



भारत सरकार Government of India विद्युत मंत्रालय Ministry of Power उत्तर पूर्वी क्षेत्रीय विद्युत समिति North Eastern Regional Power Committee

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एन ई आर पी सी कॉम्प्लेक्स, डोंग पारमाओ, लापालाङ, शिल्लोंग-७९३००६, मेघालय NERPC Complex, Dong Parmaw, Lapalang, Shillong - 793006, Meghalaya

No.: No. NERPC/SE (O)/PCC/2025/1023-1064

June 03, 2025

To As per list attached

Sub: 79वीं संरक्षण समन्वय उप-समिति (पीसीसी) बैठक का कार्यवृत/ Minutes of 79th Protection Coordination Sub-Committee (PCC) Meeting

महोदय/महोदया,

कृपया 19 मई 2025 को शिलांग के एनईआरपीसी कॉन्फ्रेंस हॉल में आयोजित 79वीं पीसीसी बैठक के कार्यवृत्त को अपनी जानकारी और आवश्यक कार्रवाई के लिए संलग्न करें। कार्यवृत्त एनईआरपीसी की वेबसाइट www.nerpc.gov.in पर भी उपलब्ध है।

कृपया कोई भी टिप्पणी जल्द से जल्द NERPC सचिवालय को सूचित करें।

Sir/Madam,

Please find enclosed herewith the minutes of the 79th PCC Meeting held at NERPC conference Hall, Shillong on 19th May 2025 for your kind information and necessary action. The minutes is also available on the website of NERPC: www.nerpc.gov.in.

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

भवदीय / Yours faithfully,

(वीरेंद्रनाथ मुंचा/ Veerendranath Muncha)

निदेशक / Director

Encl: As above

Distribution List:

- 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, Dongtieh-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, Dongtieh, 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, 10th Floor, Berger Tower, Noida sector 16B-201301
- 42. Director, NETC, 2C, 3rdFloor, D21Corporate Park, DMRC Building Sector 21, Dwarka, Delhi-77.

(वीरेंद्रनाथ मुंचा/ Veerendranath Muncha)

निदेशक / Director



Minutes of 79th PCCM

Govt. of India

Ministry of Power

North Eastern Regional Power Committee

Shillong

North Eastern Regional Power Committee

Minutes of

79th Protection Coordination Sub-Committee Meeting

Date: 19/05/2025 (Monday)

Time: 11:00 hrs.

Venue: NERPC conference Hall, Shillong

The list of participants is attached as annexure I

A. CONFIRMATION OF MINUTES

1. <u>CONFIRMATION OF MINUTES OF THE 78th PROTECTION SUB-</u> COMMITTEE MEETING OF NERPC.

Minutes of the 78th PCC Meeting held on 21st April, 2025 at NERPC Conference Hall, Shillong was circulated vide letter No.: NERPC/SE (O)/PCC/2025/536-577dated 5th May 2025.

No comments were received from the constituents

Sub-committee confirmed the minutes of the 78th 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
			Shall conduct internal	Annually
			audit of protection system	
	Internal	All users	Audit report to be shared	Within 30 days
	Audit	(132kV and	with RPC	of Audit
		above)	Action plan for rectification	Within 30 days
			of deficiencies to be shared	of Audit
			with RPC	
			Shall conduct audit for	Once in five
			each SS	years
			Shall conduct audit on	Within three
		All users	advice of RPC	months of
		(132kV and		advice of RPC
		above)	Audit report* to be	Within a
			submitted to RPC and	month of
Audit	Third		NERLDC/SLDC	submission of
	party			third-party
	Audit			audit report
			Action plan for rectification	Same as above
			of deficiencies	
		RPC	Compliance to audit	Not specified
			reports to be followed up	
			regularly	
		RPC	After analysis of any event,	Conditional
			shall identify substations	responsibility
			where audit is required to	
			be carried out	

Annual	All users	Annual audit plan to be	Annual
audit plan		submitted to RPC by 31 st	
		October	

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 (78th PCCM):

Sr	Utility/	Interna	al Audit	External audit	
No	Constituents				
		Latest Status	report	Latest Status	report
1.	Ar. Pradesh	Lekhi SS next	Report of	representative of A.P.	NA
		month	Chimpu shared		
		(Total		MS NERPC stated	
		Substation: 09)		that that audit of	

				Pashighat, Along and	
				Roing substations	
				may be conducted in	
				the last week of	
				April'25. Powergrid	
				requested NERPC to	
				conduct the nearby	
				substations of	
				Powergrid also.	
2.	Assam	For FY 2025-	Submitted for	Forum advised to	Submitted
		2026, audits to	FY 2024-25	start identifying	for phase
		start from		external agencies to	2017-2022.
		May'25.		carry out the third-	External
		(Total		party audit for next	audit of only
		Substation: 75)		phase of audit (2023-	Karimganj
				2027). Forum	S/s is left
				suggested to plan the	
				audits in phase-wise	
				manner.	
3.	Manipur	Done for all SS	Submitted	8 SS to be done,	NA
		for FY 2024-25.		Schedule to be	
		Forum		decided, subject to	
		requested to		law and Order	
		plan for FY		situation. Audit of	
		2025-26.		Yurembam ss and	
				Ningthounkong ss	
		(Total		may be done by	
		Substation: 08)		NERPC team in	
	36 1 1		D	May'25	70
4.	Meghalaya	Internal audit	Reports shared	Audit of 6 SS (Killing,	Report
		of 132kV		EPIP I, EPIP II, NEHU,	shared
		Substations		Mawlai an	
		completed		Mawphlang) done.	
		except for two		For other	
		substations		substations, seek	
		namely., IIM &		offer from CBIP, yet to	
				receive offer. 3rd	

		Mustem also done.		party audit of Lumshnong may be	
		(Total		done by NERPC in	
		Substation: 22)		May'25.	
		Substation: 22)		Way 25.	
5.	Mizoram	Done for all SS (Total Substation: 10)	Report shared	List of external agencies awaited. Searching for parties to conduct audit. Audit of Kolasib, Aizawl, Melriat (PG), Zuangtui and Luangmual may be done in May'25 by	NA
				NERPC	
6.	Nagaland	Done for all 10 SS	Report shared. Action plan to be shared	Audit of 5 SS to be done in April or May'25 by NERPC. For rest, to be planned later.	NA
7.	Tripura	April'25. For 66kV SS - audit by Mar'25. (Total Substation: 18)	informed that the report is incomplete as all the formats have not been provided. TSECL to provide complete formats by April'25	Requested NERPC to conduct audit of critical substations namely Agartala, SMnagar, PK Bari, Dharmanagar and Udaipur. MS NERPC stated that the audit may be planned for May'25	NA
8.	Powergrid (NERTS)	All 22 SS done	Shared	External audit done for Misa & Salakati s/s by NERPC.	

9.	NTL	Audit done	To be shared	For 2 substations, audit is being planned to be done by government agencies like CBIP and CPRI. Matter is under process. To be done later this	
<i>J</i> .		riddic dolle	soon	year (2025)	
10	KMTL	No representative regarding non-co		d NERLDC to send a le	etter to CERC
11	MUML/NBTL	No representative	Internal Audit done		
12	NEEPCO (Total Substation: 10)	All done		AGTCCPP done (by M/s ERDA Gujrat), report to be shared shortly. Kameng being planned, discussion with CPRI underway. Doyang in May 2025	
13	OTPC (Palatana)	Done	Shared	Done	shared
14	NTPC (BgTPP)	Done	shared	Done (by CPRI)	Complete Report shared. Action plan shared.
	NHPC (Loktak)	By Mar'25	Internal audit will be done by April'25	To be done after R&M of the plant	
16	APGCL	Utilities to updat	te status	I	

17	TPGCL				
18	MEPGCL	Audit of S	Submitted for st	External audits of all	
		Umiam stg I I	I and stg II.	generating stations	
		and Stg II was I	Internal audit of	were done in 2021.	
		done Nov'24, U	Umiam Stg 3	For next cycle of	
		Stg III and stg a	and 4 by	audit, planning being	
		IV to be done	April'25.	done.	
		by April'25			
19	Dikshi HEP	* *	*	*	*
	(IPP)				

^{*}DoP Ar. Pradesh have intimated Dikshi HEP to provide status to NERPC

Further deliberations of 78th PCCM

Many constituents expressed the need of imparting knowledge and skill for protection system to their officers. MS, NERPC stated that a protection audit training program can be arranged at NPTI Guwahati for all the utilities and NERPC secretariat will communicate with NPTI on this matter.

Regarding formation of the protection expert group in NER for conducting the external audits, Assam updated that nominations from their side, have been sent to NERPC. MS NERPC requested all the state utilities and CPSUs to send their nominations to NERPC within one week so that the audit expert members list will be ready.

With respect to internal protection audits, MS NERPC requested the utilities to prepare a list of shortcomings observed and corresponding action plans and submit to NERPC and NERLDC along with the protection audit reports. Also, he advised NERLDC to prepare compliance reports, utility wise, and present regularly in the PCC meetings.

Deliberation

Status of Internal/External audit (79th PCCM)

Sr	Utility/	Interna	al Audit	External au	dit
No	Constituents				
		Latest Status	report	Latest Status	report
1.	Ar. Pradesh	Lekhi SS next	Report of	Planning and	NA
		month	Chimpu shared	Tendering will be	
		(Total	for FY 2024-25.	done for audit of all 9	
		Substation: 09)	Planning to be	SS	
			done for 205-26		
2.	Assam	For FY 2025-	Submitted for	External agency	Submitted
		2026, audits to	FY 2024-25.	being finalized for	for phase
		start from	Planning to be	carrying out the audit	2017-2022.
		July'25.	done for 205-26		External
		(Total			audit of only
		Substation: 75)			Karimganj
					S/s is left
3.	Manipur	To be planned	Submitted for	8 SS to be done,	NA
		for FY 2025-26.	FY 2024-25.	Schedule to be	
			Planning to be	decided, subject to	
		(Total	done for 205-26	law and Order	
		Substation: 08)		situation. Audit of	
				Yurembam ss and	
				Ningthounkong ss	
				may be done by	
				NERPC team in	
				May/June'25	
4.	Meghalaya	Internal audit	Reports shared	Audit of 6 SS (Killing,	Report
		of 132kV	for FY 2024-25.	EPIP I, EPIP II, NEHU,	shared
		Subtations	Planning to be	Mawlai and	
		completed for	done for 205-26	Mawphlang) done.	
		FY 2024-25.		For other	
		For FY 2025-		substations, Offer	
		26, audits will		received from PRDC (
		start from		Cost Rs. 67 Lakh for	
		July'25			

