

Northern Region-Grid Event Report for October 2020

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	Energy Unserved (in MU)
					Date	Time	Date	Time						
1	NR	1)220 KV Badarpur(NT)-Alwar MIA(RS) (RS) Ckt-1 2)220 KV Ballabgarh(BB)-Badarpur(NT) (BB) Ckt-2	NEW DELHI	BBMB, RRVPLN,NTPC	1-Oct-20	15:02	1-Oct-20	18:21	3:19	As reported, 220 KV Badarpur(NT)-Alwar MIA(RS) (RS) Ckt-1 tripped on Y-N fault, F.D. 6KM JY-17.79KA. At the same time, 220 KV Ballabgarh(BB)-Badarpur(NT) (BB) Ckt-2 tripped due to 220 KV BUS bar protection Operated. As per SCADA 220KV Badarpur (NT) - Tuglakabad Ckt-2, 220KV Badarpur (NT) - Okhla Ckt-2 & 220KV Badarpur (NT) - Saritavihar Ckt-2 also tripped at the same time. As per PMU Y-N fault is observed. In antecedent conditions, 220 KV Badarpur(NT)-Alwar MIA(RS)(RS) Ckt-1, 220 KV Ballabgarh(BB)-Badarpur(NT)(BB) Ckt-2, 220KV Badarpur (NT) - Tuglakabad Ckt-2, 220KV Badarpur (NT) - Okhla Ckt-2 & 220KV Badarpur (NT) - Saritavihar Ckt-2 carrying 19MW,57MW,76MW, 31MW & 105MW respectively.	0	120	GD-1	0.24
2	NR	1)220KV Panipat-Dhulkote (BB) Ckt-1 2)220KV Panipat-Dhulkote (BB) Ckt-2 3)220 KV PanipatTH(HV)-Panipat(BB) (HVPNL) Ckt-1 4)220 KV PanipatTH(HV)-Panipat(BB) (HVPNL) Ckt-2 5)220KV Bus 2 at Panipat(BB)	HARYANA	BBMB, HVPNL	2-Oct-20	6:59	2-Oct-20	7:40	0:41	As reported, 220kv PanipatTH(HV)-Panipat(BB) Ckt-1 & Ckt-2 and 220kv Panipat-Dhulkote(BB) Ckt-1 & Ckt-2 tripped on Y-N fault, fault in Zone-2, fault location 15.80KM, fault current- la 316.7A, Ib 1.703KA, Ic 236.5A, At the same time, 220KV Bus 2 at Panipat(BB) tripped due to bus bar protection operation. As per PMU, Y-N fault is observed. At antecedent condition 220kv PanipatTH(HV)-Panipat(BB) Ckt-1 & Ckt-2 and 220kv Panipat-Dhulkote(BB) Ckt-1 & Ckt-2 carrying 44MW, 42MW, 3MW & 3MW respectively.	0	290	GD-1	0.20
3	NR	1)400/132 kv 100 MVA ICT 1 at Anpara(UP) 2) 500 MW Anpara TPS - UNIT 5 3)210 MW Anpara TPS - UNIT 2 4)210 MW Anpara TPS - UNIT 3 5)500 MW Anpara TPS - UNIT 4 6)210 MW Anpara TPS - UNIT 1	UTTAR PRADESH	UPPTCL	5-Oct-20	8:51	5-Oct-20	10:00	1:09	As reported, 400/132 kv 100 MVA ICT 1 at Anpara(UP) tripped due to sudden jerk at 132 kv bus coupler. At the same time, Unit 1-210MW, Unit 2-210MW, Unit 3-210MW, Unit 4-500MW & Unit 5-500MW tripped due to Bus bar protection operated at 132 KV side, resulted in failure of Auxiliary supply of generators. As per PMU, no fault is observed. In antecedent condition, 400/132 kv 100 MVA ICT 1 at Anpara(UP), Unit 1, Unit 2, Unit 4 & Unit 5 of Anpara TPS carrying 129MW, 163MW, 436MW & 402MW respectively.	1200	0	GD-1	0.00
