

North Eastern Regional Power Committee

Agenda For

56th PCC Sub-Committee Meeting

Time of meeting : 10:30 Hrs.

Date of meeting : 21st April, 2021 (Wednesday)

Venue : “NERPC Conference Hall”, Shillong.

A. CONFIRMATION OF MINUTES

CONFIRMATION OF MINUTES OF 55th MEETING OF PROTECTION SUB-COMMITTEE OF NERPC.

The minutes of 55th meeting of Protection Sub-committee held on 11th November, 2020 at NERPC Conference Hall were circulated vide letter No. NERPC/SE (O)/PCC/2020/2175-2212 dated 07th December, 2020.

The Sub-committee may confirm the minutes of 55th PCCM of NERPC as no comments/observations were received from the constituents.

B. ITEMS FOR DISCUSSION

B.1 Protection Audit of NER:

First phase of Third Party protection Audit (2013-14) was completed in 2015 and in Second Stage of Protection Audit (2017-18) numerous stations were covered. However few stations are yet to be audited. In 55th PCC meeting Director(O&P), NERPC stated that few stations have been audited in the second stage and requested all the utilities to submit the station names which are to be audited in the second stage.

Remaining stations to be audited in the Second phase:

Name of the state/utility	Name of the station(s)
Arunachal Pradesh	132/33kV Aalo, 132/33kV Pasighat, 220/132/33kV Deomali, 132/33kV Daporizo, 132/33kV Lekhi, 132/33kV Tippi, 132/33kV Chimpur, 132/33kV Khupi
Assam	Yet to be intimated
Manipur	Yet to be intimated
Meghalaya	400/220/132kV Byrnihat, 132kV Mawphlang, 132kV Mustem, 132kV Umiam
Mizoram	Yet to be intimated
Nagaland	132kV Wokha, 132kV Sanis, 132kV Kiphire**
Tripura	Yet to be intimated

Members may please discuss.

B.2 Review of Settings for Important elements:

As per discussions in the 55th PCC meeting and the Sub-group meeting on 12.04.2020 the following settings are to be reviewed:-

- (i) All 132kV feeders of DHEP alongwith Mokokchung(NAG), Sanis and Wokha.
- (ii) 400/132kV ICTs at Palatana & 132kV Palatana-Udaipur
- (iii) Downstream co-ordination at 132kV Zuangtui(Zemabawk) completed. NERTS to revert back to original zone timings at Melriat.
- (iv) 132kV Dimapur-Dimapur D/C with downstream of Dimapur(Nagarjan)
- (v) Co-ordination of Tipaimukh relay settings with Aizawl and Jiribam.
- (vi) Status of review of settings at Srikona, Panchgram and Pailapool.
- (vii) Review of settings for 132kV AGTCCPP – Agartala D/C
- (viii) Review of Distance Protection settings at Ningthoukong for Churachandpur D/C.

Members may please discuss.

AGENDA ITEM FROM NERPC:

B.3 Implementation Of Auto-Reclosure on Z-I operation:

In the discussions of the Sub-group on 12-04-2021 the following points were noted:-

- Auto-Reclosure is very much required for maintaining system stability, reliability and uninterrupted power supply.
- Presently it will take some time for the state utilities to implement the PLCC and establish carrier communication between stations.
- The operation of Auto-Reclosure on Z-I operation at the local end independent of carrier healthiness is required.

The matter was referred to the next PCC meeting for deliberation.

Members may please discuss.

AGENDA ITEM FROM NERLDC:

B.4. Frequent tripping of 132 kV Kohima-Wokha, 132 kV Sanis-Wokha and 132 kV Sanis-Doyang Lines

Frequent tripping of the above lines reduces the reliability of Wokha and Sanis area of Nagaland Power System. Healthiness of protection system at Wokha and Sanis needs to be checked at earliest for correct operation to avoid re-occurrence. DR & EL outputs from Mokokchung(Nagaland), Doyang, Wokha&Sanis needs to be submitted for proper analysis. As per preliminary analysis done the fault is most likely in 132 kV Wokha-Sanis line. Due to non-clearance of fault in the line at Wokha end, Backup protection of Kohima for the line operates. No tripping at Wokha for Kohima or Sanis line is the concern.

As discussed in the Subgroup meeting dated 12.04.2021, Director NERPC requested DoP Nagaland to share settings from Wokha, Sanis and Mokokchung for ensuring relay coordination.

NERLDC may please deliberate.

B.5. Tripping of 132 kV Imphal – Ningthoukong and Ningthoukong – Loktak line on 26.03.2021

Fault was in 132 kV Imphal-Ningthoukong line which was cleared within 105 msec at Imphal but due to non-clearance of fault at Ningthoukong end, fault was continuously feeding from Loktak HEP and was cleared by opening of healthy line 132 kV Loktak-Ningthoukong from Loktak end within 460 msec on operation B/U O/C Relay.

Observations

Protection relay at Ningthoukhong for 132 kV Imphal feeder needs to be checked/tested at the earliest by MSPCL team to avoid future reoccurrence.

NERLDC may please deliberate.

B.6. Frequent Tripping of 132 Ningthoukhong - Churachandpur D/C

132kV Ningthoukhong - Churachandpur D/C tripped on 19/02/2021 and 02/03/2021 due to fault in 132 kV Churachandpur–Elangkangpokpi/132 kV Churachandpur - Kakching line. MSPCL informed that TMS settings has been revised at Ningthoukhong for Churachandpur line to avoid tripping of healthy feeders due to relay coordination issues. In the Subgroup meeting held on 12.04.2021, Director, NERPC requested MSPCL to submit the revised implemented settings.

NERLDC may please deliberate.

B.7. Black out of Ningthoukhong area of Manipur Power system at 15:05 Hrs on 13.04.2021

At around 15:05 hrs on 13.04.2021, 132 kV Imphal-Loktak, 132kV Imphal-Ningthoukhong & 132 kV Loktak-Ningthoukhong tripped due to which Ningthoukhong area of Manipur Power System was blacked out.

As per the analysis, fault was in 132 kV Imphal – Loktak line. DPR at Imphal detected Z1, R-N, 17.37 km with fault clearing time of 71 msec and DPR at Loktak detected Z2, R-N with fault clearing time of 482 msec. At the same time, 132 kV Imphal – Ningthoukhong line tripped at Imphal end on Back up Over current EF within 482 msec. 132 kV Loktak – Ningthoukhong line also tripped from Ningthoukhong end on Back Up Over current EF.

Observations:

- No carrier aided tripping was observed at Loktak end which needs to be checked by NHPC.
- Back up protection timing coordination has to be done at Imphal(PG) for Ningthoukhong feeder and at Ningthoukhong for Loktak feeder by POWERGRID and MSPCL.
- DR output from Ningthoukhong is configured for total duration of 720 msec with pre fault time of 120 msec due to which fault clearance time cannot be concluded. Pre – fault time of 500 msec and post fault time of 2.5 sec has to be configured in the DR output for proper analysis of events.

NERLDC may please deliberate.

B.8. Tripping of 132 kV Loktak – Jiribam and 132 kV Loktak – Imphal line at 12:37 Hrs on 26.03.2021

Fault was in 132 kV Loktak – Imphal line but 132 kV Loktak – Jiribam line also tripped at Loktak end in Z4 within 162 msec.

Observations:

- Tripping of 132 kV Loktak – Jiribam line is unwanted.
- Zone 4 timing of 162 msec needs to be reviewed by NHPC to avoid unwanted tripping of healthy lines.

NERLDC may please deliberate.

B.9. Disturbance in Karong area of Manipur Power System

As per Clause no B.6 (1) of 55th PCC Meeting held on 11.11.2020, Disturbance in Karong area of Manipur Power System was observed due to non-operation of Distance Protection of 132 kV lines at Karong. It was deliberated that DP settings at Karong have been changed on 07th Oct'20 and relay connections would be checked by 15th Nov'20. However, 3 nos. of Grid Disturbance of same nature occurred since Jan'21 at Karong area of Manipur Power System which needs to be rectified to avoid repeated Grid Disturbance.

NERLDC may please deliberate.

B.10. Disturbance in Yaingangpokpi area of Manipur Power System

Unwanted tripping of 132 kV Imphal(MSPCL)- Yaingangpokpi D/C was observed on 30.01.2021 and 10.03.2021 due to operation of Earth Fault at Yaingangpokpi for downstream fault.

Also, 132 kV Imphal(MSPCL)- Yaingangpokpi D/C tripped on 12.04.2021 due to R ph CT blast in 132 kV Imphal(MSPCL)- Yaingangpokpi I line. However, tripping of 132 kV Imphal(MSPCL)- Yaingangpokpi II was observed in ZI which is undesirable.

Observations:

Protection system at Yaingangpokpi for Imphal I and II lines needs to be checked at the earliest by MSPCL to avoid recurrence.

NERLDC may please deliberate.

B.11. Black out of 220/132 kV Tinsukia S/S and radially connected S/S of Assam at 11:30 Hrs on 08.04.2021

At around 11:30 hrs of 08.04.21, 220 kV AGBPP - Tinsukia D/C tripped. At the same time, 220 kV Tinsukia Bus I and Bus II also tripped causing blackout at 220/132 kV Tinsukia S/S of Assam and radially fed substations of 132 kV Rupai, Margherita, Dibrugarh, Behating and Bordubi.

NERLDC vide Letter with Ref no NERLDC/SOII/2021/20/1245 dated 09.04.2021 had requested for intimating the root cause of the events but the reply is awaited.

AEGCL may intimate the root cause of the event resulting in the Grid Disturbance.

NERLDC may please deliberate.

B.12. Disturbance in Kohima area of Nagaland Power System at 14:00 Hrs on 10.04.2021

Grid Disturbance of category GD-1 with load loss of around 10 MW occurred at Kohima area of Nagaland Power system on 10.04.2021 due to tripping 132 kV Dimapur- Kohima, 132 kV Kohima-Wokha & 132 kV Kohima – Meluri lines.

Observations

Operation of SOTF protection at Dimapur for Kohima line for fault beyond the line seems to be unwanted. The SOTF setting needs to be checked/reviewed at Dimapur at the earliest by POWERGRID to avoid recurrence. Also, EL output from Kohima for Dimapur shows Dist REV Z-4 ON detection which confirmed that the fault was in reverse side.

NERLDC may please deliberate.

B.13. Tripping of 132 kV Dimapur – Imphal Line and 132 kV Dimapur – Kohima Line at 14:55 Hrs on 09.03.2021

Fault was in 132 kV Dimapur – Imphal Line but 132 kV Dimapur – Kohima line tripped on SOTF which is unwanted.

Observations

SOTF settings at Dimapur for Kohima line has to be checked by POWERGRID to avoid reoccurrence of event.

NERLDC may please deliberate.

B.14. Frequent Tripping of 132 kV Dimapur – Kohima line

132 kV Dimapur – Kohima line tripped 26 times since January'21.

As per the analysis, fault was mainly due to vegetation infringement.

NERLDC vide Letter no NERLDC/SOII/14/1012 dated 05.03.2021 and Letter no NERLDC/SOII/14/1215 dated 06.04.2021 had requested for clearance of vegetation infringement to avoid repeated tripping of the line. However, the tripping is persistent and considering the ongoing monsoon season, regular vegetation clearance has to be ensured to avoid reoccurrence.

NERLDC may please deliberate.

B.15. Frequent tripping of 132 kV Balipara – Tenga line.

132 kV Balipara – Tenga line tripped 4 times since Jan'21. The root cause of frequent tripping could be concluded due to unavailability of DR, EL output and FIR.

DoP, AP is requested to intimate the root cause of tripping and also submit DR and EL output along with FIR for proper analysis of the event.

NERLDC may please deliberate.