		(Total		13 S/S). Offer awaited	
		Substation: 22)		from CPRI (estimated	
				cost Rs. 35 Lakh for 13	
				S/S). External party	
				will be finalized	
				considering the	
				financial aspect. 3rd	
				party audit of	
				Lumshnong may be	
				done by NERPC in	
				May/June'25.	
5.	Mizoram	For FY 2025-	Report shared	List of external	NA
		26, audits to	for FY 2024-25.	agencies awaited.	
		start from	Planning to be		
		June'25.	done for 205-26	to conduct audit.	
		Tentative plan shared with		Audit of Kolasib,	
		NERPC and		Aizawl, Melriat (PG),	
		NERLDC.		Zuangtui and	
		(Total		Luangmual may be	
		Substation: 10)		done in June'25 by	
		,		NERPC.	
6.	Nagaland	For FY 2025-	Report shared	Audit of 5 SS to be	NA
		26, will update	for FY 2024-25.	done in June'25 by	
		the plan	Action plan to	NERPC.	
		shortly	be shared.	For rest, to be	
			Planning to be	planned later.	
			done for 205-26		
7.	Tripura	No	Shared for 13	No representative	NA
		representative	SS for FY 2024-		
		(Total	25. But, NERPC		
		Substation: 18)	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		
8.	Powergrid	Internal audit	Shared for FY	External audit done	
	(NERTS)	plan for FY	2024-25.	for Misa & Salakati	
		2025-26 has	Planning to be	s/s by NERPC.	
		been shared.	done for 205-26	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	To be shared	No representative	
		representative	soon		
10	KMTL	completed the		Requested forum to	
		internal audit		suggest the External	
		for 400/220 KV		audit panel members.	
		GIS			
		Substation,			
		New Kohima in			
		July 2024.			
		Internal audit			
		for FY 2025-26			
		will be			
		conducted			

		tentatively			
		during July'25.			
11	MUML/NBTL	Internal audit	Internal Audit	Forum advised to	
		plan for 2025- 26 has been shared	done for FY 2024-25. Planning to be done for 205-26	Plan for March'26	
12	NEEPCO	Internal audit	All shared for FY	AGTCCPP done (by	
	(Total	plan for FY	2024-25.	M/s ERDA Gujrat),	
	Substation:	2025-26 has	Planning to be	report shared RC	
	10)	been shared	done for 205-26	nagar done.ameng	
		been shared		being planned,	
				discussion with CPRI	
				underway. Doyang in	
				May 2025. Waiting for	
				price offer.	
13	OTPC	For FY 2025-	Shared for FY	Done	shared
	(Palatana)	26, to be	2024-25.		
		planned	Planning to be		
			done for 205-26		
14	NTPC	For FY 2025-	Shared for FY	Done (by CPRI)	Complete
	(BgTPP)	26, to be	2024-25.		Report
		planned	Planning to be		shared.
			done for 205-26		Action plan
					shared.
15	NHPC	Protection	Internal audit to	To be done after R&M	
	(Loktak)	team informed,	be done before	of the plant. Order	
		to be done at	June 2025	Placed.	
		the earliest for			
		FY 2025-26			
16	APGCL	Utilities to update	te status		
17	TPGCL				

18	MEPGCL	Audit of Stg III	Submitted for st	External audits of all	
		and stg IV to be	I and stg II for	generating stations	
		done by	FY 2024-25.	were done in 2021.	
		Nov'25.	Planning to be	Audit of Umiam Stg-I	
		Internal audit	done for 205-26	& Stg-IV planned	
		plan for all S/S		during Nov'25. For	
		for FY 2025-26 to be shared		other S/S, planning	
		to be shared		being done.	
19	Dikshi HEP	*	*	*	*
	(IPP)				

Further deliberations

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.

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

TABLE 8: REPORT SUBMISSION TIMELINE

	Grid Event^	Flash report	Disturbance	Detailed	Draft report	Discussion in
	(Classification)	submission	record and	report and	submission	protection
Sr.	(2.000001.)	deadline	station event	data	deadline	committee meeting
No.		(users/	log submission	submission	(RLDC/	and final report
110.		SLDC)	deadline	deadline	NLDC)	submission
			(users/ SLDC)	(users/ SLDC)		deadline (RPC)
1	GI-1/GI-2	8 hours	24 hours	+7 days	+7 days	+60 days
						·
	Near miss					
2	event	8 hours	24 hours	+7 days	+7 days	+60 days
	event					
3	GD-1	Q bours	24 hours	17 days	17 days	160 days
3	GD-1	8 hours	24 nours	+7 days	+7 days	+60 days
	GD-2/GD-				+21	
4	GD-2/GD-	8 hours	24 hours	+7 days	721	+60 days
'	3	0110410	21110410	, aays	days	oo aayo
	GD-4/GD-	0.1	041	. 7	+30	. 00 1
5	5	8 hours	24 hours	+7 days	days	+60 days
					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 April 2025 based on the draft report prepared by NERLDC.

NERLDC Agenda

Deliberation

NERLDC stated that a total of 19 GDs occurred in April'25 which have been placed in further agenda items for discussion.

B.3 Status of submission of FIR, DR & EL outputs for the Grid Events for the month of April'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 in Tripping Monitoring Portal for events from 01-04- 2025 to 30-04-2025 as on **09-05-2025** 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 after 24hrs %	Total furnished %	Furnished in	Total Furnished after 24hrs %	Total furnished %	Total Furnished in 24hrs %		Total furnished %
AEGCL	58	2	31	33	2	98	100	10	90	100
APGCL (Cumulative) *No Unit Tripping	6	0	0	0	0	0	0	0	0	0
DoP, AP (Cumulative) *No Unit Tripping	29	38	52	90	41	48	90	38	52	90
DoP, Nagaland (Cumulative) *No Unit Tripping	8	50	38	88	0	88	88	63	25	88
KMTL	2	100	0	100	0	0	0	100	0	100
MePGCL (Cumulative) *No Unit Tripping	8	0	100	100	13	88	100	13	38	50
MePTCL	23	96	4	100	96	4	100	57	43	100
MSPCL	14	14	21	36	21	14	36	29	7	36
NBTL	10	60	0	60	40	20	60	50	10	60
NEEPCO (Cumulative)	40	53	43	95	55	38	93	55	40	95
NHPC (Cumulative) *No Unit Tripping	2	50	0	50	50	0	50	50	0	50
NTL	2	50	50	100	50	50	100	0	100	100
P&ED, Mizoram (Cumulative) *No Unit Tripping	5	0	100	100	0	100	100	0	100	100
POWERGRID	94	65	35	100	71	28	99	68	31	99
TSECL	34	0	12	12	29	71	100	24	76	100

FIR/DR/EL submission status of utilities having tripping of Generating Units as on 09-05-2025:

Owner Name	Total No of FIR/DR/EL/TR to be submitted(SEND+REND)	FIR		DR			EL			
						Total			Total	
		Total	Total		Total	Furnished		Total	Furnished	
		Furnished	Furnished	Total	Furnished in	after 24hrs	Total	Furnished	after	Total
		in 24hrs %	after 24hrs %	furnished %	24hrs %	%	furnished %	in 24hrs %	24hrs %	furnished %
NEEPCO	18			94			93	_	_	93
*Unit Tripping	10	-	-	34	-	_	33	-	-	33
TPGCL (Cumulative)	1	0	0	0	0	0	0	0	0	0
*1 case of Unit Tripping only	1	U	U	U	U	0	U	U	U	U
NTPC *2 cases unit Tripping only	2	0	0	0	0	100	100	0	100	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 nerldcso3@gmail.com. This new account has been specifically set up to facilitate the secure exchange of DR and EL files that have previously faced blockage when sent to <a href="https://nerldcsos.org/ner

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)

All the utilities are requested to submit details of tripping of downstream feeder on monthly basis to NERLDC.

Members may discuss.

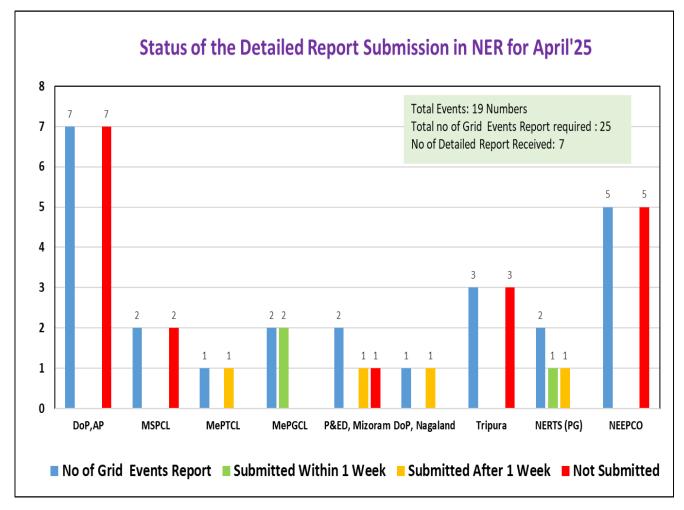
Deliberation

Forum urged all utilities to submit FIR/DR/EL in tripping portal within 24 hrs of tripping as per IEGC-23.

NERLDC highlighted that during April'25, many tripping and grid disturbances occurred due to protection failure of downstream feeders which is a cause of concern. In view of this, a google sheet will be prepared by NERLDC shortly. All utilities are required to submit tripping details of downstream system on monthly basis.

B.4 <u>Submission of Flash Report and Detailed Report by User/SLDC as per IEGC-2023:</u>

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 **April**, **2025** as on **09-05-2025** is shown below:



DoP AP, MSPCL, P&ED Mizoram, TSECL and NEEPCO have not submitted the detailed report of grid disturbance. Also, we have received 3 reports within one week of time.

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.

Deliberation

- Arunachal Pradesh: Due to busy schedule of AP personnel, detailed report could not be sent on time. To be shared shortly.
- MSPCL: NERLDC highlighted that detailed report was not submitted in proper format. 1 GD report of Rengpang not submitted. To be shared shortly.
- P&ED Mizoram: Report to be re-shared with NERLDC with proper details of grid disturbances.
- TSECL: Absent. Follow up to be done through mail.

Minutes	79th PCCM	19 th May 2025	Shillong
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• NEEPCO: Submitted for Grid event at Monarchak & Kameng. Not submitted for grid event at Tuirial HEP. To be shared shortly.

Forum appreciated MePTCL, MePGCL, DoP Nagaland & POWERGRID for submission of detailed report.

B.5	Non-operation	of auto	recloser i	<u>n Important</u>	Grid	Elements	for	transient
faults	in April 2025:			-				

01		Trippin			Auto-	Remarks
S1.	Element	g Date	RELAY_A	RELAY_B	Recloser	from Utility
	Name	and	KDDA1_A	KDDA1_D	not	
•		Time			Operated	
1	132 kV Jiribam - Tipaimukh Line	05-04- 2025 20:05:00	DP, ZI, R-E, FD: 48.14 Kms, AR Operated Successfully	DP, R- E,16.7 KM, Ir-0.81 KA	Tipaimuk h (MSPCL)	informed that issue was SF6 leakage in CB, now resolved. NERLDC informed that failure of AR recurred on 18th May'25. MSPCL to look into it again.
2	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 Unsucessful ly	Lekhi (AP)	AR was in lockout condition. Will check SF6 level.
3	132 kV Loktak - Rengpang Line	05-04- 2025 21:12:00	DP, ZI, B- E, FD: 15.44 Kms	Loss of Voltage	Loktak(N HPC)	NHPC to check and update

