

Northern Region-Grid Event Report for December 2019

S.No.	Region	Name of Elements (Tripped/Manually opened)	Affected Area	Owner/ Agency	Outage		Revival		Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards	Energy Unreserved (in MU)
					Date	Time	Date	Time						
1	NR	1) 400 kv koteswar(th)-koteswar(pg) (pg) ckt-2 2) 400kv bus 2 at koteswar(th) 3) 400kv bus 1 at koteswar(th) 4) 400 kv koteswar thps - unit 2 5) 400 kv koteswar(th)-koteswar(pg) (pg) ckt-1 6) 125 mvar bus reactor no 1 at 400kv koteswar(th)	UTTRAKHAND	POWERGRID, THDC	01-12-2019	14:58	01-12-2019	17:13	02:15	Due to failure of B-phase insulator string of 400KV Bus II at KHEP, Bus Bar protection of Bus -II of 400KV Koteswar Power House operated at about 14:58Hrs. It resulted in tripping of following elements: (a) Unit 2 of 100MW capacity resulting in generation loss of 90MW. (b) Tripping of 400 KV KOTESWAR(TH)-KOTESHWAR(PG) (PG) CKT-1 & 2 (c) 400KV Bus 1 and BUS 2 AT KOTESWAR(TH) (d) 125 MVAR BUS REACTOR NO 1 AT 400KV KOTESHWAR(TH)	90	0	GD-1	0
2	NR	1) 400 kv bareilly_2(pg)-kashipur(uk) (pg) ckt-2 2) 400 kv bareilly_2(pg)-kashipur(uk) (pg) ckt-1	UTTRAKHAND	POWERGRID	03-12-2019	09:21	03-12-2019	09:44	00:23	400 kv Bareilly (PG) - Kashipur(UK) (PG) both circuit tripped at Bareilly end. DT received at Kashipur(UK) end.	0	0	GI-2	0
3	NR	1) 220 kv mogal(pg)-mehal- kalan(ps) (pstcl) ckt-2 2) 220 kv mogal(pg)-mehal- kalan(ps) (pstcl) ckt-1 3) 220 KV MEHAL- KALAN(PS) - Bus 1 4) 220 KV MEHAL- KALAN(PS) - Bus 2	PUNJAB	PUNJAB	03-12-2019	16:02	03-12-2019	17:32	01:30	Due to mal-operation of 220KV Bus bar protection at 220 kv Mehal Kalan (PS). 220KV Bus 1 at Mehal Kalan and 220 kv Moga(PG) - Mehal Kalan(PS) (PSTCL) circuit 1 & 2 got tripped.	0	32	GD-1	0.05
4	NR	1) 400 kv panki-aligarh (up) ckt-1 2) 400 kv rewa road-panki (up) ckt-1	UTTAR PRADESH	UP	05-12-2019	06:03	05-12-2019	08:01	01:58	During fault in 400 kv Aligarh-Panki ckt, 400 kv Rewa Road-Panki ckt also tripped from Rewa Road end. As per PMU data, it seems fault was transient in nature and 400 kv Aligarh-Panki line A/R from Panki end. Further it also seems A/R function is not working at 400 kv Aligarh end.	0	0	GI-2	0
5	NR	1) 125 mvar bus reactor no 1 at 400kv manesar(pg) 2) 400 kv gurgaon-manesar (pg) ckt-1 3) 220 kv manesar(pg)-badshahpur(hv) (hvpln) ckt-1 4) 220 kv manesar(pg)-mau(hv) (hvpln) ckt-2 5) 400 kv neemrana-manesar (pg) ckt-1 6) 125 mvar bus reactor no 2 at 400kv manesar(pg) 7) 220 kv manesar(pg)-mau(hv) (hvpln) ckt-1 8) 400 kv neemrana-manesar (pg) ckt-2 9) 400 kv gurgaon-manesar (pg) ckt-2 10) 400/220 kv 500 mva ict 1 at manesar(pg) 11) 400/220 kv 500 mva ict 2 at manesar(pg) 12) 220 kv manesar(pg)-badshahpur(hv) (hvpln) ckt-2 13) 220 kv manesar(pg)-mau(hv) (hvpln) ckt-2 14) 220 kv manesar(pg)-badshahpur(hv) (hvpln) ckt-1 15) 220 kv manesar(pg)-mau(hv) (hvpln) ckt-1	HARYANA	HVPNL, POWERGRID	05-12-2019	12:34	05-12-2019	13:13	00:39	At 12:29hrs all 400kv lines tripped at Manesar(PG) due to mal-operation of contactor of SF6 gas zone trip of bus isolator of 400 kv Neemrana-Manesar (pg) ckt 1. Consecutively at 12:34hrs, all 220 kv lines also tripped at Manesar(PG)	0	200	GD-1	0.07
