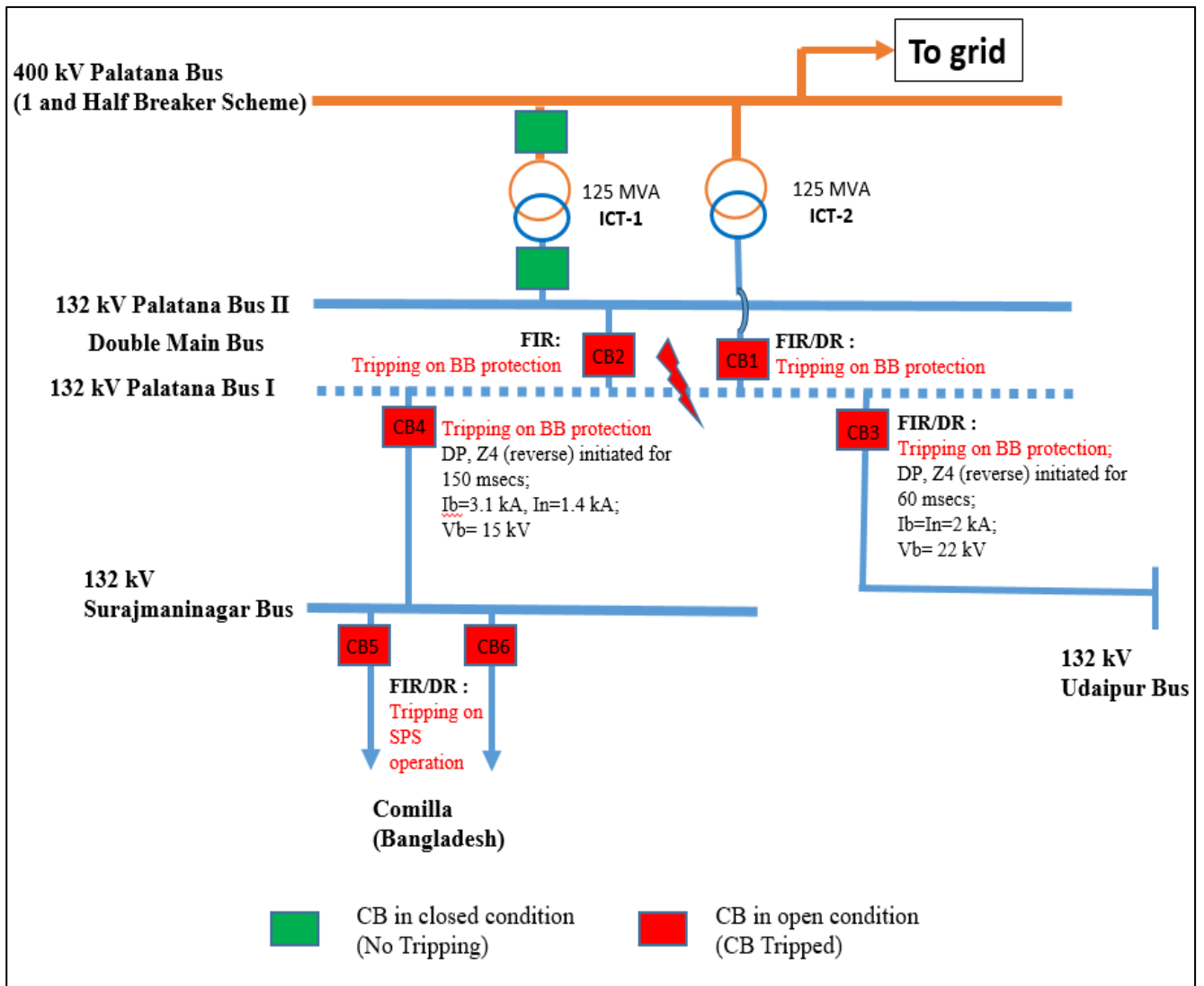
Tripping of 132 kV Surajmaninagar-Comilla D/C lines at Surajmaninagar on receipt of SPS signal generated from Palatana is inferred unwanted/maloperation.

OTPC may furnish the reason of such maloperation of SPS and remedial measures taken.

B.13 Repeated tripping of 132 kV Palatana Bus-I on 29th May'25:

Event 1: At 06:42 Hrs of 29.05.2025

At 06:42 Hrs of 29-May-25, 132 kV Palatana Bus-I tripped resulting in tripping of all elements connected to Bus-I namely., 132 kV Palatana-Surajmaninagar, 132 kV Palatana-Udaipur lines & 400/132 kV ICT-II at Palatana. SPS related to Bangladesh operated due to tripping of 132 kV Palatana-Surajmaninagar Line leading to disconnection of 132 kV Surajmaninagar-Comilla D/C lines. (Comilla load disconnection of 28 MW)



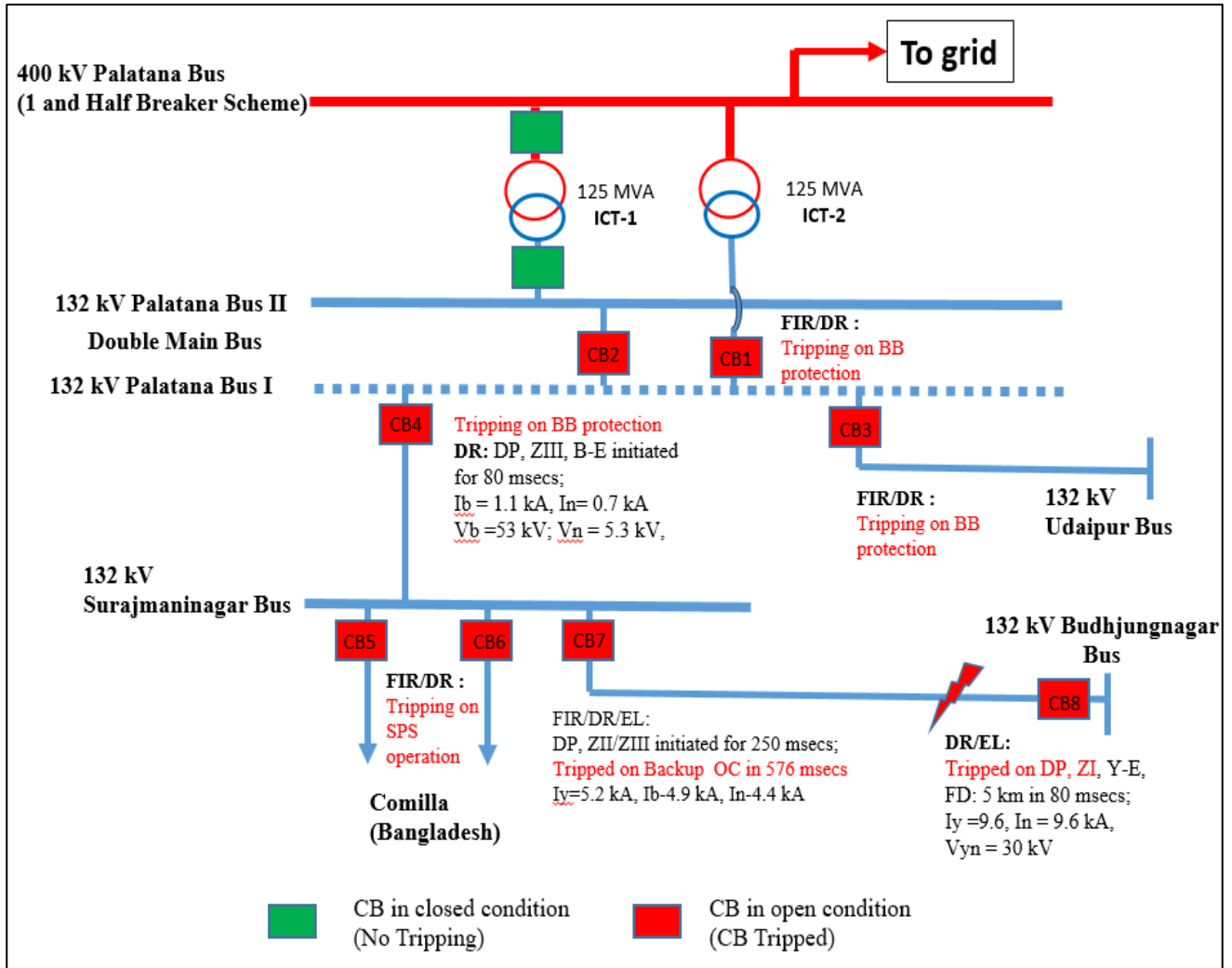
As per DR analysis, B-N fault of metallic nature initiated likely in the 132 kV Surajmaninagar Bus I which was cleared on operation Bus bar protection of 132 kV Main Bus I in 70-80 msec.

The same fault was detected by the main protection of 132 kV Palatana – Surajmaninagar line & 132 kV Palatana – Udaipur line in ZIV i.e. reverse direction. DR time drift of 1 Hr observed at Palatana end for Surajmaninagar line & 8 min for Udaipur line.

OTPC may share the root cause of the event and remedial measures taken.

Event 2: At 13:08 Hrs of 29.05.2025

At 13:08 Hrs of 29-May-25, 132 kV Palatana Bus-I tripped resulting in tripping of all elements connected to Bus-I. SPS related to Bangladesh operated due to tripping of 132 kV Palatana-Surajmaninagar Line leading to disconnection of 132 kV Surajmaninagar-Comilla D/C lines (Comilla load disconnection of 28 MW)



As per DR analysis, Y-N fault of metallic nature initiated at 13:08:01.059 Hrs in 132 kV Surajmaninagar – Budhjungnagar line which was cleared from Budhjangnagar in 80 msec on DP, ZI & Surajmaninagar in 576 msec on operation of B/U O/C protection (ZII/ZIII started and deactivated after 250 msec)

The same fault was detected by main protection of 132 kV Palatana – Surajmaninagar line in ZIII. However, Bus bar protection of 132 kV Main Bus I sensed the fault & immediately issued trip command to all the feeder connected to the Bus I.

Protection issues:

- Operation of Bus Bar protection due to external fault seems unwanted. Healthiness of BB protection need to be ensured to avoid such misoperation in future.
- DP, ZII/ZIII deactivated at Surajmaninagar for Budhjungnagar line after 250 msec during forward fault of metallic nature seems unwanted.