132 kV Pare 132 kV 2025 22:30:00 DP, ZI, R-E 22:30:00 DP, ZI, R-E 22:30:00 DP, ZI, R-E Ends				T	T	Τ	T = 3 3 1
132 kV Pare Itanagar Line 2025 22:30:00 DP, ZI, R-E Itanagar Line 2025 22:30:00 DP, ZI, R-E Itanagar Line 2025 22:30:00 DP, ZI, R-E Itanagar Line 2025 DP,							Carrier aided
132 kV Pare 2025 DP, ZI, R-E DP, ZI, R-E Ends							AR logic
132 kV Pare - Itanagar Line							needs to be
Itanagar Line	1			חם זו ס די	DP, ZII, R-E,	Both	checked and
132 kV	-	Itanagar Line		DI , ZI, K-E	FD: 29.9 KM	Ends	end-to-end
132 kV 10-04- 2025 E, FD: 6.9 Sourcessfully Sarusajai Sonapur Line 12:44 Kms; AR AR Operated Operated Successfully Sonapur Line Confirm the non-operation of AR.			22.00.00				testing to be
132 kV							done. By
132 kV							May'25
132 kV							Spurious DT
132 kV 106-04- 2025 1, 4.129 KA, 2.057 KM 2.0							received at
Khandong - Khliehriat 2 Line				M1:B-N ,Z-			Khleihriat
Khandong - Khliehriat 2 Line		132 kV	06-04-	1, 4.129	M1·R_N 7_	Khliehriat	(PG) end due
Khliehriat 2 Line Line	5	Khandong -		KA, 2.057	·		to which AR
Line Operated Sucessfully under investigation. 220 kV 10-04- DP, ZI, R- DP, ZI, Y-E, Sarusajai No update Sarusajai- 2025 E, FD: 6.9 FD: (AEGCL) from AEGCL. Sonapur Line 12:44 Kms; AR 36.9Kms; AR Operated Operated Sucessfully non-operation of AR. 220 kV 13-04- DP, ZI, Y-E, DP, ZI, Y-E, Samaguri (AEGCL) four card faulty, replacement by May'25		Khliehriat 2		KM, AR		`	not operated.
220 kV 10-04- DP, ZI, R- DP, ZI, Y-E, Sarusajai No update Sarusajai- 2025 E, FD: 6.9 FD: (AEGCL) from AEGCL. Sonapur Line 12:44 Kms; AR 36.9Kms; AEGCL to Not AR Operated Operated Successfully non-operation of AR. 220 kV 13-04- DP, ZI, Y-E, DP, ZI, Y-E, Samaguri Mariani 2025 FD: 146.7 FD:2.4 kms; (AEGCL) faulty, replacement by May'25		Line		_		, ,	Root cause is
220 kV 10-04- DP, ZI, R- DP, ZI, Y-E, Sarusajai No update Sarusajai- 2025 E, FD: 6.9 FD: (AEGCL) from AEGCL. Sonapur Line 12:44 Kms; AR 36.9Kms; AR Operated Operated Successfully non-operation of AR. 220 kV 13-04- DP, ZI, Y-E, DP, ZI, Y-E, Samaguri Mariani 2025 FD: 146.7 FD:2.4 kms; (AEGCL) from AEGCL. AEGCL to confirm the non-operation of AR.				Sucessfully			under
Sarusajai- Sonapur Line 12:44 Kms; AR 36.9Kms; AEGCL to Not AR Operated Operated Sucessfully AR. 220 kV 13-04- Mariani 2025 This is a proper to the properate of the properation of the properatio							investigation.
Sarusajai- Sonapur Line 12:44 Kms; AR 36.9Kms; AEGCL to Not AR Operated Operated Sucessfully AR. 220 kV 13-04- Mariani 2025 This is a proper to the properate of the properation of the properatio							
Sonapur Line 12:44 Kms; AR 36.9Kms; AR Operated Confirm the Not Successfully Not Samaguri Line Sonapur Line Response AR Operated Successfully Not Samaguri Line Response AR Operated Successfully Not Samaguri Line Response AR Operated Successfully Not Samaguri AR Operated Successfully Not Samaguri AR Operated Successfully Not Samaguri Confirm the non-operation of AR. AEGCL to Confirm the Not Samaguri Confirm the Not Samaguri AR Operated Successfully Not Samaguri Confirm the Not Samaguri Confirm the Not Successfully Not Samaguri Confirm the Not Samaguri Confirm the Not Successfully Not Samaguri Confirm the Not Successfully Not Samaguri Confirm the Not Successfully Not Samaguri Confirm the Not Samaguri Confirm the Not Successfully Not Samaguri Confirm the Not Samaguri Confirm the Not Successfully Not Samaguri Confirm the Not Samaguri Co		220 kV	10-04-	DP, ZI, R-	DP, ZI, Y-E,	Sarusajai	No update
Not AR Operated confirm the Operated Sucessfully non-operation of AR. 220 kV 13-04- DP, ZI, Y-E, DP, ZI, Y-E, Samaguri Mariani 2025 FD: 146.7 FD:2.4 kms; (AEGCL) faulty, replacement Samaguri Line Operated Operated Operated by May'25		Sarusajai-	2025	E, FD: 6.9	FD:	(AEGCL)	from AEGCL.
Operated Sucessfully non- operation of AR. 220 kV 13-04- DP, ZI, Y-E, DP, ZI, Y-E, Samaguri Mariani 2025 FD: 146.7 FD:2.4 kms; (AEGCL) (AEGCL) - 10:04 Kms; AR AR Not Samaguri Line Operated Operated Operated by May'25		Sonapur Line	12:44	Kms; AR	36.9Kms;		AEGCL to
7 (AEGCL) - 10:04 Kms; AR AR Not Samaguri Line Operated O	6			Not	AR Operated		confirm the
AR. 220 kV 13-04- Mariani 2025 FD: 146.7 FD:2.4 kms; (AEGCL) (AEGCL) - 10:04 Kms; AR AR Not Samaguri Line Operated Operated Operated Operated Operated Operated Operated Operated Operated Operated Operated Operated Operated Operated Operated				Operated	Sucessfully		non-
220 kV 13-04- DP, ZI, Y-E, DP, ZI, Y-E, Samaguri Mariani 2025 FD: 146.7 FD:2.4 kms; (AEGCL) (AEGCL) - 10:04 Kms; AR AR Not Samaguri Line Operated Operated Operated by May'25							operation of
Mariani 2025 FD: 146.7 FD:2.4 kms; (AEGCL) Gaulty, replacement by May'25							AR.
Mariani 2025 FD: 146.7 FD:2.4 kms; (AEGCL) faulty, replacement by May'25		220 kV	13-04-	DP, ZI, Y-E,	DP, ZI, Y-E,	Samaguri	DI cond
7 (AEGCL) - 10:04 Kms; AR AR Not Samaguri Line Operated Operated Operated by May'25		Mariani	2025	FD: 146.7	FD:2.4 kms;	(AEGCL)	
Samaguri Line Operated Operated by May'25	7	(AEGCL) -	10:04	Kms; AR	AR Not		
Sucessfully		Samaguri Line		Operated	Operated		_
<u> </u>				Sucessfully			~y 1114y 210

	132 kV Aizawl	14-04-	DP, ZI, R-	DP, ZI, R-Y,	Kumargh	
	- Kumarghat	2025	B, FD:	FD: 58.18	at	PLCC issue.
8	Line	17:34	76.53Kms;	Kms; AR Not	(POWERG	Rectified
			AR	Operated	RID)	now.
			Operated			110 W.
			Sucessfully			
	220 kV Kopili -	16-04-		DP, ZII, R-E,	Kopili	Spurious DT
	Misa 2 Line	2025	E, FD:	FD: 86.81	(NEEPCO)	received at
		11:25	1.050 kms;	Kms;		Kopili which
			AR Not	Carrier		was
9			Operated	received; AR		suspected
				Operated		due to wiring
				Sucessfully		issue. The
						matter is
						under
						investigation
	400 kV Misa -	16-04-	DP, ZI, R-	DP, ZI, Y-E,	Misa	D60 relay
	Silchar 2 Line	2025	E, FD:	FD:	(POWERG	configuration
		11:55	78Kms; AR	157.682Km	RID)	issue (Single
			Not	s; AR		phase fault
			Operated	Operated		seen as Three
10				Successfully		phase fault
						due to which
						AR not
						operated). To
						be rectified
						shortly.

	100 177	17.01	DD 61 -	DD 01 D =	77 1 .	
	132 kV	17-04-		DP, ZI, B-E;		DoP
	Dimapur (PG) -	2025	E, FD:	AR Not	(DoP,	Nagaland
	Kohima Line	13:35	37.04Kms,	Operated	Nagaland)	claimed that
			AR			AR operated
			Operated			while
			Unsucessf			NERLDC
11			ully			informed
						that DR
						suggest that
						AR did not
						operate. DoP
						Nagaland to
						check again
						and update
	132 kV	21-04-	DP, ZI, B-	DP, ZI, B-E,	AGTCCPP	NEEPCO
	AGTCCPP -	2025	E, FD:	FD:	(NEEPCO)	stated that
	Kumarghat	05:51	22.69kms;	77.191kms;		the issue
	Line		AR Not	AR Operated		could not be
			Operated	Sucessfully		identified
						and resolved
						through
12						online
12						support
						from OEM.
						Не
						requested
						Power grid
						to extend
						support in
						this regard
•	•	•	•	•		

	132 kV	23-04-	DP, ZI, B-	DP, ZI, B-E;	Kohima	
	Dimapur (PG) -	2025	E, FD:	AR Not	(DoP,	
	Kohima Line	16:04	49.123	Operated.	Nagaland)	Same as in
13			Kms; AR			point no. 11
			Operated			above
			Unsucessf			
			ully			
	132 kV	27-04-	DP, ZI, B-	DP, ZI, B-E;	Dimapur	
	Dimapur (PG) -	2025	E, FD:	AR Not	(POWERG	Same as in
14	Kohima Line	04:00	18.662	Operated.	RID) &	point no. 11
14			Kms; AR		Kohima	above
			Not		(DoP,	above
			Operated.		Nagaland)	
	132 kV	28-04-	DP, ZI, Y-E,	DP, ZI, Y-E,	Badarpur	Relay synch
	Badarpur -	2025	FD: 2.76	FD: 15.53	(POWERG	check
15	Silchar 1 Line	10:48	Kms; AR	Kms; AR	RID)	configuratio
			Not	Operated		n issue.
			Operated.	Sucessfully		Rectified
						now.
	132 kV	28-04-	DP, ZII, B-	DP, ZI, B-N,	Gohpur	Carrier
	Gohpur-	2025	N, 40.3	0.89 Km, AR	(AEGCL)	healthy
	Itanagar Line	10:15	Km, AR not	successful		signal wire
16			operated			loose.
						Applied for
						Shutdown to
						rectify the
						issue.

Sub-committee noted as above

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 13.05.2025, **NETC**, **NTPC**, **OTPC**, **DoP Nagaland**, **NEEPCO** (**Kopili & TGBPS**), **POWERGRID**, **MUML**, **NBTL**, **AEGCL**, **NTL & MePTCL** has submitted protection performance indices for the month of April'25.

S1. 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	MUML	-	-	-	No tripping during April'25
3	NTPC	1	1	1	
4	OTPC	1	1	1	
5	DoP Nagaland	1	1	1	
6	NEEPCO (TGBPS & Kopili)	1	1	1	
7	POWERGRID	1	1	1	
8	NBTL	0	0	0	At 20:44 Hrs of 26-04-2025, 220 kV Nangalbibra Bus-I tripped due to fault in 220 kV Bongaigaon-Nangalbibra I Line. Also, 31.5 MVAR B/R-I&II & 160 MVA ICT-I&II tripped which is unwanted.
9	AEGCL	1	0.862	0.862	Unwanted tripping of 220 kV NTPS- Tinsukia Line, ICT- I at Tinsukia on

					operation of
					highset O/C
					protection which is
					unwanted. Forum
					advised to replace
					with distance
					protection relay
					within first week of
					June 25
					Unwanted tripping
					of 132 kV
					Lumshnong-
					Panchgram Line at
					08:10 Hrs & 20:21
					Hrs of 24 th April,
					25.
	DoP				
12	Arunachal			_	Not Submitted
12	Pradesh				Not Submitted
	Tradesii				to be submitted
13	MSPCL	-	-	-	within a week.
	P&ED				to be submitted
14	Mizoram	-	-	-	within a week.
1 =					
15	TSECL	-	-	-	Not Submitted
16	KMTL	-	-	-	Not Submitted

S1. No.	Name of Generating Company	D= (Nc/Nc+Nf)	S= (Nc/Nc+Nu)	R= (Nc/Nc+Ni)	Remarks
1	APGCL	-	-	-	Not Submitted
2	MePGCL	-	-	-	Not Submitted

3	TPGCL	-	-	-	Not Submitted
4	NHPC	-	-	-	Not Submitted
	NEEPCO(AGBPP,				Not Submitted
	AGTCCPP,				
5	Kameng,	-	_	-	
	Doyang, Panyor				
	& Pare)				

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.