6	NR	1) 400kv bus 1 at manesar(pg) 2) 400 kv gurgaon-manesar (pg) ckt-1 3) 125 mvar bus reactor no 2 at 400kv manesar(pg) 4) 400/220 kv 500 mva ict 1 at manesar(pg) 5) 400KV Neemrana-Manesar (PG) Ckt-1	HARYANA	POWERGRID	06-12-2019	17:44	06-12-2019	18:59	01:15	400kv Bus bar -1 at 400/220KV Manesar(PG) hand tripped due to sudden SF6 gas leakage observed in bus bar-1 VT compartment leading to tripping of 400kv Gurgaon-Manesar(pg) ckt-1, 400kv Neemrana-Manesar (PG) Ckt-1, 500 MVA ICT 2 at Manesar(pg) & 125 MVAR bus reactor no 2 at 400kv Manesar(pg). As per PMU, No fault is observed in the system. In antecedent conditions, 500 MVA ICT 2 carrying 94MW.	0	0	GI-2	0
7	NR	1) 220 kv bairstu(nh)-jessore(hp) (pg) ckt-1 2) 220 kv bairstu(nh)-pong(bb) (pg) ckt-1	HIMACHAL PRADESH	POWERGRID	12-12-2019	15:00	12-12-2019	15:39	00:39	220 kv bairstu(nh)-jessore(hp) (pg) & 220 kv bairstu(nh)-pong(bb) (pg) tripped on overvoltage. As per PMU, No fault is observed in the system. In antecedent conditions, 220 kv bairstu(nh)-jessore(hp) (pg) & 220 kv bairstu(nh)-pong(bb) carrying 8MW & 11MW respectively. Generation at 220kv Bairstu(NHPC) was zero at the time of tripping.	0	0	GI-2	0
8	NR	1) 400 kv kishenpur-newwanpoh (pg) ckt-1 2) 400 kv kishenpur-newwanpoh (pg) ckt-2	J & K	POWERGRID	13-12-2019	11:00	13-12-2019	11:07	00:07	400 kv kishenpur-newwanpoh (pg) ckt-1 tripped on R-N fault & 400 kv kishenpur-newwanpoh (pg) ckt-2 tripped on B-N fault. As per PMU, R-N & B-N fault with unsuccessful autorectesting is observed in the system. In antecedent conditions, 400 kv kishenpur-newwanpoh (pg) ckt-1 & 2 carrying 18MW & 9MW respectively.	0	0	GI-2	0
9	NR	1) 220 kv uncharhar(nt)-fatehpur(up) (up) ckt-1 2) 220 kv uncharhar(nt)-fatehpur(up) (up) ckt-2 3) 220 kv fatehpur(pg)-fatehpur(up) (up) ckt-1 4) 220 kv fatehpur(pg)-fatehpur(up) (up) ckt-2	UTTAR PRADESH	UP	16-12-2019	12:30	16-12-2019	12:42	00:12	220kv uncharhar(nt)-fatehpur(up) (up) ckt-2 tripped on ZI distance protection. Along with aforesaid line, all 220kv lines at Fatehpur(UP) tripped. As per PMU, R-V fault with delayed clearance of 760ms is observed in the system. In antecedent conditions, 220kv fatehpur(pg)-fatehpur(up) (up) ckt-1 & 2, 220kv uncharhar(nt)-fatehpur(up) (up) ckt-1 & 2 carrying 27MW, 27MW, 80MW & 80MW respectively.	0	140	GD-1	0.03
10	NR	1) 400kv bus 1 at chhabra(vun) 2) 400 kv chhabra-chhabra sctps (rs) ckt-1 3) 660 mw chhabra sctps - unit 5 4) 660 mw chhabra sctps - unit 6	RAJASTHAN	RRVNL	17-12-2019	18:14	17-12-2019	19:34	01:20	Y-phase jumper of 400kv Chhabra-Chhabra SCTPS inter connector (between bus-1 at Chhabra & bus-3 at Chhabra SCTPS) snapped and created bus fault of Bus-1 at Chhabra TPS. This resulted in tripping of all CBs connected to bus-1. As, Chhabra SCTPS-Anta D/C was already out, running generation at Chhabra SCTPS (Unit #5, #6) tripped due to loss of evacuation. As per PMU, Y-N fault is observed in the system. In antecedent conditions, Chhabra SCTPS Units & Unit6 carrying 322MW & 303MW respectively.	625	0	GD-1	0
11	NR	1) 220 kv tanakpur(nh)-sitarganj(pg) (pg) ckt-1 2) 220 kv tanakpur(nh)-cbganj(up) (up) ckt-1	UTTAR PRADESH	POWERGRID	18-12-2019	04:00	18-12-2019	04:37	00:37	220kv Tanakpur(NHPC)-Sitarganj(PG) (pg) ckt-1 & 220kv Tanakpur(NHPC)-Cbganj(UP) (pg) ckt-1 tripped on heavy jerk. Unit#2 and Unit#3 at 220kv Tanakpur(NHPC) also tripped due to loss of evacuation path. As per PMU, Fluctuations in Y-phase voltages is observed. In antecedent conditions, Unit#2 and Unit#3 at 220kv Tanakpur(NHPC) generating 10MW & 32MW respectively.	40	0	GD-1	0