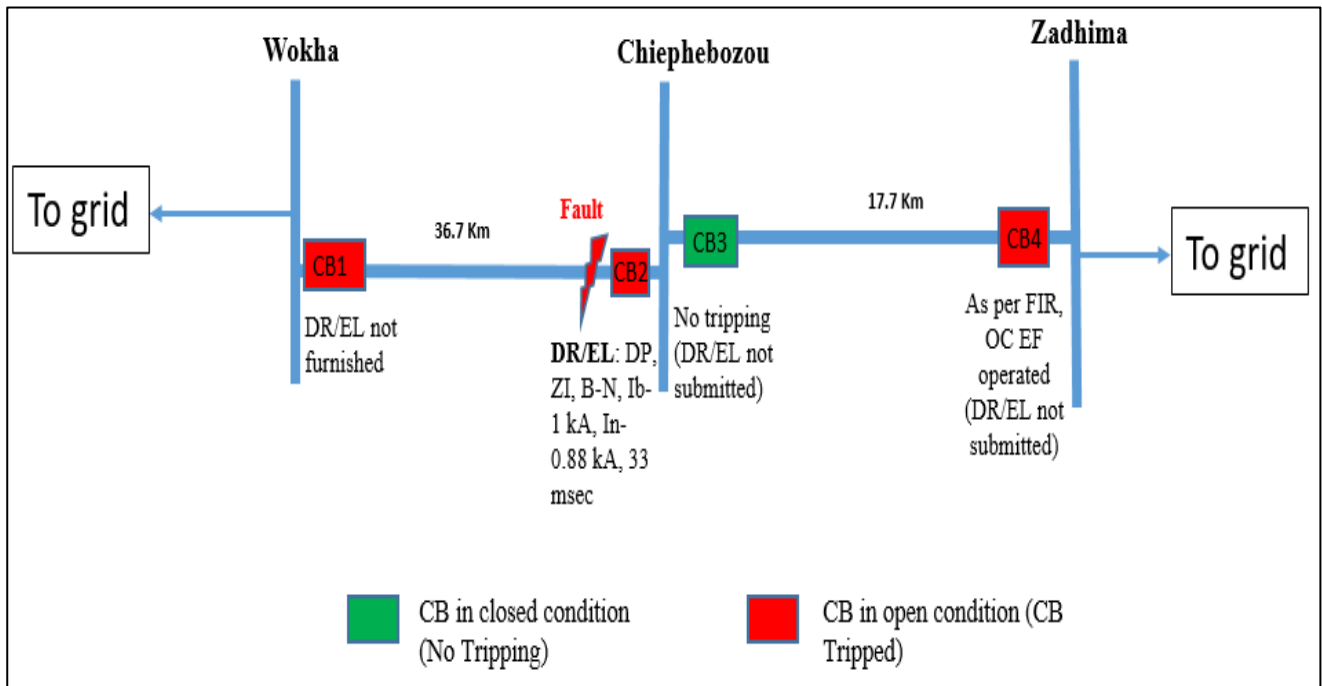
- DR time drift of around 10 min observed at Surajmaninagar end for 132 kV Budhjungnagar line. DR time drift of 1 Hr observed at Palatana end for 132 kV Surajmaninagar Line and 8 min for 132 kV Udaipur line.

OTPC & TSECL may update share the root cause and provide update on the above mentioned issues.

B.14 Grid disturbance in Nagaland Power System during May'25:

Event 1: Grid disturbance in Chiephebozou area of Nagaland on 22-05-2025

At 16:42 Hrs of 22-05-2025, 132 kV Wokha - Chiephobozou and 132 kV Zhadima - Chiephobozou lines tripped resulting in grid disturbance of Chiepebozou area of Nagaland. Load loss of 1.2 MW occurred.



As per DR analysis of 132 kV Wokha-Chiephebozou line, solid B-N fault (Ib-1 kA, In-0.88 kA) initiated at 16:09:08.490 Hrs and cleared within 33 msec from Chiephebozou end on operation of DP, ZI. As per FIR, OC EF operated at Zadhima end for 132 kV Chiephebozou line.

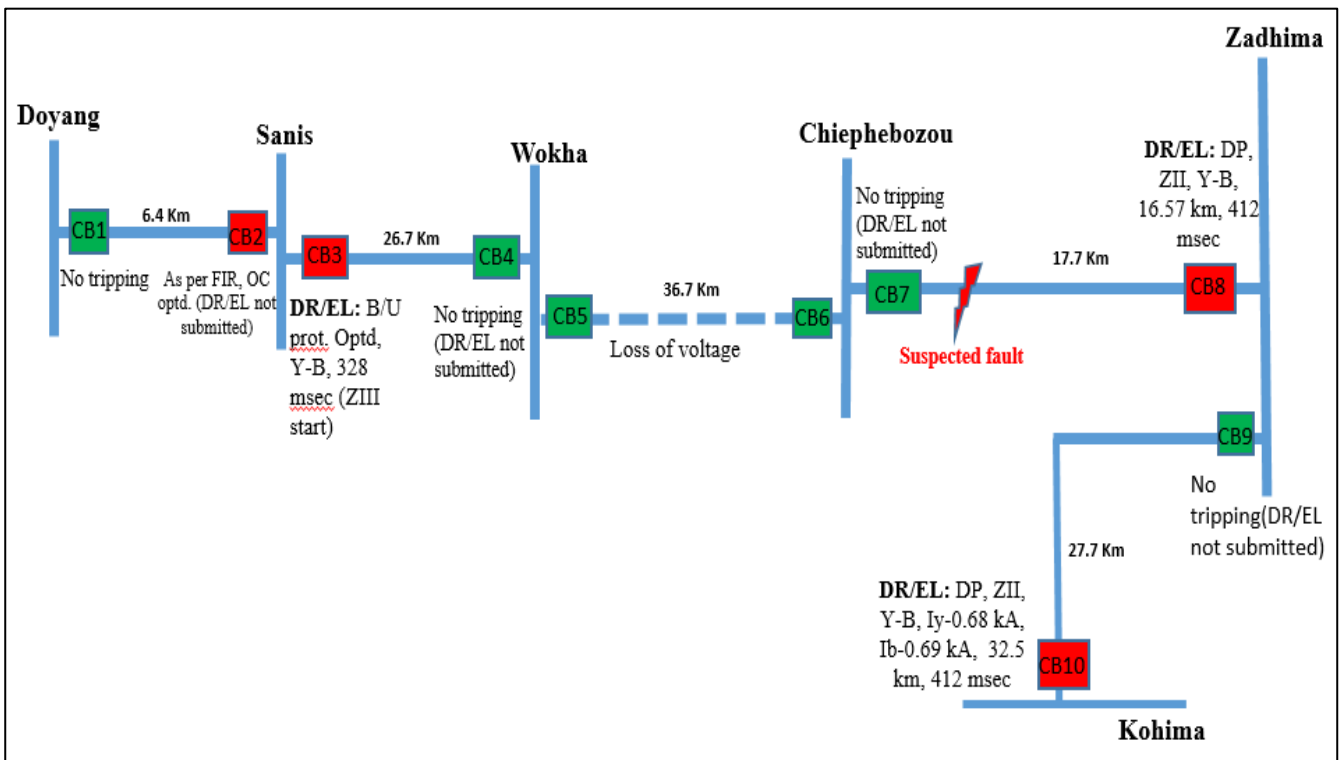
Following observations:

- Tripping of 132 kV Zadhima-Chiephebozou line on operation of OC EF for fault beyond the line is inferred unwanted.
- DR/EL not submitted for tripping of 132 kV Zadhima-Kohima line & Wokha end for Chiephebozou line which is a violation of Clause 37.2 (c) of IEGC-23.

DoP Nagaland may share the root cause of the event and provide update on the above-mentioned issues.

Event 2: Grid disturbance in Sanis, Wokha, Chiephebozou & Zadhima areas of Nagaland on 31-05-2025

At 01:32 Hrs of 31-05-2025, 132 kV Zadhima-Kohima, 132 kV Doyang-Sanis & 132 kV Sanis-Wokha lines tripped resulting in grid disturbance of Sanis, Wokha, Chiephebozou & Zadhima areas of Nagaland. Load loss of 2 MW occurred.



As per DR analysis, Y-B fault (Iy-0.68 kA, Ib-0.69 kA) initiated at 01:48:31.562 Hrs which was cleared within 412 msec from Kohima end on operation of DP, ZII. No tripping from Zadhima end.

132 kV Chiephebozou-Zadhima line tripped on ZII from Zadhima end within 412 msec. No tripping from Chiephebozou end.

132 kV Sanis-Wokha line likely tripped on B/U protection (ZIII start in main relay) within 328 msec. No tripping from Wokha end.

Following observations:

- Suspected fault in 132 kV Zadhima-Chiephebozou line at a distance of 16.57 Km (as per FIR)
- Non-opening of CB7 is a matter of concern.

- 132 kV Sanis-Wokha line tripped within 328 msec on B/U protection. B/U protection setting needs to be reviewed.
- Tripping of 132 kV Doyang-Sanis line on OC protection from Sanis end for fault in reverse direction seems unwanted. Directionality of B/U protection needs to be checked and kept forward direction.
- DR/EL not submitted for CB1, CB2, CB3(B/U protection), CB4, CB5, CB7 & CB9 which is a violation of Clause 37.2 (c) of IEGC-23.
- DR time drift of 16 min observed at Kohima end for Zadhima line, 26 min at Zadhima end for 132 kV Chiepebozou line, 13 min at Sanis end for Wokha line.

Similar incident occurred on 27.06.2024.

DoP Nagaland may share the root cause of the event and provide update on the above-mentioned issues.

C. FOLLOW-UP AGENDA ITEMS

C.1 Submission of monthly and quarterly progress report by respondents of NERLDC's Petition:

As per the Direction of Hon'ble commission related to the Petition No 198/MP/2020, 259/MP/2020, 535/MP/2020, 539/MP/2020 and 540/MP/2020, respective respondents have to submit the **monthly/quarterly progress report** of the action plan prepared by the respective respondents in consultation with the Petitioner (i.e. NERLDC) to NERPC.

Order dated	Petition No	Respondent
08-Nov-2023	198/MP/2020	DoP, Arunachal Pradesh
	259/MP/2020	DoP, Nagaland
	539/MP/2020	MSPCL
27-Oct-2023	535/MP/2020	TPTL/TSECL
	540/MP/2020	P&ED, Mizoram

In 63rd PCCM, MS, NERPC stated that Hon'ble CERC (in above mentioned Petition) has directed the following:

NERPC shall monitor the work of the implementation of the Protection system by the Department of Power, Arunachal Pradesh; Department of Power, Nagaland, MSPCL, TPTL/TSECL, P&ED, Mizoram and shall submit a quarterly progress report to the Commission till the establishment of the Protection system at the substations identified by the NERLDC.

NERPC shall validate relay settings and conduct the Protection Audit of the associated transmission system at the substation and transmission lines, as and when required. Any issue faced during the implementation of Protection system or observed during the protection audit shall be discussed in the Protection Sub-Committee meeting at the RPC forum and sorted out. Concerned Power department /State shall identify one person from their top management as a nodal officer, who shall submit a monthly progress report on the implementation of the protection

system to the NERPC and NERLDC, till the establishment of the Protection system at the substations identified by the NERLDC.

In this regard, Member Secretary stated that the monthly progress reports will be monitored at PCC forum. He requested the States to send monthly progress report and action plan accordingly.

In 79th PCCM, NERLDC informed that only Nagaland has not yet submitted the progress report of April. Forum urged Nagaland to submit the same at the earliest. Further, NERPC stated that the quarterly report for Jan'25-March'25 quarter will be submitted to CERC next week.

