



भारत सरकार Government of India

विद्युत मंत्रालय Ministry of Power

उत्तर पूर्वी क्षेत्रीय विद्युत समिति

North Eastern Regional Power Committee

एन ई आर पी सी कॉम्प्लेक्स, डोंग पारमाओ, लापालाङ, शिल्लोंग-७९३००६, मेघालय  
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No. NERPC/SE (O)/PCC/2020/2175-2212

Dated: 07<sup>th</sup> December, 2020

To,

1. Managing Director, AEGCL, Bijuli Bhawan, Guwahati – 781 001
2. Managing Director, APDCL, Bijuli Bhawan, Guwahati – 781 001
3. Managing Director, APGCL, Bijuli Bhawan, Guwahati – 781 001
4. Director (Generation), Me. PGCL, Lumjingshai, Short Round Road, Shillong – 793 001
5. Director (Distribution), Me. ECL, Lumjingshai, Short Round Road, Shillong – 793 001
6. Director(Transmission), Me. PTCL, Lumjingshai, Short Round Road, Shillong – 793 001
7. Managing Director, MSPDCL, Secure Office Bldg. Complex, South Block, Imphal – 795 001
8. Managing Director, MSPCL, Electricity Complex, Keishampat, Imphal – 795 001
9. Director (Tech.), TSECL, Banamalipur, Agartala -799 001.
10. Director (Generation), TPGCL, Banamalipur, Agartala -799 001.
11. Chief Engineer (WE Zone),Department of Power ,Govt. of Arunachal Pradesh, Itanagar- 791111
12. Chief Engineer (EE 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. Engineer-in-Chief (P&E), Department of Power, Govt. of Mizoram, Aizawl – 796 001
15. Chief Engineer (P), Department of Power, Govt. of Nagaland, Kohima – 797 001
16. CGM, (LDC), SLDC Complex, AEGCL, Kahilipara, Guwahati-781 019
17. Group General Manager, NTPC, Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
18. ED, NERTS, PGCIL, Dongtiah-Lower Nongrah, Lapalang, Shillong -793 006
19. ED (O&M), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
20. ED (Commercial), NEEPCO Ltd., Brookland Compound, Lower New Colony, Shillong-793003
21. ED (O&M), NHPC, NHPC Office Complex, Sector-33, Faridabad,Haryana-121003
22. Vice President (Plant), OTPC, Badarghat Complex, Agartala, Tripura - 799014
23. GM, NERLDC, Dongtiah, Lower Nongrah, Lapalang, Shillong -793 006
24. Member Secretary, ERPC, 14 Golf Club Road, Tollygunge, Kolkata-700033
25. Chief Engineer, GM Division, Central Electricity Authority, New Delhi – 110066
26. Chief Engineer (NPC), NRPC Complex, Katwaria Sarai, SJSS Marg, New Delhi - 110016

**Sub: Minutes of 55<sup>th</sup> PCC Meeting.**

**Sir/Madam,**

Please find enclosed herewith the minutes of 55<sup>th</sup> PCC Meeting held “NERPC Conference Hall”, Shillong on the **11<sup>th</sup> November, 2020** for your kind information and necessary action. The minute is also available on the website of NERPC, **www.nerpc.nic.in**.

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

**Encl: As above**

भवदीय / Yours faithfully,

B. Lyngkhai  
**Director/ SE**

Copy to:

1. CGM, AEGCL, Bijuli Bhavan, Guwahati - 781001
2. CGM, APGCL, Bijuli Bhavan, Guwahati - 781001
3. CGM, DISCOM, Bijuli Bhavan, Guwahati - 781001
4. Head of SLDC, Me.ECL, Lumjingshai, Short Round Road, Umjarain, Shillong – 793 022
5. Head of SLDC, Department of Power, Govt. of Arunachal Pradesh, Itanagar- 791 111
6. Head of SLDC, Department of Power, Dimapur, Nagaland
7. Head of SLDC, Electricity Department, Govt. of Manipur, Keishampat, Imphal – 795 001
8. Head of SLDC, Department of Power, Govt. of Mizoram, Aizawl – 796 001
9. Head of SLDC, TSECL, Agartala – 799 001
10. Chief Engineer(Elect), Loktak HEP, Vidyut Vihar, Kom Keirap, Manipur- 795124
11. Addl. GM (EED), NTPC Ltd., Bongaigoan Thermal Power Project, P.O. Salakati, Kokrajhar- 783369
12. DGM (C&M), OTPC, 6th Floor, A-Wing, IFCI Tower -61, Nehru Place, New Delhi – 110019.



**Director/ SE**

**North Eastern Regional Power Committee**

**MINUTES OF THE 55<sup>th</sup> PROTECTION COORDINATION**

**SUB-COMMITTEE MEETING OF NERPC**

**Date** : 11/11/2020 (Wednesday)  
**Time** : 10:30 hrs  
**Venue** : “NERPC Conference Hall”, Shillong.

The List of Participants in the 55<sup>th</sup> PCC Meeting is attached at **Annexure – I**

Shri B. Lyngkhoi, Director(O&P), NERPC welcomed all the participants to the 55<sup>th</sup> PCC meeting. He stated that since January, 2020 the PCC meeting could not be held due to the prevailing pandemic situation, however Sub-group meetings to analyze trippings are being held every month over Video-conferencing. He thanked all the utilities for attending the PCC meeting over Video-Conferencing.