12	NR	1) 400/220 kv 315 mva ict 2 at muradnagar_2(up) 2) 400/220 kv 240 mva ict 1 at muradnagar_2(up)	UTTAR PRADESH	UP	18-12-2019	17:47	18-12-2019	20:15	02:28	240MVA ICT 1 & 315MVA ICT 2 at 400/220kv Muradnagar New(UP) tripped due to earth fault. As per PMU, B-N fault followed by R-N fault is observed in the system. In antecedent conditions, 240MVA ICT 1 & 315MVA ICT 2 carrying 7MW & 10MW respectively.	0	0	GI-2	0
13	NR	1) 400 kv banda-oral (up) ckt-2 2) 400 kv oral-mainpuri (up) ckt-1	UTTAR PRADESH	UP	20-12-2019	06:37	20-12-2019	09:10	02:33	400kv Oral-Mainpuri (up) ckt-1 tripped on Y-N fault, fault current - 18.26 kA. At the same time, 400kv Banda-Oral (up) ckt-2 tripped on Y-N fault from oral end only. As per PMU, Y-N fault with unsuccessful autoreclosing is observed in the system. In antecedent conditions, 400kv Oral-Mainpuri (up) ckt-1 & 400kv Banda-Oral (up) ckt-2 carrying 163MW & 18MW respectively.	0	0	GI-2	0
14	NR	1) 400/220 kv 315 mva ict 3 at sultanpur(up) 2) 400 kv sultanpur(up)-lucknow_1(pg) (up) ckt-1 3) 400 kv tandan(nt)-sultanpur(up) (up) ckt-1 4) 400kv bus 1 at sultanpur(up) 5) 400/220 kv 240 mva ict 2 at sultanpur(up) 6) 400KV Ora_B-Sultanpur (UP) Ckt-1 7) 400/220 kv 315 MVA ICT 1 at Sultanpur(UP)	UTTAR PRADESH	UP	22-12-2019	02:54	22-12-2019	04:19	01:25	Bus bar protection of 400KV Bus 1 at 400/220kv Sultanpur(UP) operated resulting in tripping of all connected elements. As per PMU, Multiple R-N faults are observed in the system. In antecedent conditions, 315MVA ICT 1, 240MVA ICT 2 & 315MVA ICT 3 at 400/220kv Sultanpur(UP) carrying 60MW, 40MW & 55MW respectively.	0	40	GD-1	0.06
15	NR	1) 400 KV Bawana CCGTB(DTL) - Bus 2 2) 400 KV Bawana-Mundka (DV) Ckt-1 3) 400 KV Bawana-Mundka (DV) Ckt-2	DELHI	DTL	28-12-2019	00:24	28-12-2019	18:58	18:34	During charging of STG1 at 00:24Hrs, Bus sectionalizer-2 at Bawana tripped due to snapping of jumper resulted 400KV Bawana-Mundka 1 and 2 tripped. No load loss occurred at Delhi. As per PMU, Y-N fault is observed in the system. In antecedent conditions, 400KV Bawana-Mundka 1 and 2 carrying 219MW & 212MW respectively.	0	0	GI-2	0

S.No.	Region	Name of Elements (Tripped/Manually opened)	Affected Area	Owner/ Agency	Outage		Revival		Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards	Energy Unserved (in MU)
					Date	Time	Date	Time						
16	NR	1) 660 MW Chhabra SCTPS - UNIT 6 2) 660 MW Chhabra SCTPS - UNIT 5 3) 400 KV Anta(RS)-Kawai SCTPS(APR) (RS) Ckt-2	RAJASTHAN	RRVPNL	29-12-2019	07:53	29-12-2019	10:42	02:49	400 KV Anta(RS)-Kawai SCTPS(APR) (RS) Ckt-2 tripped on R-N fault. At the same time, 660 MW Chhabra SCTPS - UNIT 5 & UNIT 6 tripped due to operation of Generator differential Protection. As per PMU, R-N fault with unsuccessful autoreclosing is observed. In antecedent conditions, Chhabra SCTPS - UNIT 5 & UNIT 6 generating 408MW & 361MW respectively.	780	0	GD-1	0
17	NR	1) 800 KV HVDC Champa(PG)- Kurukshetra(PG) Pole-1 2) 800 KV HVDC Champa(PG)- Kurukshetra(PG) Pole-2 3) 800 KV HVDC Champa(PG)- Kurukshetra(PG) Pole-3	HARYANA	POWERGRID	30-12-2019	10:26	30-12-2019	12:17	01:51	800KV HVDC Champa-Kurukshetra pole 1, pole 2 & pole 3 tripped at 1026Hrs due to CNAP(Common Neutral Area Protection) protection alarm present at champa end. 800KV HVDC Champa-Kurukshetra pole 2 & pole 3 charged at 1132Hrs & 1145Hrs respectively and again got tripped at 1151Hrs due to same reason. As per PMU, Fluctuations observed in the phase voltages. In antecedent conditions, 800KV HVDC Champa-Kurukshetra pole 1, pole 2 & pole 3 carrying 1050MW, 250MW & 200MW respectively.	0	0	GI-2	0