Sub-committee may deliberate

Deliberation

NERLDC highlighted that Protection Performance Indices received from NETC, NTPC, OTPC, DoP Nagaland, NEEPCO (Kopili, TGBPS, Pare), POWERGRID, MUML, NBTL, AEGCL, NTL, MePTCL, MePGCL, KMTL, TSECL and DoP Arunachal Pradesh.

Not received from transmission utilities such as MSPCL and P&ED Mizoram. Also, not received from Generating companies such as APGCL, TPGCL, NHPC and NEEPCO (AGBPP, AGTCCPP, Kameng, Doyang & Panyor)

Forum urged all the utilities for timely submission of protection performance indices.

B.7 Time Drift issue of submitted Disturbance recorder during April 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 April 2025 are as follows:

SL No	Element Name	Tripping Date and Time	End 1 Owner	End 2 Owner	Time Drift observed at Substation & duration	Remarks
1	132 kV Umiam - Umiam St I Line	01-04- 2025 01:55	MePTCL	MePGCL	Umiam: 1 Hr time lead (02:55 Hrs)	GPS not present. Corrected manually.
2	132kV Khleiriat(ME) - Lumshong Line	01-04- 2025 03:45	MePTCL	MePTCL	Khleiriat(ME): 3 min time lag (03:41:58 Hrs)	GPS not present. Corrected manually
3	132 kV Pare - Itanagar Line	05-04- 2025 22:30	NEEPCO	DoP, Ar. Pradesh	Pare: 8 min time lead (22:30 Hrs)	GPS present. Time synced with GPS (rectified)
4	132 kV Khandong - Khliehriat 2 Line	06-04- 2025 16:35	POWER GRID	POWER GRID	Khandong: 9 min time lag (16:26 Hrs) in Main II DR (Main I is time synchronized)	Manually corrected by NERTS. As per GPS owner is NEEPCO, to be synced by NEEPCO in coordination with NERTS
5	132 kV Kamalpur - P K Bari Line	07-04- 2025 02:22	TSECL	TSECL	Kamalpur: 63 min time lag (01:19 Hrs)	TSECL Absent

6	132 kV Badarpur - Kolasib Line	07-04- 2025 03:34	POWER GRID	POWER GRID	Kolasib: 5 min time lag (03:39 Hrs)	GPS not present. Manually corrected. GPS be procured by June'25
7	220 kV Balipara - Sonabil 1 Line	09-04- 2025 06:50	POWER GRID	AEGCL	Sonabil: 5 min time lag (06:45 Hrs)	GPS malfunctioning. Forum urged AEGCL to ensure healthiness of GPS in all substations.
8	132 kV Dharmanagar - P K Bari Line	10-04- 2025 08:30	TSECL	TSECL	Dharmanagar: 17 min time lag (08:13 Hrs) PKBari: 3 min time lag (08:27 Hrs)	TSECL Absent
9	132 kV Sarusajai - Umtru 2 Line	10-04- 2025 12:43	AEGCL	MePGCL	Umtru: 29 min time lag (12:14 Hrs)	GPS not present. Corrected manually.
10	132 kV Dharmanagar - Dullavcherra Line	10-04- 2025 13:22	TSECL	AEGCL	Dharmanagar: 2 min time lead (13:22 Hrs)	TSECL Absent

	132 kV	13-04-			Umiam : 5 min	To be checked
11	Chapakhowa	2025	AEGCL	AEGCL	time lag (and confirmed
	- Rupai Line	13:05			13:01 Hrs)	by NERLDC
	-				Along : 2 min	GPS not
					time lag (present.
	132 kV Along	16-04-	DoP. Ar.	DoP, Ar.	13:58 Hrs)	Corrected
12	- Pasighat	2025	Pradesh	Pradesh	Pasighat : 4	manually
	Line	14:00			min time lag (manually
					13:56 Hrs)	
					Monarchak :	GPS sync done
					10 min time	at Monarchak
	132 kV	17-04-			lag (12:37	(rectified)
13	Monarchak -	2025	NEEPCO	TSECL	Hrs)	(rectified)
	Udaipur Line	12:47			Udaipur : 2	TSECL absent
	_				min time lag (ISECE absent
					12:45 Hrs)	
					Monarchak :	GPS sync done
					10 min time	at Monarchak
	132 kV	17-04-			lag (12:37	(rectified)
14	Monarchak -	2025	NEEPCO	TSECL	Hrs)	
	Rokhia Line	12:49			Udaipur : 2	TSECL absent
					min time lag (
					12:45 Hrs)	
					Pare : 1 hr	Time synced
	132 kV	18-04-			time lead (with GPS.
15	Ranganadi -	2025	NEEPCO	NEEPCO	12:33 Hrs) in	Rectified.
	Pare 1 Line	11:33			Main I	
					No time drift in	
					Main II	

16	132 kV Panchgram - Lumshnong Line	27-04- 2025 02:58	AEGCL	MePTCL	Panchgram: 3 min time lag (02:55 Hrs)	GPS present. However, it is malfunctioning. Forum urged AEGCL to ensure healthiness of GPS in all substations.
17	132KV- Myntdu Leshka- Mynkre 1 Line	28-04- 2025 07:04	MePGCL	MePTCL	Mynkre: 10 min time lag (06:54 Hrs)	Mynkre: GPS defective at Mynkre. Under repairing stage. Leshka: GPS not present. To be procured. MePGCL informed that GPS at generating S/S has been proposed in PSDF.
18	132KV- Myntdu Leshka- Mynkre 2 Line	28-04- 2025 07:04	MePGCL	MePTCL	Mynkre: 10 min time lag (06:54 Hrs)	Same as point no. 17

19	132 kV Dharmanagar - P K Bari Line	28-04- 2025 09:07	TSECL	TSECL	Dharmanagar : 18 min time lag (08:49 Hrs) P K Bari : 4 min time lag (09:07 Hrs)	TSECL absent
20	400 kV Balipara - Bongaigaon 4 Line	28-04- 2025 09:13	POWER GRID	POWER GRID	Bongaigaon: 5 min time lag (09:08 Hrs)	Relay connectivity issue. Rectified.
21	132 kV Agartala - Rokhia 1 Line	28-04- 2025 10:34	TSECL	TSECL	Agartala: 1 Hr time lag (09:34 Hrs)	TSECL absent
22	132 kV Bodhjannagar - Jirania Line	29-04- 2025 11:57	TSECL	TSECL	Bodhjannagar: 3 min time lag (11:54 Hrs)	TSECL absent

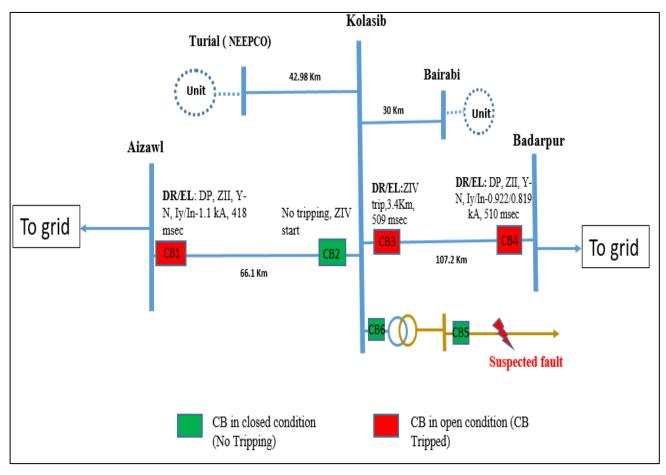
Utilities should ensure that the submitted DR and EL files have corrected time synchronization for proper analysis purposes. Healthiness of GPS may be checked and time to be adjusted as per grid code. All utilities requested to install GPS and make DR standardization.

The agenda will be refereed to next RPC for sensitization of higher authority.

B.8 Grid Disturbance in Tuirial HEP of NEEPCO & Kolasib and Bairabi areas of Mizoram Power System on 07-04-2025:

Kolasib and Bairabi areas of Mizoram & Tuirial HEP of NEEPCO were connected with rest of NER Grid through 132 kV Kolasib-Badarpur and 132 kV Kolasib – Aizawl lines.

At 03:34 Hrs of 07-04-2025, 132 kV Aizawl-Kolasib and 132kV Badarpur-Kolasib lines tripped. Due to tripping of these elements, Kolasib, Turial and Bairabi areas of Mizoram Power system got isolated from NER grid and collapsed due to no source available in these areas. Load loss of 1 MW occurred.



As per DR analysis, Y-N fault with Iy-922 A, In-819 A initiated at 03:34:05.236 Hrs which was cleared within 510 msec from Badarpur end on operation of DP, ZII (ZIII start) and within 509 msec on ZIV trip from Kolasib end. For 132 kV Aizawl-Kolasib line, fault cleared within 418 msec from Aizawl end on DP, ZII (ZIII start). DR of different time submitted at Kolasib end. There was no tripping from Kolasib end (ZIV start as per EL)

Fault is suspected fault in downstream of Kolasib S/S as ZIV operated from Kolasib end (Fault distance-3.4 Km as per EL).

Following observations:

- Protection system of downstream feeder and HV side transformer 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 132 kV Kolasib-Tuirial line.
- DR time drift of 5 min observed at Kolasib end for 132 kV Badarpur Line & 2 min for 132 kV Aizawl line.

 Non-submission of Flash report and detailed report by P&ED Mizoram & NEEPCO which is a violation of Clause 37.2 (b) & 37.2 (e) of IEGC regulation 2023.

Similar incident occurred at 15:33 hrs of 05.05.2024, 15:28 hrs of 13.08.2024, 14:24 Hrs of 20-03-2025 & 05:52 Hrs of 12.05.2025.

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

Deliberation

Exact location of fault not known by P&ED Mizoram.

NERLDC highlighted the issue of frequent tripping of 132 kV Aizawl-Kolasib & 132 kV Badarpur-Kolasib line for fault beyond the line causing grid disturbance in Kolasib area which is the cause of concern.

POWERGRID informed that on 12.05.2025, fault was in 132 kV Tuirial-Kolasib line which was not cleared leading to tripping of healthy lines.

DR/EL of 132 kV Tuirial-Kolasib line to be submitted for proper analysis of the event.

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.

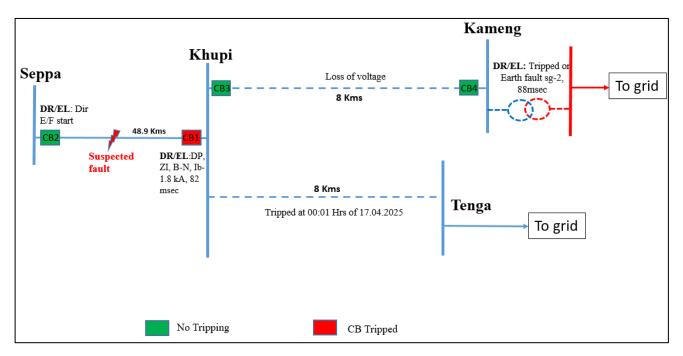
A separate meeting to be conducted among PSAG subgroup i.e NERPC, NERLDC, PowerGrid and Mizoram to holistically review the settings of elements at Kolasib SS.