Sub-committee may deliberate

C.2 Status on remedial measures actions on non-operation of auto recloser in Important Grid Elements for transient faults occurred in last few months:

Utilities updated in 79th PCCM as provided in the table below:

Sl No	Element Name	Tripping date and time	Relay End1	Relay End2	A/R not Operated	Remarks from Utility (79th PCCM)
1	132 kV Agartala - Surajmaninagar 2 Line	17-11-2023 15:10	DP,ZI,Y-B,FD:5.81 km, AR successful	DP,ZI,R-Y,FD:11.98 KM	Surajmani nagar	Tripura absent
2	132 kV Dimapur - Doyang 2	29-03-2024 13:10	DP, Z1, R-Y, FD: 72.6km	DP, Z1, R-Y	Doyang	CB procurement underway. By May'25
3	132 kV Aizawl - Tipaimukh Line	02-11-2024 10:22	DP, ZII,Y-E, FD: 32.4 KM, Carrier received after CB opening , No Carrier	LLG fault. IL1 1.06kA IL2 0.88 kA FD: 63.3 km (A/R Successful)	Aizawl(PG CIL)	Carrier signal issue at Tipaimukh end. MSPCL to check the time delay settings for sending carrier at Tipaimukh.

			aided tripping			MSPCL updated that issue could not be resolved due to law & Order issue in the state
4	220 kV Behiating - Tinsukia Line	02-11-2024 10:32	DP, ZI, B-E, 1.1 kA	DP, ZI, B-E	Both ends	AEGCL updated that matter has been raised to NERPSIP. Matter to be taken up in NERSIP review meeting
5	132 kV Panchgram - Lumshnong Line	04-11-2024 12:50	DP, ZI, Y-E, FD: 12.5km, 3.2kA	DP, ZI, Y-E, FD: 39.9 km	Both Ends	AR in disabled mode at both ends. To be enabled after CT replacement at Lumshnonng end by MePTCL.
6	132 kV Bokajan - Dimapur Line	10-11-2024 13:08	DP, ZI, Y-E, FD: 20.3 kms	DP, ZI, Y-E, FD: 8.4 KM, AR Successful	Bokajan (AEGCL)	Issues with pneumatic breakers at Bokajan end. New CBs in transit, to reach the site by end of June'25. After that 1 week required for installing the CBs.
7	132 kV Daporijo - Ziro Line	13-01-2025 15:00:00	DP, ZI, B-E, AR Not Operated	DP, ZI, B-E, FD: 67.724Kms, A/R	Daporijo (DoP AP)	Relay logic issues, will be checked.

				Operated Successful ly		Issue with pneumatic CBs. Procurement of new CBs underway.
8	132 kV AGTCCPP - Kumarghat Line	16-03- 2025 20:32:00	DP, ZI, B-E, FD: 22.08 Kms, A/R Not Operated	DP, ZI, B- E, FD: 76.656 Kms, A/R Operated Successful ly	AGTCCPP (NEEPCO)	End to end testing will be done in coordination with NERTS to resolve the AR issue at AGTCCPP. Requested NERTS to extend support in the matter.
9	132 kV Basar- Daporijo Line	19-03- 2025 08:44:00	DP, ZI, R-Y, FD: 33.15 km, A/R Not Operated	DP, ZI, R- Y, A/R Operated Successful ly	Basar (DoP, Arunachal Pradesh)	Multiphase AR logic implemented at Basar but not working. Basar SS is not handed over to DoP. Issue to be resolved jointly by DoP, AP And NER Comprehensive team of Powergrid.
10	132 kV Jiribam - Tipaimukh Line	05-04- 2025 20:05:00	DP, ZI, R-E, FD: 48.14 Kms, AR Operated Sucessfully	DP, R- E, 16.7 KM, Ir-0.81 KA	Tipaimukh (MSPCL)	MSPCL informed that issue was SF6 leakage in CB, now resolved. NERLDC

						informed that failure of AR occurred on 18th May'25. MSPCL to look into it again.
11	132 kV Lekhi - Nirjuli Line	05-04-2025 20:56	DP, ZI, Y-E, FD: 0.489 km	DP, ZI, Y-E, FD: 5.9 Kms, AR Operated Unsucessfully	Lekhi (AP)	AR was in lockout condition. Will check SF6 level.
12	132 kV Loktak - Rengpang Line	05-04-2025 21:12:00	DP, ZI, B-E, FD: 15.44 Kms	Loss of Voltage	Loktak(NHPC)	NHPC to check and update
13	132 kV Pare - Itanagar Line	05-04-2025 22:30:00	DP, ZI, R-E	DP, ZII, R-E, FD: 29.9 KM	Both Ends	Carrier aided AR logic needs to be checked and end-to-end testing to be done. By May'25
14	132 kV Khandong - Khliehriat Line	06-04-2025 16:35:00	M1:B-N ,Z-1, 4.129 KA, 2.057 KM, AR Operated Sucessfully	M1:B-N ,Z-1, 4.129 KA, 2.057 KM	Khliehriat (POWERGRID)	Spurious DT received at Khliehriat (PG) end due to which AR not operated. Root cause is under investigation..
15	220 kV Sarusajai-Sonapur Line	10-04-2025 12:44	DP, ZI, R-E, FD: 6.9 Kms; AR Not Operated	DP, ZI, Y-E, FD: 36.9Kms; AR Operated Sucessfully	Sarusajai (AEGCL)	No update from AEGCL. AEGCL to confirm the non-operation of AR.

16	220 kV Mariani (AEGCL) - Samaguri Line	13-04- 2025 10:04	DP, ZI, Y-E, FD: 146.7 Kms; AR Operated Sucessfully	DP, ZI, Y- E, FD:2.4 kms; AR Not Operated	Samaguri (AEGCL)	DI card faulty, replacement by May'25
17	220 kV Kopili - Misa 2 Line	16-04- 2025 11:25	DP, ZI, R-E, FD: 1.050 kms; AR Not Operated	DP, ZII, R- E, FD: 86.81 Kms; Carrier received; AR Operated Sucessfull y	Kopili (NEEPCO)	Spurious DT received at Kopili which was suspected due to wiring issue. The matter is under investigation
18	400 kV Misa - Silchar 2 Line	16-04- 2025 11:55	DP, ZI, R-E, FD: 78Kms; AR Not Operated	DP, ZI, Y- E, FD: 157.682K ms; AR Operated Successful ly	Misa (POWERG RID)	D60 relay configuration issue (Single phase fault seen as Three phase fault due to which AR not operated). To be rectified shortly.
19	132 kV AGTCCPP - Kumarghat Line	21-04- 2025 05:51	DP, ZI, B-E, FD: 22.69kms; AR Not Operated	DP, ZI, B- E, FD: 77.191km s; AR Operated Sucessfull y	AGTCCPP (NEEPCO)	NEEPCO stated that the issue could not be identified and resolved through online support from OEM. He requested Power grid to extend support in this regard

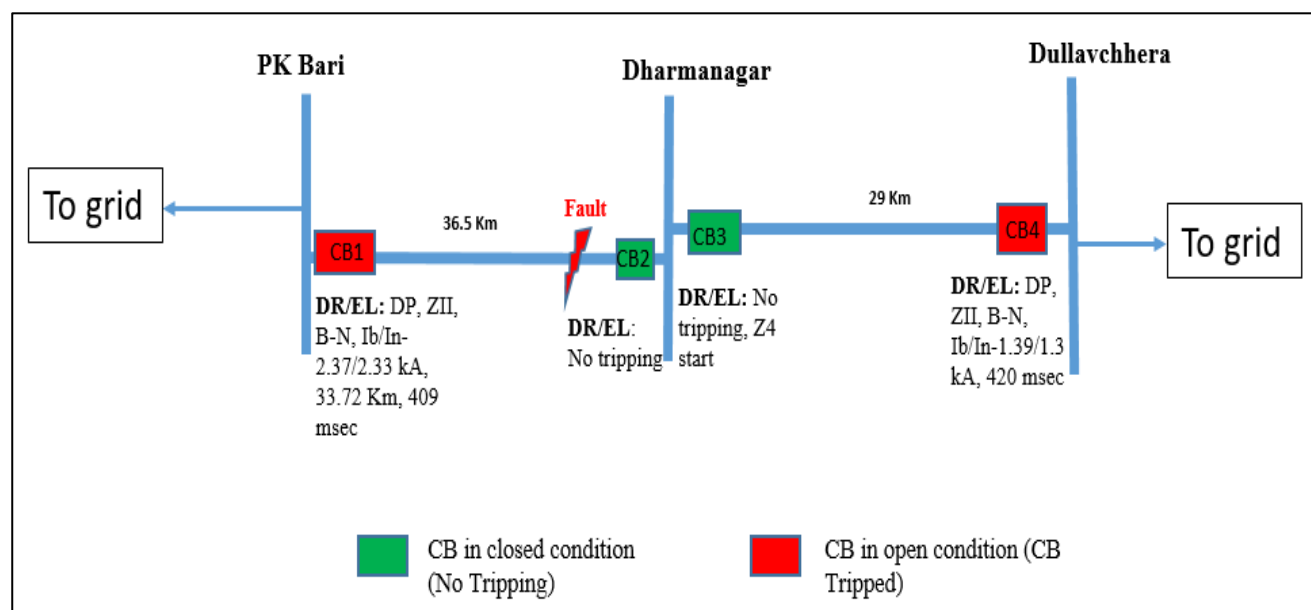
20	132 kV Gohpur- Itanagar Line	28-04- 2025 10:15	DP, ZII, B-N, 40.3 Km, AR not operated	DP, ZI, B- N, 0.89 Km, AR successful	Gohpur (AEGCL)	Carrier healthy signal wire loose. Applied for Shutdown to rectify the issue.
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Utilities may further update

C.3 Grid Disturbance in Dharmanagar area of Tripura Power system on 28-04-2025:

Dharmanagar area of Tripura power system was connected to rest of NER grid through 13 2kV Dharmanagar –Dullavcherra and 132 kV P K Bari – Dharmanagar lines.

At 09:07 Hrs of 28-04-2025, 132 kV Dharmanagar –Dullavcherra line and 132 kV P K Bari –Dharmanagar line tripped resulting in grid disturbance in Dharmanagar S/S. Load loss of 9 MW occurred.



As per DR analysis, solid B-N fault (Ib-2.37 kA, In-2.33 kA) in 132 kV PK Bari-Dharmanagar Line initiated at 09:03:35.099 Hrs which was cleared within 409 msec from PK Bari end on operation of DP, ZII.

For 132 kV Dharmanagar-Dullavcherra Line, fault cleared from Dullavcherra end within 420 msec on operation of ZII. Z4 started at 09:05:46.628 Hrs. Fault current disappears after 420 msec.

Following observations:

- Suspected fault in 132 kV PK Bari-Dharmanagar line as fault distance is 33.72 Km from PK Bari end. Also, Z4 started at Dharmanagar end for 132 kV Dullavchhera line indicating fault in reverse direction.
- Protection system at Dharmanagar end for 132 kV PK Bari Line failed to isolate the fault in line resulting in clearance of fault by tripping of healthy 132 kV Dharmanagar-Dullavchhera Line from Dullavchhera end on ZII.
- DR time drift of 4 min observed at PK Bari end for 132 kV Dharmanagar Line.
- Non-submission of flash report and detailed report by TSECL which is a violation of Clause 37.2 (b) & 37.2 (e) of IEGC regulation 2023.