4	NR	1)400/132 kv 100 MVA ICT 1 at Anpara(UP) 2)400/132 kv 100 MVA ICT 3 at Anpara(UP)	UTTAR PRADESH	UPPTCL	5-Oct-20	17:18	5-Oct-20	18:44	1:26	As reported, 400/132 kv 100 MVA ICT 1 at Anpara(UP) & 400/132 kv 100 MVA ICT 3 at Anpara(UP) tripped at 400/132kv Anpara(UP). As per PMU, no fault is observed. In antecedent condition, 400/132 kv 100 MVA ICT 1 at Anpara(UP) & 400/132 kv 100 MVA ICT 3 at Anpara(UP) carrying 26MW & 24MW respectively.	0	0	GI-2	0.00
5	NR	1)220 KV Ballabgarh-Charkhi Dabri (BB) Ckt-1 2)220 KV Bhiwani-Charkhi Dabri (BB) Ckt-3 3)220 KV Charkhi Dabri(BB)-Lulahir(HV) (HVPNL) Ckt-1 4)220 KV Charkhi Dabri(BB)-Khetri(RS) (BB) Ckt-1 5)220KV Bus 1 at Charkhi Dabri(BB) 6)220 KV Charkhi Dabri(BB)-Mahindergarh(HV) (BB) Ckt-2 7)220 KV Bhiwani-Charkhi Dabri (BB) Ckt-1 8)220 KV Charkhi Dabri-Samaypur (BB) Ckt-1	HARYANA	BBMB	5-Oct-20	17:21	5-Oct-20	18:13	0:52	As reported, 220 KV Bhiwani-Charkhi Dabri (BB) Ckt-3, 220KV Bus 1 at Charkhi Dabri(BB), 220 KV Ballabgarh-Charkhi Dabri (BB) Ckt-1, 220 KV Charkhi Dabri-Samaypur (BB) Ckt-1, 220 KV Charkhi Dabri(BB)-Lulahir(HV) (HVPNL) Ckt-1, 220 KV Bhiwani-Charkhi Dabri (BB) Ckt-1 & 220 KV Charkhi Dabri(BB)-Khetri(RS) (BB) Ckt-1 tripped at 220kv Charkhi Dabri(BB) due to LBB OF 220 KV Bus-1 Operated. As per PMU, no fault is observed. In antecedent condition 220 KV Bhiwani-Charkhi Dabri (BB) Ckt-3, 220 KV Ballabgarh-Charkhi Dabri (BB) Ckt-1, 220 KV Charkhi Dabri-Samaypur (BB) Ckt-1, 220 KV Charkhi Dabri(BB)-Lulahir(HV) (HVPNL) Ckt-1, 220 KV Bhiwani-Charkhi Dabri (BB) Ckt-1 & 220 KV Charkhi Dabri(BB)-Khetri(RS) (BB) Ckt-1 tripped at 220kv Charkhi Dabri(BB) carrying 9MW, 2MW, 45MW, 73MW, 9MW & 20MW respectively.	0	200	GD-1	0.12
6	NR	1)800 KV HVDC Kurukshetra(PG) Pole-2 2)800 KV HVDC Kurukshetra(PG) Pole-4	HARYANA	POWERGRID	8-Oct-20	4:30	8-Oct-20	7:21	2:51	As reported, 800 KV HVDC Kurukshetra(PG) Pole-2 & Pole-4 tripped due to CAT-B protection initiated by Pole-4 at Kurukshetra end and Pole-2 & Pole-4 blocked. As per PMU, no fault is observed. In antecedent condition 800 KV HVDC Kurukshetra(PG) Pole-2 & Pole-4 carrying 492MW & 488MW respectively.	0	0	GI-2	0.00
7	NR	1)210 MW Anpara TPS - UNIT 1 2)210 MW Anpara TPS - UNIT 3 3)210 MW Anpara TPS - UNIT 2	UTTAR PRADESH	UPPTCL	9-Oct-20	14:02	10-Oct-20	5:34	15:32	As reported, Anpara TPS-UNIT-1 210MW, UNIT-2 210MW & UNIT-3 210MW tripped due to tripping of cooling water pump. As per PMU, no fault is observed. In antecedent condition Anpara TPS-UNIT-1 210MW, UNIT-2 210MW & UNIT-3 210MW carrying 121MW, 162MW, 179MW respectively.	500	0	GD-1	0.00