**Western Region-Event Report for December 2019**

S.No	Region	Name of Elements	Owner/Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards	Energy Unserved (MU)
				Date	Time	Date	Time	Time					
1	WR	Tripping of 1.400 kV Kolhapur(MH)-Kolhapur(PG) 2 2.400 kV Kolhapur(MH)- Karad 2 3.400 kV Kolhapur(MH)- Alkud 4.400/220 kV Kolhapur(MH) 500 MVA ICT 3 5.400 kV Kolhapur(MH) 125 MVAR BR	MSETCL	9-Dec-19	10:25	9-Dec-19	10:50	00:25	At 400/220 kV Kolhapur(MH) s/s, while opening 400 kV 125 MVAR reactor at Kolhapur(MH) for Voltage regulation, Y phase CB of the reactor got blasted and created fault in 400 kV Bus 2. This resulted in tripping of all the elements connected to 400 kV Bus 2 along with the bus coupler on BB operation.	Nil	Nil	GI-2	Nil
2	WR	Tripping of 1.400kV MB Power-Jabalpur PS-1 2.400kV MB Power-Jabalpur PS-2 3.600 MW MB Power Unit 2	PGCIL/MB Power	17-Dec-19	16:53	17-Dec-19	17:27	00:34	At 400 kV MB Power Power station, 400 kV MB Power-Jabalpur(PS) 1&2 tripped due to the receipt of DT from Jabalpur(PS). 600 MW MB Power Unit 2 tripped due to the loss of evacuation path. At the time of the tripping 400kV Bus 1 at Jabalpur(PS) was under planned outage.	510	Nil	GD-1	Nil
3	WR	Tripping of 1.400 kV Indore- Nada 2.400 kV Indore- ISP 1 3.400 kV Indore- Indore(PG) 1 4.400 kV Indore- Itarsi 1 5.400 kV Indore- Asoj 1 6.400/220 kV 315 MVA Indore(MP) ICTs 1&2 7.ISP Unit 1	MPPTCL	28-Dec-19	13:20	28-Dec-19	13:50	00:30	At 400/220 kV Indore(MP) s/s, B-phase CT of 400kV Nagda blasted and resulted in tripping of all the elements connected to 400 kV bus 1 on Bus bar protection operation. ISP Unit 1 tripped on overall GT Differential protection operation.	123.75	Nil	GI-2	Nil
4	WR	Tripping of 1.800 kV HVDC Champa - Kurukshetra Pole 1 2.800 kV HVDC Champa - Kurukshetra Pole 3	PGCIL	14-Dec-19	10:37	14-Dec-19	11:48	01:11	At 800 kV HVDC Champa s/s, Pole 1 blocked due to the DC Undercurrent on CAT-B protection operation and Pole 3 blocked due to the failure of O/C relay (Delcon-make)at Kurukshetra end. After the relay replacement and resetting pole protections,the poles got deblocked.	Nil	Nil	GI-2	Nil
5	WR	Tripping of 1.800 kV HVDC Champa - Kurukshetra Pole 1 2.800 kV HVDC Champa - Kurukshetra Pole 2 3.800 kV HVDC Champa - Kurukshetra Pole 3	PGCIL	30-Dec-19	10:26	30-Dec-19	11:32	01:06	At 800 kV HVDC Champa s/s, Pole 1&2 blocked on Common Neutral Area Protection at Champa end and at the same time pole 3 blocked on CAT-B protection operation.	Nil	Nil	GI-2	Nil
6	WR	Tripping of 1.800 kV HVDC Champa - Kurukshetra Pole 2 2.800 kV HVDC Champa - Kurukshetra Pole 3	PGCIL	30-Dec-19	11:51	30-Dec-19	12:44	00:53	At 800 kV HVDC Champa s/s, Pole 2 blocked due to Earth overcurrent protection operation and pole 3 blocked on CAT-B protection operation.	Nil	Nil	GI-2	Nil

*Disclaimer : The Above details are based on the preliminary/flash report of the event and may change after finalisation of the detailed report.The quantum of load/generation loss is based on details given by SLDC and utility and may vary later with updated details.*

**Southern Region-Grid Event Report for December 2019**

Sl. No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards	Energy Unserviced (MU)
				Date	Time (Hrs)	Date	Time (Hrs)	Time					