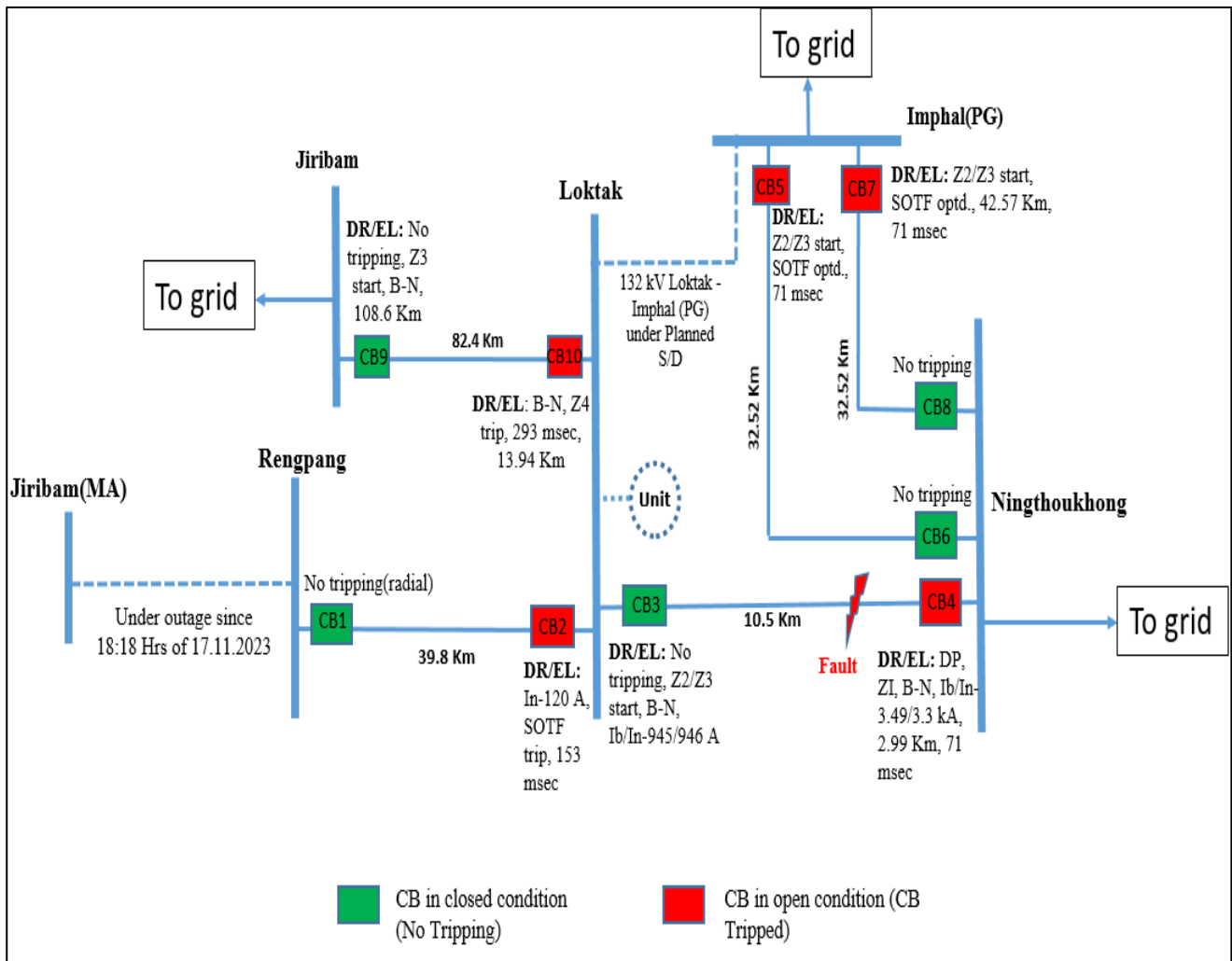
Similar incident occurred on 10.03.2024, 16.03.2024 and 22.04.2024.

TSECL to share the root cause and provide update on the above mentioned issues.

C.4 Grid Disturbance in Loktak HEP of NHPC & Rengpang area of Manipur Power system on 24-03-2025

Loktak HEP of NHPC and Rengpang area of Manipur power system were connected with rest of NER grid through 132 kV Loktak-Jiribam, 132 kV Loktak-Imphal(PG), 132 kV Loktak-Ningthoukhong and 132 kV Loktak-Rengpang lines. Prior to the event, 132 kV Loktak-Imphal(PG) line was under planned shutdown and all units of Loktak were withdrawn as per schedule. Also, 132 kV Jiribam(MA)-Rengpang line was under outage since 17-11-2023.

At 11:38 Hrs of 24.03.2025, 132 kV Loktak-Jiribam, 132 kV Loktak-Ningthoukhong and 132 kV Loktak-Rengpang lines tripped resulting in blackout of Loktak HEP & Rengpang. Load loss of 1 MW occurred.



As per DR analysis, resistive B-N fault (Ib-3.49 kA, In-3.3 kA) in 132 kV Loktak-Ningthoukhong line at a distance of 2.99 Km initiated at 11:38:07.129 Hrs which was cleared within 71 msec from Ningthoukhong end on operation of DP, ZI. ZII started at Loktak end (no tripping) and fault current disappeared within 293 msec. 132 kV Loktak-Jiribam line tripped from Loktak end on Z4 within 293 msec (FD: 13.94 Km). Z3 start from Jiribam end and no tripping.

132 kV Imphal(PG)-Ningthoukhong II & III lines tripped on SOTF within 71 msec (Z2/Z3 started and FD: 42.57 Km).

Suspected fault is in 132 kV Loktak-Ningthoukhong line. Tripping of 132 kV Loktak-Jiribam line at Loktak end prior to CB opening at Loktak for 132 kV Ningthoukhong line led to blackout in Loktak HEP and Rengpang S/S.

Following observations:

- Tripping of 132 kV Loktak-Jiribam line on Z4 from Loktak within 293 msec seems misoperation. Z4 time delay setting needs to be reviewed and set as per NER protection philosophy.

- Tripping of 132 kV Imphal (PG)-Ningthoukhong II & III lines on SOTF operated from Imphal (PG) for fault beyond the line is inferred unwanted.
- 132 kV Loktak-Rengpang line tripped on SOTF within 153 msec. The same needs to be checked by NHPC.
- Time drift of 7 min observed at Ningthoukhong end for 132 kV Loktak-Ningthoukhong line which need to be sync with GPS.
- Non-submission of flash report and detailed report by NHPC & MSPCL which is a violation of Clause 37.2 (b) & 37.2 (e) of IEGC regulation 2023.

Deliberation of the 78th PCC

PowerGrid informed, regarding tripping of Imhpal-Ningthoukhong lines on SOTF, that there was some configuration issue and same has been rectified.

NHPC informed that there is no LBB protection at Loktak S/S and Z4 time delay was kept at 200-250 msec at Loktak for 132 kV Jiribam Line.

Forum directed NHPC to –

1. Implement PLCC and Line differential protection on the Loktak Ningthoukhong (10.5 Km) line
2. Review and rectify the Z4 timing and reach at Loktak end for the Jiribam line
3. Rectify the SOTF issue at Loktak end for Rengpang line.

Submit detailed report of the grid event at Loktak

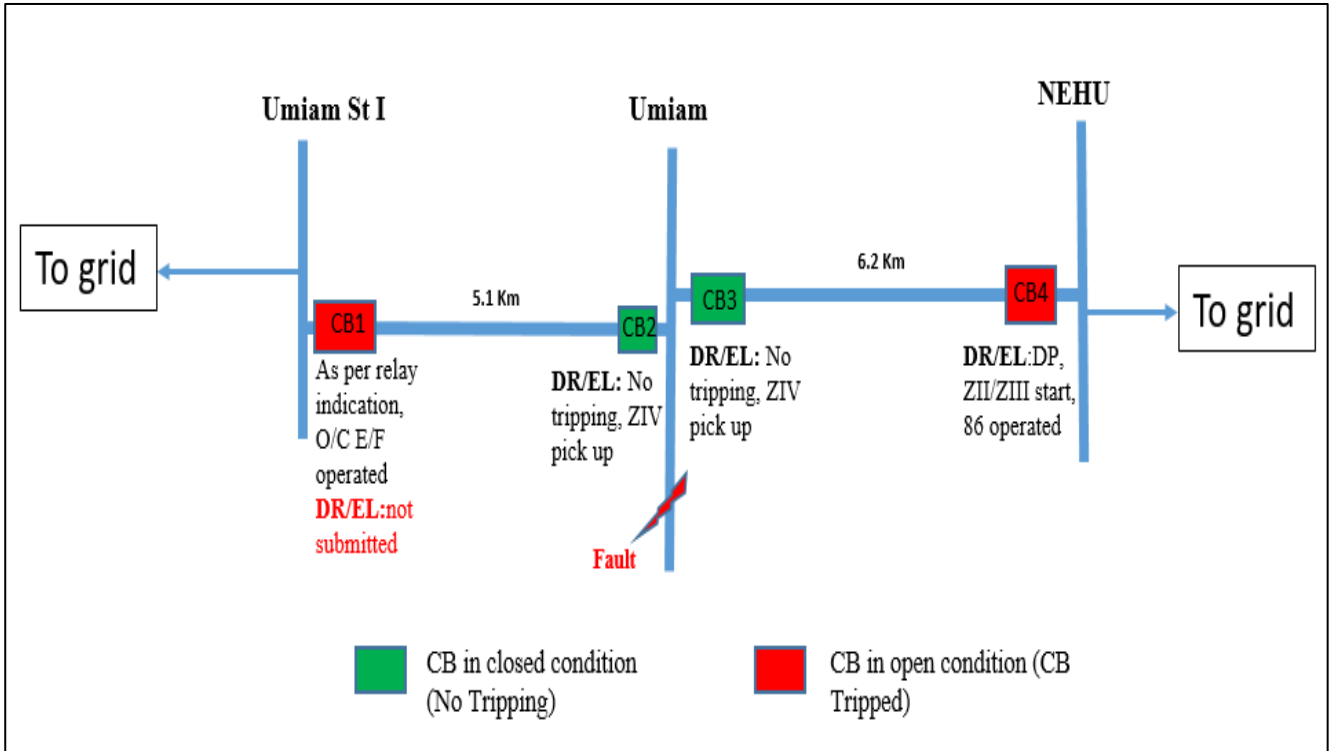
In 79th PCCM, NHPC updated as follow –

1. Implement PLCC and Line differential protection on the Loktak Ningthoukhong (10.5 Km) line – Going to purchase PLCC or may be DTPC. LDR matter has been escalated to higher authority.
2. Review and rectify the Z4 timing and reach at Loktak end for the Jiribam line – to be done within a week
3. Rectify the SOTF issue at Loktak end for Rengpang line. – to be done within a week

NHPC may further update

C.5 Grid disturbance in 132 kV Umiam S/S of Meghalaya Power system on 01-04-2025:

At 01:55 Hrs of 01-04-2025, 132 kV Umiam-Umiam Stg I and 132 kV NEHU-Umiam Lines tripped resulting in blackout of 132 kV Umiam S/S of Meghalaya Power system.



As per DR analysis, R-N fault (Ir-3.1 kA, In-2.9 kA) initiated at 01:55:31.117 Hrs which was cleared within 121 msec from NEHU end. ZII/ZIII start and 86 operated at 01:55:31.202 Hrs. Z4 pickup at Umiam end (no tripping).

For 132 kV Umiam St I-Umiam line, Z4 started at Umiam end and fault current disappears after 255 msec. FIR/DR/EL of Umiam Stg I end not submitted by MePGCL.

Z4 pickup at Umiam end for tripping of 132 kV NEHU-Umiam and 132 kV Umiam-Umiam St I line indicates that fault is in 132 kV Umiam Switchyard.

As per FIR, R-phase CT blast at 132 kV Umiam S/S.

Following observations:

- It is not clear which protection system operated at NEHU end for 132 kV Umiam line and cleared the fault.
- FIR/DR/EL at Umiam St I end for 132 kV Umiam St I-Umiam Line not submitted by MePGCL which is a violation of Clause 37.2 (c) of IEGC-23.
- Time drift of 1 Hour observed at Umiam end for 132 kV Umiam St I Line.
- Flash report and detailed report not submitted by MePTCL Clause 37.2 (b) & 37.2 (e) of IEGC regulation 2023.

Deliberation of the 78th PCC

MePGCL updated that fault occurred at Umiam substations due to blasting of R-phase CT blast at 132 kV Umiam S/S for 132 kV Umiam – NEHU line. The same line tripped on LDP protection at NEHU end & CB opening delayed at Umiam end. However, 132 kV Umiam St-I – Umiam Line tripped early from Umiam Stg-I.

MePTCL informed that unwanted tripped occurred at Umiam St I due to OC Highset enabled resulted into early clearance from Umiam St I.

Further, he informed that there is no distance protection at the Umiam stg I end for the Umiam line and also there are no LDP for the lines due to non-availability of the OPGW links.