Thereafter he requested Sh. Srijit Mukherjee, EE, NERPC to take up the agenda items for discussion.

**A. CONFIRMATION OF MINUTES**

**CONFIRMATION OF MINUTES OF 54<sup>th</sup> MEETING OF PROTECTION SUB-COMMITTEE OF NERPC.**

The minutes of 54<sup>th</sup> meeting of Protection Sub-committee held on 22<sup>nd</sup> January, 2020 at Guwahati were circulated vide letter No. NERPC/SE/PCC/2018/2565-589 dated 07<sup>th</sup> February, 2020.

***The Sub-committee confirmed the minutes of 54<sup>th</sup> PCCM of NERPC as no other 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. Detailed list attached at **Annexure-B.1.**

**Deliberation of the sub-Committee:**

The forum noted the lackadaisical efforts with respect to implementation of audit recommendations particularly in respect of Arunachal Pradesh and Tripura. Sr.EE, SLDC P&ED Mizoram stated that the status was submitted on 2018 and many of the recommendations have been subsequently implemented. He further informed that 132kV Khawiva has also been audited in the Second stage of Protection Audit.

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. AEE, MePTCL requested that 400kV Killing, 132kV Mawphlang, 132kV Mustem and 132kV Umiam may also be audited as part of the second phase.

***The Sub-Committee noted as above.***

***Action: all utilities.***

**B.2 Frequent tripping of 132kV Balipara-Tenga line:**

132 kV Balipara – Tenga Line tripped 3 times in Sep’20 and 6 times in Oct’20. Pending actions as per discussions in 55<sup>th</sup> PCCM and OCC meetings:

- Conversion of all T connections to LILO for 132kV Balipara – Khupi
- Periodic maintenance of the line by DoP Ar. Pradesh

**Deliberation of the sub-Committee:**

EE(Trans), DoP Ar. Pradesh informed that presently the line is being maintained by NEEPCO. Regarding conversion of T to LILO of the said line it was informed that the works are under the scope of M/s Platinum Alloys and jungle clearance is awaited. For handing over of the line by NEEPCO (and taking over by DoP Ar. Pradesh) the matter was referred to the next OCCM for discussion.

DGM, NEEPCO informed that trippings are mainly due to vegetation and extensive vegetation clearance has been done in Oct’20.

***The Sub-Committee noted as above.***

***Action: DoP Ar. Pradesh, NEEPCO***

**B.3 Frequent tripping of lines in the 132kV RHEP-Ziro-Daporizo-Along-Pasighat corridor:**

132kV RHEP-Ziro-Daporizo-Along-Pasighat-Roing-Tezu-Namsai line corridor is radial and tripping of any line in between leads to Grid Disturbance.

Name of the line	Number of Trippings		
	Aug'20	Sep'20	Oct'20
132kV Along-Pasighat	3 times	9 times	1 time
132kV Ziro-Daporizo	1 time	1 time	NIL
132kV Daporizo-Along	1 time	NIL	NIL

Remedial actions already undertaken:

- O/C settings at RHEP reviewed considering the present loading of the line.
- Auto-Reclosure implemented for 132kV RHEP-Ziro

It has been noted that no DR/EL is being submitted by DoP Ar. Pradesh for the lines owned and maintained by DoP Ar. Pradesh viz. 132kV Daporizo-Along, 132kV Along-Pasighat.

**Deliberation of the sub-Committee:**

NERLDC informed that presently DR/EL is being submitted only for 132kV Lekhi, 132kV Chimpu S/Sn. EE(Trans), DoP Ar. Pradesh stated that the personnel at various substations of DoP Ar. Pradesh are being trained for DR/EL downloading. Thereafter the DR/EL for 132kV Daporizo, 132kV Along, 132kV Pasighat shall be submitted periodically. Regarding frequent tripping of 132kV Along-Pasighat it was informed that majority of the trippings were due to vegetation and extensive clearance was done in Oct'20 and also would be done in Jan'21.

It was requested by NERLDC to monitor the status of submission of DR data from Balipara (or replacement of existing relay at Balipara) and implementation of carrier aided protection & Auto recloser in 132 kV Balipara – Tenga – Khupi link in subgroup /PCC meeting. Forum agreed.

***The Sub-Committee noted as above & dropped.***

***Action: DoP Ar. Pradesh.***

**B.4 Review of Settings for Important elements:**

In the Sub-group meeting on 15<sup>th</sup> October, 2020 NERTS informed that the HTLS parameters are being searched for the 132kV AGTCCPP-79Tilla D/C line and shall be implemented by Oct'20. Director(O&P), NERPC stated that as per detailed discussions of the Sub-group the following settings need to be reviewed with co-ordination amongst the concerned utilities:

- (i) All 132kV feeders of DHEP
- (ii) 400/132kV ICTs at Palatana & 132kV Palatana-Udaipur
- (iii) 132kV Melriat-Zuangtui with downstream of 132kV Zuangtui (Zemabawk)
- (iv) 132kV Dimapur-Dimapur D/C with downstream of Dimapur (Nagarjan)

He requested all the utilities to submit the related settings to NERPC at the earliest.

**Deliberation of the sub-Committee:**

DGM, NEEPCO informed that the settings of all lines and unit feeders of DHEP shall be submitted by Nov'20.

Regarding co-ordination of settings for 132kV Palatana-Udaipur and 400/132kV ICTs at Palatana, OTPC informed that sensitive E/F for the ICTs were disabled subsequent to event dated. 10<sup>th</sup> Aug'20. OTPC was requested to submit the settings for LV side of the ICTs for further analysis.