B.16. Near Miss Incident at Palatana Power Station at 12:54 Hrs on 28.03.2021

400 kV Bus 2 along with 400/132 kV ICT 2 at Palatana, OTPC tripped at 12:54 Hrs on 28.03.2021 due to operation of Bus Bar protection. DR, EL output and FIR has not been received for analysis of the event.

Palatana, OTPC is requested to intimate the root cause of the event and remedial measures that has been taken.

NERLDC may please deliberate.

B.17. Non operation of SPS 4 at Palatana , OTPC at 10:41 Hrs on 01.04.2021

At 10:41 Hrs on 01.04.2021, 400/132 kV, 125 MVA ICT II at Palatana tripped while ICT I was under Shutdown. However, SPS 4 at Palatana resulting in tripping of 132 kV Comilla – SM Nagar (TSECL) D/C did not operate.

Observations:

As per the implemented SPS-4 logic, the scheme will work during operation of master trip relays of both the ICTs. As ICT I was under Shutdown, the scheme did not operate. For more reliability, contacts of HV and LV side CB auxiliary status needs to be included in the present logic.

NERLDC may please deliberate.

B.18. Disturbance in PK Bari(TSECL) area of Tripura Power System at 00:58 Hrs on 01.04.21

At 00:58 Hrs on 01.04.21, all the 132 kV elements at PK Bari(TSECL) tripped due to operation of LBB protection.

Observations:

Which feeder initiated the LBB protection has to be clarified by TSECL.

NERLDC may please deliberate.

B.19. Tripping of 400 kV Silchar – Imphal D/C at 06:26 Hrs on 14.04.2021

Fault was in 400 kV Silchar – Imphal III Line. Tripping of 400 kV Silchar – Imphal Line is unwanted.

Observations:

CB Timing at Silchar for Imphal II Line is to be checked as Y ph was opened after 8 msec of opening of R and B phase.

NERLDC may please deliberate.

B.20. Black out of Leshka Power Station of Meghalaya at 18:50 Hrs on 31.03.2021

132 kV Khleihriat – Leshka D/C tripped at 18:50 Hrs on 31.03.2021 with R-B-E fault in ZI for both the feeders. As per the analysis, solid nature of fault is observed but root cause could not be concluded due to unavailability of DR and EL output and FIR from Leshka Power Station. MePTCL may confirm the root cause and MePGCL may upload DR and EL output and FIR from Leshka PS in Tripping portal.

NERLDC may please deliberate.

C. I T E M S F O R S T A T U S R E V I E W

C.1. STANDARDIZATION OF DR CHANNELS:

In 55th PCC meeting, DM, AEGCL informed that for 220kV Boko, 132kV Rangia and few other stations in Upper Assam DR standardisation would be done by Dec'20. AEE, MePTCL informed that for all MePTCL stations except 400kV Byrnihat the DR standardisation has been completed. He requested NERTS to share the contact details of service engineer so that the same may be completed at the earliest.

Members unanimously requested NERTS, POWERGRID for a training on DR standardisation/downloading etc., over VC.

DoP Ar. Pradesh, AEGCL, MSPCL, MePTCL, DoP Nagaland, TSECL may please intimate the latest status.

C.2 STATUS OF AUTO-RECLOSURE FOR IMPORTANT STATE GRID LINES:

- Latest status of AEGCL lines

SPAR implemented at both ends	Status as updated in the last Sub-group Meeting	Latest status
220kV Agia - BTPS D/C	New ERL Panels installed. Latest Status to be intimated.	

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220kV BTPS- Salakati D/C	Salakati PLCC in service. Connection from protection panel in Kiosk to PLCC panel in CR to be made. Target Aug'20. Latest Status to be intimated.	Operational.
SPAR implemented at one end	Status as updated in the last Sub-group Meeting	Latest status
220kV Agia-Azara D/C	SPAR available at Azara. At Agia by the end of January 2020. Tied to completion of PLCC works under R&U. Latest Status to be intimated.	Tied to completion of PLCC works under R&U.
220kV Azara-Boko D/C	SPAR available at Azara. At Boko, the testing of the new panels is yet to be started. By January 2020. Tied to completion of PLCC works under R&U. Latest Status to be intimated.	
220kV Samaguri-Sarusajai D/C	PLCC to be established under R&U scheme. Tied to completion of PLCC works under R&U. Latest Status to be intimated.	
132kV Balipara-Sonabil	Balipara end status to be intimated. Tied to completion of PLCC works under R&U. Latest Status to be intimated.	
132kV Pavoi-Sonabil	PLCC to be established under R&U scheme. Tied to completion of PLCC works under R&U. Latest Status to be intimated.	

Status of MePTCL lines

Name of the line	Status as updated in the last Sub-group meeting	Latest Status
132 kV Agia - Mendipathar	PLCC works completed. AR operation to be configured by Aug'2020. Latest Status to be intimated.	PLCC works completed. AR operation to be configured by Aug'2020.
132 kV EPIP II - Byrnihat D/C		
132 kV EPIP II - Umtru D/C		
132 kV Kahilipara - Umtru D/C		
132 kV Khliehriat - Mustem		
132 kV Mustem - NEHU line		
132 kV Khliehriat (MePTCL) - Khliehriat (PG) Ckt#II		
132 kV Khliehriat- NEIGRIHMS		
132 kV NEHU - Mawlai		
132 kV Mawlai - Umiam Stage I		
132 kV Mawphlang - Nongstoin		
132 kV Mawphlang - Umiam Stg I D/C		
132 kV Mawphlang- Mawlai		
132 kV Mendipathar – Nangalbibra		
132 kV Myntdu Leshka - Khliehriat D/C		
132 kV Nangalbibra – Nongstoin		
132 kV NEHU – NEIGRIHMS		
132 kV NEHU – Umiam		
132 kV Sarusajai - Umtru D/C		

132 kV Umiam - Umiam St I	Under MePGCL Scope	No participant from MePGCL
132 kV Umiam St I - Umiam St II		
132 kV Umiam St I - Umiam St III D/C		
132 kV Umiam St III - Umiam St IV D/C		
132 kV Umiam St III - Umtru D/C		
132 kV Umtru - Umiam St IV D/C		

In 55th PCC meeting MePTCL informed that check sync relay for AR is under procurement.

- Other utilities are requested to furnish the target date for Implementation of Auto Reclosure Scheme and furnish the details as decided
- For 132kV Dimapur-Kohima decision as per previous meeting: 3-ph A/R is to be implemented for 132kV Dimapur-Kohima, with dead line charging at Kohima and check sync at Dimapur.
- Updated list of auto recloser is attached as **Annexure-C.2**.

Concerned utilities may please intimate the latest status.

C.3 Installation of line differential protection for short lines:

As per discussion in 55th PCC meeting and subsequent OCC/Sub-group meetings the status for different STUs are as follows:

Name of utility	Last updated status	Latest status
AEGCL	Lines identified. Under Preparation stage.	
MSPCL	Lines identified. LDP for 132kV Imphal-Imphal and 132kV Jiribam-Jiribam proposed. DPR submitted.	
MePTCL	Work completed but not commissioned. By Nov'20.	
P&ED Mizoram	Lines identified viz. 132kV Aizawl Luangmual and 132kV Kawmzawl Khawiva. DPR submitted	
DoP Nagaland	Lines identified under DPR preparation stage.	
TSECL	132kV 79Tilla-Budhjungnagar. DPR to be prepared	

Also as per previous deliberation for the following important lines it was decided to implement LDP as early as possible:

Name of the line	Status of OPGW		Status of relay at both ends	
	Implementing utility	Latest status	Implementing utility	Latest status
132kV DHEP-Sanis	DoP Nagaland	NERTS to co-ordinate for fiber allocation	NEEPCO	LDP to be implemented. Relay under procurement

132kV RHEP- Pare-2	NERTS	NERTS to co-ordinate for fiber allocation	NEEPCO	Relay under procurement
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As per approval of the 19th TCC/NERPC meeting NERTS is required to implement line differential protection for the following lines. The status may be discussed.

SN	Line	Length (CKm)
1	132kV D/C RC Nagar – Agartala - I	8.38
2	132kV D/C RC Nagar – Agartala - II	8.38
3	132kV D/C Mokokchung – Mokokchung - I	1.70
4	132kV D/C Mokokchung – Mokokchung - II	1.70
5	132kV S/C Aizawl – Melriat	12.00
6	132kV S/C Badarpur – Badarpur	1.02
7	132kV S/C Imphal – Imphal – I	1.50
8	132kV S/C Imphal – Imphal – II	1.50
9	132kV S/C Kumarghat – PK Bari	5.00
10	132kV S/C Khliehriat – Khliehriat - I	7.8
11	132kV S/C Dimapur (PG) – Dimapur (S) - Old	0.65
12	132kV S/C Dimapur (PG) – Dimapur (S) - New	0.65
13	220kV S/C Balipara - Tezpur	8.62
14	220kV Salakati – BTPS - I	2.70
15	220kV Salakati – BTPS - II	2.70

Concerned utilities may please update the status.

C.4 Implementation of carrier inter-trip for important grid lines

Decisions as per previous meeting(s):

- Carrier-intertrip to be immediately implemented for all Important grid elements in NER.
- Utilities are requested to update the Status
- List of Important Grid Elements in NER is attached as **Annexure-C.4**

Concerned utilities may please update the status.

C.5 Status for SPS and Islanding Schemes:

The latest status for suggested modifications to be updated:

Sl No	SPS Name	Status as per 55th PCC meeting	Utility	Latest status
A. Existing				
1	SPS-2 (Tripping of 400kV Palatana-Silchar D/C when both modules of Palatana in service)	By Nov'20	POWERGRID	
2	SPS-6 (When 132kV Umiam Stg-I to Umiam Stg-III D/C line trips)	Carrier communication to be established for 132kV Umiam Stg-I to Mawngap. Procurement involved.	MePTCL	
3	SPS-7 (When 220kV BTPS-Salakati D/C gets overloaded OR in case of outage of one circuit the other circuit gets overloaded(i.e loading greater than 600A)	At Agia – in PLCC panel carrier channel interchanged, wiring to be rectified by Dec'20	AEGCL	
4	SPS-9 (Tripping of 132kV AGTCCPP – Kumarghat line)	Panel does not support carrier intertrip. Procurement involved. By Jan'21.	NERTS	
5	SPS-1(Tripping of both modules of Palatana)	To be de-activated and channels freed at Palatana/Silchar	NERTS/OTPC	
6	SPS-2(Tripping of 400kV Palatana- Silchar D/C when both modules of Palatana in service)	SPS loading part of SPS-2 at Silchar to be removed	NERTS	
7	SPS-3 (Tripping of both 400kV Silchar – Azara and 400kV Silchar-Byrnihat when both modules of Palatana in service)	To be de-activated after commissioning of 400kV Silchar-Misa D/C	NERTS/AEG CL/MePTCL	

8	SPS-4(Tripping of both 400kV Silchar-Azara and 400kV Silchar-Byrnihat when both modules of Palatana not in service)	To be de-activated and channels to be freed at Silchar	NERTS	
New				
1	SPS related to secure & reliable operation of BgTPP	In service w.e.f. 15.10.2020. NTPC to submit the detailed schematic.	NTPC	
2	SPS related to secure & reliable operation of Monarchak	STG to be tripped. Wiring by Dec'20.	NEEPCO	
3	SPS for RHEP-Pare	OEM visit required. Delayed due to lockdown restrictions.	NEEPCO	

For Islanding Scheme-2:

Identification of feeders for additional UFR based load shedding with procurement of UFRs for the same by TSECL

Concerned utilities may please update the status.