Forum suggested MePGCL that High set to be disabled at Umiam St I.

Forum requested MePGCL to install the Distance protection at Umiam stg I at the earliest and install OPGW on the lines and enable the LDP.

In 79th PCCM, MePGCL updated as follow –

1. Distance protection on the line- to be enabled by June'25.
2. OPGW on the line – DPR sent to PSDF last year, under discussion in TESG. TESG raised some query which is being replied to.
3. MePGCL informed that High set will be disabled at Umiam St I by June'25.

MePGCL may further update

C.6 Status on resolution of protection issues as discussed in 79th and 78th PCCM

<i>SN</i>	<i>Protection issues to be resolved as decided in previous PCC meetings</i>	<i>Concerned Utility</i>	<i>Previous status</i>	<i>Latest status (80th PCCM)</i>
1.	LDP on Rokhia-N.Rokhia link	TSECL	RoW issue resolved. Work to be completed by next PCC	
2.	BB protection stability test at Doyang	NEEPCO	Hitachi provided the offer, but there is issue with terms of payment, will be	

			resolved by end of May'25	
3.	Modification of SPS Scheme related to the outage of 132 kV Leshka –Khliehriat D/C after LILO at 132 kV Mynkre S/S	MePTCL	Matter has been taken up with NERPSIP. Also, Protection coupler is not present there, in talk with ABB	
4.	Grid Disturbance in Tuirial S/S of NEEPCO & Kolasib and Bairabi areas of Mizoram Power System on 20-03-2025: Protection system of 132 kV Kolasib-Tuirial line failed to isolate the fault. P&ED Mizoram needs to ensure healthiness of protection system of 132 kV Kolasib-Tuirial line.	Mizoram	Mizoram to conduct relay testing for checking the healthiness for 132 kV Kolasib – Tuirial and 132 kV Kolasib – Bairabi line.	
5.	Grid Disturbance in Mawlyndep area of Meghalaya Power system on 23-03-2025: “Carrier send” signal high at Mawlyndep end. However, 132 kV	MePTCL	NERLDC highlighted in 78th PCCM that there was no carrier aided tripping at Mustem despite carrier received from Mawlyndep end. Forum directed	Protection coupler at Mustem is defective due to which carrier aided tripping did not occur at Mustem.

	Mustem-Mawlyndep line tripped after ZII time delay. The same needs to be checked by MePTCL.		MePTCL to look into and resolve the matter at the earliest and install GPS.	MePTCL informed that communication team is trying to replace the defective coupler. However, no spare is available. Spare protection coupler of other substations to be used.
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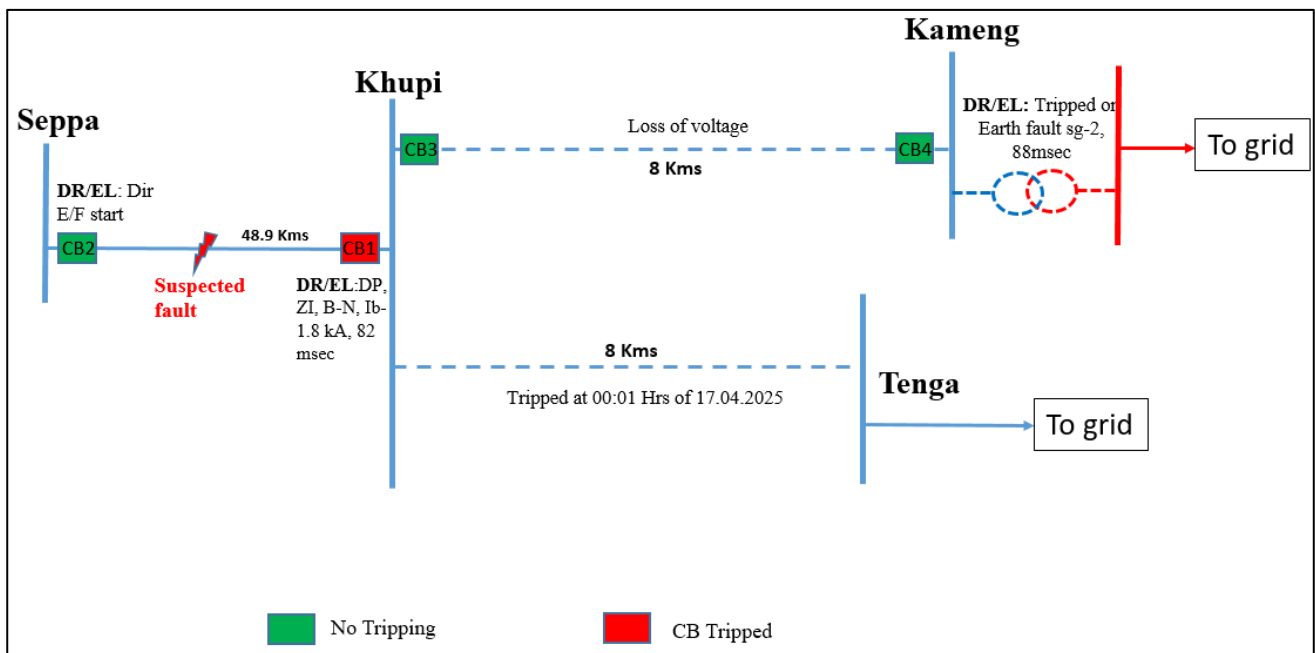
Utilities may further update

C.7 Frequent tripping of 400/132 kV Kameng ICT and Grid disturbances in Tenga, Khupi and Seppa areas of Arunachal Pradesh during April, 2025:

400/132 kV Kameng ICT tripped twice during Apr'2025 causing grid disturbance in Tenga, Khupi & Seppa areas of Arunachal Pradesh which is a matter of serious concern.

Event 1: At 13:58 Hrs of 17th April'25

Prior to the event, 132 kV Tenga-Khupi Line tripped at 00:01 Hrs of 17-04-2025. At 13:58 Hrs of 17.04.2025, 400/132 kV ICT at Kameng and 132 kV Khupi-Seppa line tripped resulting in grid disturbance in 132 kV Kameng S/S of NEEPCO, Khupi and Seppa areas of Arunachal Pradesh. Load loss of 1 MW occurred.



As per DR analysis, B-N fault with Ib-1.8 kA initiated at 14:01:22.820 Hrs which was cleared within 82 msec from Khupi end on operation of DP, ZI. Directional E/F started at 13:58:54.479 Hrs and no tripping from Seppa end.

As intimated by DoP Arunachal Pradesh, vegetation B-N fault in 132 kV Khupi-Seppa Line at a distance of 28.3 Km from Khupi end.

At 13:58:52.814 Hrs, Kameng ICT tripped on E/F Stg-II within 88 msec which seems to be unwanted.

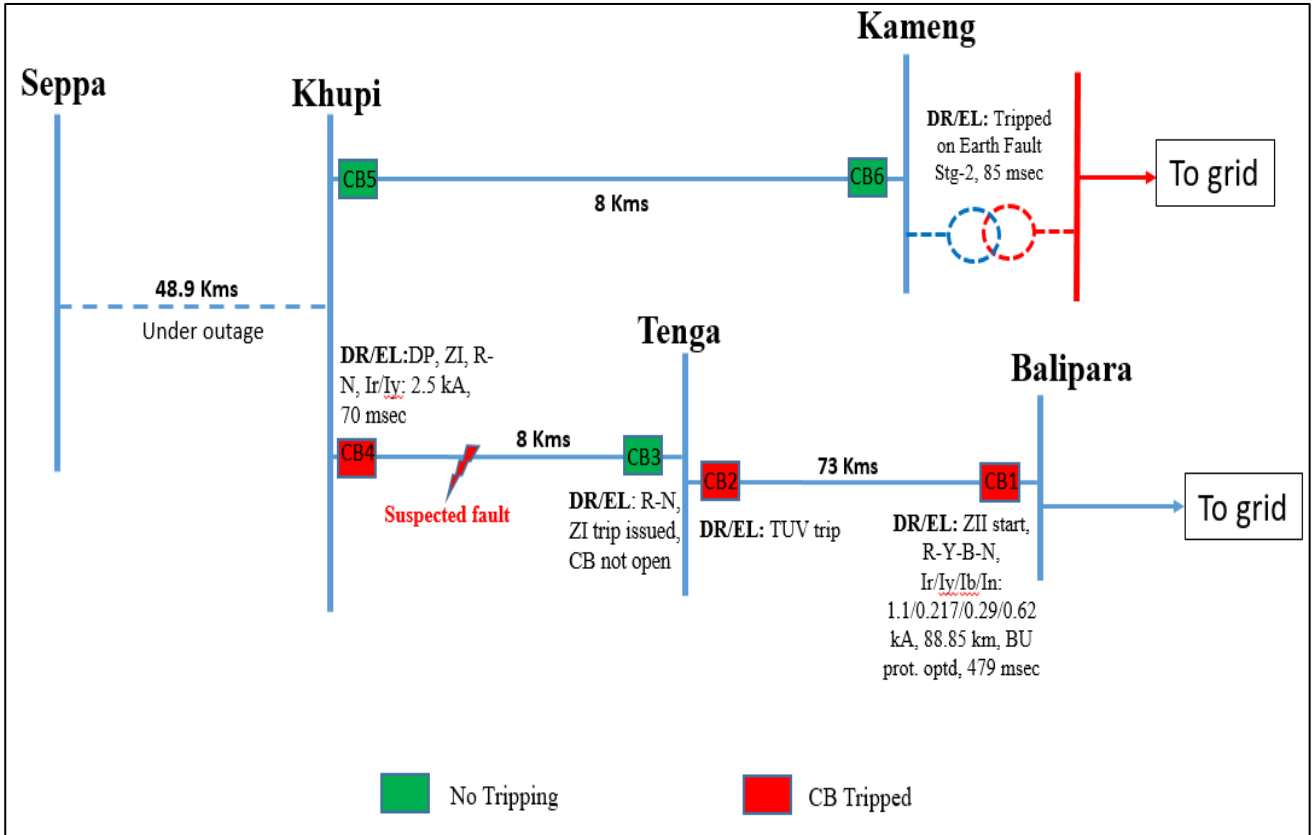
Following observations:

- Instantaneous tripping of Kameng ICT on E/F Stg-II during fault in downstream lines is unwanted. Maloperation of the ICT HV side protection is likely due to very low current pick up settings for High set B/U E/F protection. High set Backup E/F setting needs to be reviewed and coordinated to prevent unwanted tripping for the fault beyond protected zone.
- DR analog and digital channel of Kameng ICT & 132 kV Khupi-Seppa Line needs to be standardized as per recommendations in FOLD working group.
- Non-submission of flash report and detailed report by DoP Arunachal Pradesh & NEEPCO which is a violation of Clause 37.2 (b) & 37.2 (e) of IEGC regulation 2023.

Event 2: At 18:15 Hrs of 24th April'25

Prior to the event, 132 kV Khupi-Seppa line was under outage. At 18:15 Hrs of 24.04.2025, 400/132 kV ICT at Kameng, 132 kV Balipara-Tenga line and 132 kV

Tenga-Khupi line tripped resulting in grid disturbance in 132 kV Kameng S/S of NEEPCO and Tenga, Khupi and Dikshi areas of Arunachal Pradesh. Load loss of 13 MW occurred.



As per DR analysis, R-N fault (Ir-2.5 kA, In-2.5 kA) initiated at 18:15:35.763 Hrs in 132 kV Tenga-Khupi Line which was cleared within 70 msec from Khupi end on operation of DP, ZI. From Tenga end, DEF start & ZI trip command issued. However, Tenga CB did not open.