Regarding E/F setting of 132kV Palatana - Udaipur line, it was decided to discuss the issue in next subgroup meeting due to absence of representative from TSECL, MRT.

Sr.EE, P&ED Mizoram informed that the co-ordination with downstream has already been done on 30<sup>th</sup> September, 2020 with Z-2 timing as 300ms and Z-3 timing as 500ms. NERTS was requested to revise the zone timings at Melriat accordingly.

For co-ordination of 132kV Dimapur-Dimapur D/C with downstream, DoP Nagaland was requested to submit the settings for downstream feeders at 132kV Nagarjan.

Regarding setting issue at 132 kV Tipaimukh, NERTS was requested to check the settings submitted by MSPCL by Nov'20 and revert back in the next subgroup meeting.

***The Sub-Committee noted as above.***

***Action: NEEPCO, OTPC, NERTS, DoP Nagaland.***

**B.5 Status of submission of FIR and DR & EL outputs for the Grid Events for Oct'20:**

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 Oct'20(as on 04.11.20) is given below:

Name of Utility	Total FIR/ DR/EL to be submitted	% Submission of		
		FIR	DR output	EL output
DoP, Arunachal Pradesh	19	21	11	0
AEGCL	45	84	78	2
MSPCL	26	100	81	77
MePTCL	18	28	44	0
P&ED, Mizoram	0	No Event		
DoP, Nagaland	21	100	87	65
TSECL	14	0	21	21

POWERGRID	61	39	71	22
NEEPCO	57	44	42	47
NHPC	3	0	0	0
NTPC	2	0	0	0
OTPC	2	50	100	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 (<http://103.7.131.234/Trippingnew/Account/Login.aspx>) for analysis purpose.

**Deliberation of the sub-Committee:**

The forum requested all the utilities to submit DR/EL periodically. NERLDC requested all the SLDCs especially SLDC Tripura to submit the FIR for all events in their state with due diligence periodically. Members requested NERTS to conduct a Special training on DR/EL downloading via Video-Conferencing for different make and models.

***The Sub-Committee noted as above.***

***Action: all utilities.***

**B.6 Major Grid Events in NER Power System in Oct'20:**

Details of the major Grid Events in NER Power System since last Subgroup Meeting held on 15.10.20 are given the below table:

1. Disturbance in Karong area of Manipur Power System due to non-operation of Distance Protection of 132 kV lines at Karong: 5 times in Oct'20
2. Tripping of both units at Kameng HEP for fault in 400 kV Balipara - Kameng 1 Line on 08.10.20
3. Blackout of 132 kV Hailakandi area of Assam Power System on 09.10.20
4. Blackout of Kolasib substation on 10.10.20
5. Grid Disturbance in Meghalaya Power System on 13.10.20 & 14.10.20
6. Blackout of Monarchak on 17.10.20

**Deliberation of the sub-Committee:**

1. DGM, SLDC, MSPCL informed that DP settings at Karong have been changed on 07<sup>th</sup> Oct'20 and relay connections would be checked by 15<sup>th</sup> Nov'20.
2. DGM, NEEPCO informed that for revision of GT neutral O/C protection settings, OEM is yet to give a firm date.
3. On 09.10.2020 the blackout was due to mal-tripping of LBB protection at Hailakandi. The wiring was rectified thereafter.

4. Fault in Bairabi downstream, remote tripping from Badarpur and Aizawl due to wrong co-ordination. Same has been rectified.
5. On 13.10.2020: transient fault in 132kV Umtru-Umiam Stg-IV- Ckt#I, backup protection directionality to be checked at 132kV EPIP-II for New Umtru.  
On 14.10.2020: Transient fault in 132kV Umiam-Umiam Stg-I. As only O/C, E/F protection present for the line, remote tripping from Umtru and Mawngap. Line differential protection for 132kV Umiam under implementation  
On 01.11.2020: Transient fault in 132kV Umiam-Stg-III to Umtru D/C. 132kV Umtru-New Umtru tripped on Highset O/C at New Umtru. Highset cannot put back in service to prevent humming in machine for faults in line.
6. Z-II at Monarchak. TSECL to submit DR/EL and also intimate RCA.

***The Sub-Committee noted as above.***

***Action: all utilities as above.***

## **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 54<sup>th</sup> PCCM NERLDC informed that sample DR outputs have not been received. Only those DRs which have been submitted sporadically subsequent to trippings have been analyzed for proper channel standardization.

All utilities were requested to submit DR outputs by February 2020.

#### **Deliberation of the sub-Committee:**

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. NERTS agreed.

***The Sub-Committee noted as above.***

***Action: All utilities as above.***

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

- Status of AEGCL & MePTCL is monitored in PCC subgroup meeting.
- 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**.

**Deliberation of the sub-Committee:**

AEE, MePTCL informed that check sync relay for AR is under procurement. Director(O&P), NERPC Shillong requested all the state utilities to submit the status as per annexure at the earliest.