C.6 Status against remedial actions for important grid events:

Sl. No	Details of the event	Remedial Actions suggested	Name of the utility	Status as intimated in Sub-group meeting on 12-04-21	Latest status
1	Unwanted tripping of 132 kV Imphal (PG) - Ningthoukong Line ((03-03-2020 15:57:00, 16-03-2020 05:25, & 132 kV Loktak - Ningthoukhong Line for reverse faults	Ningthoukong end DR of 132kV Loktak- Ningthoukong to be time synchronised, channel standardisation to be done.	MSPCL	GPS/TSE to be procured. DR channel standardisation subsequent to training.	
2	Tripping of 132kV Loktak- Ningthoukong & 132kV Imphal- Ningthoukong on 01.08.20	Faulty DP relay at Ningthoukong for Imphal(PG) to be replaced.	MSPCL	To be replaced under PSDF scheme.	

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3	Tripping of 400 kV BiswanathChariali - Ranganadi 2 Line for fault in 400 kV Balipara - BiswanathChariali 4 Line	CT knee point measurement to be done	NERTS & NEEPCO	Over-reach issue at RHEP. OEM to be engaged in 1-2 days.	
4	Tripping of 132 kV AGTCCPP - Kumarghat Line only at AGTCCPP on 02-04-2020 18:06:00	Calibration of numerical relay at AGTCCPP	NEEPCO	E/M B/U relay will be replaced with P442 by Apr'21	
5	Tripping of 132kV Dimapur-Kohima, 132kV Karong - Kohima & 132kV Wokha-Kohima on 02-06-2020/20-06-2020	Carrier aided inter-tripping to be immediately implemented for 132kV Dimapur-Kohima	DoP Nagaland	PLCC installation in process. By May'21	
6	132 kV Agartala-Rokhia D/C lines & 132 kV Monarchak - Rokhia line tripped on 05.06.2020, 09.06.2020	CBs to be installed at both ends of link feeder at Rokhia	TPGL	Estimate submitted	
7		Line differential protection to be installed for link feeder at Rokhia	TPGL	Estimate submitted.	
8	220 kV AGBPP - Mariani(PG) line, 220 kV AGBPP - Mariani(AS) line, 220 kV AGBPP - Tinsukia D/C tripped on 09.06.2020, along with all units in service at AGBPP.	Joint checking to be conducted by AEGCL & NEEPCO for wiring issue for Bus selection isolator in LBB scheme for 220kV Tinsukia-I.	NEEPCO /AEGCL	Joint inspection by Apr'21	
9	Tripping of 220 kV AGBPP - Deomali Line @ 12:51:00 09-06-2020	CT sensing problem at AGBPP	DoP Ar.Pradesh	CT replaced. DoP Ar.Pradesh to confirm	
10	Tripping of 220kV BTPS-Rangia D/C lines and 132kV Rangia-Motonga line on 23.07.2020	Carrier intertrip to be implemented for 220kV Rangia-BTPS D/C.	AEGCL	At Salakati end, one damaged PLCC panel is to be replaced. Will be done by Apr'21	

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11	Tripping of 132 kV Lumshnong-Panchgram twice on 12.07.2020	DR time synchronisation	MePTCL	In discussion with OEM	
12	Blackout of 220kV Mariani, 220/132kV Mokokchung(PG) & 132kV Mokokchung(NAG) on 06.08.2020	At AGBPP end E/F TMS to be revised	NEEPCO	Presently B/U E/F TMS of Mariani(PG) line set at 0.25 and implemented in Main-I, Main-II DP relay. B/U numerical relay to be installed by June'21.	
13		AR to be implemented at DHEP for 132kV DHEP-Mokokchung with check syc function at Doyang	NEEPCO	Under proposal	
14	Tripping of 132 kV Aizawl - Luangmual Line on 14-08-2020	Delayed opening of CB(150ms) to be investigated by P&ED Mizoram	P&ED Mizoram	O/C Relay at Luangmual was directional. Therefore, CB did not open. O/C relay now made unidirectional.	
15	Tripping of both 132kV Aizawl-Tipaimukh & 132kV Jiribam-Tipaimukh on 25.08.20	TMS for B/U protection to be co-ordinated with DP at Tipaimukh.	MSPCL	Exact TMS to be intimated to MSPCL for implementation	
16		Software to be procured for downloading DR/EL	MSPCL	Procurement in process	
17	400 kV Alipurduar - Bongaigaon 1 Line tripped on 18-08-2020 & 400 kV Alipurduar - Bongaigaon 2 Line tripped on 02-08-2020	Conductor failure. To be taken up with OEM	M/s STERLITE	OEM reply awaited.	
18	Tripping of 132kV Loktak-Ningthoukong & 132kV Loktak-Rengpang tripped multiple times	3ph AR facility at Loktak for Z-I to be implemented at the earliest	NHPC	By Apr'21	

Agenda for 56th PCC Meeting to be held on 21st April, 2021

19	Tripping of all main CBs connected to 400kV Bus-2 at Balipara on 19.08.2020	Replacement of all MCTI relays for 400kV Balipara, Bongaigaon & Misa	NERTS	Procurement of relay in progress.	
20	Tripping of 132 kV Dimapur (PG)-Kohima (DoP, Nagaland) line, 132 Kohima -Wokha line and 132 kV Karong -Kohima line on 24-09-2020	Bus strengthening both at 132kV & 33kV level to be done at Kohima	DoP Nagaland	Will be done by Feb, 2021	
21	Tripping of 132kV Umiam- Umiam Stg-I on 14.10.2020	Line differential protection to be implemented for 132kV Umiam- Umiam Stg-I	MePGCL	-	

Concerned utilities may please update the status.

AGENDA ITEM FROM NERLDC:

C.7 Status of submission of FIR and DR & EL outputs for the Grid Events

In line with regulation 12 (1) of CEA Grid Standards Regulations and IEGC provision under clause 5.2 (r), 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 and DR & EL outputs in Tripping Monitoring Portal for events in last quarter (Jan'21-Mar'21) is given below:

Name of Utility	Total FIR/ DR/EL	% Submission of		
		FIR	DR output	EL output
DoP, Arunachal Pradesh	15	6.7%	6.7%	6.7%
AEGCL	32	87.5%	88.9%	50.0%
MSPCL	68	91.2%	25.9%	19.7%
MePTCL	21	100.0%	100.0%	100.0%
P&ED, Mizoram	2	0.0%	0.0%	0.0%
DoP, Nagaland	42	95.2%	56.8%	42.1%
TSECL	14	0.0%	42.9%	42.9%
POWERGRID	131	78.6%	89.9%	50.0%
NEEPCO	55	43.6%	74.4%	59.1%
NHPC	25	0.0%	28.0%	0.0%
NTPC	4	0.0%	0.0%	0.0%
OTPC	11	36.4%	36.4%	0.0%
Sterlite Power	11	45.5%	90.0%	90.9%
KMTL	6	66.7%	33.3%	50.0%

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://103.7.131.234/Trippingnew/Account/Login.aspx>) for analysis purpose.

D. ITEMS FOR INFORMATION

D.1 Summary of NER Load Loss:

Summary of NER Grid Loss (MU) for FY 2019-20 & FY 2020-21

Year	Jan	Feb	Mar
FY 2019-20	0.09	0.02	0.167
FY 2020-21	0.1553	0.1089	0.1432

Localized Load Loss (in MU) for Jan'21, Feb'21 and Mar'21

Sl. No.	Affected State	Area	Jan-21	Feb-21	Mar-21
1	Arunachal Pradesh	Along area		0.0203	
2		Pasighat, Roing, Tezu & Namsai area	0.016		
3		Tenga & Khupi area			0.04
4		Daporijo area			0.01
5	Assam	BTPS (AS) area			0.04
6		Jawaharnagar area			0.009
7		Panchgram Area		0.0324	
8	Manipur	Yiangangpokpi, Hundung, Kongba & Thoubal area	0.1183		0.016
9		Karong area	0.021		0.006
10		Churachandpur area		0.0026	0.01
11		Rengpang area		0.0007	
12	Meghalaya	Lumshnong Area		0.0095	
13	Mizoram	Luangmual, Melriat & Lunglei (Khawiva) areas		0.0434	
14	Nagaland	Mokokchung, Sanis and Wokha Areas			0.007
15	Tripura	Rabindranagar area			0.005
Total Load Loss(MU)			0.155	0.109	0.143

This is for information only.

Any other item:

Details of Auto Recloser of Lines in North Eastern Regional Grid

SI No	Voltage Level	Name of Element (Emanating - Terminating)	Ckt ID	Tower Configuration n (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
1	132 kV	132 kV South Comilla (Bangladesh) - Surajmani Nagar	1	D/C	PGCB	POWERGRID	POWERGRID	Information not Available	Information not Available
2	132 kV	132 kV South Comilla (Bangladesh) - Surajmani Nagar	2	D/C	PGCB	POWERGRID	POWERGRID	Information not Available	Information not Available
1	132 kV	132 kV Gelyphu (Bhutan) - Salakati	1	S/C	BPCL	POWERGRID	POWERGRID	3-ph AR in service at Salakati	
2	132 kV	132 kV Motonga (Bhutan) - Rangia	1	S/C	BPCL	AEGCL	POWERGRID & BPC	3-ph AR in service at Rangia	
1	400 kV	400 kV Azara - Bongaigaon	1	D/C	AEGCL	POWERGRID	NETC(1.8%) &AEGCL (98.2%)	SPAR in service	
2	400 kV	400 kV Azara - Silchar	1	D/C	AEGCL	POWERGRID	NETC(37.5%) & AEGCL(62.5%)	SPAR in service	
3	400 kV	400 kV Balipara - Biswanath Chariali	1	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
4	400 kV	400 kV Balipara - Biswanath Chariali	2	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
5	400 kV	400 kV Balipara - Biswanath Chariali	3	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
6	400 kV	400 kV Balipara - Biswanath Chariali	4	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
7	400 kV	400 kV Balipara - Bongaigaon	1	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
8	400 kV	400 kV Balipara - Bongaigaon	2	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
9	400 kV	400 kV Balipara - Bongaigaon	3	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
10	400 kV	400 kV Balipara - Bongaigaon	4	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
11	400 kV	400 kV Balipara - Misa	1	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
12	400 kV	400 kV Balipara - Misa	2	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
13	400 kV	400 kV Biswanath Chariali - Ranganadi	1	D/C	POWERGRID	NEEPCO	POWERGRID	SPAR in service	
14	400 kV	400 kV Biswanath Chariali - Ranganadi	2	D/C	POWERGRID	NEEPCO	POWERGRID	SPAR in service	
15	400 kV	400 kV Bongaigaon - Byrnihat	1	D/C	POWERGRID	MePTCL	NETC(97.91 %) & MePTCL(2.09%)	SPAR in service	
16	400 kV	400 kV Binaguri - Bongaigaon	1	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
17	400 kV	400 kV Binaguri - Bongaigaon	2	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
18	400 kV	400 kV Alipurduar - Bongaigaon	1	D/C	POWERGRID	POWERGRID	ENICL	SPAR in service	
19	400 kV	400 kV Alipurduar - Bongaigaon	2	D/C	POWERGRID	POWERGRID	ENICL	SPAR in service	
20	400 kV	400 kV BgTPP - Bongaigaon	1	D/C	NTPC	POWERGRID	POWERGRID	SPAR Available	Due to LDP, SPAR is not attempting