Due to non-opening of CB at Tenga, fault was continuously feeding through 132 kV Balipara-Tenga line which was cleared by tripping of Balipara CB within 479 msec on operation of BU E/F O/C (Z2 started).

At 18:15:49.699 Hrs, Kameng ICT tripped on E/F Stg-II within 85 msec which seems to be unwanted.

Following observations:

- Non-opening of CB at Tenga end for 132 kV Khupi Line despite issuance of ZI trip is a matter of concern. The same needs to be checked by DoP Arunachal Pradesh.
- Instantaneous tripping of Kameng ICT on E/F Stg-II during fault in downstream lines is unwanted. Maloperation of the ICT HV side protection is likely due to very low current pick up settings for High set B/U E/F protection.

High set Backup E/F setting needs to be reviewed and coordinated to prevent unwanted tripping for the fault beyond protected zone.

- DR analog and digital channel of Kameng ICT needs to be standardized as per recommendations in FOLD working group.
- The back-up protection settings at Kameng, Khupi and Tenga needs to be reviewed and coordinated as per NER protection philosophy.
- Non-submission of flash report and detailed report by DoP Arunachal Pradesh & NEEPCO which is a violation of Clause 37.2 (b) & 37.2 (e) of IEGC regulation 2023.

Frequent tripping of 400/132 kV Kameng ICT was intimated to NEEPCO vide email dated 28th April'25.

Similar incident occurred on 05.05.2024, 09.07.2024, 11.07.2024, 19.07.2024, 12.08.2024 & 18.08.2024.

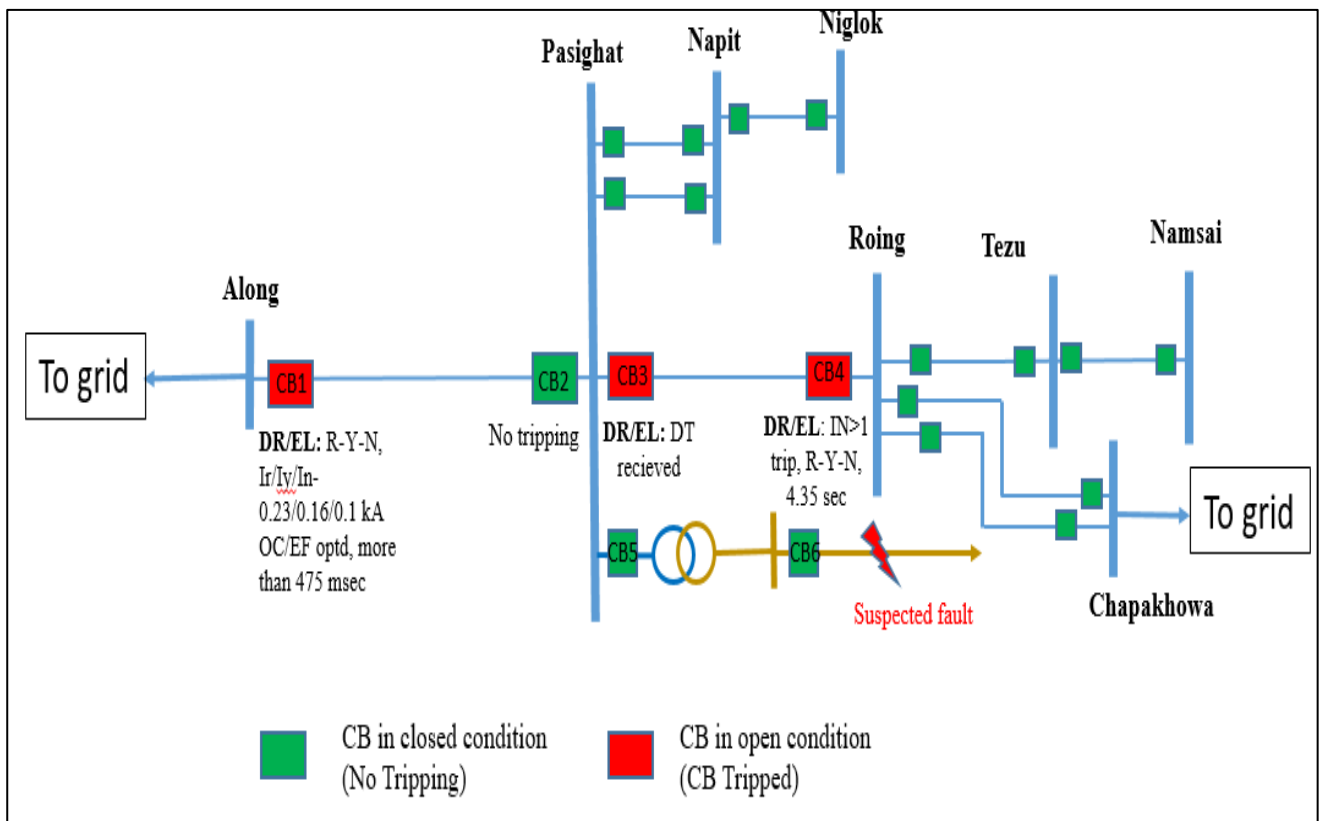
As per 79th PCC minutes,

Regarding non-opening of CB at Tenga end for 132 kV Khupi Line despite issuance of ZI trip, DoP AR. Pradesh informed that 33 kV line fell on DC supply due to which trip coil at Tenga end got burnt. Issue has been resolved now. Regarding instantaneous tripping of Kameng ICT on EF, MS NERPC instructed that the settings to be reviewed in a joint meeting between NERPC, NERLDC , DoP AR. Pradesh, NEEPCO and Powergrid.

Sub-committee may deliberate

C.8 Grid Disturbance in Pasighat and radially connected Napit & Niglok areas of Arunachal Pradesh on 22-04-2025:

At 00:37 Hrs of 22-04-2025, 132 kV Along-Pasighat & 132 kV Roing - Pasighat lines tripped resulting in grid disturbance in Pasighat and radially connected Napit & Niglok areas of Arunachal Pradesh. Load loss of 22 MW occurred.



As per DR analysis, R-Y-N fault with Ir-237 A, Iy-167 A, In-107 A observed which was cleared in more than 475 msec from Along end on operation of OC/EF protection. No tripping from Pasighat end as per submitted DR. Fault duration recorded at Pasighat EL - 3.726 sec.

For 132 kV Roing-Pasighat Line, R-Y-N fault initiated at 00:37:16.786 Hrs and cleared within 4.35 sec on operation of E/F from Roing end and DT recieved at Pasighat end.

Following observations:

- Protection system of downstream feeder and HV side of transformer failed to isolate the fault resulting in clearing of fault by tripping of healthy 132 kV Along-Pasighat and 132 kV Roing-Pasighat Lines.
- For DR submitted for 132 kV Along-Pasighat & 132 kV Roing-Pasighat lines, pre-fault data is not visible which is the cause of concern. As per DR Standardisation report of FOLD Working Group 3, pre-fault data of 500 msec and post fault data of 2500 msec should be visible in the DR window.
- DR Time drift of 2 min observed at Pasighat for 132 kV Along Line and 13 min for 132 kV Roing Line.

- Non-submission of detailed report by DoP Arunachal Pradesh which is a violation of Clause 37.2 (e) of IEGC regulation 2023.

Similar kind of event occurred at 16:01 Hrs of 03-05-2025 in which tripping of 132 kV Along-Pasighat & 132 kV Roing - Pasighat lines led to loss of power in Pasighat, Napit & Niglok areas of Arunachal Pradesh. Such repeated grid disturbances are the cause of concern.

During 2024, similar incident occurred on 24.09.2024, 25.09.2024, 16.11.2024 and 08.12.2024.

As per 79th PCC minutes,

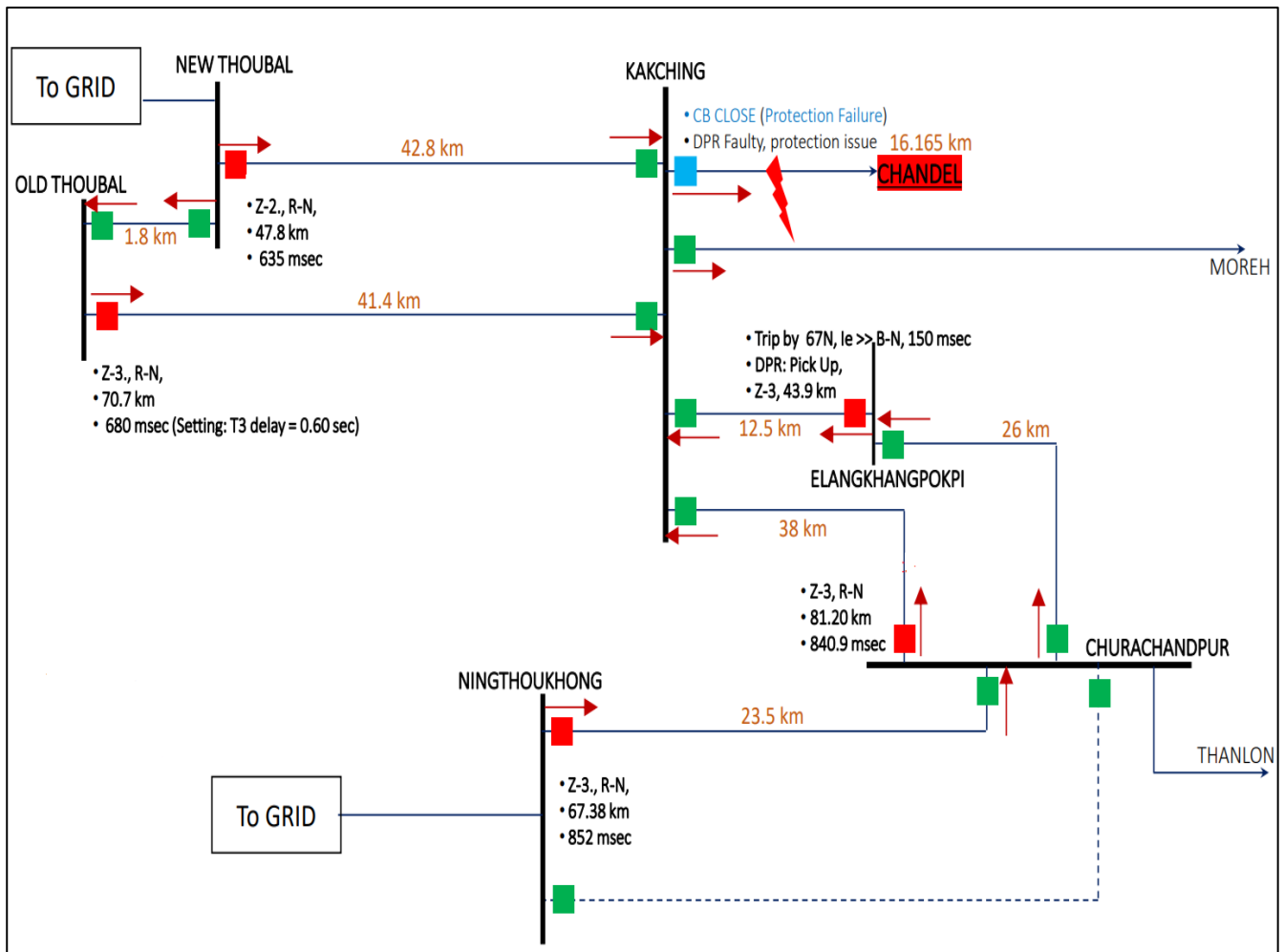
DoP Ar. Pradesh apprised that the fault was in downstream 33kV line and HV side of ICT at Pasighat which was not cleared by HV side Transformer due to faulty trip coil. The same has been replaced. Other 132/33 kV Transformer trip coil is faulty. The same will be kept isolated till the issue is rectified. NERLDC informed that such incident reoccurred on 3rd May'25. Forum opined that the downstream fault should have been cleared by 33 kV feeder itself or the HV side of the ICT and exhorted DoP Ar. Pradesh to resolve the issues at the earliest.