***The Sub-Committee noted as above.***

***Action: MSPCL, P&ED Mizoram, DoP Ar. Pradesh, DoP Nagaland and TSECL.***

**C.3 Installation of Line differential protection for short lines:**

As per discussion in 54th PCC meeting and subsequent OCC/Sub-group meetings the status for different STUs are as follows:

Name of utility	Last updated status	Status as updated in 55 <sup>th</sup> PCC
AEGCL	Lines identified. Under Preparation stage.	
MSPCL	Lines identified. LDP for 132kV Imphal-Imphal and 132kV Jiribam-Jiribam proposed. Under DPR preparation stage.	DPR submitted
MePTCL	LoA issued. First tranche of funds received from PSDF.	Work completed but not commissioned. By Nov'20.
P&ED Mizoram	Lines identified viz. 132kV Aizawl - Luangmual and 132kV Kawmzawl - Khawiva. Under DPR preparation stage.	Lines identified viz. 132kV Aizawl - Luangmual and 132kV Kawmzawl - Khawiva. Under DPR preparation stage.
DoP Nagaland	Lines identified under DPR preparation stage.	Lines identified under DPR preparation stage.
TSECL	132kV 79Tilla-Budhjungnagar. DPR to be prepared	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	Exactly 10km. LDP to be implemented. Relay under procurement
132kV RHEP-Pare-2	NERTS	NERTS to co-ordinate for fiber allocation	NEEPCO	Relay under procurement

***The Sub-Committee noted as above.***

***Action: All utilities as above.***

#### **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**

#### **Deliberation of the sub-Committee:**

Director(O&P), NERPC re-iterated the need for carrier-intertrip for all important grid lines. He requested all the state utilities to submit the status as per annexure at the earliest.

***The Sub-Committee noted as above.***

***Action: all state utilities***

#### **C.5 Status for SPS and Islanding Schemes:**

The latest status for suggested modifications to be updated:

Sl No	SPS Name	Status as per last Sub-group meeting	Utility	Status as updated in 55 <sup>th</sup> PCC
<b>A. Existing</b>				
1	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.	POWERGRID	By Nov'20
2	SPS-6 (When 132kV Umiam Stg-I to Umiam Stg-III)	Identified 30 MW load at Mawngap. Carrier issues from Umiam Stg-I to Mawngap by Nov'20	MePTCL	Carrier communication to be established for 132kV Umiam Stg-I

	D/C line trips)			to Mawngap. Procurement involved.
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)	a) Wiring for tripping of 132 kV BTPS-Dhaligaon D/C at BTPS to be removed. b) In case of over loading, a signal to be sent from BTPS to Agia to trip 220 kV Agia – Azara S/C and 220 kV Agia – Boko S/C, both circuits at Agia end.  By Oct'20	AEGCL	At Agia – in PLCC panel carrier channel interchanged, wiring to be rectified by Dec'20
4	SPS-9 (Tripping of 132kV AGTCCPP – Kumarghat line)	Put in service on 13.10.2020. Protection coupler to be procured for the line and Carrier- intertrip to be implemented for complete effectiveness of SPS	NERTS	Panel does not support carrier intertrip. Procurement involved. By Jan'21.
<b>New</b>				
1	SPS related to secure & reliable operation of BgTPP	->Logic building completed. ->Wiring by Oct'20 ->Digital channel for 400kV D/C line by Oct'20 ->Detailed Scheme to be shared with NERPC/NERLDC after implementation	NTPC	In service w.e.f. 15.10.2020. NTPC to submit the detailed schematic.
2	SPS related to secure & reliable operation of Monarchak	->Will be implemented during shutdown in Sep'20 ->Generation reduction slightly less than 65MW ->Detailed Scheme to be shared with NERPC/NERLDC after implementation	NEEPCO	STG to be tripped. Wiring by Dec'20.
3	SPS for RHEP- Pare	->M/s GE to implement ->Delayed due to lockdown measures	NEEPCO	OEM visit required. Delayed due to lockdown restrictions.

**For Islanding Scheme-2:**

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

**Deliberation of the Sub-Committee:**

DGM, SLDC, TSECL informed that the procurement of UFR shall be done after obtaining approval. NERLDC requested UFR to be enabled in DP (and set at 49.8Hz, 500ms) for 132kV P.K.Bari-Dharmanagar line at P.K.Bari. TSECL to revert back in next subgroup meeting.

***The Sub-Committee noted as above.***

***Action: all utilities as above.***

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

<b>Sl. No</b>	<b>Details of the event</b>	<b>Remedial Actions suggested</b>	<b>Name of the utility</b>	<b>Status as per last Sub-group</b>	<b>Status as intimated in 55<sup>th</sup> PCC</b>
1	Grid Disturbance in Dimapur area of Nagaland on 30.09.19 due to tripping of 220kV Misa-Dimapur D/C, 132kV Dimapur-Dimapur D/C, 132kV Bokajan-Dimapur	Overreach of Main - 2 relay of 220kV Misa-Dimapur-I at Misa to be rectified	NERTS	Settings OK. Testing in next Shutdown.	Settings OK. Testing in next Shutdown.
2	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 clock unavailable. DR channel standardisation by Oct'20.	GPS/TSE to be procured. DR channel standardisation subsequent to training.
3	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.	To be replaced under PSDF scheme.