8	NR	1)800 KV HVDC Kurukshetra(PG) Pole-2 2)800 KV HVDC Kurukshetra(PG) Pole-03 3)800 KV HVDC Kurukshetra(PG) Pole-1 4)800 KV HVDC Kurukshetra(PG) Pole-4	HARYANA	POWERGRID	10-Oct-20	10:22	10-Oct-20	11:05	0:43	As reported, 800 KV HVDC Kurukshetra(PG) Pole-1,2,3 & 4 tripped due to CNAP protection operated at champa and CAT B protection operated at Kurukshetra end. As per PMU, no fault is observed. In antecedent condition 800 KV HVDC Kurukshetra(PG) Pole-1,2,3 & 4 all carrying total 1946 MW.	0	0	GI-2	0.00
9	NR	1)220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-2 2)220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-1	J & K	PDD JK, NRSS29	11-Oct-20	11:12	11-Oct-20	12:52	1:40	As reported, 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-1 tripped due to Y-B phase fault. At the same time 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-2 also tripped from Ziankote end only due to fault reflected of the ckt-1 on ckt-2. Fault current IA 407A, IB 1721 A, IC 1492A, IG56A. As per PMU Y-B fault is observed. In antecedent condition 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-1 & Ckt-2 carrying 118MW & 117MW respectively.	0	0	GI-2	0.00
10	NR	1)220 KV Cheeka(HV)-Kaithal(PG) (HVPNL) Ckt-1 2)220 KV Cheeka(HV)-Kaithal(PG) (HVPNL) Ckt-2	HARYANA	HVPNL, POWERGRID	11-Oct-20	17:40	11-Oct-20	20:20	2:40	As reported, 220 KV Cheeka(HV)-Kaithal(PG) (HVPNL) Ckt-2 tripped due to R-N Phase to earth fault. At the same time 220 KV Cheeka(HV)-Kaithal(PG) (HVPNL) Ckt-1 also tripped due to R phase LA of 220 kv cheeka-Kaithal ckt 2 damaged at Kaithal end. As per PMU, R-N fault is observed. In antecedent condition 220 KV Cheeka(HV)-Kaithal(PG) (HVPNL) Ckt-1 & ckt-2 both carrying 39MW.	0	80	GD-1	0.21

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					Date	Time	Date	Time						
11	NR	1)400 KV Merta-Kankani (RS) Ckt-1 2)400 KV Akal-Kankani (RS) Ckt-2	RAJASTHAN	RRVNL	12-Oct-20	13:27	12-Oct-20	18:30	5:03	As reported, 400 KV Merta-Kankani (RS) Ckt-1 tripped due to B-N phase to earth fault. Fault current 8.03KA, fault distance 8.7KM from Kankani end and 146.4KM from Merta end. At the same time 400 KV Akal-Kankani (RS) Ckt-2 also tripped. As per PMU, B-N fault is observed. In antecedent condition 400 KV Merta-Kankani (RS) Ckt-1 & 400 KV Akal-Kankani (RS) Ckt-2 carrying 19MW & 27MW respectively.	0	0	GI-2	0.00