B.9 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.

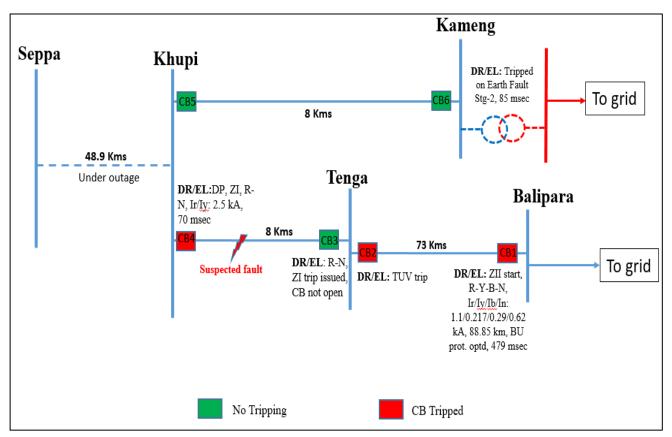
Following observations:

- 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.

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

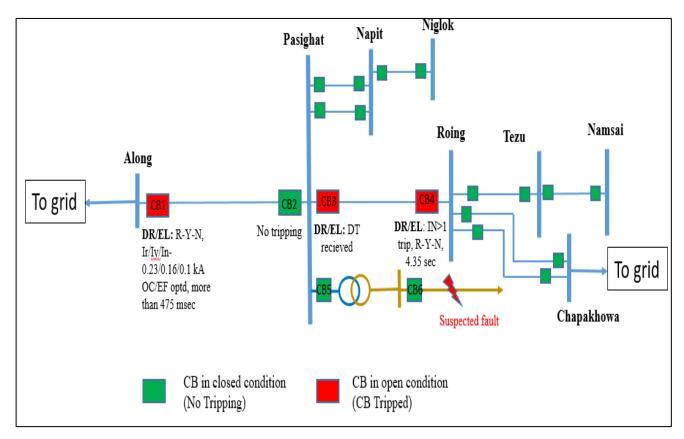
Deliberation

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. Pradsh, NEEPCO and Powegrid.

B.10 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.

DoP Arunachal Pradesh to share the root cause of the event and update the actions taken on the above-mentioned issues.

Deliberation

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.

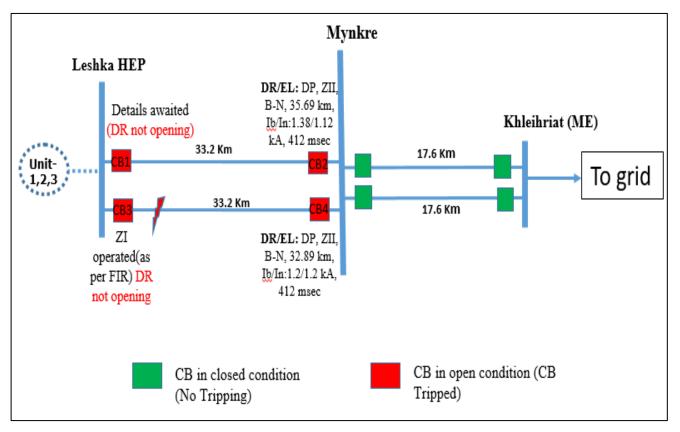
Forum opined that the downstream fault should have been cleared by 33 kV feeder itself or the HV side of the ICT and exhorted DoP Ar. Pradesh to resolve the issues at the earliest.

B.11 Grid disturbance in Leshka HEP of Meghalaya Power system on 27th April & 28th April, 2025:

Leshka HEP of Meghalaya power system was connected with rest of NER grid through 132 kV Leshka-Mynkre I & II Lines.

Event 1: At 02:43 Hrs of 27-04-2025

At 02:43 Hrs of 27-04-2025, 132 kV Leshka-Mynkre I & II Lines tripped due to which Leshka Unit-1,2&3 tripped due to loss of evacuation path. Generation loss of 119 MW occurred.



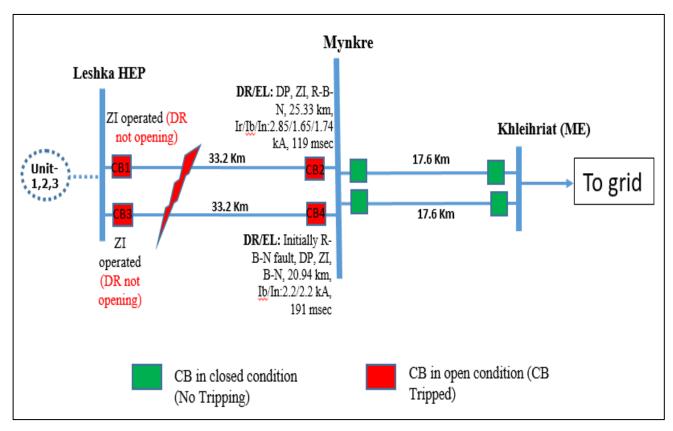
As per DR analysis, solid B-N fault (Ib-1.38 kA, In-1.12 kA) initiated in 132 kV Leshka-Mynkre I & II lines at 02:36:15.155 Hrs which was cleared within 412 msec from Mynkre end on operation of DP, ZII. As per FIR, ZI operated at Leshka end (DR file of Leshka end is not opening)

Following observations:

- Suspected fault in 132 kV Leshka-Mynkre II line as fault distance of 32.89
 Km from Mynkre end (as per EL)
- Leshka end CB failed to isolate the fault resulting in clearing of fault by tripping of healthy 132 kV Leshka-Mynkre I line from remote end on ZII.
- DR file at Leshka end is not opening for both the lines. The same needs attention from MePGCL.
- DR Time drift of 7 min observed at Mynkre end for 132 kV Leshka I & II lines.
- Non-submission of detailed report by MePGCL which is a violation of Clause 37.2 (e) of IEGC regulation 2023.

Event 2: At 07:04 Hrs of 28-04-2025

At 07:04 Hrs of 28-04-2025, 132 kV Leshka-Mynkre I & II Lines tripped due to which Leshka HEP of Meghalaya got isolated from grid due to no source available in this area. No generation loss.



As per DR analysis of 132 kV Leshka-Mynkre I line, solid R-B-N fault (Ir-2.85 kA, Ib-1.65 kA, In-1.74 kA) initiated at 06:54:44.787 Hrs which was cleared within 119 msec from Mynkre end on operation of DP, ZI (initially ZII started).

For 132 kV Leshka-Mynkre II Line, R-B-N fault initiated at 06:54:44.787 Hrs (Z2/Z3 started). After 59 msec, R-phase current disappeared. B-N fault was cleared within 191 msec from Mynrke end on operation of DP, ZI.

As per FIR, ZI operated at Leshka end (DR file of Leshka end is not opening)

Following observations:

- DR file at Leshka end is not opening for both the lines. The same needs attention from MePGCL.
- DR time drift of 10 min observed at Mynkre end for 132 kV Leshka I & II lines.

MePGCL may update the root cause of both the events and update the actions taken on the above-mentioned issues.

Deliberation

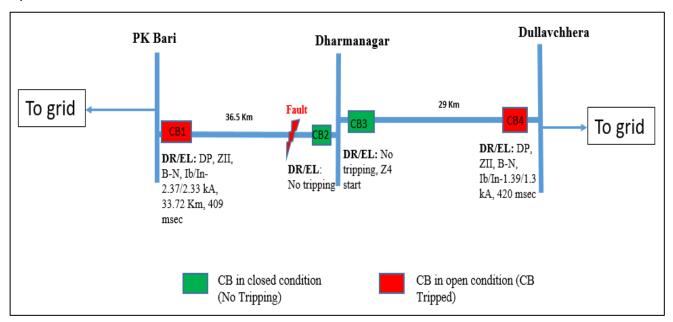
MePGCL clarified that fault occurred in both the lines in Event 1. Forum noted that lightning faults in 132 kV Leshka-Mynkre-Khliehriat corridor causes large no. of GDs and tripping of Leshka units. Forum asked Meghalaya to check tower footing resistance of all towers in corridor and to install TLSA on the line. Meghalaya replied

that DPR had been sent to PSDF in Dec'24 and the matter is under discussion of TESG of PSDF.

B.12 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-Dullavchhera Line, fault cleared from Dullavchhera 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.

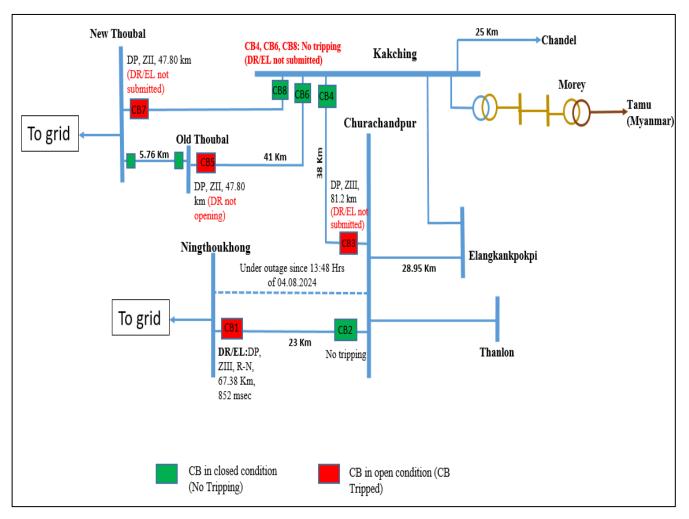
Deliberation

TSECL was not present in the meeting so the agenda could not be discussed.

B.13 <u>Grid disturbance in Churachandpur, Elangkankpokpi, Thanlon, Kakching, Chandel and Morey areas of Manipur and Tamu area Myanmar Power</u> 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 since13:48 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 ocurred on 05.07.2024.

MSPCL may share the root cause and provide update on the above mentioned issues.