4	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	Found OK at Biswanath Chariali. M/s GE & NERTS to visit RHEP.	Found OK at Biswanath Chariali. M/s GE & NERTS to visit RHEP.
5	Tripping of 132 kV AGTCCPP - Kumarghat Line only at AGTCCPP on 02-04-2020 18:06:00	Calibration of numerical relay at AGTCCPP	NEEPCO	By Oct'20.	By Nov'20.
6	Tripping of all units at AGBPP on 10-05-2020 at 11:47hrs	referred to OEM for checking the logics of newly commissioned auxiliary systems.	NEEPCO	Delayed due to pandemic	Delayed due to pandemic
7	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	After commissioning of PLCC	By Dec'20
8	132 kV Agartala-Rokhia D/C lines & 132 kV Monarchak - Rokhia line tripped on 05.06.2020,	CBs to be installed at both ends of link feeder at Rokhia	TPGL	Estimate preparation under process.	Estimate preparation under process.
9	09.06.2020	Line differential protection to be installed for link feeder at Rokhia	TPGL	Estimate preparation under process.	Estimate preparation under process.
10	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 visit by Oct'20	Joint inspection on 19-11-2020.
11	Tripping of 220 kV AGBPP - Deomali Line @ 12:51:00 09-06-2020	CT sensing problem at AGBPP	DoP Ar.Pradesh	By Nov'20	By Nov'20
12	Pare Units 1&2 tripped on 22.06.2020	Differential protection of SST operated. However units also tripped. Referred to ANDRIZ HYDRO for RCA.	NEEPCO	ANDRIZ reply awaited	Discussions ongoing with ANDRIZ

13	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	Carrier communication work is completed at Rangia end. Carrier communication work could not be completed at BTPS end due to panel damage.	At Salakati end, one damaged PLCC panel is to be replaced. Will be done by Dec,2020.
14		AR operation to be tested for 220kV Rangia-BTPS D/C	AEGCL		AR fully functional at Rangia end. At Salakati, AR scheme is under testing phase.
15		Testing of DP at Rangia for BTPS#1 to be done	AEGCL		
16	Tripping of 220kV BTPS-Salakati D/C on 05.08.2020	non-operation of O/C protection at Salakati for Ckt#I to be checked	NERTS	By Oct'20	O/C protection at Salakati for Ckt#I checked and corrected
17	Tripping of 132 kV Lumshnong-Panchgram twice on 12.07.2020	B/U settings to be modified as per fault current for 132kV Lumshnong-Khliehriat	MePTCL	By Oct'20	By Nov'20
18		DR time synchronisation	MePTCL	In discussion with OEM	In discussion with OEM
19	Blackout of 220kV Mariani, 220/132kV Mokokchung(PG) & 132kV Mokokchung(NAG) on 06.08.2020	At AGBPP end E/F TMS of Mariani(PG) line to be revised to 1.2 from 0.12	NEEPCO	B/U E/M relay de-commissioned. Relay setting and PSL to be sent to NERTS.	At AGBPP end E/F TMS of Mariani(PG) line set at 0.25. Relay setting and PSL to be set after discussion with GE.
20		AR to be implemented at DHEP for 132kV DHEP-Mokokchung with check sync function at Doyang	NEEPCO	OEM site visit awaited. Delayed due to COVID.	OEM site visit awaited. Delayed due to COVID.

21	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	By Oct'20	By Nov'20
22	Tripping of 132 kV Ranganadi - Ziro Line three times in Aug'20	AR non-operation due to Trip coil problem to be rectified	NEEPCO	By Oct'20	Trip coil problem Rectified. AR operation may be tested in next tripping.
23	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	By Oct'20	Exact TMS to be intimated to MSPCL for implementation
24		Software to be procured for downloading DR/EL	MSPCL	Requisition sent to higher authority	Procurement in process
25	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	By Oct'20	OEM reply awaited.
26	Tripping of 220 kV BTPS - Rangia 2 Line 3 times in Aug'20	Testing of DP at Rangia for BTPS#1 to be done due to delayed detection of Z-1 at Rangia be done due to delayed detection of Z-1 at Rangia.	AEGCL	Relays to be tested and report to be submitted by Dec'20	Tested and found OK. To be dropped
27		AR operation on Z-I only to be tested for both ends	AEGCL	by Oct'20	
28	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 Oct'20	By Nov'20
29	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.	Procurement of relay in progress.
30		GT settings at Kameng to be reviewed	NEEPCO	To be taken up with OEM	To be taken up with OEM

31	Tripping of 220 kV Misa - Samaguri I and II lines, 220 kV Samaguri - Jawaharnagar line, 220 kV Samaguri - Sonapur line, 220 kV Samaguri - Sonabil line on 17-09-2020	Two separate DC sources to be installed with source separation and DCDB at Samaguri also by Dec'20.	AEGCL	-	Completed
32	Tripping of 220/132 kV, 100 MVA ICT II at BTPS(AS) on 29-09-2020	Jumper Strengthening to be done at BTPS	AEGCL	-	Completed
33	Tripping of 132 kV Dullavcherra - Hailakandi line, 132 kV Dharmanagar - Dullavcherra line & 132 kV PK Bari - Dharmanagar line on 05.09.20	Non-operation of CB at Dharmanagar for P.K.Bari line to be investigated	TSECL	-	By Dec'20
34	Tripping of 132 kV New Umtru HEP U-I, New Umtru HEP U-II, 132 kV New Umtru - Umtru line and 132 kV New Umtru - EPIP II line on 17-09-2020	High set O/C, E/F for New Umtru lines to be disabled.	MePGCL	-	High set not disabled as it causes humming in machine.
35	Tripping of 400 kV Ranganadi - BiswnathChariali D/C and 132 kV Ranganadi - Pare 2 Line on 11.09.20	Reasons for tripping of Line Reactors for external fault to be investigated	NEEPCO	-	Polarity of Neutral CT was found to be wrong. Rectified.
36	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