Details of Auto Recloser of Lines in North Eastern Regional Grid

SI No	Voltage Level	Name of Element (Emanating - Terminating)	Ckt ID	Tower Configuration (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
21	400 kV	400 kV BgTPP - Bongaigaon	2	D/C	NTPC	POWERGRID	POWERGRID	SPAR Available	Due to LDP, SPAR is not attempting
22	400 kV	400 kV Byrnihat - Silchar	1	D/C	MePTCL	POWERGRID	NETC(98.06%)& MePTCL(1.94%)	SPAR in service	
23	400 kV	400 kV Pallatana - Silchar	1	D/C	OTPC	POWERGRID	NETC	SPAR in service	
24	400 kV	400 kV Pallatana - Silchar	2	D/C	OTPC	POWERGRID	NETC	SPAR in service	
1	220 kV	220 kV AGBPP - Mariani	1	S/C	NEEPCO	AEGCL	POWERGRID	Information not available	AGBPP-SPAR enabled, Mariani end- POWERGRID may intimate
2	220 kV	220 kV AGBPP - Mariani(PG)	1	S/C	NEEPCO	POWERGRID	POWERGRID	SPAR in service	
3	220 kV	220 kV Mariani - Misa	1	S/C	AEGCL	POWERGRID	POWERGRID	Information not available	POWERGRID may intimate the status
4	220 kV	220 kV Mariani (PG) - Misa	1	S/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
1	132 kV	132kV Imphal - Silchar	1	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
2	132 kV	132kV Imphal - Silchar	2	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
3	132 kV	132kV P K Bari - Silchar	1	D/C	TSECL	POWERGRID	POWERGRID	SPAR in service	
4	132 kV	132kV P K Bari - Silchar	2	D/C	TSECL	POWERGRID	POWERGRID	SPAR in service	
1	220 kV	220 kV AGBPP - Deomali	1	S/C	NEEPCO	DoP,Arunachal Pradesh	DoP, Arunachal Pradesh	Information not available	DoP AP may intimate the status
2	220 kV	220 kV AGBPP - Tinsukia	1	S/C	NEEPCO	AEGCL	AEGCL	SPAR not in service	SPAR available at both ends, but is not enabled at AGBPP as per Audit report
3	220 kV	220 kV AGBPP - Tinsukia	2	S/C	NEEPCO	AEGCL	AEGCL	SPAR not in service	SPAR available at both ends, but is not enabled at AGBPP as per Audit report
4	220 kV	220 kV Agia - Azara	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	SPAR available at Azara. At Agia by the end of January 2020.
5	220 kV	220 kV Agia - Boko	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	SPAR available at Azara. At Agia by the end of January 2020.
6	220 kV	220 kV Agia - BTPS	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	At BTPS SPAR completed. At Agia End testing of new panels are going on. Will be completed in two months time.
7	220 kV	220 kV Agia - BTPS	2	D/C	AEGCL	AEGCL	AEGCL	Not Available	At BTPS SPAR completed. At Agia End testing of new panels are going on. Will be completed in two months time.
8	220 kV	220 kV Azara - Boko	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	SPAR available at Azara. At Boko, the testing of the new panels are yet to be started. By March 2020.
9	220 kV	220 kV Azara - Sarusajai	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	SPAR available at Azara, other end will be done in R&M works

Details of Auto Recloser of Lines in North Eastern Regional Grid

<i>Sl No</i>	<i>Voltage Level</i>	<i>Name of Element (Emanating - Terminating)</i>	<i>Ckt ID</i>	Tower Configuration n (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
10	220 kV	220 kV Azara - Sarusajai	2	D/C	AEGCL	AEGCL	AEGCL	Not Available	SPAR available at Azara, other end will be done in R&M works
11	220 kV	220 kV Balipara - Sonabil	1	S/C	POWERGRID	AEGCL	AEGCL	SPAR in service	AEGCL & POWERGRID may confirm
12	220 kV	220 kV Alipurduar - Salakati	1	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
13	220 kV	220 kV Alipurduar - Salakati	2	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
14	220 kV	220 kV BTPS - Salakati	1	D/C	AEGCL	POWERGRID	POWERGRID	Not Available	SPAR available at BTPS end. Carrier communication link is yet to be established. In the AR logic, AR is blocked if comm. Link is absent.
15	220 kV	220 kV BTPS - Salakati	2	D/C	AEGCL	POWERGRID	POWERGRID	Not Available	SPAR available at BTPS end. Carrier communication link is yet to be established. In the AR logic, AR is blocked if comm. Link is absent.
16	220 kV	220 kV Dimapur - Misa	1	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	SPAR will be done in R&M works
17	220 kV	220 kV Dimapur - Misa	2	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
18	220 kV	220 kV Jawaharnagar - Samaguri	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	
19	220 kV	220 kV Jawaharnagar - Sarusajai	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	SPAR available at JawaharNagar, other end will be done in R&M works
20	220 kV	220 kV Karbi Langpi - Sarusajai	1	S/C	APGCL	AEGCL	AEGCL	Not Available	SPAR will be done in R&M works
21	220 kV	220 kV Karbi Langpi - Sarusajai	2	S/C	APGCL	AEGCL	AEGCL	Not Available	SPAR will be done in R&M works
22	220 kV	220 kV Byrnihat - Misa	1	S/C	MePTCL	POWERGRID	MePTCL	SPAR in service	SPAR in service
23	220 kV	220 kV Byrnihat - Misa	2	S/C	MePTCL	POWERGRID	MePTCL	SPAR in service	
24	220 kV	220 kV Kopili - Misa	1	D/C	NEEPCO	POWERGRID	POWERGRID	SPAR in service	
25	220 kV	220 kV Kopili - Misa	2	D/C	NEEPCO	POWERGRID	POWERGRID	SPAR in service	SPAR in service
26	220 kV	220 kV Kopili - Misa	3	S/C	NEEPCO	POWERGRID	POWERGRID	SPAR in service	
27	220 kV	220 kV Mariani (AEGCL) - Samaguri	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	
28	220 kV	220 kV Mariani (PG) - Mokokchung (PG)	1	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	will be done in PSDF scheme
29	220 kV	220 kV Mariani (PG) - Mokokchung (PG)	2	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
30	220 kV	220 kV Misa - Samaguri	1	D/C	POWERGRID	AEGCL	POWERGRID	Information not available	
31	220 kV	220 kV Misa - Samaguri	2	D/C	POWERGRID	AEGCL	POWERGRID	Information not available	POWERGRID may intimate the status
32	220 kV	220 kV NTPS - Tinsukia	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	will be done in PSDF scheme
33	220 kV	220 kV NTPS - Tinsukia	2	D/C	AEGCL	AEGCL	AEGCL	Not Available	will be done in PSDF scheme

Details of Auto Recloser of Lines in North Eastern Regional Grid

SI No	Voltage Level	Name of Element (Emanating - Terminating)	Ckt ID	Tower Configuration (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
34	220 kV	220 kV Samaguri - Sarusajai	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
35	220 kV	220 kV Samaguri - Sarusajai	2	D/C	AEGCL	AEGCL	AEGCL	Not Available	will be done in PSDF scheme
35	220 kV	220 kV Samaguri - Sonabil	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	Due to problem at Samaguri end. Implemeted in R&M scheme funded from PSDF
36	220 kV	220 kV Samaguri - Sonabil	2	S/C	AEGCL	AEGCL	AEGCL	Not Available	Due to problem at Samaguri end. Implemeted in R&M scheme funded from PSDF
1	132 kV	132 kV Agartala - AGTCCPP	1	D/C	TSECL	NEEPCO	POWERGRID	Not Available	SPAR available at AGTCCPP, PLCC is not in service
2	132 kV	132 kV Agartala - AGTCCPP	2	D/C	TSECL	NEEPCO	POWERGRID	Not Available	SPAR available at AGTCCPP, PLCC is not in service
3	132 kV	132 kV Agartala - Bodhjannagar	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
4	132 kV	132 kV Agartala - Dhalabil	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
5	132 kV	132 kV Agartala - Rokhia	1	D/C	TSECL	TSECL	TSECL	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
6	132 kV	132 kV Agartala - Rokhia	2	D/C	TSECL	TSECL	TSECL	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
7	132 kV	132 kV Agia - Mendipathar	1	S/C	AEGCL	MePTCL	MePTCL	Not Available	Agia end: 3-ph AR will be implemented under R&M works, Mendipathar- MePTCL will implement the 3 Ph AR in paralell with ongoing R&M works of PLCC &DPC by September 2019.
8	132 kV	132 kV AGTCCPP - Kumarghat	1	S/C	NEEPCO	POWERGRID	POWERGRID	SPAR/TPAR not in service	AGTCCPP: 1 AR facility available; Kumarghat: Gang Operated CBs
9	132 kV	132 kV Aizawl - Jiribam	1	S/C	POWERGRID	POWERGRID	POWERGRID	3-Ph AR in service	

Details of Auto Recloser of Lines in North Eastern Regional Grid

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10	132 kV	132 kV Aizawl - Kolasib	1	S/C	POWERGRID	P&ED, Mizoram	POWERGRID	3-Ph AR in service	POWERGRID may confirm
11	132 kV	132 kV Aizawl - Kumarghat	1	S/C	POWERGRID	POWERGRID	POWERGRID	3-Ph AR in service	
12	132 kV	132 kV Aizawl - Luangmual	1	S/C	POWERGRID	P&ED, P&ED, Mizoram	P&ED, Mizoram	Not Available	
13	132 kV	132 kV Aizawl - Melriat(PG)	1	S/C	POWERGRID	POWERGRID	POWERGRID	Not Available	
14	132 kV	132 kV Ambasa - Gamaitila	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) is not erected.132 KV breaker are 3-ph. gang operated.
15	132 kV	132 kV Ambasa - Kamalpur	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) is not erected.132 KV breaker are 3-ph. gang operated.
16	132 kV	132 kV Ambasa - P K Bari	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
17	132 kV	132 kV Badarpur - Jiribam	1	S/C	POWERGRID	POWERGRID	POWERGRID	Information not available	POWERGRID may intimate the status
18	132 kV	132 kV Badarpur - Kolasib	1	S/C	POWERGRID	P&ED, Mizoram	POWERGRID	Information not available	POWERGRID may intimate the status
19	132 kV	132 kV Badarpur - Kumarghat	1	S/C	POWERGRID	POWERGRID	POWERGRID	3-Ph AR in service	
20	132 kV	132 kV Badarpur - Panchgram	1	S/C	POWERGRID	AEGCL	POWERGRID	Information not available	POWERGRID may intimate the status, Panchgram end: 3 ph AR will be implemented under R&M
21	132 kV	132 kV Badarpur - Silchar	1	D/C	POWERGRID	POWERGRID	POWERGRID	Information not available	Silchar end: AR in BCU available, AEGCL may intimate the status
22	132 kV	132 kV Badarpur - Silchar	2	D/C	POWERGRID	POWERGRID	POWERGRID	Information not available	Silchar end: 3-ph AR in BCU available, AEGCL may intimate the status
23	132 kV	132 kV Balipara - Bhalukpong	1	S/C	POWERGRID	DoP, Arunachal Pradesh	NEEPCO & DoP, Arunachal Pradesh	Not Available	
24	132 kV	132 kV Balipara - Depota	1	S/C	POWERGRID	AEGCL	AEGCL	Not Available	AEGCL&POWERGRID may intimate the plan of action