Deliberation of 79th PCC & E-mail received from MSPCL

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	Protection Circuit checked and
	line failed to isolate the fault.	distance relay replaced, settings
		and PSL tested.
3	132 kV New Thoubal-Kakching line tripped on ZII	Settings reviewed, will be updated
	from New Thoubal end within 635 msec. ZII time	once approved.
	delay needs to be revised as per protection	
	philosophy.	
4	132 kV Old Thoubal-Kakching Line on ZIII from	Settings reviewed, will be updated
	Old Thoubal end within 680 msec. ZIII time delay	once approved.
	needs to revised as per protection philosophy.	
5	132 kV Elangkankpokpi-Kakching line tripped on	Settings reviewed, settings
	E/F from Elangkaknkpokpi end within 150 msec.	changed as per standard template,
	B/U E/F protection needs to be coordinated with	testing yet to be done.
	ZIII time delay as per protection philosophy.	
	Phase sequence issue observed	
6	132 kV Churachandpur-Kakching line tripped on	Setting review yet to be done
	ZIII from Churachandpur end within 841 msec	
	which is inferred unwanted. ZIII reach needs to be	
	reviewed and set as per protection philosophy.	
7	132 kV Ningthoukhong-Churachandpur II line	Forum urged MSPCL to review the
	tripped on ZIII from Ningthoukhong end within	ZIII reach at Ningthoukhong end.
	852 msec	
8	DR/EL not submitted for tripping of 132 kV New	Forum asked MSPCL to submit all
	Thoubal-Kakching, 132 kV Old Thoubal-	the DR/EL files
	Kakching, 132 kV Churachandpur-Elangkankpokpi	
	& 132 kV Elangkankpokpi-Kakching Lines	

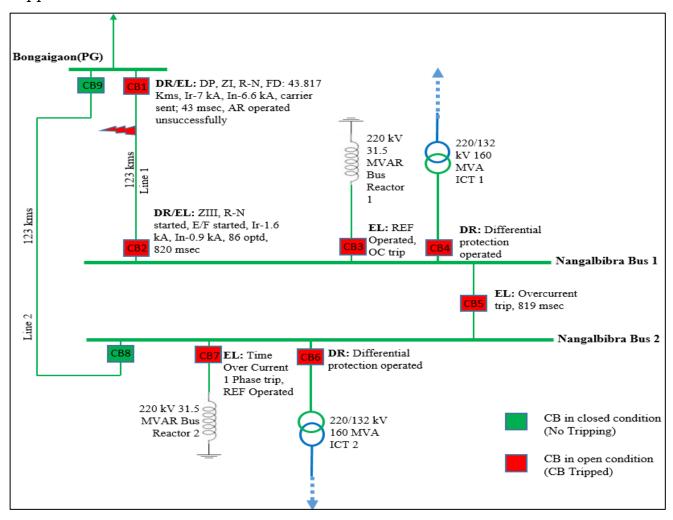
NERPDC highlighted that ZIII should not have operated at Ningthounkong end for Churanchandpur line and instructed Mizoram to check the reach of ZIII and limit it to the 100% of Main line + 100% of the longest line at remote end.

B.14 Blackout of 220 kV Bus-I at Nangalbibra(ST) on 26-04-2025:

Nangalbibra(ST) substation is connected with rest of NER grid through 220 kV Bongaigaon-Nangalbibra I & II Lines.

Prior to the event, 220 kV Bongaigaon-Nangalbibra I, 31.5 MVAR B/R-I & 160 MVA ICT-I were connected to 220 kV Bus-I. And, 220 kV Bongaigaon-Nangalbibra II, 31.5 MVAR B/R-II & 160 MVA ICT-II were connected to 220 kV Bus-II.

At 20:44 Hrs of 26-04-2025, 220 kV Nangalbibra Bus-I tripped resulting in tripping of all elements connected to Bus-I. Also, 31.5 MVAR B/R-II & 160 MVA ICT-II tripped.



As per DR analysis, R-N fault (Ir-7 kA, In-6.6 kA) initiated at 20:44:43.000 Hrs which was cleared within 43 msec from Bongaigaon end on operation of DP, ZI (Carrier send). AR operated after a dead time of 1 sec but tripped due to persistent fault. At Nangalbibra end, ZIII and E/F started and Carrier was received. However, CB did not trip. After 820 msec, 86 relay operated at Nangalbibra.

Before clearing of fault from Nangalbibra end for Bongaigaon-1 line, 220 kV Bus coupler at Nangalbibra tripped on Over Current and cleared fault in 819 msec (as per EL, DR file not opening).

Also, 220/132 kV ICT-I & II tripped on differential protection. B/R-I & II tripped on operation of REF protection & OC trip (as per EL, DR file not opening)

Following Observations:

- Non-tripping of Nangalbibra CB despite receiving carrier from Bongaigaon is the cause of concern. NBTL need to check the healthiness of the carrier aided scheme in 220 kV Bongaigaon-Nangalbibra I Line.
- Both ZIII and E/F started at Nangalbibra end for 220 kV Bongaigaon-1 line. However, on which protection CB opened is not clear from the submitted DR.
- Both 200/132 kV ICTs at Nangalbibra tripped on differential protection which seems to be unwanted.
- B/R-I & II tripped on operation of REF protection & OC trip for fault in 220 kV Bongaigaon-Nangalbibra I Line which seems unwanted.
- DR channels of 220/132 kV ICT-I & II at Nangalbibra needs to be standardized as per recommendation in FOLD working group-3.

NBTL may update the actions taken on the above-mentioned issues.

Deliberation

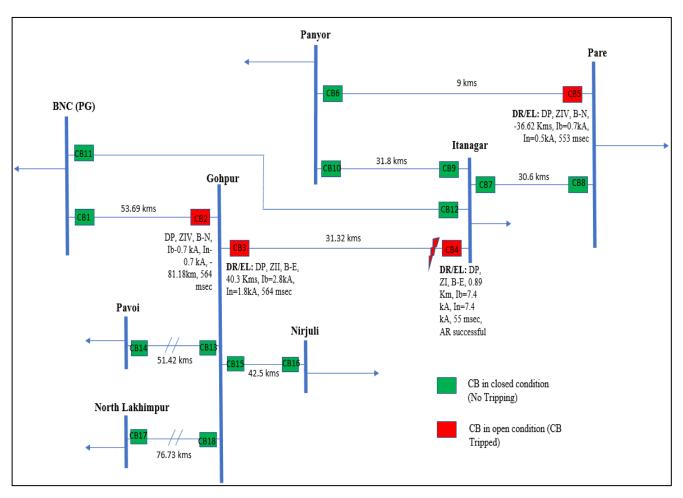
NBTL informed as follow-

- 1. Tripping of Bongaigaon-Nangalbibra line from Nangalbbira end in ZIII settings issue and the same will be revised in coordination with NERPC.
- 2. Tripping of ICTs at Nangalbibra Vector group was incorrectly mapped, so there was differential current for external faults. The matter has been resolved.
- 3. Tripping of Bus reactors stabilizing resistor of the REF failed so it tripped on REF. The matter has been resolved.

Forum instructed Sterlite to review the settings in coordination with NERPC and NERLDC and get protection approval from NERPC at the earliest. Also, Forum suggested NBTL to coordinate O/C setting of Bus coupler with ZIII time delay of Line.

B.15 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.

IndiGrid/AEGCL to share the root cause and update the actions taken on the abovementioned issues.

Deliberation

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.

B.16 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.

Members may discuss.

Deliberation

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 TLSA installation in lightning prone areas.

B.17 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.

Deliberation

States utilities stated that as the matter is regularly discussed in OCC meetings, status updated will be provided in 226th OCC meeting.

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.

Forum urged all the utilities for testing of UFR relay. Checking of UFR relay to be conducted during 3rd party audits.

B.18 Status update on AR of lines and Carrier communication details:

NERLDC has prepared a google spreadsheet comprising the list of important transmission lines of NER for maintaining database of AR of lines and Carrier communication details.

 $\underline{https://docs.google.com/spreadsheets/d/1WJHNBlzfqyewZT5G8escBY-\\\underline{dbgo1t8ZMZZ1j5N7Wal0/edit?pli=1\&gid=1763021158\#gid=1763021158}$

Status as on 13.05.2025:

S1. No.	Name of Utilities	AR status and Communication details	Remarks
1	KMTL	Not updated	
3	NEEPCO	Not updated	
4	NHPC	Not updated	
5	NTPC	Not updated	
6	OTPC	Not updated	
7	POWERGRID	Partially updated	
8	IndiGrid	Updated	

9	NBTL	Updated
10	MUML	Updated
11	DoP Arunachal Pradesh	Updated
12	TSECL	Not updated
13	TPGCL	Not updated
14	DoP Nagaland	Updated
15	MePTCL	Updated
16	MePGCL	Not updated
17	MSPCL	Not updated
18	P&ED Mizoram	Not updated
19	AEGCL	partially completed
20	APGCL	partially completed

All utilities are requested to update the google spreadsheet.

Deliberation

KMTL stated that google spreadsheet has been updated.

PowerGrid informed that it has been partially updated, to be updated completely shortly.

Forum exhorted the utilities who have not yet updated the sheet to update at the earliest.

B.19 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-

G_EUCx_ansmfo1W3VN0F5yLec8SyT3l3U/edit?gid=1889122402#gid=1889122402

Status as on 13.05.2025:

S1.	N C TT4:11:4:	DR parameter	Damada
No.	Name of Utilities	standardization	Remarks
1	KMTL	Not updated	
2	NETC	Not updated	
3	NEEPCO	Not updated	
4	NHPC	Not updated	
5	NTPC	Standardized	
6	OTPC	Not updated	
7	POWERGRID	Standardized	
8	IndiGrid	Not updated	
9	NBTL	Nangalbibra ICT-I&II not	
	NDIL	standardized	
10	MUML	Standardized	
11	DoP Arunachal	Not updated	
11	Pradesh	Not updated	
12	TSECL	Not updated	
13	TPGCL	Not updated	
14	DoP Nagaland	Not updated	
15	MePTCL	Partially completed	
16	MePGCL	Partially completed	
17	MSPCL	Yet to be standardized	
18	P&ED Mizoram	Standardized (limited to	
10	1 GED WILDUIAIII	available facility)	
19	AEGCL	Not updated	
20	APGCL	Not updated	

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

Deliberation

NBTL informed that Old relay at ICT-I & II at Nangalbibra which does not have option for DR standardization. The same will be replaced.

Forum strongly urged all utilities to update the google spreadsheet.

B.20 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_yXrGzXbM6VYRirhU3j2ut_
<a href="https://docs

Status as on 13.05.2025:

S1. No.	Name of Utilities	Relay setting details	Remarks
1	KMTL	Not updated	
2	NEEPCO	Partially updated	
3	NHPC	Not updated	
4	NTPC	Updated	
5	OTPC	Not updated	
6	POWERGRID	Partially updated	
7	IndiGrid	Not updated	
8	NBTL	Not updated	
9	DoP Arunachal Pradesh	Not updated	
10	TSECL	Partially 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	Not updated	
18	APGCL	Not updated	

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

Deliberation

Forum strongly urged all utilities to update the google spreadsheet at the earliest.

B.21 <u>Insulator details pertaining to the important transmission lines of NER</u> Power System:

Due to the upcoming monsoon season, it is of upmost 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-XlNpEOTEjM6x9vwpq6-AoJBWH_E/edit?usp=sharing

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

Deliberation

Forum strongly urged all utilities to update the google spreadsheet at the earliest.

B.22 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.

S1.	Description	Analog	Digital Points		Protection
No.		Points			Signal
1	SPS Signal		DIGITAL	STATUS:	
			Enable/Disable,		
			Operated/No	Operated	
			(Condition/Logic	Wise)	

Display of SPS SCADA Mapping

09-May-2	025 16:02:4	3 SPS	STATU	JS &	OPERATION
STATION	SPS	SPS ON/OFF	SPS OPTD.		
BGTPP_NTPC	BGTPP U-3	ON	NRML		
	SPS-2 Bangladesh	ON	NRML		
	SPS-4 Bangladesh	ON	NRML		
PALATANA_OTPC	SPS -2 HSR	OFF	NRML		
	SPS -3 HSR	OFF	NRML		
ZIRO_PG	ZIRO SPS	ON	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	ON	NRML		
BONGA_AS	SPS Stage -1	ON	NRML		
	SPS Stage -2	ON	NRML		
MONARCHAK	MONARCHAK	ON	NRML		

				SPS map	ping
S1.	CDC under energies	Long	term	status	in
No.	SPS under operation	measures		SCADA	(
				YES/No)	as

			per 78 th PCCM
1	Related to Generation evacuation from Monarchak(NEEPCO) Power Plant - Tripping of STG at Monarchak under outage of any one circuit of 132 kV Monarchak - Rokhia line & 132 kV Monarchak- Udaipur	132 kV Monarchak-	Mapping done till RLDC during April'25
2	SPS related to outage of 220 Misa-Samaguri DC: 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.	
3	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	RTU issue. By May'25
4	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 informed by Meghalaya during 78th PCCM. Latest status at NERLDC: Yet to be done.