12	NR	1)220KV Samaypur(BB)-Badshahpur(HV) (UNDEF) Ckt-1 2)220KV Samaypur(BB)-Badshahpur(HV) (UNDEF) Ckt-2	HARYANA	HVNLBMBM	12-Oct-20	16:21	12-Oct-20	16:58	0:37	As reported, 220KV Samaypur(BB)-Badshahpur(HV) (UNDEF) Ckt-1 & Ckt-2 tripped due to 220 kv Badshapur(Har)- Manesar (Har) Ckt-1 Jumper broken in line. At the same time 220 kv Badshapur(Har)- Manesar (Har) Ckt-1 also tripped. As per PMU, R-Y-B Three phase fault is observed. Load loss of approx 400MW is observed as per SCADA. In antecedent condition, 220KV Samaypur(BB)-Badshapur(HV) (UNDEF) Ckt-1, Ckt-2 & 220 kv Badshapur(Har)- Manesar (Har) Ckt-1 carrying 98MW, 98MW & 100MW respectively.	0	400	GD-1	0.25
13	NR	1)400 KV Abdullapur - Kurukshetra (PG) Ckt-2 2)400KV Bus 2 at Abdullapur(PG)	HARYANA	POWERGRID	14-Oct-20	4:05	14-Oct-20	6:21	2:16	As reported, 400 KV Abdullapur - Kurukshetra (PG) Ckt-2 tripped due to phase to earth fault R-N. At the same time 400KV Bus 2 at Abdullapur(PG) tripped due to R-ph IPS Al Tube between CB-CT fell down. 220KV Abdullapur(PG)- Kala Amb(GIS) Ckt-1 also tripped at same time. As per PMU, R-N fault is observed. In antecedent condition 400 KV Abdullapur - Kurukshetra (PG) Ckt-2 & 220KV Abdullapur(PG)- Kala Amb(GIS) Ckt-1 carrying 440MW & 42MW respectively.	0	0	GI-2	0.00
14	NR	1)400/220 kv 240 MVA ICT 3 at Gorakhpur(UP) 2)400/220 kv 500 MVA ICT 1 at Gorakhpur(UP)	UTTAR PRADESH	UPPTCL	15-Oct-20	13:07	15-Oct-20	15:58	2:51	As reported, 400/220 kv ICT-1 500MVA & ICT-3 240MVA at Gorakhpur(UP) tripped due to fault in 220 kv busbar. At the same time 220kv Gorakhpur(UP)- HATA Ckt-1 & Ckt-2 also tripped. As per PMU, Y-N fault is observed. In antecedent condition 400/220 kv ICT-1, ICT-3 at Gorakhpur(UP), 220kv Gorakhpur(UP)- HATA Ckt-1 & Ckt-2 carrying 248MW, 113MW, 88MW & 88MW respectively.	0	400	GD-1	0.73
15	NR	1)400/220 kv 315 MVA ICT 1 at Mathura(UP) 2)400/220 kv 315 MVA ICT 2 at Mathura(UP) 3)80 MVAR Bus Reactor No 1 at 400KV Mathura(UP)	UTTAR PRADESH	UPPTCL	16-Oct-20	9:32	16-Oct-20	10:12	0:40	As reported, 400/220 kv 315 MVA ICT 1 & ICT 2 at Mathura(UP) tripped due to PRV-2,OSR-3 Trip, OTI trip and Master relay 86A & 86B operated. At the same time 80 MVAR Bus Reactor No 1 also tripped on Buchholz alarm, OTI alarm, 86A & 86B operated. PMU data was not available. In antecedent condition 400/220 kv 315 MVA ICT, ICT 2 & 80 MVAR Bus Reactor No 1 carrying 74MW, 73MW & 76MVAR.	0	0	GI-2	0.00
16	NR	1)220 KV Bhadla(PG)-Saurya Urja Solar(SU) (Saurya Urja) Ckt-1	RAJASTHAN	(Saurya Urja)	19-Oct-20	11:17	19-Oct-20	12:17	1:00	As reported, 220 kv Bhadla(PG)-Saurya Urja Solar(SU) (Saurya Urja) Ckt-1 tripped due to phase to earth fault. At the same time 220/33kv ICT-1,2&3 each of 125MVA at Saurya Urja Solar(SU) also tripped. As per PMU, no fault is observed. In antecedent condition 220 kv Bhadla(PG)-Saurya Urja Solar(SU) (Saurya Urja) Ckt-1, 220/33kv ICT-1,2&3 carrying 230MW, 95MW, 90MW & 97MW respectively.	300	0	GD-1	0.00