**The Sub-Committee noted as above.**

**Action: all utilities as above.**



**D. I T E M S FOR INFORMATION**

**D.1 Summary of NER Load Loss:**

Year	Aug	Sept	Oct
FY 2019-20	0.2299	0.3020	0.3175
FY 2020-21	0.6190	0.8830	0.2317

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

**Localized Load Loss for October, 2020**

Sl No.	Affected State	Area	Load Loss in MU
1	Arunachal Pradesh	Itanagar	0.025
2		Pasighat	0.101
3		Khupi	0.035
4	Assam	Rangia	0.012
5		Hailakandi	0.004
6		Golaghat and Bokajan	0.023
7	Manipur	Churachandpur	0.002
8		Karong	0.011
9	Meghalaya	Capital Area	0.109

***This is for information only.***

**Date and Venue of next PCC**

It is proposed to hold the 56<sup>th</sup> PCC meeting of NERPC on second week of February, 2021. The date & exact venue will be intimated in due course.

The meeting ended with thanks to the Chair.

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**Annexure-I****List of Participants in the 55<sup>th</sup> PCC Meeting held on 11.11.2020**

<b>SN</b>	<b>Name &amp; Designation</b>	<b>Organization</b>	<b>Contact No.</b>
1	Sh. T.K Tara, SE(E), Electrical Transmission Circle	Ar. Pradesh (MS Team)	-
2	Sh. Nangkong Perme, SE (E), SO&PSC,	Ar. Pradesh (MS Team)	-
3	Sh. Sange Phuntso, EE(E), SLDC	Ar. Pradesh (MS Team)	-
4	Sh. P. Buchi, AE	Ar. Pradesh (MS Team)	-
5	Sh. G. Yinyo, JE	Ar. Pradesh (MS Team)	-
6	Ms. Pura Anu, JE (E), Elect. Transmission Circle	Ar. Pradesh (MS Team)	-
7	Ms. Binpi Lendo, JE (E), SLDC	Ar. Pradesh (MS Team)	-
8	Sh. Gem Tada, JE(E), SLDC	Ar. Pradesh (MS Team)	-
9	Sh. J. Toko Batte, JE (E) SLDC	Ar. Pradesh (MS Team)	-
10	Sh. Hibu Bama, EE(E), Transmission Division -II	Ar. Pradesh (MS Team)	-
11	Sh. Abhishek Kalita, Asst. Manager	Assam (MS Team)	-
12	Sh. Hidam Roshikanta,, DM	Manipur (VC)	-
13	Sh. L. Roger Singh, CRA SSD-II, SLDC	Manipur (VC)	-
14	Sh. Kh. Rocky Singh, DM, SSD-III	Manipur (VC)	-
15	Sh. Kh. Choro Paul, DM, SSD-II	Manipur (VC)	-
16	Smti. Jayela Wahengbam, DM, SLDC	Manipur (VC)	-
17	Sh. H. Rakesh, Manager, SSD-III	Manipur (VC)	-
18	Smti. Laishram Ritu, DGM, SLDC	Manipur (VC)	-
19	Smti. Steffi Okram, Manager (E) (SLDC)	Manipur (MS Team)	-
20	Sh. G. Tada, JE	Nagaland (VC)	-
21	Sh. McDonald Dkhar, EE (System Protection)	Meghalaya (VC)	-
22	Sh. Alvin Shullai, AEE, MePGCL	Meghalaya (VC)	-
23	Sh. D.J. Lyngdoh, EE, SM	Meghalaya (VC)	-
24	Sh. A.G. Tham, AE, MePTCL	Meghalaya (VC)	-
25	Sh. R. Khongmalai, AEE, MRT, MePTCL	Meghalaya (VC)	-

26	Sh. K. Kynjing,	Meghalaya (VC)	-
27	Sh. J.H. Laithangliana, SE	Mizoram (VC)	-
28	Sh. Benjamin L. Thumtea, Sr. EE (SLDC)	Mizoram (VC)	-
29	Sh. B. Joy Singh, SDO, MRT	Mizoram (VC)	-
30	Sh. Vanlalthima, EE, MRT	Mizoram (VC)	-
31	Sh. L. Sailo, JE, SLDC	Mizoram (VC)	-
32	Sh. Anil Debbarma, DGM (SLDC)	Tripura (MS Team)	09612589250
33	Sh. K. Parameswara Rao, Sr. DGM (RTAMC)	PGCIL (VC)	09436335369
34	Sh. S.C. De, GM	NERLDC (VC)	
35	Sh. B. Swargiary, Manager	NERLDC (VC)	09402102354
36	Sh. Jerin Jacob, Dy. Manager	NERLDC (MS Team)	09436930830
37	Sh. Chitra Thapa, SO-II	NERLDC (MS Team)	-
38	Sh. Devaprasad Paul, Ch. Mgr (AM)	PGCIL (MS Team)	-
39	Sh. Joypal Roy, DGM	NEEPCO (MS Team)	08837200069
40	Sh. Subhajit Ganguly, Sr. Manager (O)	OTPC (MS Team))	-
41	Smti. Ishani Choudhary	PRDC (MS Team)	-
42	Sh. Debarati Basu	PRDC (MS Team)	-
43	Sh. Dibyendu Goswami, Engineer (PSS)	PRDC (MS Team)	-
44	Sh. Sh. Ras Shanker Choubey, Engineer (PSS)	PRDC (VC)	-
45	Sh. B. Lyngkhai, Director (O&P)	NERPC	09436163419
46	Sh. S. Mukherjee, Dy. Director	NERPC	08794277306
47	Sh. S. Chatturvedi, AE	NERPC	-