			Done as
5	Related to outage of any one circuit of 132 kV Leshka – Khliehriat D/C	Reconductoring of 132 kV Khliehriat – Leshka D/C	informed by Meghalaya during 78th PCCM. Latest status at NERLDC: Yet to be done.
6	Related to 132kV SM Nagar(ISTS) - SM Nagar line to prevent Overloading	i) Commissiong 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	informed by TPTL during 78th PCCM. Latest status at NERLDC: As per NERLDC SCADA team, data point yet

Deliberation

				SPS maj	pping
				status	in
S1.	CDCdo	Long	term	SCADA	(
No.	SPS under operation	measures		YES/No)	as
				per	78 th
				PCCM	

	Related to Generation evacuation		
	from Monarchak(NEEPCO) Power		
	<u>Plant</u> - Tripping of STG at	Commissioning of	
1	Monarchak under outage of any one	132 kV Monarchak-	
	circuit of 132 kV Monarchak –	Surajmaninagar line	
	Rokhia line & 132 kV Monarchak-		Done on
	Udaipur		April'25
	SDS related to outgo of 220	Commissioning of	
	SPS related to outage of 220	400 kV Sonapur	
	Misa-Samaguri DC:	Substation. LILO of	
2	On tripping of 220 kV Misa-	400 kV Bongaigaon-	
	Samaguri DC: Load reduction of	Byrnihat Line at	
	50-60 MW at Samaguri area	Sonapur.	By June'25
		Reconductoring of	
		220 kV Balipara-	
	Related to outage of any one circuit	Sonabil D/C lines	
3		with higher ampacity	
	of 220 kV Balipara - Sonabil D/C	and Utilisation of 2 X	
		160 MVA ICTs at	
		Balipara	By June'25
			Done as per
			Meghalaya. Yet
		Reconductoring of	to be done as per
	Related to the outage of any one	132 KV Khliehriat	NERLDC.
4	circuit of the 132 KV Khliehriat	(PG)-Khliehriat D/C	Meghalaya to
	(PG)- Khliehriat D/C line	line	coordinate with
			NERLDC
			SCADA team.
			Done as per
	D-1-4-14	Reconductoring of	Meghalaya. Yet
5	Related to outage of any one circuit	132 kV Khliehriat –	to be done as per
	of 132 kV Leshka – Khliehriat D/C	Leshka D/C	NERLDC.
			Meghalaya to

				_
	Minutes 79th PCCM 19th	May 2025 Shillong		
			coordinate with	
			NERLDC	
			SCADA team.	
	Related to 132kV SM Nagar(ISTS) -	i) Commissiong of 132kV Monarchak - SM Nagar D/C ii)HTLS Reconductoring of 132kV SM		
6	SM Nagar line to prevent Overloading	Nagar(ISTS) - SM Nagar, 132kV SM Nagar(ISTS) - Budhjungnanagar, 132kV PK Bari(ISTS) - Ambasa and 132kV PK Bari(ISTS) - PK Bari	TSECL Absent	

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
	198/MP/2020	DoP, Arunachal Pradesh
08-Nov-2023	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 78th PCCM, NERLDC informed that all the concerned states have provided the progress report till March'25. Further, NERPC stated that the quarterly report for Jan'25-Marhch'25 quarter will be submitted to CERC shortly.

Deliberation

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.

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:

S1 N	Element Name	Trippin g date and time	Relay End1	Relay End2	A/R not Operated	Remarks from Utility (79 th PCCM)
1	132 kV Agartala - Surajmanina gar 2 Line	17-11- 2023 15:10	DP,ZI,Y-B,FD:5.81km, AR successfu	DP,ZI,R- Y,FD:11.98 KM	Surajman inagar	Tripura absent
2	132 kV Dimapur - Doyang 2	29-03- 2024 13:10	DP, Z1, R- Y, FD: 72.6km	DP, Z1, R-	Doyang	CB procurement underway. By May'25

		Minutes 7	9 th PCCM 19 th	May 2025 Shi	llong	
3	132 kV Aizawl	02-11-	DP, ZII,Y-	LLG fault.	Aizawl(PG	Carrier signal
	- Tipaimukh	2024	E, FD: 32.4	IL1	CIL)	issue at
	Line	10:22	KM,	1.06kA		Tipaimukh
			Carrier	IL2 0.88		end. MSPCL to
			received	kA FD:		check the time
			after CB	63.3 km (delay settings
			opening ,	A/R		for sending
			No Carrier	Successfu		carrier at
			aided	1)		Tipaimukh.
			tripping			MSPCL
						updated that
						issue could
						not be resolved
						due to law &
						Order issue in
						the state
4	220 kV	02-11-	DP, ZI, B-	DP, ZI, B-	Both ends	AEGCL
	Behiating -	2024	E, 1.1 kA	E		updated that
	Tinsukia 1	10:32				matter has
	Line					been raised to
						NERPSIP.
						Matter to be
						taken up in
						NERSIP review
						meeting
5	132 kV	04-11-	DP, ZI, Y-	DP, ZI, Y-	Both	AR in disabled
	Panchgram -	2024	E, FD:	E, FD:	Ends	mode at both
	Lumshnong	12:50	12.5km,	39.9 km		ends. To be
	Line		3.2kA			enabled after
						СТ
						replacement at
						Lumshnonng

	Minutes 79th PCCM 19th May 2025 Shillong					
						end by MePTCL.
6	132 kV	10-11-	DP, ZI, Y-	DP, ZI, Y-	Bokajan	Issues with
	Bokajan -	2024	E, FD: 20.3	E, FD: 8.4	(AEGCL)	pneumatic
	Dimapur Line	13:08	kms	KM, AR		breakers at
				Successfu		Bokajan end.
				1		New CBs in
						transit, to
						reach the site
						by end of
						June'25. After
						that 1 week
						required for
						installing the
						CBs.
						Relay logic
				DP, ZI, B-		issues, will be
				E, FD:		checked.
	132 kV	13-01-	DP, ZI, B-	67.724K	Daporijo	Issue with
7	Daporijo -	2025	E, AR Not	ms, A/R	(DoP AP)	pneumatic
	Ziro Line	15:00:00	Operated	Operated	(201111)	CBs.
				Successfu		Procurement
				lly		of new CBs
						underway.
						End to end
				DP, ZI, B-		testing will be
	132 kV		DP, ZI, B-			done in
	AGTCCPP -	16-03-	E, FD:		AGTCCPP	coordination
8	Kumarghat	2025	22.08 Kms,	•	(NEEPCO)	with NERTS to
	Line	20:32:00	A/R Not	_	•	resolve the AR
			Operated	Successfu		issue at
				lly		AGTCCPP.
						Requested

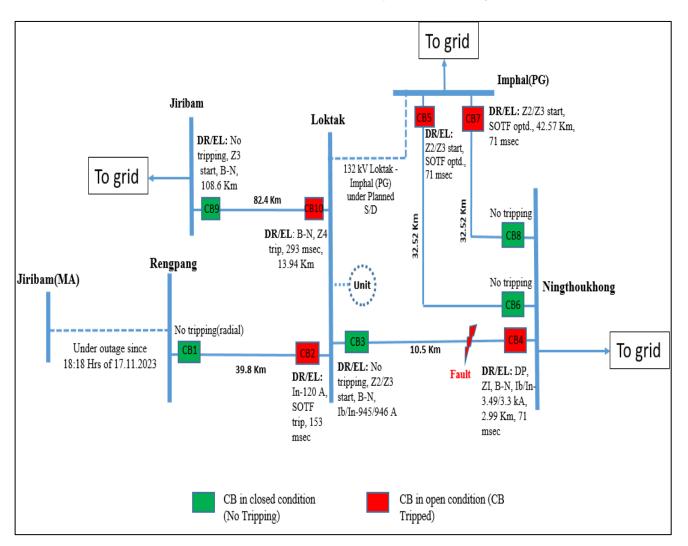
						NERTS to extend support in the matter.
9	132 kV Basar- Daporijo Line	19-03- 2025 08:44:00	DP, ZI, R-Y, FD: 33.15 km, A/R Not Operated	Y, A/R Operated	Basar (DoP, Arunacha 1 Pradesh)	Multiphase AR logic implemented at Basar but not working. Basar SS is not handed over to DoP. Issue to be resolved jointly by DoP, AP And NER Comprehensiv e team of Powergrid.

Sub-committee noted as above

C.3 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)-Ninghtoukhong 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.

NHPC & MSPCL may update the actions taken on the above-mentioned issues.

Deliberation of the 78th PCC

PowerGrid informed, regarding tripping of Imhpal-Ningthounkong 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 Ningthounkong (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

NHPC may update

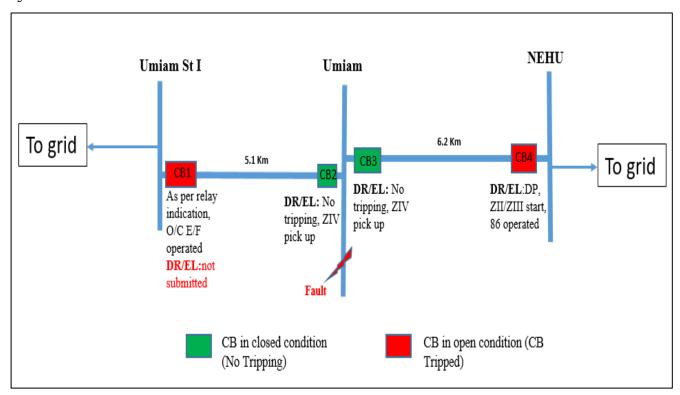
Deliberation

NHPC updated as follow -

- Implement PLCC and Line differential protection on the Loktak Ningthounkong (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 lineto be done within a week
- 3. Rectify the SOTF issue at Loktak end for Rengpang line. to be done within a week

C.4 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.

MePTCL/MePGCL is requested to provide update on the above-mentioned issues

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 Umaim 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.

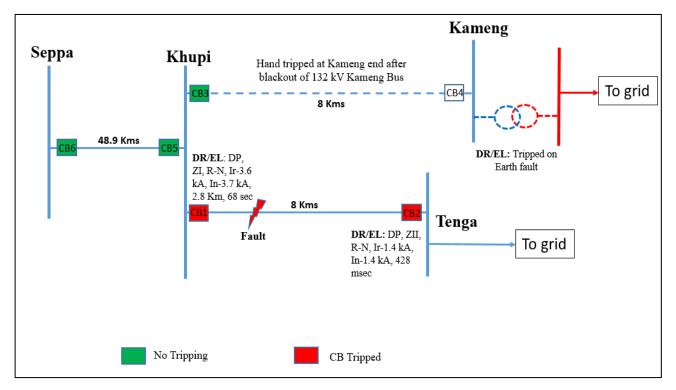
Deliberation

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.