17	NR	1)220 KV Allahabad(PG)-AllahabadRewaRoad(UP) (PG) Ckt-2 2)220 KV Allahabad(PG)-AllahabadRewaRoad(UP) (PG) Ckt-1	UTTAR PRADESH	POWERGRID, UP	20-Oct-20	15:36	20-Oct-20	16:44	1:08	As reported, 220 kv Allahabad(PG)-Allahabad Rewa Road(UP) (PG) Ckt-1 & Ckt-2 due to R-Y phase to phase fault. As per PMU, Y-B fault is observed. In antecedent condition 220 kv Allahabad(PG)-Allahabad Rewa Road(UP) (PG) Ckt-1 & Ckt-2 carrying 86MW & 75MW respectively.	0	0	GI-2	0.00
18	NR	1)400/220 kv 315 MVA ICT 1 at Makhu(PS) 2)400/220 kv 315 MVA ICT 2 at Makhu(PS)	PUNJAB	PTCL	23-Oct-20	13:36	23-Oct-20	15:24	1:48	As reported, 400/220 kv 315 MVA ICT 1 & ICT 2 at Makhu(PS) tripped due to fault at 220kv S/S Botianwala, the fault was travelled from 220 kv S/S Botianwala. At the same time, 220kv Makhu-Botianwala Ckt-1 also tripped on B-N fault. As per PMU, B-N fault is observed. In antecedent condition, 220kv Makhu-Botianwala Ckt-1, 400/220 kv 315 MVA ICT 1 & ICT 2 at Makhu(PS) carrying 13MW, 81MW & 81MW respectively.	0	0	GI-2	0.00
19	NR	1)220 KV Tanakpur(NH)-Sitarganj(PG) (PG) Ckt-1 2)220 KV Sitarganj(PG)-CBGanj(UP) (PG) Ckt-1 3)220 KV Tanakpur(NH)-CBGanj(UP) (PG) Ckt-1	UTTAR PRADESH	POWERGRID,NHP C,UP	25-Oct-20	6:23	25-Oct-20	8:30	2:07	As reported, 220 kv Tanakpur(NH)-Sitarganj(PG) (PG) Ckt-1 & 220 kv Sitarganj(PG)-CBGanj(UP) (PG) Ckt-1 tripped due to blackout at CBGanj(UP) substation. At the same time, 220 kv Tanakpur(NH)-CBGanj(UP) (PG) Ckt-1 also tripped on earth fault. As per PMU, B-N fault is observed followed by three phase fault. In antecedent condition 220 kv Tanakpur(NH)-Sitarganj(PG) (PG) Ckt-1 & 220 kv Sitarganj(PG)-CBGanj(UP) (PG) Ckt-1 & 220 kv Tanakpur(NH)-CBGanj(UP) (PG) Ckt-1 carrying 50MW, 24MW & 4MW respectively.	0	0	GI-2	0.00
20	NR	1)400 KV Alaknanda GVK(UPC)-Muzaffarnagar (UP) Ckt-1 2)400 KV Meerut(PG)-Muzaffarnagar(UP) (PG) Ckt-1 3)400KV Bus 2 at Muzaffarnagar(UP) 4)400 KV Roorkee(PG)-Muzaffarnagar(UP) (PG) Ckt-1 5)400/220 kv 315 MVA ICT 2 at Muzaffarnagar(UP)	UTTAR PRADESH	POWERGRID, UPPTCL	26-Oct-20	14:05	26-Oct-20	15:30	1:25	As reported, 400 KV Roorkee(PG)-Muzaffarnagar(UP) (PG) Ckt-1, 400 KV Meerut(PG)-Muzaffarnagar(UP) (PG) Ckt-1, 400 KV Alaknanda GVK(UPC)-Muzaffarnagar (UP) Ckt-1, 400KV Bus 2 at Muzaffarnagar(UP) & 400/220 kv 315 MVA ICT 2 at Muzaffarnagar(UP) all tripped due to LBB operated due to fault occurred on 400 KV Roorkee(PG)-Muzaffarnagar(UP) (PG) Ckt-1. As per PMU, B-N fault is observed. In antecedent condition 400 KV Roorkee(PG)-Muzaffarnagar(UP) (PG) Ckt-1, 400 KV Meerut(PG)-Muzaffarnagar(UP) (PG) Ckt-1, 400 KV Alaknanda GVK(UPC)-Muzaffarnagar (UP) Ckt-1 & 400/220 kv 315 MVA ICT 2 at Muzaffarnagar(UP) carrying 49MW, 365MW, 130MW & 113MW respectively.	0	200	GD-1	0.30