1	SR	i. 220kV Hubli - Narendra line-1&2 ii. 220kV Hubli - Nagjheri Line-1,2&3 iii. 220kV Hubli - Bidnal Line-1&2 iv. 220kV Nagjheri - Bidnal	KPTCL	14-Dec-19	10:56	14-Dec-19	11:17	21 mins	Complete loss of supply at 220kV Hubli SS, 220kV Bidnal SS of KPTCL and 220kV Nagjheri GS of KPCL: Triggering incident was fault in 220kV Hubli-Narendra Line-2. Due to cascaded tripping of connected lines and loss of evacuation, there was complete loss of supply at 220kV Hubli SS, 220kV Bidnal SS of KPTCL and 220kV Nagjheri GS of KPCL.	550 MW	110 MW	GD-1	0.04
2	SR	i. 220kV Shimoga - Sharavathy Line-4 ii. All 220kV connected lines tripped.	KPTCL	25-Dec-19	17:44	25-Dec-19	18:09	25 mins	Complete loss of supply at 220kV Shimoga SS of KPTCL: Triggering incident was line to line fault in 220kV Shimoga-Sharavathi line -4. Bus-1 Bus bar protection operated at 220kV Shimoga resulting in complete loss of supply since all the elements were connected to Bus-1 during antecedent conditions.	-----	80 MW	GD-1	0.03
3	SR	i. 220kV KTPS - Lower Sileru ii. 220kV KTPS V - Lower Sileru	APGENCO	2-Dec-19	02:30	2-Dec-19	05:57	3 hrs 27 mins	Tripping of Bus-2 at 220kV Lower Sileru station: During deparalleling of Unit -1 (connected to 220kV Bus-2) at Lower Sileru, R-phase circuit breaker of Unit-1 did not open. This led to operation of LBB protection of 220kV Bus-2 resulting in tripping of all elements connected to 220kV Bus-2.	NIL	80 MW	GI-1	-----
4	SR	i. 220kV Kudgi-NTPC - Kudgi PG Line-3 ii. 220kV Kudgi-NTPC - Kudgi PG Line-5	NTPC-Kudgi	20-Dec-19	06:40	20-Dec-19	17:00	10 hrs 20 mins	Tripping of 220kV Bus-1 at 400/220kV Kudgi GS: Triggering incident was 220kV Bus-1 R-phase suspension insulator flashover. Bus bar protection of 220kV Bus-1 operated resulting in tripping of all elements connected to 220kV bus-1.	NIL	NIL	GI-1	-----
5	SR	i. 220kV Malyalappalli - Ramapur ii. 400/220kV ICT-2 at Ramagungam iii. 400/220kV ICT-4 at Ramagungam	TSTRANSCO	21-Dec-19	03:10	21-Dec-19	03:59	49 mins	Tripping of Bus-2 at 220kV Malyalappalli (Ramagundam) station: Triggering incident was B-N fault in 220kV Malyalappalli-Ramapur line. LBB of Bus-2 operated since B-phase CB of 220kV Malyalappalli-Ramapur line did not open due to damage in trip coil.	NIL	NIL	GI-1	-----
6	SR	i. 400/230kV ICT-5 at Anaikadavu ii. 230kV Anaikadavu - Periyapatty line	TANTRANSCO	25-Dec-19	16:07	25-Dec-19	16:59	52 mins	Tripping of 230kV Bus-2 at 400/230kV Anaikadavu station: Triggering incident was B-phase bus fault. Bus bar protection of 230kV Bus-2 operated resulting in tripping of all elements connected to 230kV bus-2.	NIL	NIL	GI-1	-----

**Eastern Region-Grid Event Report for December 2019**

Sl. No.	Region	Name of major elements tripped	Owner / Agency	Outage		Revival		Outage Duration Time	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards	Loss of Energy(in MU)
				Date	Time	Date	Time						
1	ERLDC	400/200 ICT -2 at Gokarna 160 MVA 220/132 KV ICT 2&4 at Gokarna 220 Kv Gokarna Sagardighi 2 220 kv Gokarna - Krishnanagar D/C	WBSSETCL	6-Dec-19	10:58	6-Dec-19	11:50	00:52	220 Kv sagardighi Gokaran 1 was under planned shutdown. At 10:58 hrs B phase CT-blast of 220 kv Gokarna - Sadaipur - 2 resulted bus fault at Gokarna which led to tripping of all lines connected to bus 2 at Gokarna end. 400 kv Farakka Gokarna S/C also tripped at same time sensing the same fault in Z-III. Line was in charged condition from Gokarna end. As per verbal information received, there is no bus bar protection at 220 kv level at Gokarna. As per PMU, fault clearance was around 1 second (Z-III time)	0	0	GI-II	0.0000