C.5 Grid Disturbance in 132 kV Kameng S/S of NEEPCO and Khupi and Seppa areas of Arunachal Pradesh Power System on 23-03-2025:

132 kV Kameng S/S of NEEPCO and Khupi and Seppa areas of Arunachal Pradesh Power System were connected with rest of NER Grid through 132 kV Tenga-Khupi line and 132 kV Kameng-Khupi line and 400/132 kV ICT at Kameng. At 18:18 Hrs of 23.03.2025, 400/132 kV ICT at Kameng and 132 kV Tenga-Khupi line tripped. Due to these trippings, 132 kV Kameng S/S, Khupi and Seppa areas resulting in grid disturbance at 132 kV Kameng S/S of NEEPCO and Khupi & Seppa areas of Arunachal Pradesh got isolated from NER Grid and collapsed due to no source available in these areas. Load loss of 3 MW occurred.



As per DR analysis, R-N fault (Ir-3.6 kA, In-3.7 kA) in 132 kV Tenga-Khupi line at a distance of 2.8 Km from Khupi initiated at 18:18:13.361 Hrs and cleared within 68 msec from Khupi end on operation of DP, ZI. Fault cleared within 428 msec from Tenga end on ZII. At 18:18:14.141 Hrs, Kameng ICT tripped on E/F which seems to be unwanted.

Following observations:

- Tripping of 400/132 kV ICT at Kameng on Earth fault Stg-1 before fault could be cleared from Khupi end of 132 kV Tenga Khupi Line is inferred misoperation. Root cause of unwanted tripping of 400/132 kV ICT at Kameng needs to be intimated.
- The back-up protection settings at Kameng, Khupi and Tenga needs to be reviewed and coordinated as per NER protection philosophy.
- DR analog and digital channel of Kameng ICT needs to be standardized as per recommendations in FOLD working group.
- SOE not recorded for tripping of 132 kV Tenga-Khupi line at 18:18 Hrs. The same needs attention from DoP Arunachal Pradesh/SLDC Arunachal Pradesh.
 - 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

Similar incident occurred at 15:25 Hrs of 13-02-2025.

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

As per 78th **PCC minutes,** NEEPCO updated, regarding tripping of ICT at Kameng, that a tree branch fell on the ICT during the inclement weather. NERPC raised concern that tripping is related to Fault in the Khuppi-Tenga line and there may be issue with the B/U protection settings of the ICT. Forum opined that B/U protection coordination is required and requested NERPC secretariat to resolve the coordination issue through a special meeting with NERLDC, NEEPCO, PowerGrid and Arunachal Pradesh

Deliberation

NERPC stated that the meeting will be held shortly to resolve the matter.

C.6 Status on resolution of protection issues as discussed in 78th and 77th PCCM

SN	Protection issues to	Concerned	Previous status	Latest status
	be resolved as	Utility		(79th PCCM)
	decided in 77 th and			
	76th PCCM			
1.	LDP on Rokhia-	TSECL	RoW issue resolved.	Tripura absent
	N.Rokhia link		Work to be completed	
			by next PCC	
2.	BB protection stability	NEEPCO	Price offer awaited	Hitachi
	test at Doyang		from ABB. ABB	provide the
			persons will come in	offer ,but there
			end of May'25	is issue with
				terms of
				payment, will
				be resolved by
				end of May'25
3.	Modification of SPS	MePTCL	Matter has been taken	Same staus
	Scheme related to the		up with NERPSIP.	
	outage of 132 kV		Also, Protection	
	Leshka –Khliehriat		coupler is not present	
	D/C after LILO at 132		there, in talk with	
	kV Mynkre S/S		ABB	

4.	Grid Disturbance in	MIzoram	Mizoram to conduct	Will look into
	Tuirial S/S of		relay testing for	the matter this
	NEEPCO & Kolasib		checking the	month
	and Bairabi areas of		healthiness for 132 kV	
	Mizoram Power		Kolasib – Tuirial and	
	System on 20-03-		132 kV Kolasib -	
	2025:		Bairabi line.	
	Protection system of			
	132 kV Kolasib-Turial			
	line failed to isolate the			
	fault. P&ED Mizoram			
	needs to ensure			
	healthiness of			
	protection system of			
	132 kV Kolasib-Tuirial			
	line.			
5.	Grid Disturbance in	MePTCL	NERLDC highlighted	Protection
5.	Grid Disturbance in Mawlyndep area of	MePTCL	NERLDC highlighted in 78th PCCM that	
5.		MePTCL		coupler at
5.	Mawlyndep area of	MePTCL	in 78th PCCM that there was no carrier	coupler at Mustem is
5.	Mawlyndep area of Meghalaya Power	MePTCL	in 78th PCCM that	coupler at Mustem is
5.	Mawlyndep area of Meghalaya Power system on 23-03-	MePTCL	in 78th PCCM that there was no carrier aided tripping at	coupler at Mustem is defective due to which carrier
5.	Mawlyndep area of Meghalaya Power system on 23-03-2025:	MePTCL	in 78th PCCM that there was no carrier aided tripping at Mustem despite	coupler at Mustem is defective due to which carrier aided tripping
5.	Mawlyndep area of Meghalaya Power system on 23-03- 2025: "Carrier send" signal	MePTCL	in 78th PCCM that there was no carrier aided tripping at Mustem despite carrier received from	coupler at Mustem is defective due to which carrier aided tripping did not occur at
5.	Mawlyndep area of Meghalaya Power system on 23-03- 2025: "Carrier send" signal high at Mawlyndep	MePTCL	in 78th PCCM that there was no carrier aided tripping at Mustem despite carrier received from Mawlyndep end.	coupler at Mustem is defective due to which carrier aided tripping did not occur at Mustem.
5.	Mawlyndep area of Meghalaya Power system on 23-03- 2025: "Carrier send" signal high at Mawlyndep end. However, 132 kV	MePTCL	in 78th PCCM that there was no carrier aided tripping at Mustem despite carrier received from Mawlyndep end. Forum directed	coupler at Mustem is defective due to which carrier aided tripping did not occur at Mustem. MePTCL
5.	Mawlyndep area of Meghalaya Power system on 23-03- 2025: "Carrier send" signal high at Mawlyndep end. However, 132 kV Mustem-Mawlyndep	MePTCL	in 78th PCCM that there was no carrier aided tripping at Mustem despite carrier received from Mawlyndep end. Forum directed MePTCL to look into	coupler at Mustem is defective due to which carrier aided tripping did not occur at Mustem. MePTCL informed that
5.	Mawlyndep area of Meghalaya Power system on 23-03- 2025: "Carrier send" signal high at Mawlyndep end. However, 132 kV Mustem-Mawlyndep line tripped after ZII	MePTCL	in 78th PCCM that there was no carrier aided tripping at Mustem despite carrier received from Mawlyndep end. Forum directed MePTCL to look into and resolve the matter	coupler at Mustem is defective due to which carrier aided tripping did not occur at Mustem. MePTCL informed that communication
5.	Mawlyndep area of Meghalaya Power system on 23-03- 2025: "Carrier send" signal high at Mawlyndep end. However, 132 kV Mustem-Mawlyndep line tripped after ZII time delay. The same	MePTCL	in 78th PCCM that there was no carrier aided tripping at Mustem despite carrier received from Mawlyndep end. Forum directed MePTCL to look into and resolve the matter at the earliest and	coupler at Mustem is defective due to which carrier aided tripping did not occur at Mustem. MePTCL informed that communication team is trying to
5.	Mawlyndep area of Meghalaya Power system on 23-03- 2025: "Carrier send" signal high at Mawlyndep end. However, 132 kV Mustem-Mawlyndep line tripped after ZII time delay. The same needs to be checked by	MePTCL	in 78th PCCM that there was no carrier aided tripping at Mustem despite carrier received from Mawlyndep end. Forum directed MePTCL to look into and resolve the matter at the earliest and	coupler at Mustem is defective due to which carrier aided tripping did not occur at Mustem. MePTCL informed that communication team is trying to replace the
5.	Mawlyndep area of Meghalaya Power system on 23-03- 2025: "Carrier send" signal high at Mawlyndep end. However, 132 kV Mustem-Mawlyndep line tripped after ZII time delay. The same needs to be checked by	MePTCL	in 78th PCCM that there was no carrier aided tripping at Mustem despite carrier received from Mawlyndep end. Forum directed MePTCL to look into and resolve the matter at the earliest and	coupler at Mustem is defective due to which carrier aided tripping did not occur at Mustem. MePTCL informed that communication team is trying to

		However,	no
		spare	is
		available. Sp	are
		protection	
		coupler of ot	her
		substations	to
		be used.	

Sub-committee noted as above

C.7 Installation of line differential protection for short lines:

As per sub-regulation3 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 78th PCCM -

Name of utility	Last updated status	Status as per
	(77th/76rd/75nd PCCM)	78th PCCM
AEGCL	AEGCL updated that PSDF	Under discussion in
	monitoring group has suspended	TESG, TESG asked for
	funding for LDP for 1 year. AEGCL	some inputs, replied to.
	requested MS, NERPC to take up	
	with NPC, CEA to provide funding	
	for the same considering the	
	special case of NER.	
	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	DPR to be revised. State
	submitted within one month.	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
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	Budhjungnagar. DPR to be prepared. Cost estimate submitted to TIDC to arrange for ADB funding. TIDC approval is still waited for fund. Approved for ADB funding. Etendering underway. Regarding Rokhia-N.Rokhia link, he updated that the breaker has been received.	Tripura absent

Sub-committee noted as above

Annexure-I
List of Participants in the 79th PCC Meeting held on 19.05.2025

SN	Name & Designation	Organization	Contact No.
1	Sh. Moli Kamki, AE (E)	Ar. Pradesh	09863703539
2	Sh. Nishanta Baruah, Dy.Mgr (MRT),AEGCL	Assam	08475036988
3	Sh. Juganta Sonowar, Dy.Mgr (MRT), AEGCL,	Assam	09957710783
4	Sh. Lukran Kamei,Mgr, MSPCL	Manipur	07085597555
5	Sh. C.Chawngzikpuia, SDO (MRT)	Mizoram	08974770712
6	Sh. Samuel Lalhriatzuala, SDO (Power Store)	Mizoram	08729982857
7	Sh. Vipin Kumar Azad, AE, SLDC	Mizoram	07085205665
8	Sh. Kitbok Syrti, EE (SP Division), MePTCL	Meghalaya	08974595356
9	Sh. A.Shullai,AEE,GSPSD, MePGCL	Meghalaya	07005379616
10	Sh. A.G.Tham, AEE, MRT, MePTCL	Meghalaya	09774664034
11	Sh. Alex E.Ngullie, JE, SLDC	Nagaland	08837080321
	-	Tripura	-
12	Sh. Neeraj Kumar, GM	NERLDC	09910907949
13	Sh. Subhra Ghosh, Asst.Mgr	NERLDC	08415857079
14	Sh. Manash Jyoti Baishya, Ch.Manager	PGCIL	09435555740
15	Smti. M.Talukdar, GM	NEEPCO	09435339690
16	Sh. Manas Pratim Sharma, Sr.Mgr	NEEPCO	08729901871
17	Sh. Sanjib Pal, Section Head-PME	OTPC	09436583737
18	Sh. C.L.Khayuingam, Gr.Sr.Mgr (E)	NHPC	07085916006
19	Sh.Mahesh Bhagat, Mgr (O&M)	STERLITE	09206682124
20	Sh. Suneel Kumar Patel, Engineer (CCR)	STERLITE	09109467509
	-	NTPC	-
21	Sh.Basab Maity, Engineer	PRDC	09732416233
22	Sh. Manoj Kumar Gupta, DGM(Trans.)	KMTL	09996789264
23	Sh. K.B.Jagtap, Member Secretary	NERPC	-
24	Smti Maya Kumari, Dy.Director	NERPC	09024334279
25	Sh. Vikash Shankar, Asst.Director	NERPC	09455331756