# THIRD PARTY PROTECTION AUDIT in NER

# PRESENT STATUS

Name of the Utility	2013-14 Audit		2017-18 Audit	
	No. Of stations covered	% of recommendations completed	No. Of stations covered	% of recommendations completed
Ar. Pradesh	6	4	3	0
Assam	37	33	16	38
Manipur	9	69	4	40
Meghalaya	10	100	10	11
Mizoram	6	93	3	8
Nagaland	4	99	3	81
Tripura	7	96	11	0

# STATIONS AUDITED

## ARUNACHAL PRADESH

2013-14 Audit	2017-18 Audit
<b>132kV Aalo/Along S/Sn</b>	<b>132kV Aalo/Along S/Sn</b>
<b>132kV Daporizo</b>	<b>132kV Daporizo</b>
<b>220kV Deomali</b>	<b>132kV Pasighat</b>
<b>132kV Lekhi</b>	
<b>132kV Tippi</b>	
<b>132kV Kimi</b>	

# STATIONS AUDITED

## ASSAM

2013-14 Audit	2017-18 Audit
132kV Srikona S/Sn	132kV Srikona S/Sn
132kV Durlavcherra S/Sn	220kV Mariani S/Sn
132kV Bokajan	132kV Depota
132kV Bokaghat	132kV Dhaligaon
132kV Diphu	132kV Dibrugarh
132kV Goregaon	132kV Gohpur
132kV Golaghat	132kV Kahilipara
220kV Mariani	132kV Pailapool
132kV APM	132kV Rangia
132kV Baghjap	220kV Agia
132kV Depota	220kV Boko
132kV Dhaligaon	220kV Jawaharnagar

# STATIONS AUDITED

## ASSAM

2013-14 Audit	2017-18 Audit
132kV Dibrugarh	220kV Namrup
132kV Gohpur	220kV Samaguri
132kV Gossaigaon	220kV Sonabil
132kV Haflong	220kV Tinsukia
132kV Kahilipara	
132kV Margherita	
132kV Moran	
132kV N.Lakhimpur	
132kV Nalbari	
132kV Narengi	
132kV Pailapool	
132kV Panchgram	



# STATIONS AUDITED

## MANIPUR

2013-14 Audit	2017-18 Audit
132kV Yurembam	132kV Yurembam
132kV Kongba	132kV Karong
132kV Rengpang	132kV Ningthoukong
132kV Jiribam	132kV Kakching
132kV Karong	
132kV Yaingangpokpi	
132kV Ningthoukong	
132kV Churachandpur	
132kV Kakching	

# STATIONS AUDITED

## MEGHALAYA

2013-14 Audit	2017-18 Audit
132kV NEHU	132kV Mawlai
132kV Umiam Stg-I	132kV NEHU
132kV Umiam Stg-II	132kV Umiam Stg-I
132kV Umiam Stg-III	132kV Umiam Stg-II
132kV Umiam Stg-IV	132kV Umiam Stg-III
132kV NEIGRIHMS	132kV Umiam Stg-IV
132kV Lumshnong	132kV Umtru
132kV Mawngap	132kV Leshka
132kV Sohra	132kV Mendipathar
132kV Nongstoin	132kV EPIP-II

# STATIONS AUDITED

## MIZORAM

2013-14 Audit	2017-18 Audit
<b>132kV Zuangtui</b>	<b>132kV Zuangtui</b>
<b>132kV Saitual</b>	<b>132kV Kolasib</b>
<b>132kV Serchip</b>	<b>132kV Luangmaul</b>
<b>132kV Luangmual</b>	
<b>132kV Kolasib</b>	
<b>132kV HFO Bairabi</b>	

# STATIONS AUDITED

## NAGALAND

2013-14 Audit	2017-18 Audit
<b>132kV Mokokchung</b>	<b>132kV Mokokchung</b>
<b>132kV Dimapur</b>	<b>132kV Dimapur</b>
<b>132kV Kohima</b>	<b>132kV Kohima</b>
<b>132kV Wokha</b>	

# STATIONS AUDITED

## TRIPURA

2013-14 Audit	2017-18 Audit
132kV 79Tilla	132kV 79Tilla
132kV Budhjungnagar	132kV Budhjungnagar
132kV SMNagar	132kV SMNagar
132kV Udaipur	132kV Udaipur
132kV Jirania	132kV Baramura
132kV Dhalabil	132kV Rokhia
132kV Teliamura	132kV Ambassa
	132kV Dharmanagar
	132kV Kailashor
	132kV Kamalpur
	132kV P.K.Bari

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>	<b>Tower Configuration (S/C or D/C)</b>	<b>Agency at End 1</b>	<b>Agency at End 2</b>	<b>Owner</b>	<b>AR Details (SPAR/3-Ph AR/Not Available/Information not Available)</b>	<b>Remarks</b>
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