DoP Ar. Pradesh may further update

C.9 Grid disturbance in Churachandpur, Elangkankpokpi, Thanlon, Kakching, Chandel and Morey areas of Manipur and Tamu area Myanmar Power system on 28-04-2025:

Churachandpur, Elangkankpokpi, Thanlon, Kakching, Chandel and Morey areas of Manipur and Tamu area Myanmar Power system were connected to rest of NER grid through 132 kV Ningthoukhong-Churachandpur II, 132 kV Old Thoubal-Kakching & 132 kV New Thoubal-Kakching Lines. Prior to the event, 132 kV Ningthoukhong-Churachandpur I line is under outage since 13:48 Hrs of 04.08.2024.

At 13:43 Hrs of 28-04-2025, 132 kV Ningthoukhong-Churachandpur II, 132 kV Old Thoubal-Kakching, 132 kV New Thoubal-Kakching & 132 kV Churachandpur-Kakching Lines tripped. Load loss of 30 MW occurred.



As per DR analysis of 132 kV Ningthoukhong-Churachandpur II Line, R-N fault (Ir-1.26 kA, In-1 kA) initiated at 13:42:32.292 Hrs which was cleared within 852 msec from Ningthoukhong end on operation of DP, ZIII.

At 13:42:20.911 Hrs, 132 kV Old Thoubal-Kakching Line tripped from Old Thoubal end (as per EL, DR file not opening)

Suspected fault is beyond Churachandpur and Kakching Substations as fault distance of 67.38 Km from Ningthoukhong end.

Following observations:

- Exact location of fault could not be concluded as DR/EL not submitted by MSPCL.
- It is unclear which protection system operated and cleared the fault from Old Thoubal end for 132 kV Kakching Line.
- SOE not recorded for tripping of 132 kV Churachandpur-Kakching Line & 132 kV Old Thoubal-Kakching Line. The same needs attention from MSPCL/SLDC Manipur team.

- Non-submission of flash report and detailed report by MSPCL which is a violation of Clause 37.2 (b) & 37.2 (e) of IEGC regulation 2023.

Similar incident occurred on 05.07.2024.

As per 79th PCC minutes,

Sl. No.	Observations	Remarks
1	Exact location of fault could not be concluded.	Vegetation fault was in 132 kV Kakching-Chandel Line
2	Protection system of 132 kV Kakching-Chandel line failed to isolate the fault.	Protection Circuit checked and distance relay replaced, settings and PSL tested.
3	132 kV New Thoubal-Kakching line tripped on ZII from New Thoubal end within 635 msec. ZII time delay needs to be revised as per protection philosophy.	Settings reviewed, will be updated once approved.
4	132 kV Old Thoubal-Kakching Line on ZIII from Old Thoubal end within 680 msec. ZIII time delay needs to be revised as per protection philosophy.	Settings reviewed, will be updated once approved.
5	132 kV Elangkankpokpi-Kakching line tripped on E/F from Elangkankpokpi end within 150 msec. B/U E/F protection needs to be coordinated with ZIII time delay as per protection philosophy. Phase sequence issue observed	Settings reviewed, settings changed as per standard template, testing yet to be done.
6	132 kV Churachandpur-Kakching line tripped on ZIII from Churachandpur end within 841 msec which is inferred unwanted. ZIII reach needs to be reviewed and set as per protection philosophy.	Setting review yet to be done
7	132 kV Ningthoukhong-Churachandpur II line tripped on ZIII from Ningthoukhong end within 852 msec	Forum urged MSPCL to review the ZIII reach at Ningthoukhong end.

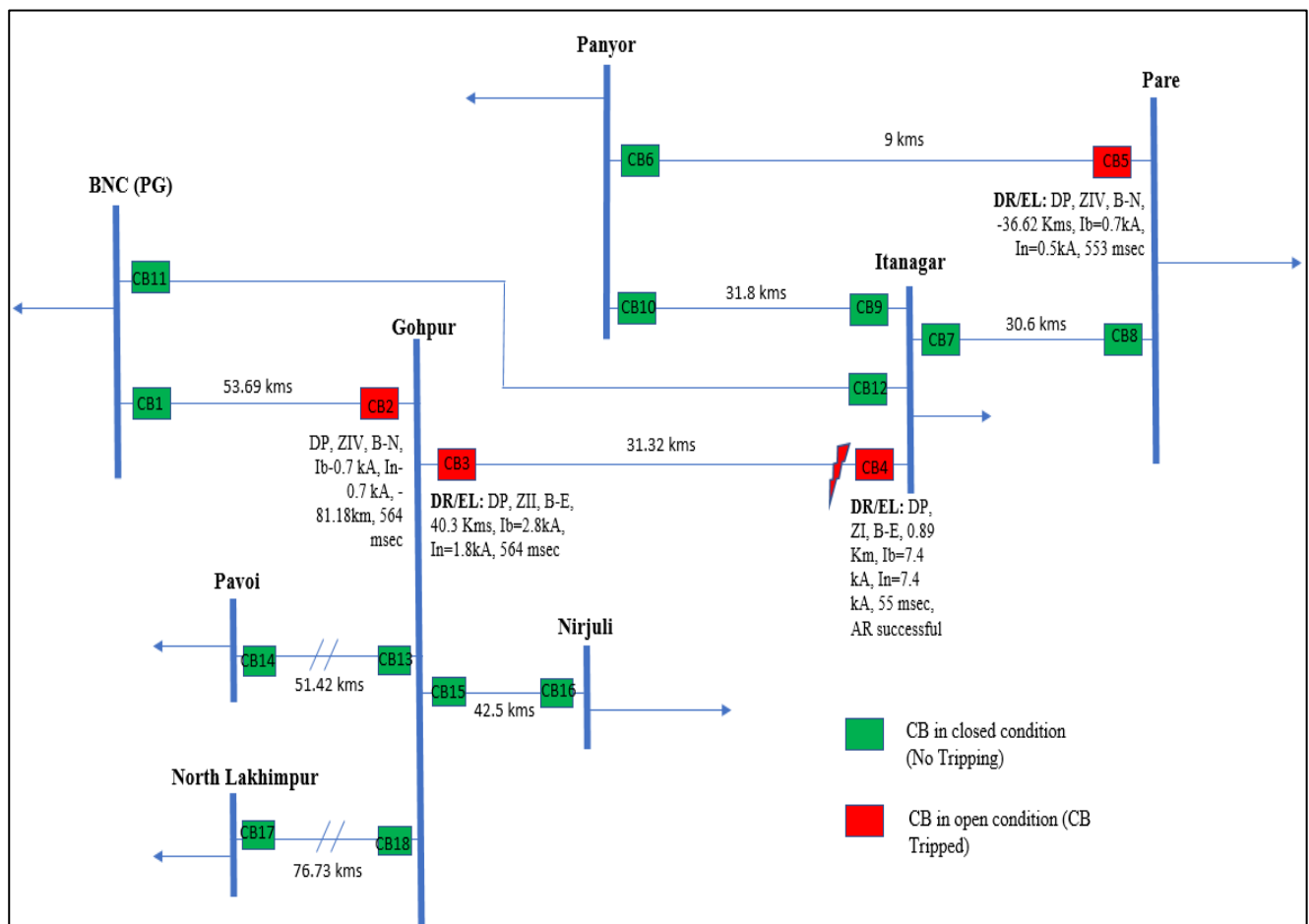
8	DR/EL not submitted for tripping of 132 kV New Thoubal-Kakching, 132 kV Old Thoubal-Kakching, 132 kV Churachandpur-Elangkankpokpi & 132 kV Elangkankpokpi-Kakching Lines	Forum asked MSPCL to submit all the DR/EL files
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NERPC highlighted that ZIII should not have operated at Ningthoungkong end for Churachandpur line and instructed Mizoram to check the reach of ZIII and limit it to the 100% of Main line + 100% of the longest line at remote end.

MSPCL may update

C.10 Multiple tripping on 28-04-2025:

At 10:15 Hrs of 28-04-2025, 132 kV Gohpur-Itanagar, 132 kV Panyor-Pare & 132 kV BNC-Gohpur Lines tripped.



As per DR analysis, B-N fault (Ib-7.4 kA, In-7.4 kA) in 132 kV Gohpur-Itanagar Line initiated at 10:15:15.920 Hrs which was cleared within 55 msec from Itanagar end on operation of DP, ZI (Carrier Send). B-N fault converted into R-Y-N fault (Ir-0.36

kA, Iy-0.56 kA, In-0.9 kA). Fault was cleared within 564 msec from Gohpur end on DP, ZII. Autorecloser operated successfully from Itanagar end.

132 kV BNC (PG)-Gohpur Line tripped on Z4 within 564 msec from Gohpur end. There was no tripping from BNC (PG) end.

At 10:15:24.880 Hrs, 132 kV Panyor-Pare Line tripped on Z4 within 553 msec from Pare end. There was no tripping from Panyor end.

Following observations:

- Carrier was send from Itanagar end to Gohpur end. However, 132 kV Gohpur-Itanagar Line tripped after ZII time delay. AEGCL needs to check the carrier aided tripping scheme at Gohpur.
- AR operated successfully from Itanagar end for 132 kV Gohpur Line. However, AR not attempted at Gohpur end.
- ZII time delay at Gohpur end for 132 kV Itanagar Line needs to be reviewed and set as per NERPC Protection philosophy.
- Tripping of 132 kV Panyor-Pare Line on Z4 from Pare end for fault in 132 kV Gohpur-Itanagar Line seems unwanted. Z4 reach needs to be reviewed.

Similar event occurred on 16.05.2024.

As per 79th PCC minutes,

Regarding tripping of 132 kV Gohpur-Itanagar line at Gohpur end on ZII, forum noted that ZII should have operated in 350 msec and carrier aided tripping should have occurred. AEGCL informed that, regarding carrier aided protection, testing for carrier will be conducted during May'25 and the time delay setting will be revised shortly. Regarding tripping of 132 kV Gohpur-BNC line at Gohpur on ZIV, Forum requested AEGCL to revise the reach of ZIV as it should not be more than 50% of the shortest line as per NERPC protection protocol. Regarding tripping at Pare end, NEEPCO acknowledged that there is reach issue of ZIV and stated that the same will be revised shortly. Forum, in general noted that protection settings of NEEPCO stations are deviating from NERPC protection protocol and instructed NEEPCO to modify the settings at all of their stations as per the protocol.

AEGCL and NEEPCO to update

C.11 Frequent tripping of 132 kV Agartala-Rokhia D/C lines during April, 2025:

132 kV Agartala - Rokhia D/C Lines have tripped eight (8) times in the month of April 2025 which is a matter of serious concern. As per DR analysis, all the faults are solid in nature.