Details of Auto Recloser of Lines in North Eastern Regional Grid

<i>Sl No</i>	<i>Voltage Level</i>	<i>Name of Element (Emanating - Terminating)</i>	<i>Ckt ID</i>	Tower Configuration n (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
25	132 kV	132 kV Balipara - Sonabil	1	S/C	AEGCL	AEGCL	AEGCL	Information not available	Sonabil end: 3-ph AR available, Balipara end: POWERGRID may intimate
26	132 kV	132 kV Baramura - Gamaitilla	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442) is not erected.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) is not erected.132 KV breaker are 3-ph. gang operated.
27	132 kV	132 kV Baramura - Jirania	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442) is not erected.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) is not erected.132 KV breaker are 3-ph. gang operated.
28	132 kV	132 kV Bhalukpong - Khupi	1	S/C	DoP, Arunachal Pradesh	NEEPCO	NEEPCO & DoP, Arunachal Pradesh	Not Available	
29	132 kV	132 kV Biswanath Chariali - Pavoi	1	D/C	POWERGRID	AEGCL	POWERGRID	Not Available	Pavoid end- 3-ph AR will be implemented, BNC: POWERGRID may intimate the status
30	132 kV	132 kV Biswanath Chariali - Pavoi	2	D/C	POWERGRID	AEGCL	POWERGRID	Not Available	Pavoid end- 3-ph AR will be implemented, BNC: POWERGRID may intimate the status
31	132 kV	132 kV Pavoi - Sonabil	1	S/C	AEGCL	AEGCL	AEGCL	Not available	TPAR is available both at Pavoi and Sonabil. Carr. Comm. Is yet to be established.
32	132 kV	132 kV Bodhjannagar - Jirania	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) is not erected.132 KV breaker are 3-ph. gang operated.
33	132 kV	132 kV Bokajan - Dimapur	1	S/C	AEGCL	POWERGRID	AEGCL	Not available	
34	132 kV	132 kV Bokajan - Golaghat	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
35	132 kV	132 kV BTPS - Dhaligaon	1	D/C	AEGCL	AEGCL	AEGCL	Not available	3-ph AR under R&M
36	132 kV	132 kV BTPS - Dhaligaon	2	D/C	AEGCL	AEGCL	AEGCL	Not available	3-ph AR under R&M
37	132 kV	132 kV BTPS-Kokrajhar	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
38	132 kV	132 kV Bilashipara-Kokrajhar	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
39	132 kV	132 kV Bilashipara-Gauripur	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
40	132 kV	132 kV Bornagar - Dhaligaon	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action

Details of Auto Recloser of Lines in North Eastern Regional Grid

<i>Sl No</i>	<i>Voltage Level</i>	<i>Name of Element (Emanating - Terminating)</i>	<i>Ckt ID</i>	Tower Configuration (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available	Remarks
41	132 kV	132 kV Bornagar - Rangia	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
42	132 kV	132 kV Budhjangnagar - Surjamaninagar	1	D/C	TSECL	TSECL	TSECL	Not available	Distance Relay(P442) commissioned at BudhjungNgar.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
43	132 kV	132 kV Budhjangnagar - Surjamaninagar	2	D/C	TSECL	TSECL	TSECL	Not available	Distance Relay(P442) commissioned at BudhjungNgar.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
44	132 kV	132 kV Dhalabil - Kamalpur	1	S/C	TSECL	TSECL	TSECL	Not available	Distance Relay(P442) is not erected.132 KV breaker are 3-ph. gang operated.
45	132 kV	132 kV Dhaligaon-Gossaigaon	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
46	132 kV	132 kV Dharmanagar - Dullavcherra	1	S/C	TSECL	AEGCL	AEGCL	Not available	AEGCL&TSECL may intimate the plan of action
47	132 kV	132 kV Dullavcherra - Hailakandi	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
48	132 kV	132 kV Dharmanagar - P K Bari	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442) is not erected.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
49	132 kV	132 kV Dimapur - Doyang	1	D/C	POWERGRID	NEEPCO	POWERGRID	SPAR in service	
50	132 kV	132 kV Dimapur - Doyang	2	D/C	POWERGRID	NEEPCO	POWERGRID	SPAR in service	
51	132 kV	132 kV Dimapur - Imphal	1	S/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
52	132 kV	132 kV Dimapur (PG) - Dimapur (DoP, Nagaland)	1	S/C	POWERGRID	ED, DoP, Nagaland	DoP, Nagaland	Not Available	DoP Nagaland may please intimate the plan of action
53	132 kV	132 kV Dimapur (PG) - Dimapur (DoP, Nagaland)	2	S/C	POWERGRID	ED, DoP, Nagaland	DoP, Nagaland	Not Available	DoP Nagaland may please intimate the plan of action
54	132 kV	132 kV Dimapur (PG) - Kohima	1	S/C	POWERGRID	ED, DoP, Nagaland	DoP, Nagaland	Not Available	3-ph AR available at Dimapur(PG). DoP Nagaland may please intimate the plan of action
55	132 kV	132 kV Doyang - Mokokchung (DoP, Nagaland)	1	S/C	NEEPCO	ED, DoP, Nagaland	DoP, Nagaland	Not Available	
56	132 kV	132 kV Doyang - Sanis	1	S/C	NEEPCO	DoP, Nagaland	DoP, Nagaland	Not Available	

Details of Auto Recloser of Lines in North Eastern Regional Grid

SI No	Voltage Level	Name of Element (Emanating - Terminating)	Ckt ID	Tower Configuration (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
57	132 kV	132 kV EPIP II - Byrnihat	1	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePTCL will implement the 3 Ph AR in parallell with ongoing R&M works of PLCC &DPC by September 2019.
58	132 kV	132 kV EPIP II - Byrnihat	2	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePTCL will implement the 3 Ph AR in parallell with ongoing R&M works of PLCC &DPC by September 2019.
59	132 kV	132 kV EPIP II - Umtru	1	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePTCL will implement the 3 Ph AR in parallell with ongoing R&M works of PLCC &DPC by November 2019.
60	132 kV	132 kV EPIP II - Umtru	2	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePTCL will implement the 3 Ph AR in parallell with ongoing R&M works of PLCC &DPC by November 2019.
61	132 kV	132 kV Gauripur-Gossaigaon	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
62	132 kV	132 kV Gohpur - Pavoi	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
63	132 kV	132 kV Gohpur - Nirjuli	1	S/C	AEGCL	POWERGRID	POWERGRID	Not available	AEGCL may intimate the plan of action
64	132 kV	132 kV Golaghat - Mariani (AEGCL)	1	S/C	AEGCL	AEGCL	AEGCL	Not available	AEGCL may intimate the plan of action
65	132 kV	132 kV Haflong - Jiribam	1	S/C	POWERGRID	POWERGRID	POWERGRID	Not available	AEGCL may intimate the plan of action
66	132 kV	132 kV Haflong - Umranshu	1	S/C	AEGCL	POWERGRID	AEGCL	Not available	AEGCL may intimate the plan of action
67	132 kV	132 kV Imphal (MSPCL) - Imphal (PG)	1	S/C	MSPCL	POWERGRID	POWERGRID	Not available	AEGCL may intimate the plan of action
68	132 kV	132 kV Imphal (MSPCL) - Imphal (PG)	2	S/C	MSPCL	POWERGRID	POWERGRID & MSPCL	Not available	AEGCL may intimate the plan of action
69	132 kV	132 kV Imphal (MSPCL) - Karong	1	S/C	MSPCL	MSPCL	MSPCL	Not Available	AEGCL may intimate the plan of action
70	132 kV	132 kV Imphal (PG) - Ningthoukong	1	S/C	POWERGRID	MSPCL	MSPCL	Not Available	AEGCL may intimate the plan of action
71	132 kV	132 kV Imphal (PG) - Loktak	1	S/C	POWERGRID	NHPC	POWERGRID	SPAR in service	
72	132 kV	132 kV Jiribam - Loktak	2	S/C	POWERGRID	NHPC	POWERGRID	SPAR in service	
73	132 kV	132 kV Jiribam - Pailapool	1	S/C	POWERGRID	AEGCL	AEGCL/ MSPCL	Not Available	POWERGRID & AEGCL may intimate the plan of action

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Sl No	Voltage Level	Name of Element (Emanating - Terminating)	Ckt ID	Tower Configuration n (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available	Remarks
74	132 kV	132 kV Jiribam(PG) - Jiribam(MA)	1	S/C	POWERGRID	MSPCL	MSPCL	Not available	AEGCL may intimate the plan of action
75	132 kV	132 kV Jorhat - Mariani	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
76	132 kV	132 kV Jorhat - Mariani	2	S/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
77	132 kV	132 kV Jorhat - Nazira	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
78	132 kV	132 kV Kahilipara - Kamalpur	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
79	132 kV	132 kV Kamalpur - Rangia	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
80	132 kV	132 kV Kamalpur - Rangia	2	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
81	132 kV	132 kV Kahilipara - Sarusajai	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
82	132 kV	132 kV Kahilipara - Sarusajai	2	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
83	132 kV	132 kV Kahilipara - Sarusajai	3	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
84	132 kV	132 kV Sarusajai - Sishugram	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
85	132 kV	132 kV Kamalpur - Sishugram	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
86	132 kV	132 kV Kahilipara - Umtru	1	D/C	AEGCL	MePTCL	MePTCL	Not Available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by Deceber 2019
87	132 kV	132 kV Kahilipara - Umtru	2	D/C	AEGCL	MePTCL	MePTCL	Not Available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by Deceber 2019
88	132 kV	132 kV Kamalpur - P K Bari	1	S/C	TSECL	TSECL	TSECL	Distance Relay(P442)is not erected.132 KV breaker are 3-ph. gang operated.	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
89	132 kV	132 kV Karong - Kohima	1	S/C	DoP, Nagaland	MSPCL	MSPCL(65.3%) / DoP, Nagaland(34.7%)	Not Available	
90	132 kV	132 kV Khandong - Khliehriat	1	S/C	NEEPCO	POWERGRID	POWERGRID	SPAR in service	

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91	132 kV	132 kV Khandong - Khliehriat	2	S/C	NEEPCO	POWERGRID	POWERGRID	Information not available	POWERGRID may intimate the status
92	132 kV	132 kV Khandong - Kopili	1	S/C	NEEPCO	NEEPCO	POWERGRID	SPAR kept in non-auto mode	(SPAR facility available)
93	132 kV	132 kV Khandong - Kopili	2	S/C	NEEPCO	NEEPCO	POWERGRID	AR kept in non-auto mode	Gang operated CB at Kopili end (Owner:POWERGRID)
94	132 kV	132 kV Khandong - Umranshu	1	S/C	NEEPCO	AEGCL	POWERGRID & AEGCL	Not Available	Due to problem at Umrangshu end, Single pole CB, AR relay available at Khandong end
95	132 kV	132 kV Khliehriat - Badarpur	1	S/C	POWERGRID	POWERGRID	POWERGRID	3-Ph AR in service	
96	132 kV	132 kV Khliehriat - Mustem	1	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by January 2020.
97	132 kV	132 kV Mustem - NEHU line	1	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by January 2020.
98	132 kV	132 kV Khliehriat (MePTCL) - Khliehriat (PG)	1	S/C	MePTCL	POWERGRID	POWERGRID	Not available	
99	132 kV	132 kV Khliehriat (MePTCL) - Khliehriat (PG)	2	S/C	MePTCL	POWERGRID	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by January 2020.
100	132 kV	132 kV Khliehriat- NEIGRIHMS	1	S/C	MePTCL	POWERGRID	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by January 2020.
101	132 kV	132 kV Kumarghat - P K Bari	1	S/C	POWERGRID	TSECL	TSECL	Not Available	Scheme not available at PK Bari end; PLCC not available
102	132 kV	132 kV Lekhi - Nirjuli	1	S/C	DoP, Arunachal Pradesh	POWERGRID	DoP, Arunachal Pradesh & POWERGRID	Information not available	DoP, Arunachal Pradesh & POWERGRID may please intimate the status
103	132 kV	132 kV Pare - Ranganadi	1	S/C	DoP, Arunachal Pradesh	NEEPCO	DoP, Arunachal Pradesh & POWERGRID	AR kept in non-auto mode	
104	132 kV	132 kV Loktak - Ningthoukhong	1	S/C	NHPC	MSPCL	MSPCL	Not Available	
105	132 kV	132 kV Loktak - Rengpang	1	S/C	NHPC	MSPCL	MSPCL	Not Available	