<i>Sl No</i>	<i>Voltage Level</i>	<i>Name of Element (Emanating - Terminating)</i>	<i>Ckt ID</i>	<b>Tower Configuration (S/C or D/C)</b>	<b>Agency at End 1</b>	<b>Agency at End 2</b>	<b>Owner</b>	<b>AR Details (SPAR/3-Ph AR/Not Available/Information not Available)</b>	<b>Remarks</b>
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>	<b>Tower Configuration n (S/C or D/C)</b>	<b>Agency at End 1</b>	<b>Agency at End 2</b>	<b>Owner</b>	<b>AR Details (SPAR/3-Ph AR/Not Available/Information not Available)</b>	<b>Remarks</b>
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	
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	SPAR available at JawaharNagar, other end will be done in R&M works
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	
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	
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	will be done in PSDF scheme
28	220 kV	220 kV Mariani (PG) - Mokokchung (PG)	1	D/C	POWERGRID	POWERGRID	POWERGRID	SPAR in service	
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	POWERGRID may intimate the status
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

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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	<b>POWERGRID may intimate the status,</b> 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, <b>AEGCL may intimate the status</b>
22	132 kV	132 kV Badarpur - Silchar	2	D/C	POWERGRID	POWERGRID	POWERGRID	Information not available	Silchar end: 3-ph AR in BCU available, <b>AEGCL may intimate the status</b>
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

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25	132 kV	132 kV Balipara - Sonabil	1	S/C	AEGCL	AEGCL	AEGCL	Information not available	Sonabil end: 3-ph AR available, <b>Balipara end: POWERGRID may intimate</b>
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

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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

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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

Details of Auto Recloser of Lines in North Eastern Regional Grid

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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 parallell 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 parallell 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	

Details of Auto Recloser of Lines in North Eastern Regional Grid

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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 parallell 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 parallell 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 parallell 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 parallell 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 - Renggang	1	S/C	NHPC	MSPCL	MSPCL	Not Available	

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>	<b>Tower Configuration n (S/C or D/C)</b>	<b>Agency at End 1</b>	<b>Agency at End 2</b>	<b>Owner</b>	<b>AR Details (SPAR/3-Ph AR/Not Available/Information not Available</b>	<b>Remarks</b>
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



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>	<b>Tower Configuration (S/C or D/C)</b>	<b>Agency at End 1</b>	<b>Agency at End 2</b>	<b>Owner</b>	<b>AR Details (SPAR/3-Ph AR/Not Available/Information not Available)</b>	<b>Remarks</b>
120	132 kV	132 kV Mendipathar - Nangalbibra	1	S/C	MePTCL	MePTCL	MePTCL	Not available	MePTCL will implement the 3 Ph AR in parallell with ongoing R&M works of PLCC &DPC by Septemeber 2019.
121	132 kV	132 kV Mokochung (PG) - Mokokchung (DoP, Nagaland)	1	D/C	POWERGRID	DoP,Nagaland	POWERGRID	Information not available	
122	132 kV	132 kV Mokochung (PG) - Mokokchung (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 parallell 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 parallell 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 parallell 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 parallell 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 parallell 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

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>	<b>Tower Configuration n (S/C or D/C)</b>	<b>Agency at End 1</b>	<b>Agency at End 2</b>	<b>Owner</b>	<b>AR Details (SPAR/3-Ph AR/Not Available/Information not Available)</b>	<b>Remarks</b>
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 paralll 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 paralll 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

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>	<b>Tower Configuration n (S/C or D/C)</b>	<b>Agency at End 1</b>	<b>Agency at End 2</b>	<b>Owner</b>	<b>AR Details (SPAR/3-Ph AR/Not Available/Information not Available)</b>	<b>Remarks</b>
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-9**

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-9

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-9

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 Availabilty	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		

**List of Lines in North Eastern Regional Grid**

Annexure-9

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)
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	Byrnihat - Misa	1	MePTCL	POWERGRID	MePTCL							
25	Byrnihat - 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						
2	Agartala - AGTCCPP	2	TSECL	NEEPCO	POWERGRID	NA						
3	Agartala - Bodhjanagar	1	TSECL	TSECL	TSECL							

**List of Lines in North Eastern Regional Grid**

Annexure-9

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)
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							
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							



**List of Lines in North Eastern Regional Grid**

Annexure-9

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)
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 - Pavoi	1	POWERGRID	AEGCL	POWERGRID							
30	Biswanath Chariali - Pavoi	2	POWERGRID	AEGCL	POWERGRID							
31	Pavoi - 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							
<b><i>G. 132 kV Lines</i></b>												
35	BTPS - Dhaligaon	1	AEGCL	AEGCL	AEGCL							
36	BTPS - Dhaligaon	2	AEGCL	AEGCL	AEGCL							
37	Budhjannagar - Surjamaninagar	1	TSECL	TSECL	TSECL							

**List of Lines in North Eastern Regional Grid**

Annexure-9

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)
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 - Mokokchung (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							
63	Imphal (MSPCL) - Imphal (PG)	2	MSPCL	POWERGRID	POWERGRID & MSPCL							
64	Imphal (MSPCL) - Karong	1	MSPCL	MSPCL	MSPCL							

**List of Lines in North Eastern Regional Grid**

Annexure-9

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)
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		
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		

**List of Lines in North Eastern Regional Grid**

Annexure-9

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)
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							
118	Monarchak - Udaipur	1	NEEPCO	TSECL	TSECL							
119	Myntdu Leshka - Kheihriat	1	MePTCL	MePTCL	MePTCL							
120	Myntdu Leshka - Kheihriat	2	MePTCL	MePTCL	MePTCL							

**List of Lines in North Eastern Regional Grid**

Annexure-9

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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							
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							

**List of Lines in North Eastern Regional Grid**

Annexure-9

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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							