2	ERLDC	132kv Dumka-Lalmatia D/C	JUSNL	9-Dec-19	11:35	9-Dec-19	11:50	00:15	132 kv KhSTPP - Lalmatia S/C under shutdown. At 10:26 Hrs, 220 KV FSTPP -Lalmatia S/C tripped from Lalmatia end only due to pole discrepancy. Consequently, 38 MW load loss occurred at Lalmatia. Lalmatia availed power from Dumka through 132 KV Dumka-Lalmatia D/C at 11:25 Hrs. At 11:35 hrs this D/C lines tripped resulting power failure at Lalmatia.	0	38	GD-I	0.0095
3	ERLDC	220 kv Gaya Sonenagar - I	BSPTCL	12-Dec-19	11:18	12-Dec-19	11:34	00:16	Planned shutdown of 220 KV Gaya-Sonenagar 1 was availed at 11:12 Hrs. At 11:18 Hrs 220 KV Gaya-Sonenagar 2 tripped from Sonenagar on R-N fault leading to a load loss of 90 MW in downstream at Sonenagar and Japla (Traction loss- 20 MW at Japla). Auto-re-close was successful at Gaya.	0	90	GD-I	0.0240
4	ERLDC	220 kv Darbhanga(DMTCL) – Motipur I 220 kv MTPS – Motipur S/C	BSPTCL	14-Dec-19	02:50	14-Dec-19	04:51	02:01	220 kv Darbhanga(DMTCL)-Motipur II was kept open on voltage regulation from 14:35 hrs on 13.12.19. At around 02:50 hrs on 14-12-19, 220 kv Darbhanga(DMTCL) – Motipur I and 220 kv MTPS – Motipur tripped on E/F causing load loss of around 45 MW at Motipur / Sitamari/Musari area of BSPTCL system. 220 kv Darbhanga(DMTCL) – Motipur I was taken in to service at 03:25 hrs and tripped again on E/F at 03:37 hrs.	0	45	GD-I	0.0908
5	ERLDC	220 KV Gaya- Khizersarai I	BSPTCL	19-Dec-19	17:09	19-Dec-19	17:52	00:43	220 KV Bharsariff- Khizersarai S/C , 132 KV Bus at Lakhisarai & 132 KV Banka-Sultanganj D/c were out of service. 220 KV Gaya-Khizersarai I tripped at 17.09 hrs on B-N fault. 220KV Gaya-Khizersarai II tripped on overload interrupting power supply to Khizersarai S/S. In absence of feed from other sources like Biharsharif, Lakhisarai and Banka due to shutdown, total power failure occurred at Khizersarai and its surrounding areas.	0	266	GD-I	0.1906
6	ERLDC	220kv CTPS A - CTPS B D/C	DVC	28-Dec-19	05:26	28-Dec-19	08:51	03:25	At 05:26 hrs 220KV CTPS A-CTPS B D/C tie lines tripped on differential protection resulting tripping of all 220 kv feeders at CTPS A and all 220/132 kv at CTPS A. At the same time, U#8 of CTPS B also tripped.	193	300	GD-I	1.0250

North Eastern Region-Grid Disturbances Report for December 2019												
Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generati on Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	400 kv Imphal-Silchar Line 1 &2, 132 kv Imphal-Loktak & 132 kv Imphal-Kohima line	PGCIL	01-Dec-19 09:06	01-Dec-19 09:48	42 mins	Imphal area of Manipur Power System was connected with the rest of the NER grid through 400 kv Imphal-Silchar Line 1 &2 lines, 132 kv Imphal -Loktak line & 132 kv Imphal-Kohima line (132 kv Karong-Kohima line was under shutdown wef. 22 November 19 for HTLS Conductor Strining & 132 kv Kakching-Kongba line & 132 kv Imphal - Ningthoukhong line kept open to avoid overloading of 132 kv Loktak-Ningthoukhong line ) At 09:06 Hrs on 01.12.2019, 400 kv Imphal-Silchar Line 1 &2 Lines, 132 kv Imphal -Loktak Line & 132 kv Imphal-Kohima line tripped. Due to tripping of these elements, Imphal area of Manipur Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	00:00	108	0	0.076	GD 1