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<i>Sl No</i>	<i>Voltage Level</i>	<i>Name of Element (Emanating - Terminating)</i>	<i>Ckt ID</i>	Tower Configuration (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
106	132 kV	132 kV LTPS - Mariani	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
107	132 kV	132 kV LTPS - Moran	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
108	132 kV	132 kV LTPS - Nazira	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
109	132 kV	132 kV LTPS - Nazira	2	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
110	132 kV	132 kV LTPS - NTPS	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
111	132 kV	132 kV LTPS - Sonari	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
112	132 kV	132 kV Mariani (AEGCL) - Mokokchung (DoP, Nagaland)	1	S/C	AEGCL	ED, DoP, Nagaland	AEGCL(40%)/ DoP, Nagaland(60%)	Not Available	
113	132 kV	132 kV NEHU - Mawlai	1	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by January 2020.
114	132 kV	132 kV Mawlai - Umiam Stage I	2	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by January 2021.
115	132 kV	132 kV Mawphlang - Nongstoin	1	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by March 2020.
116	132 kV	132 kV Mawphlang - Umiam Stg I	1	D/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by March 2020.
117	132 kV	132 kV Mawphlang - Umiam Stg I	2	D/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by March 2020.
118	132 kV	132 kV Mawphlang- Mawlai	1	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by January 2021.
119	132 kV	132 kV Melriat(PG) - Zuangtui	1	S/C	POWERGRID	P&ED, Mizoram	POWERGRID	Not Available	POWERGRID may intimate the status

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<i>Sl No</i>	<i>Voltage Level</i>	<i>Name of Element (Emanating - Terminating)</i>	<i>Ckt ID</i>	Tower Configuration n (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
120	132 kV	132 kV Mendipathar - Nangalbibra	1	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by Septemeber 2019.
121	132 kV	132 kV Mokochung (PG) - Mokochung (DoP, Nagaland)	1	D/C	POWERGRID	DoP,Nagaland	POWERGRID	Information not available	
122	132 kV	132 kV Mokochung (PG) - Mokochung (DoP, Nagaland)	2	D/C	POWERGRID	DoP,Nagaland	POWERGRID	Information not available	
123	132 kV	132 kV Monarchak - Rokhia	1	S/C	NEEPCO	Monarchak	TSECL	Not available	Distance Relay(P442) commissioned at Rokhia.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
124	132 kV	132 kV Monarchak - Udaipur	1	S/C	NEEPCO	Monarchak	TSECL	Not available	Distance Relay(P442) commissioned at Udaipur. Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
125	132 kV	132 kV Myntdu Leshka - Khleihriat	1	D/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by April 2020.
126	132 kV	132 kV Myntdu Leshka - Khleihriat	2	D/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by April 2020.
127	132 kV	132 kV Nangalbibra - Nongstoin	1	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by November 2019.
128	132 kV	132 kV NEHU - NEIGRIHMS	1	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by May 2020.
129	132 kV	132 kV NEHU - Umiam	1	D/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in paralll with ongoing R&M works of PLCC &DPC by June 2020.
130	132 kV	132 kV NTPS - Tinsukia	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
131	132 kV	132 kV NTPS - Sonari	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
132	132 kV	132 kV Pailapool - Srikona	1	D/C	AEGCL	AEGCL	AEGCL	Not Available	AEGCL may intimate the plan of action
133	132 kV	132 kV Palatana - Surjamaninagar	1	D/C	OTPC	POWERGRID	POWERGRID	Not Available	Gang operated CB at Palatana end

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<i>Sl No</i>	<i>Voltage Level</i>	<i>Name of Element (Emanating - Terminating)</i>	<i>Ckt ID</i>	Tower Configuration (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
134	132 kV	132 kV Palatana - Udaipur	1	S/C	TSECL	OTPC	TSECL	Not Available	Distance Relay(P442) commissioned.Hardware connection is going on.132 KV breaker are 3-ph. gang operated.
135	132 kV	132 kV Hailakandi - Silchar	1	S/C	AEGCL	POWERGRID	POWERGRID	Information not available	Silchar end: AR in BCU available, AEGCL may intimate the status
136	132 kV	132 kV Panchgram - Srikona	1	S/C	AEGCL	AEGCL	AEGCL	Not Available	Will be implemented under R&M works funded from PSDF
137	132 kV	132 kV Ranganadi - Ziro	1	S/C	NEEPCO	POWERGRID	POWERGRID	SPAR in service	
138	132 kV	132 kV Roing - Pasighat	1	S/C	POWERGRID	POWERGRID	POWERGRID	Information not available	POWERGRID may intimate the status
139	132 kV	132 kV Roing - Tezu	1	S/C	POWERGRID	POWERGRID	POWERGRID	Information not available	POWERGRID may intimate the status
140	132 kV	132 kV Sarusajai - Umtru	1	D/C	AEGCL	MePTCL	MePTCL	Not Available	MePTCL will implement the 3 Ph AR in parallell with ongoing R&M works of PLCC &DPC by May 2020.
141	132 kV	132 kV Sarusajai - Umtru	2	D/C	AEGCL	MePTCL	MePTCL	Not Available	MePTCL will implement the 3 Ph AR in parallell with ongoing R&M works of PLCC &DPC by May 2020.
142	132 kV	132 kV Silchar - Srikona	1	D/C	POWERGRID	AEGCL	POWERGRID	Information not available	Silchar end: AR in BCU available, AEGCL may intimate the status
143	132 kV	132 kV Silchar - Srikona	2	D/C	POWERGRID	AEGCL	POWERGRID	Information not available	Silchar end: AR in BCU available, AEGCL may intimate the status
144	132 kV	132 kV Umiam - Umiam St I	1	S/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action
145	132 kV	132 kV Umiam St I - Umiam St II	1	S/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action
146	132 kV	132 kV Umiam St I - Umiam St III	1	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action
147	132 kV	132 kV Umiam St I - Umiam St III	2	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action

Annexure-C.2

Details of Auto Recloser of Lines in North Eastern Regional Grid

<i>Sl No</i>	<i>Voltage Level</i>	<i>Name of Element (Emanating - Terminating)</i>	<i>Ckt ID</i>	Tower Configuration (S/C or D/C)	Agency at End 1	Agency at End 2	Owner	AR Details (SPAR/3-Ph AR/Not Available/Information not Available)	Remarks
148	132 kV	132 kV Umiam St III - Umiam St IV	1	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action
149	132 kV	132 kV Umiam St III – Umiam St IV	2	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action
150	132 kV	132 kV Umiam St III - Umtru	1	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action
151	132 kV	132 kV Umiam St III - Umtru	2	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action
152	132 kV	132 kV Umtru - Umiam St IV	1	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action
153	132 kV	132 kV Umtru - Umiam St IV	2	D/C	MePTCL	MePTCL	MePTCL	Not Available	MePGCL may intimate the plan of action
154	132 kV	132 kV Pare - Lekhi	1	S/C	NEEPCO	DoP, Arunachal Pradesh	NEEPCO, DoP, Arunachal Pradesh & POWERGRID	Not Available	
155	132 kV	132 kV Ranganadi - Itananar	1	S/C	NEEPCO	DoP, Arunachal Pradesh	NEEPCO & DoP, Arunachal Pradesh	Information not available	

List of Lines in North Eastern Regional Grid

Annexure-C.4

Sl No	Name of Element (Emanating - Terminating)	Ckt ID	Agency at End 1	Agency at End 2	Name of Owners	TLSA	Megger /off line Fault locator	Controlled Switching Device (CSD)	Line Differential Protection Availability	OPGW Availability	PLCC Availability	Carrier Aided Protection Availability (Yes/No)
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A. International Lines

a. 400 kV Lines (Charged at 132 kV)

1	South Comilla (Bangladesh) - Surajmani Nagar	1	PGCB	TSECL	POWERGRID & PGCB	NA				Available		
2	South Comilla (Bangladesh) - Surajmani Nagar	2	PGCB	TSECL	POWERGRID & PGCB	NA				NA		

b. 132 kV Line

1	Gelyphu (Bhutan) - Salakati	1	BPCL	POWERGRID	POWERGRID				Not Available	Available		
2	Motonga (Bhutan) - Rangia	1	BPCL	AEGCL	POWERGRID							

c. 11 kV Line

1	Moreh - Tamu (Myanmar)	1	MSPCL	ESE, Myanmar	MSPDCL & ESE, Myanmar							
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B. +/- 800 kV HVDC Lines

1	Agra - Biswanath Chariali	Pole 1	POWERGRID	POWERGRID	POWERGRID							
2	Agra - Biswanath Chariali	Pole 2	POWERGRID	POWERGRID	POWERGRID							

C. 400 kV Lines

1	Azara - Bongaigaon	1	AEGCL	POWERGRID	NETC(1.8%) & AEGCL (98.2%)				No			
2	Azara - Silchar	1	AEGCL	POWERGRID	NETC(37.5%) & AEGCL(62.5%)				No			
3	Balipara - Biswanath Chariali	1	POWERGRID	POWERGRID	POWERGRID							
4	Balipara - Biswanath Chariali	2	POWERGRID	POWERGRID	POWERGRID							
5	Balipara - Biswanath Chariali	3	POWERGRID	POWERGRID	POWERGRID							
6	Balipara - Biswanath Chariali	4	POWERGRID	POWERGRID	POWERGRID							
7	Balipara - Bongaigaon	1	POWERGRID	POWERGRID	POWERGRID			Not Installed	Not Available			
8	Balipara - Bongaigaon	2	POWERGRID	POWERGRID	POWERGRID			Not Installed	Not Available			
9	Balipara - Bongaigaon	3	POWERGRID	POWERGRID	POWERGRID			Not Installed	Not Available			
10	Balipara - Bongaigaon	4	POWERGRID	POWERGRID	POWERGRID			Not Installed	Not Available			

C. 400 kV Lines

11	Balipara - Misa	1	POWERGRID	POWERGRID	POWERGRID	NA		No	NA	YES		
12	Balipara - Misa	2	POWERGRID	POWERGRID	POWERGRID	NA		No	NA	YES		
13	Biswanath Chariali - Ranganadi	1	POWERGRID	NEEPCO	POWERGRID							
14	Biswanath Chariali - Ranganadi	2	POWERGRID	NEEPCO	POWERGRID							

List of Lines in North Eastern Regional Grid

Annexure-C.4

Sl No	Name of Element (Emanating - Terminating)	Ckt ID	Agency at End 1	Agency at End 2	Name of Owners	TLSA	Megger /off line Fault locator	Controlled Switching Device (CSD)	Line Differential Protection Availability	OPGW Availability	PLCC Availability	Carrier Aided Protection Availability (Yes/No)
15	Bongaigaon - Byrnihat	1	POWERGRID	MePTCL	NETC(97.91 %) & MePTCL(2.09%)							
16	New Siliguri - Bongaigaon	1	POWERGRID	POWERGRID	POWERGRID							
17	New Siliguri- Bongaigaon	2	POWERGRID	POWERGRID	POWERGRID							
18	Alipurduar - Bongaigaon	1	POWERGRID	POWERGRID	ENICL							
19	Alipurduar - Bongaigaon	2	POWERGRID	POWERGRID	ENICL							
20	BgTPP - Bongaigaon	1	NTPC	POWERGRID	POWERGRID			Not Installed	Available			
21	BgTPP - Bongaigaon	2	NTPC	POWERGRID	POWERGRID			Not Installed	Available			
22	Byrnihat - Silchar	1	MePTCL	POWERGRID	NETC(98.06%)& MePTCL(1.94%)							
23	Pallatana - Silchar	1	OTPC	POWERGRID	NETC							
24	Pallatana - Silchar	2	OTPC	POWERGRID	NETC							
25	Imphal - Silchar	1	POWERGRID	POWERGRID	POWERGRID	No		NA				
26	Imphal - Silchar	2	POWERGRID	POWERGRID	POWERGRID	No		NA				
27	Balipara - Kameng	1	POWERGRID	NEEPCO	POWERGRID							
28	Balipara - Kameng	2	POWERGRID	NEEPCO	POWERGRID							