The details of tripping are tabulated as below:

Sl. No.	Element Name	Owner	Tripping Date and Time	DR analysis (End A)	DR analysis (End B)
1	132 kV Agartala - Rokhia 2 Line	TSECL	10-04-2025 20:10	DP, ZI, B-N, Ib-3.3 kA, In-2.6 kA, 61 msec	DP, ZI, R-N, Ir-3.3 kA, In-3.9 kA, 61 msec
2	132 kV Agartala - Rokhia 2 Line	TSECL	11-04-2025 19:05	DP, ZI, B-N, Ib-3.3 kA, In-2.6 kA, 60 msec	DP, ZI, R-N, Ir-3.1 kA, In-3.9 kA, 61 msec
3	132 kV Agartala - Rokhia 2 Line	TSECL	13-04-2025 05:21	DP, ZI, B-N, Ib-3.8 kA, In-2.8 kA, 61 msec	DP, ZI, R-N, Ir-3.8 kA, In-3.8 kA, 60 msec
4	132 kV Agartala - Rokhia 2 Line	TSECL	15-04-2025 17:59	DP, ZI, B-N, Ib-3.8 kA, In-2.8 kA, 60 msec	DP, ZI, Y-N, Iy-3 kA, In-3.6 kA, 60 msec
5	132 kV Agartala - Rokhia 2 Line	TSECL	17-04-2025 08:44	DP, ZI, B-N, Ib-3.4 kA, In-2.7 kA, 59 msec	DP, ZI, R-N, Ib-3.5 kA, In-4.2 kA, 59 msec
6	132 kV Agartala - Rokhia 1 Line	TSECL	17-04-2025 12:47	DP, ZI, R-N, Ir-3 kA, In-2.5 kA, 72 msec	DP, ZI, Y-N, Iy-3.1 kA, In-3.5 kA, 60 msec
7	132 kV Agartala - Rokhia 1 Line	TSECL	28-04-2025 10:34	DP, ZI, Y-N, Iy-10 kA, In-9.9 kA, 72 msec	DP, ZI, R-N, Ir-1.8 kA, In-2.3 kA, 60 msec
8	132 kV Agartala - Rokhia 2 Line	TSECL	28-04-2025 10:35	DP, ZI, B-N, Ib-5.8 kA, In-5.2 kA, 70 msec	DP, ZI, R-N, Ir-1.9 kA, In-2.5 kA, 58 msec

Such repeated tripping is a cause of concern as it threatens the reliability of the Tripura Power System.

Therefore, TSECL is requested to carry out regular patrolling of these lines and carry out measurement of tower footing resistance of all towers to know whether the values are within permissible limit.

Also, phase sequence issue is observed in 132 kV Agartala - Rokhia D/C Lines which needs to be rectified by TSECL.

As per 79th PCC minutes,

The matter could not be discussed as Tripura was not present in the meeting. Forum suggested to carry out measurement of Tower footing resistance and ensure values are within permissible limit. TFR data to be submitted by Tripura within 15 days. Follow up to be done through mail. Forum also suggested for TLISA installation in lightning prone areas.

Tripura may update**C.12 Mapping of UFR in the SCADA Display for real time monitoring:**

As per Clause 29(13)(d) of IEGC-23, SLDC shall ensure that telemetered data of feeders (MW power flow in real time and circuit breaker status) on which UFR and df/dt relays are installed is available at its control centre.

At present, mapping of UFR in SCADA display is available for 4 states namely, **Assam, Meghalaya, Nagaland & Tripura.**

Arunachal Pradesh, Manipur & Mizoram are requested to map UFR data in SCADA display in compliance with IEGC-23.

As per 79th PCC minutes,

Arunachal Pradesh: To be discussed in OCC meeting. (Latest update not provided)

Manipur: Payment issues with GE. By June-July'25

Mizoram: GE & Alstom updated the database. However, hardware work is pending. By June-July'25.

C.13 Status Update on Parameter standardization of Disturbance Recorder (DR):

The parameter standardization of Disturbance Recorder (DR) was approved during the 59th PCCM (B.30 Standardization of Disturbance Recorder (DR) Channels). Subsequently, it has been incorporated into the Protection Protocol of the North Eastern Region by NERPC (62nd PCCM 20th December 2023). As per the Uniform Protection Protocol, DR parameters are to be standardized in line with the recommendations of the FOLD working group-3.

NERLDC has prepared a google sheet with substation wise and feeder wise details of each state for maintaining a database of DR parameter standardization.

[https://docs.google.com/spreadsheets/d/1ddce-tJov-](https://docs.google.com/spreadsheets/d/1ddce-tJov-G_EUCx_ansmfo1W3VN0F5yLec8SyT3l3U/edit?gid=1889122402#gid=1889122402)

[G_EUCx_ansmfo1W3VN0F5yLec8SyT3l3U/edit?gid=1889122402#gid=1889122402](https://docs.google.com/spreadsheets/d/1ddce-tJov-G_EUCx_ansmfo1W3VN0F5yLec8SyT3l3U/edit?gid=1889122402#gid=1889122402)

Status as on 11.06.2025:

Sl. No.	Name of Utilities	DR parameter standardization	Remarks
1	KMTL	Not updated	

2	NETC	No bay owned	
3	NEEPCO	Partially updated	
4	NHPC	Not updated	
5	NTPC	Standardized	
6	OTPC	Standardized	
7	POWERGRID	Standardized	
8	IndiGrid	Standardized	
9	NBTL	Standardized	
10	MUML	Standardized	
11	DoP Arunachal Pradesh	Not updated	
12	TSECL	Partially updated	
13	TPGCL	Not updated	
14	DoP Nagaland	Standardized	
15	MePTCL	Partially completed	
16	MePGCL	Standardized	
17	MSPCL	Yet to be standardized	
18	P&ED Mizoram	Standardized (limited to available facility)	
19	AEGCL	Standardized	

All utilities are requested to update status of DR standardization as per recommendation in FOLD working group-3.

C.14 Relay Setting Database for 66 kV and Above Substations:

Maintaining a comprehensive relay setting database is essential for effective protection analysis and ensuring accurate coordination of the protection system. A well-maintained database benefits all stakeholders by enhancing the accuracy and reliability of these records. All utilities are requested to share the substation-wise relay setting status on the PDMS portal of NERPC in comparison with the actual settings implemented at site.

NERLDC has prepared a google spreadsheet containing substations of each state.

https://docs.google.com/spreadsheets/d/1TcBdI5acaD_yXrGzXbM6VYRirhU3j2utSy1IChN1HwU/edit?gid=0#gid=0

Status as on 13.05.2025:

Sl. No.	Name of Utilities	Relay setting details	Remarks
1	KMTL	Updated	
2	NEEPCO	Updated except Doyang S/S & AGBPP	
3	NHPC	Not updated	
4	NTPC	Updated	
5	OTPC	Updated	
6	POWERGRID	Updated	
7	IndiGrid	Updated	
8	NBTL	Updated	
9	DoP Arunachal Pradesh	Not updated	
10	TSECL	Updated	
11	TPGCL	Not updated	
12	DoP Nagaland	Updated	
13	MePTCL	Updated	
14	MePGCL	Updated	
15	MSPCL	Partially updated	
16	P&ED Mizoram	Updated	
17	AEGCL	Partially updated	
18	APGCL	Not updated	

All utilities are requested to review and update relay settings in the google spreadsheet.

C.15 18. Insulator details pertaining to the important transmission lines of NER Power System:

Due to the upcoming monsoon season, it is of utmost importance to ensure healthiness of insulators pertaining to the important transmission lines of NER Power System.

In view of this, NERLDC has prepared a Google spreadsheet detailing the list of Important transmission lines in NER, tabulated by voltage level.

https://docs.google.com/spreadsheets/d/1e01XwENPs9axtT-XlNpEOTEjM6x9-vwpq6-AoJBWH_E/edit?usp=sharing

All the utilities are requested to furnish the insulator type along with date of installation.

C.16 Mapping of SPS in the SCADA Display for real time monitoring of all SPS:

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)	

Display of SPS SCADA Mapping

12th Jun-2025 09:00:00 SPS STATUS & OPERATION

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	F ☐	F ☐
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	☐	☐

Sl. No.	SPS under operation	Long term measures	SPS mapping status in SCADA (YES/No) as per 79 th PCCM
1	<u>SPS related to outage of 220 Misa-Samaguri DC:</u> On tripping of 220 kV Misa-Samaguri DC: Load reduction of 50-60 MW at Samaguri area	Commissioning of 400 kV Sonapur Substation. LILO of 400 kV Bongaigaon-Byrnihat Line at Sonapur.	By June'25

2	Related to outage of any one circuit of 220 kV Balipara - Sonabil D/C	Reconductoring of 220 kV Balipara-Sonabil D/C lines with higher ampacity and Utilisation of 2 X 160 MVA ICTs at Balipara	By June'25
3	Related to the outage of any one circuit of the 132 KV Khliehriat (PG)- Khliehriat D/C line	Reconductoring of 132 KV Khliehriat (PG)-Khliehriat D/C line	Done as per Meghalaya. Yet to be done as per NERLDC. Meghalaya to coordinate with NERLDC SCADA team
4	Related to outage of any one circuit of 132 kV Leshka – Khliehriat D/C	Reconductoring of 132 kV Khliehriat – Leshka D/C	Done as per Meghalaya. Yet to be done as per NERLDC. Meghalaya to coordinate with NERLDC SCADA team

5	Related to 132kV SM Nagar(ISTS) - SM Nagar line to prevent Overloading	i) Commissioning of 132kV Monarchak - SM Nagar D/C ii) HTLS Reconductoring of 132kV SM Nagar(ISTS) - SM Nagar, 132kV SM Nagar(ISTS) - Budhjungnanagar, 132kV PK Bari(ISTS) - Ambasa and 132kV PK Bari(ISTS) - PK Bari	As per NERLDC SCADA team, data point yet to be mapped first at SLDC then RLDC.
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Utilities may further update

C.17 Installation of line differential protection for short lines:

As per sub-regulation 3 of Regulation 48 of Central Electricity Authority (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations, 2022-

"For short line (less than 10 km) or cable or combination of overhead line and cable, line differential protection shall be used with built-in backup distance protection."

As per discussion in 61st PCC meeting the status for different STUs/ISTS licensees are as follows:

Status as updated in 79th PCCM –

Name of utility	Last updated status (78th/77rd/76nd PCCM)	Status as per 79th PCCM
AEGCL	AEGCL updated that PSDF monitoring group has suspended funding for LDP for 1 year. AEGCL requested MS, NERPC to take up with NPC, CEA to provide funding for the same considering the special case of NER.	Under discussion in TEGS, TEGS asked for some inputs, replied to.

	MS, NERPC stated that funding for the LDP considering the special case of NER has been taken up as resolution by RPC forum	
MSPCL	DPR under preparation, to be submitted within one month.	DPR to be revised. State funding being explored.
MePTCL	LDP operation for 9 feeders. For Neighrims-NEHU line, waiting for dark fiber. For other lines, OPGW not available commissioned after OPGW link is established. 7 Feeder operational for rest OPGW work is pending OPGW to be installed on 16 lines. LDP will be enabled after that.	Discussed in last TESG meeting, some queries raised, being replied to. For NEHU-NEighrims line, NERPSIP informed the forum that fiber for this line is not under the scope of NERPSIP. Therefore, forum suggested MePTCL to cover this in any other scheme.
P&ED Mizoram	Lines identified 132kV Khamzawl - Khawiva. Mizoram stated that DPR in final stage. Price offer has been received from one vendor and awaited form other vendors. The DPR would be prepared by end of Sept.'24.	DPR prepared and planning to do under SASCI (Special Assistance to States Capital investment. Process underway
TSECL	132kV 79 Tilla-Budhjungnagar. DPR to be prepared. Cost estimate submitted to TIDC to arrange for ADB funding. TIDC approval is still waited for fund.	Tripura absent

	Approved for ADB funding. E-tendering underway. Regarding Rokhia-N.Rokhia link, he updated that the breaker has been received. MS, NERPC suggested to apply under PSDF	
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Utilities may further update