2	NER	132 kv Loktak- Ningthoukhong line	MSPCL	02-Dec-19 07:00	02-Dec-19 07:28	28 mins	Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kv Loktak-Ningthoukhong line. 132 kv Imphal - Ningthoukhong line and 132 kv Kakching - Kongba line kept open for over-loading of 132 kv Loktak- Ningthoukhong line. At 07:00 Hrs on 02.12.19, 132 kv Loktak- Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	00:00	47	0	0.022	GD 1
3	NER	132 kv Daporijo- Ziro line	DOP , AP	08-Dec-19 15:55	08-Dec-19 16:38	43 mins	Daporijo area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kv Daporijo- Ziro line. At 15:55 Hrs on 08.12.19, 132 kv Daporijo- Ziro line tripped. Due to tripping of this element, Daporijo area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	00:00	11	0	0.008	GD 1
4	NER	132 kv Loktak- Ningthoukhong line	MSPCL	17-Dec-19 18:43	17-Dec-19 18:55	12 mins	Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kv Loktak-Ningthoukhong line. 132 kv Imphal - Ningthoukhong line and 132 kv Kakching - Kongba line kept open for over-loading of 132 kv Loktak- Ningthoukhong line. At 18:43 Hrs on 17.12.19, 132 kv Loktak- Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	00:00	47	0	0.009	GD 1
5	NER	132 kv Loktak- Ningthoukhong line	MSPCL	17-Dec-19 19:25	17-Dec-19 19:33	8 mins	Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kv Loktak-Ningthoukhong line. 132 kv Imphal - Ningthoukhong line and 132 kv Kakching - Kongba line kept open for over-loading of 132 kv Loktak- Ningthoukhong line. At 19:25 Hrs on 17.12.19, 132 kv Loktak- Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	00:00	21	0	0.003	GD 1
6	NER	132 kv Lumshong-Panchgram line	MEPTCL & AEGCL	19-Dec-19 14:33	19-Dec-19 15:25	52 mins	Panchgram area of Assam Power System was connected with the rest of NER Grid through 132 kv Lumshong-Panchgram line. 132 kv Hailakandi - Panchgram line tripped at 14:22 Hrs on 19.12.2019,132 kv Badarpur - Panchgram line was under shutdown due to 132 kv Badarpur bus P/S/D and 132 kv Srikona-Panchgram was under shutdown due to tower collapse. At 14:33 Hrs on 19.12.2019, 132 kv Lumshong - Panchgram tripped ,Due to tripping of this element, Panchgram area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area."	00:00	20	0	0.017	GD 1
7	NER	132 kv Aizawl-Luangmual line	P&ED, Mizoram	24-Dec-19 06:54	24-Dec-19 07:39	45 mins	Luangmual area of Mizoram Power System was connected with the rest of NER Grid through 132 kv Aizawl-Luangmual line. At 06:54 Hrs on 24.12.2019 ,132 kv Aizawl-Luangmual line tripped, Due to tripping of this element, Luangmual area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	00:00	31	0	0.023	GD 1
8	NER	132 kv Silchar- Hailakandi-1 & 2 Lines, 132 kv Hailakandi- Dullavchera Line and 132 kv Hailakandi-Panchgram Line	AEGCL	27-Dec-19 05:08	27-Dec-19 05:24	16 mins	Hailakandi area of Assam Power System was connected with the rest of NER Grid through 132 kv Silchar-Hailakandi-1 & 2 Lines, 132 kv Hailakandi - Dullavchera Line and 132 kv Hailakandi - Panchgram Line. At 05:08 Hrs on 27.12.19, 132 kv Silchar- Hailakandi-1 & 2 Lines, 132 kv Hailakandi- Dullavchera Line and 132 kv Hailakandi- Panchgram Line tripped. Due to tripping of these elements, Hailakandi area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	00:00	12	0	0.0032	GD 1
9	NER	132 kv Ziro - Daporijo line	POWERGRID	30-Dec-19 07:23	30-Dec-19 07:40	17 mins	Daporijo area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kv Ziro - Daporijo line. At 07:23 Hrs on 30.12.19, 132 kv Ziro - Daporijo line tripped. Due to tripping of this element, Daporijo area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	00:00	12	0	0.003	GD 1