D. 400 kV Lines (Charged at 220 kV)

1	AGBPP - Mariani	1	POWERGRID	POWERGRID	POWERGRID	Nil	1 Off Line Fault Locator/2 Megger	No		Available		
2	AGBPP - Mariani(PG)	2	POWERGRID	POWERGRID	POWERGRID	Nil		No		Available		
3	Mariani - Misa	1	AEGCL	POWERGRID	POWERGRID	NA			NA			
4	Mariani (PG) - Misa	1	POWERGRID	POWERGRID	POWERGRID	NA			NA			

E. 400 kV Lines (Charged at 132 kV)

1	Silchar-Melriat	1	POWERGRID	POWERGRID	POWERGRID	NA			NIL	YES		
2	Silchar-Melriat	2	POWERGRID	POWERGRID	POWERGRID	NA			NIL	NO		
3	P K Bari - Silchar	1	TSECL	POWERGRID	POWERGRID							
4	P K Bari - Silchar	2	TSECL	POWERGRID	POWERGRID							
5	Palatana - Surjamaninagar	1	OTPC	TSECL	POWERGRID	NA				NA		

F. 220 kV Lines

1	AGBPP - Deomali	1	NEEPCO	DoP,Arunachal Pradesh	DoP, Arunachal Pradesh							
2	AGBPP - Tinsukia	1	NEEPCO	AEGCL	AEGCL							
3	AGBPP - Tinsukia	2	NEEPCO	AEGCL	AEGCL							
4	Agia - Azara	1	AEGCL	AEGCL	AEGCL							
5	Agia - Boko	1	AEGCL	AEGCL	AEGCL							
6	Agia - BTPS	1	AEGCL	AEGCL	AEGCL							
7	Agia - BTPS	2	AEGCL	AEGCL	AEGCL							
8	Azara - Boko	1	AEGCL	AEGCL	AEGCL							
9	Azara - Sarusajai	1	AEGCL	AEGCL	AEGCL							
10	Azara - Sarusajai	2	AEGCL	AEGCL	AEGCL							

F. 220 kV Lines

11	Alipurduar - Salakati	1	POWERGRID	POWERGRID	POWERGRID							
12	Alipurduar - Salakati	2	POWERGRID	POWERGRID	POWERGRID							

List of Lines in North Eastern Regional Grid

Annexure-C.4

Sl No	Name of Element (Emanating - Terminating)	Ckt ID	Agency at End 1	Agency at End 2	Name of Owners	TLSA	Megger /off line Fault locator	Controlled Switching Device (CSD)	Line Differential Protection Availability	OPGW Availability	PLCC Availability	Carrier Aided Protection Availability (Yes/No)
13	Balipara - Sonabil	1	POWERGRID	AEGCL	AEGCL							
14	Bongaigaon-Salakati	1	POWERGRID	POWERGRID	POWERGRID			Not Installed	Available	Available		
15	Bongaigaon-Salakati	2	POWERGRID	POWERGRID	POWERGRID			Not Installed	Available	Available		
16	BTPS - Salakati	1	AEGCL	POWERGRID	POWERGRID			Not Installed	Not Available	Available		
17	BTPS - Salakati	2	AEGCL	POWERGRID	POWERGRID			Not Installed	Not Available	Available		
18	Dimapur - Misa	1	POWERGRID	POWERGRID	POWERGRID				NA			
19	Dimapur - Misa	2	POWERGRID	POWERGRID	POWERGRID				NA			
20	Jawaharnagar - Samaguri	1	AEGCL	AEGCL	AEGCL							
21	Jawaharnagar - Sarusajai	1	AEGCL	AEGCL	AEGCL							
22	Karbi Langpi - Sarusajai	1	APGCL	AEGCL	AEGCL							
23	Karbi Langpi - Sarusajai	2	APGCL	AEGCL	AEGCL							
24	Bymihat - Misa	1	MePTCL	POWERGRID	MePTCL							
25	Bymihat - Misa	2	MePTCL	POWERGRID	MePTCL							
26	Kopili - Misa	1	NEEPCO	POWERGRID	POWERGRID				NA			
27	Kopili - Misa	2	NEEPCO	POWERGRID	POWERGRID				NA			
28	Kopili - Misa	3	NEEPCO	POWERGRID	POWERGRID				NA			
29	Mariani (AEGCL) - Samaguri	1	AEGCL	AEGCL	AEGCL							
30	Mariani (PG) - Mokokchung (PG)	1	POWERGRID	POWERGRID	POWERGRID							
31	Mariani (PG) - Mokokchung (PG)	2	POWERGRID	POWERGRID	POWERGRID							
32	Misa - Samaguri	1	POWERGRID	AEGCL	POWERGRID				NA			
33	Misa - Samaguri	2	POWERGRID	AEGCL	POWERGRID				NA			

F. 220 kV Lines

34	NTPS - Tinsukia	1	AEGCL	AEGCL	AEGCL							
35	NTPS - Tinsukia	2	AEGCL	AEGCL	AEGCL							
36	Samaguri - Sonapur	1	AEGCL	AEGCL	AEGCL							
37	Sarusajai-Sonapur	1	AEGCL	AEGCL	AEGCL							
38	Samaguri - Sonabil	1	AEGCL	AEGCL	AEGCL							
39	Samaguri - Sonabil	2	AEGCL	AEGCL	AEGCL							

G. 132 kV Lines

1	Agartala - AGTCCPP	1	TSECL	NEEPCO	POWERGRID	NA						
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List of Lines in North Eastern Regional Grid

Annexure-C.4

Sl No	Name of Element (Emanating - Terminating)	Ckt ID	Agency at End 1	Agency at End 2	Name of Owners	TLSA	Megger /off line Fault locator	Controlled Switching Device (CSD)	Line Differential Protection Availability	OPGW Availability	PLCC Availability	Carrier Aided Protection Availability (Yes/No)
2	Agartala - AGTCCPP	2	TSECL	NEEPCO	POWERGRID	NA						
3	Agartala - Bodhjannagar	1	TSECL	TSECL	TSECL							
4	Agartala - Dhalabil	1	TSECL	TSECL	TSECL							
5	Agartala - Rokhia	1	TSECL	TSECL	TSECL							
6	Agartala - Rokhia		TSECL	TSECL	TSECL							
7	Agia - Mendipathar	1	AEGCL	MePTCL	MePTCL							
8	AGTCCPP - Kumarghat	1	NEEPCO	POWERGRID	POWERGRID							
9	Aizawl - Tipaimukh	1	POWERGRID	MSPCL	POWERGRID	37 nos. of TLSA, Make-Oblum	1.0	-	NO	NO		
10	Aizawl - Kolasib	1	POWERGRID	P&ED, Mizoram	POWERGRID	09 nos. of TLSA, Make-Oblum		-	NO	Yes		
11	Aizawl - Kumarghat	1	POWERGRID	POWERGRID	POWERGRID	30 nos. of TLSA, Make-Oblum		-	NO	Yes		
12	Aizawl - Luangmual	1	POWERGRID	P&ED, Mizoram	P&ED, Mizoram	0.0		-	NO	NO		
13	Aizawl - Melriat(PG)	1	POWERGRID	POWERGRID	POWERGRID				NIL			
14	Ambasa - Gamaitila	1	TSECL	TSECL	TSECL							
15	Ambasa - Kamalpur	1	TSECL	TSECL	TSECL							

List of Lines in North Eastern Regional Grid

Annexure-C.4

Sl No	Name of Element (Emanating - Terminating)	Ckt ID	Agency at End 1	Agency at End 2	Name of Owners	TLSA	Megger /off line Fault locator	Controlled Switching Device (CSD)	Line Differential Protection Availability	OPGW Availability	PLCC Availability	Carrier Aided Protection Availability (Yes/No)
16	Ambasa - P K Bari	1	TSECL	TSECL	TSECL							

G. 132 kV Lines

17	Badarpur - Jiribam	1	POWERGRID	POWERGRID	POWERGRID				NO			
18	Badarpur - Kolasib	1	POWERGRID	P&ED, Mizoram	POWERGRID							
19	Badarpur - Kumarghat	1	POWERGRID	POWERGRID	POWERGRID							
20	Badarpur - Panchgram	1	POWERGRID	AEGCL	POWERGRID							
21	Badarpur - Silchar	1	POWERGRID	POWERGRID	POWERGRID							
22	Badarpur - Silchar	2	POWERGRID	POWERGRID	POWERGRID							
23	Balipara - Bhalukpong	1	POWERGRID	DoP, Arunachal Pradesh	NEEPCO & DoP, Arunachal Pradesh							
24	Balipara - Ghoramari	1	POWERGRID	AEGCL	AEGCL							
25	Balipara - Sonabil	1	AEGCL	AEGCL	AEGCL							
26	Baramura - Gamaitilla	1	TSECL	TSECL	TSECL							
27	Baramura - Jirania	1	TSECL	TSECL	TSECL							
28	Bhalukpong - Khupi	1	DoP, Arunachal Pradesh	NEEPCO	NEEPCO & DoP, Arunachal Pradesh							
29	Biswanath Chariali - Pavo	1	POWERGRID	AEGCL	POWERGRID							
30	Biswanath Chariali - Pavo	2	POWERGRID	AEGCL	POWERGRID							
31	Pavo - Sonabil	1	AEGCL	AEGCL	AEGCL							
32	Bodhjannagar - Jirania	1	TSECL	TSECL	TSECL							
33	Bokajan - Dimapur	1	AEGCL	POWERGRID	AEGCL							
34	Bokajan - Golaghat	1	AEGCL	AEGCL	AEGCL							

G. 132 kV Lines

35	BTPS - Dhaligaon	1	AEGCL	AEGCL	AEGCL							
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List of Lines in North Eastern Regional Grid

Annexure-C.4

Sl No	Name of Element (Emanating - Terminating)	Ckt ID	Agency at End 1	Agency at End 2	Name of Owners	TLSA	Megger /off line Fault locator	Controlled Switching Device (CSD)	Line Differential Protection Availability	OPGW Availability	PLCC Availability	Carrier Aided Protection Availability (Yes/No)
36	BTPS - Dhaligaon	2	AEGCL	AEGCL	AEGCL							
37	Budhjangnagar - Surjamaninagar	1	TSECL	TSECL	TSECL							
38	Budhjangnagar - Surjamaninagar	2	TSECL	TSECL	TSECL							
39	Dhalabil - Kamalpur	1	TSECL	TSECL	TSECL							
40	Dharmanagar - Dullavcherra	1	TSECL	AEGCL	AEGCL							
41	Dullavcherra - Hailakandi	1	AEGCL	AEGCL	AEGCL							
42	Dharmanagar - P K Bari	1	TSECL	TSECL	TSECL							
43	Dimapur - Doyang	1	POWERGRID	NEEPCO	POWERGRID				No	Yes		
44	Dimapur - Doyang	2	POWERGRID	NEEPCO	POWERGRID				No	Yes		
45	Dimapur - Imphal	1	POWERGRID	POWERGRID	POWERGRID				No	Yes		
46	Dimapur (PG) - Dimapur (DoP, Nagaland)	1	POWERGRID	DoP, Nagaland	DoP, Nagaland							
47	Dimapur (PG) - Dimapur (DoP, Nagaland)	2	POWERGRID	DoP, Nagaland	DoP, Nagaland							
48	Dimapur (PG) - Kohima	1	POWERGRID	DoP, Nagaland	DoP, Nagaland							
49	Doyang - Mokochung (DoP, Nagaland)	1	NEEPCO	DoP, Nagaland	DoP, Nagaland							
50	Doyang-Sanis	1	NEEPCO	DoP, Nagaland	DoP, Nagaland							
G. 132 kV Lines												
51	Hailakandi - Silchar	1	AEGCL	POWERGRID	POWERGRID							
52	Hailakandi - Silchar	2	AEGCL	POWERGRID	POWERGRID							
53	EPIP II - Byrnihat	1	MePTCL	MePTCL	MePTCL							
54	EPIP II - Byrnihat	2	MePTCL	MePTCL	MePTCL							
55	EPIP II - Umtru	1	MePTCL	MePTCL	MePTCL							
56	EPIP II - Umtru	2	MePTCL	MePTCL	MePTCL							
57	Gohpur - Pavoi	1	AEGCL	AEGCL	AEGCL							
58	Gohpur - Nirjuli	1	AEGCL	POWERGRID	POWERGRID	Not Installed	YES	NA	Not Used	Available		
59	Golaghat - Mariani (AEGCL)	1	AEGCL	AEGCL	AEGCL							
60	Haflong - Jiribam	1	POWERGRID	POWERGRID	POWERGRID	No	Yes	NA	NO	YES(some part)		
61	Haflong - Umranshu	1	AEGCL	POWERGRID	AEGCL							
62	Imphal (MSPCL) - Imphal (PG)	1	MSPCL	POWERGRID	POWERGRID							