**North Eastern Region-Grid Incidences Report for December 2019**

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	AGBPP Unit -6	NEEPCO	03-Dec-19 16:44	03-Dec-19 17:30	46 mins	AGBPP Unit-6 tripped at 16:44 Hrs on 03-12-19 . Revision done from Block No.71 on 03-12-19	19:12	0	0.020	0	GI 2
2	NER	AGTCCPP Unit -2	Neepco	05-Dec-19 05:02	05-Dec-19 05:45	43 mins	AGTCCPP Unit-2 tripped at 05:02 Hrs on 05-12-19 . Revision done from Block No.24 on 05-12-19	00:00	0	0.020	0	GI 1
3	NER	BgTPP Unit -3	NTPC	05-Dec-19 21:40	05-Dec-19 22:15	35 mins	BgTPP Unit-3 tripped at 21:40 Hrs on 05-12-19 . Revision done from Block No.90 on 05-12-19	00:00	0	0.090	0	GI 2
4	NER	Kopili II -Unit 1	NEEPCO	07-Dec-19 09:04	07-Dec-19 10:30	1 hrs 26 mins	Kopili II -Unit 1 tripped at 09:04 Hrs on 07-12-19 . Revision done from Block No.43 on 07-12-19	12:00	0	0.040	0	GI 1
5	NER	AGBPP Unit -2 & 4	NEEPCO	07-Dec-19 10:11	07-Dec-19 11:15	1 hrs 4 mins	AGBPP Unit-2 & 4 tripped at 10:11 Hrs on 07-12-19 . Revision done from Block No.46 on 07-12-19	14:24	0	0.060	0	GI 2
6	NER	AGTCCPP unit -5	NEEPCO	43808.49444	09-Dec-19 12:30	38 mins	AGTCCPP Unit 5 tripped at 11:52 Hrs on 09-12-19 . Revision done from Block No.51 on 09-12-19	12:00	0	0.020	0	GI 1
7	NER	AGBPP 1,3 & 4	NEEPCO	11-Dec-19 16:12	11-Dec-19 17:30	1 hrs 18 mins	AGBPP Unit 1,3 & 4 tripped at 16:12 Hrs on 11-12-19 . Revision done from Block No.71 on 11-12-19	00:00	0	0.080	0	GI 2
8	NER	AGBPP Unit 5 & 7	NEEPCO	11-Dec-19 16:13	11-Dec-19 17:30	1 hrs 17 mins	AGBPP Unit 5 & 7 tripped at 16:13 Hrs on 11-12-19 . Revision done from Block No.71 on 11-12-19	00:00	0	0.050	0	GI 2
9	NER	AGBPP Unit 6 & 8	NEEPCO	11-Dec-19 16:19	11-Dec-19 17:30	1 hrs 11 mins	AGBPP Unit 6 & 8 tripped at 16:19 Hrs on 11-12-19 . Revision done from Block No.71 on 11-12-19	00:00	0	0.050	0	GI 2
10	NER	AGBPP Unit 9	NEEPCO	11-Dec-19 16:26	11-Dec-19 17:30	1 hrs 4 mins	AGBPP Unit 9 tripped at 16:19 Hrs on 11-12-19 due to interruption of gas supply. Revision done from Block No.71 on 11-12-19.	00:00	0	0.030	0	GI 2
11	NER	AGTCCPP Unit 3 & 6	NEEPCO	11-Dec-19 19:50	11-Dec-19 20:45	55 mins	AGTCCPP Unit 3 & 6 tripped at 19:50 Hrs on 11-12-19 . Revision done from Block No.84 on 11-12-19	00:00	0	0.030	0	GI 1
12	NER	BGTPP UNIT -2	NTPC	16-Dec-19 11:03	16-Dec-19 11:45	42 mins	BGTPP Unit-2 tripped at 11:03 Hrs on 16-12-19 due to Problem in ID fan . Revision done from Block No.48 on 16-12-19	00:00	0	0.160	0	GI 2
13	NER	AGTCCPP UNIT -2	NEEPCO	18-Dec-19 06:13	18-Dec-19 07:00	47 mins	AGTCCPP UNIT -2 tripped at 06:13 Hrs on 18-12-19 due to Air filter differential pressure high . Revision done from Block No.29 on 18-12-19	00:00	0	0.010	0	GI 1
14	NER	AGBPP UNIT -1	NEEPCO	23-Dec-19 12:33	23-Dec-19 13:15	42 mins	AGBPP Unit-1 tripped at 12:33 Hrs on 23-12-19 due to High vibration in Thrust Bearing . Revision done from Block No.54 on 23-12-19	00:00	0	0.020	0	GI 2
15	NER	AGBPP UNIT -1,2,3,4,5,7,8 & 9	Neepco	25-Dec-19 14:31	25-Dec-19 15:15	44 mins	AGBPP Unit-1,2,3,4,5,7,8 & 9 tripped at 14:31 Hrs on 25-12-19 due to Tripping of gas compressor . Revision done from Block No.62 on 25-12-19	00:00	0	0.150	0	GI 2
16	NER	Palatana GTG 2 & STG 2	OTPC	31-Dec-19 0:09	31-Dec-19 0:45	36 mins	Palatana GTG 2 & STG 2 tripped at 00:09 Hrs on 31.12.19 due to Low Gas Pressure. (Revision of schedule from Block No 4 on 31.12.19).	00:00	0	0.220	0	GI 2