List of Lines in North Eastern Regional Grid

Annexure-C.4

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63	Imphal (MSPCL) - Imphal (PG)	2	MSPCL	POWERGRID	POWERGRID & MSPCL							
64	Imphal (MSPCL) - Karong	1	MSPCL	MSPCL	MSPCL							
65	Imphal (PG) - Ningthoukong	1	POWERGRID	MSPCL	MSPCL							
66	Imphal (PG) - Loktak	1	POWERGRID	NHPC	POWERGRID							
67	Jiribam - Loktak	2	POWERGRID	NHPC	POWERGRID	No	Yes	NA	NO	No		
68	Jiribam - Pailapool	1	POWERGRID	AEGCL	AEGCL/ MSPCL							
69	Jiribam(PG) - Jiribam(MA)	1	POWERGRID	MSPCL	MSPCL							
70	Jiribam-Tipaimukh	1	POWERGRID	MSPCL	POWERGRID	No	Yes	NA	NO	NO		
71	Jorhat - Mariani	1	AEGCL	AEGCL	AEGCL							
72	Jorhat - Mariani	2	AEGCL	AEGCL	AEGCL							
73	Jorhat - Nazira	1	AEGCL	AEGCL	AEGCL							
G. 132 kV Lines												
74	Kahilipara - Kamalpur	1	AEGCL	AEGCL	AEGCL							
75	Kahilipara - Sarusajai	1	AEGCL	AEGCL	AEGCL							
76	Kahilipara - Sarusajai	2	AEGCL	AEGCL	AEGCL							
77	Kahilipara - Sarusajai	3	AEGCL	AEGCL	AEGCL							
78	Kamakhya-Sarusajai	1	AEGCL	AEGCL	AEGCL							
79	Kamakhya-Sishugram	1	AEGCL	AEGCL	AEGCL							
80	Kahilipara - Umtru	1	AEGCL	MePTCL	MePTCL							
81	Kahilipara - Umtru	2	AEGCL	MePTCL	MePTCL							
82	Kamalpur - P K Bari	1	TSECL	TSECL	TSECL							
83	Karong - Kohima	1	DoP, Nagaland	MSPCL	MSPCL (65.3%) / DoP, Nagaland (34.7%)							
84	Khandong - Khliehriat	1	NEEPCO	POWERGRID	POWERGRID	in 16 towers				No		
85	Khandong - Khliehriat	2	NEEPCO	POWERGRID	POWERGRID	100% TOWERS (Make-Oblum & Raychem)				Yes		
86	Khandong - Kopili	1	NEEPCO	NEEPCO	POWERGRID	NIL				No		
87	Khandong - Kopili	2	NEEPCO	NEEPCO	POWERGRID	NIL				Yes		
88	Khandong - Umranshu	1	NEEPCO	AEGCL	POWERGRID & AEGCL							
89	Khliehriat - Badarpur	1	POWERGRID	POWERGRID	POWERGRID	in 12 towers				Yes		

List of Lines in North Eastern Regional Grid

Annexure-C.4

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90	Khliehriat - Mustem	1	MePTCL	MePTCL	MePTCL							
91	Mustem - NEHU line	1	MePTCL	MePTCL	MePTCL							
92	Khliehriat (MePTCL) - Khliehriat (PG)	1	MePTCL	POWERGRID	POWERGRID	NIL				Yes		
93	Khliehriat (MePTCL) - Khliehriat (PG)	2	MePTCL	POWERGRID	MePTCL							
94	Khliehriat- NEIGRIHMS	1	MePTCL	POWERGRID	MePTCL							
95	Kumarghat - P K Bari	1	POWERGRID	TSECL	TSECL							
96	Lekhi - Nirjuli	1	DoP, Arunachal Pradesh	POWERGRID	DoP, Arunachal Pradesh & POWERGRID	Not Installed	Yes	NA	Not Available	Yes		
97	Lekhi - Pare	1	DoP, Arunachal Pradesh	NEEPCO	DoP, Arunachal Pradesh & POWERGRID	Not Installed	Yes	NA	Not Available	Yes		

G. 132 kV Lines

98	Loktak - Ningthoukhong	1	NHPC	MSPCL	MSPCL							
99	Loktak - Rengpang	1	NHPC	MSPCL	MSPCL							
100	LTPS - Mariani	1	AEGCL	AEGCL	AEGCL							
101	LTPS - Moran	1	AEGCL	AEGCL	AEGCL							
102	LTPS - Nazira	1	AEGCL	AEGCL	AEGCL							
103	LTPS - Nazira	2	AEGCL	AEGCL	AEGCL							
104	LTPS - NTPS	1	AEGCL	AEGCL	AEGCL							
105	LTPS - Sonari	1	AEGCL	AEGCL	AEGCL							
106	Mariani (AEGCL) - Mokokchung (DoP, Nagaland)	1	AEGCL	ED, DoP, Nagaland	AEGCL(40%/ DoP, Nagaland(60%)							
107	NEHU - Mawlai	1	MePTCL	MePTCL	MePTCL							
108	Mawlai - Umiam Stage I	2	MePTCL	MePTCL	MePTCL							
109	Mawphlang - Nongstoin	1	MePTCL	AEGCL	MePTCL							
110	Mawphlang - Umiam Stg I	1	MePTCL	MePTCL	MePTCL							
111	Mawphlang - Umiam Stg I	2	MePTCL	MePTCL	MePTCL							
112	Mawphlang- Mawlai	1	MePTCL	MePTCL	MePTCL							
113	Melriat(PG) - Zuangtui	1	POWERGRID	P&ED, Mizoram	POWERGRID				NIL			
114	Mendipathar - Nangalbibra	1	MePTCL	MePTCL	MePTCL							
115	Mokokchung (PG) - Mokokchung (DoP, Nagaland)	1	POWERGRID	DoP,Nagaland	POWERGRID	Nil	yes	No	Yes, Micom Schneider	Available		
116	Mokokchung (PG) - Mokokchung (DoP, Nagaland)	2	POWERGRID	DoP,Nagaland	POWERGRID	Nil	Yes	No	Yes, Micom Schneider	Available		
117	Monarchak - Rokhia	1	NEEPCO	TSECL	TSECL							

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118	Monarchak - Udaipur	1	NEEPCO	TSECL	TSECL							
119	Myntdu Leshka - Khleihriat	1	MePTCL	MePTCL	MePTCL							
120	Myntdu Leshka - Khleihriat	2	MePTCL	MePTCL	MePTCL							
121	Namsai-Tezu	1	POWERGRID	POWERGRID	POWERGRID	NO	Megger available	NA	NO	NO		
122	Nangalbibra - Nongstoin	1	MePTCL	MePTCL	MePTCL							
123	NEHU - NEIGRIHMS	1	MePTCL	MePTCL	MePTCL							
124	NEHU - Umiam	1	MePTCL	MePTCL	MePTCL							

G. 132 kV Lines

125	NTPS - Tinsukia	1	AEGCL	AEGCL	AEGCL							
126	NTPS - Sonari	1	AEGCL	AEGCL	AEGCL							
127	Pailapool - Srikona	1	AEGCL	AEGCL	AEGCL							
128	Palatana - Udaipur	1	TSECL	TSECL	TSECL							
129	Panchgram - Srikona	1	AEGCL	AEGCL	AEGCL							
130	Pare- Itanagar	1	NEEPCO	DoP, Arunachal Pradesh	DoP, Arunachal Pradesh & NEEPCO							
131	Ranganadi- Itanagar I	1	POWERGRID	DoP, Arunachal Pradesh	DoP, Arunachal Pradesh							
132	Ranganadi - Pare	1	NEEPCO	NEEPCO	POWERGRID	Not Installed	Yes	NA				
133	Ranganadi - Pare	2	NEEPCO	NEEPCO	DoP, Arunachal Pradesh & NEEPCO							
134	Ranganadi - Ziro	1	NEEPCO	POWERGRID	POWERGRID	03 nos, make: OBLUM	1.0			Yes		
135	Roing - Pasighat	1	POWERGRID	POWERGRID	POWERGRID	NO	1.0		NO	NO		
136	Roing - Tezu	1	POWERGRID	POWERGRID	POWERGRID	NO	1.0		NO	NO		
137	Sarusajai - Umtru	1	AEGCL	MePTCL	MePTCL							
138	Sarusajai - Umtru	2	AEGCL	MePTCL	MePTCL							
139	Silchar - Srikona	1	POWERGRID	AEGCL	POWERGRID							
140	Silchar - Srikona	2	POWERGRID	AEGCL	POWERGRID							
141	Umiam - Umiam St I	1	MePTCL	MePTCL	MePTCL							
142	Umiam St I - Umiam St II	1	MePTCL	MePTCL	MePTCL							
143	Umiam St I - Umiam St III	1	MePTCL	MePTCL	MePTCL							
144	Umiam St I - Umiam St III	2	MePTCL	MePTCL	MePTCL							

List of Lines in North Eastern Regional Grid

Annexure-C.4

Sl No	Name of Element (Emanating - Terminating)	Ckt ID	Agency at End 1	Agency at End 2	Name of Owners	TLSA	Megger /off line Fault locator	Controlled Switching Device (CSD)	Line Differential Protection Availability	OPGW Availability	PLCC Availability	Carrier Aided Protection Availability (Yes/No)
145	Umiam St III - Umiam St IV	1	MePTCL	MePTCL	MePTCL							
146	Umiam St III – Umiam St IV	2	MePTCL	MePTCL	MePTCL							
147	Umiam St III - Umtru	1	MePTCL	MePTCL	MePTCL							
148	Umiam St III - Umtru	2	MePTCL	MePTCL	MePTCL							
149	Umtru - Umiam St IV	1	MePTCL	MePTCL	MePTCL							
150	Umtru - Umiam St IV	2	MePTCL	MePTCL	MePTCL							

Lines expected to be commissioned during 2019-20 (After commissioning of these elements, they will be considered as important elements of NER)

B. 220 kV Lines

1	BTPS - Rangia	1	AEGCL	AEGCL	AEGCL							
2	BTPS - Rangia	2	AEGCL	AEGCL	AEGCL							

C. 132 kV Lines

1	Palatana- Surajmaninagar	2	OTPC	TSECL	POWERGRID							
2	Monarchak - Surajmaninagar	1	NEEPCO	TSECL	TSECL							
3	Monarchak - Surajmaninagar	2	NEEPCO	TSECL	TSECL							