21	NR	1)800 KV HVDC Kurukshetra(PG) Pole-03 2)800 KV HVDC Kurukshetra(PG) Pole-4	HARYANA	POWERGRID	27-Oct-20	9:06	27-Oct-20	10:58	1:52	As reported, 800 KV HVDC Kurukshetra(PG) Pole 3&4 tripped at 09:06Hrs from Champa end. Both Pole 3&4 also tripped at 12:36Hrs due to pole blocked due to filter power limit protection operated at champa end. As per PMU, Y-N fault is observed at 09:06Hrs and Y-B fault is observed at 12:36Hrs. In antecedent condition 800 KV HVDC Kurukshetra(PG) Pole 3&4 each carrying 400MW at 09:06Hrs and approx 715MW at 12:36Hrs	0	0	GI-2	0.00

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					Date	Time	Date	Time						
22	NR	1)220 KV Bairasiul(NH)-Jessore(HP) (PG) Ckt-1 2)220 KV Bairasiul(NH)-Pong(BB) (PG) Ckt-1	HIMACHAL PRADESH	POWERGRID	29-Oct-20	1:50	29-Oct-20	9:49	7:59	As reported, 220 KV Bairasiul(NH)-Jessore(HP) (PG) Ckt-1 & 220 KV Bairasiul(NH)-Pong(BB) (PG) Ckt-1 tripped due to over voltage. As per PMU, no fault is observed. In antecedent condition, 220 KV Bairasiul(NH)-Jessore(HP) (PG) Ckt-1 & 220 KV Bairasiul(NH)-Pong(BB) (PG) Ckt-1 carrying 9MW & 10MW respectively.	0	0	GI-2	0
23	NR	1)400KV Bus 2 at Koteswar(TH) 2)400 KV Koteswar(TH)-Koteswar(PG) (PG) Ckt-2 3)400 KV Koteswar(TH)-Koteswar(PG) (PG) Ckt-1 4)125 MVAR Bus Reactor No 1 at 400KV Koteswar(TH) 5)100 MW Koteswar HPS - UNIT 2	UTTRAKHAN D	POWERGRID, THDC	30-Oct-20	12:23	30-Oct-20	13:20	0:57	As reported, 400KV Bus 2 at Koteswar(TH) tripped due to bur bar protection operation. At the same time, 400 KV Koteswar(TH)-Koteswar(PG) (PG) Ckt-1 & Ckt-2, 125 MVAR Bus Reactor No 1 at 400KV Koteswar(TH) & 100 MW Koteswar HPS - UNIT 2 also tripped on same reason. As per PMU, no fault is observed. In antecedent condition, 400 KV Koteswar(TH)-Koteswar(PG) (PG) Ckt-1 & Ckt-2, 125 MVAR Bus Reactor No 1 at 400KV Koteswar(TH) & 100 MW Koteswar HPS - UNIT 2 carrying 33MW, 32MW, 114MVAR & 69MW respectively.	69	0	GD-1	0
24	NR	1)400 KV Aligarh-Sikandrabad (UP) Ckt-1 2)400 KV Panki-Aligarh (UP) Ckt-1	UTTAR PRADESH	UPPTCL	30-Oct-20	23:23	31-Oct-20	0:33	1:10	As reported, 400 KV Aligarh-Sikandrabad (UP) Ckt-1 tripped due to R-N Phase to earth fault. At the same time, 400 KV Panki-Aligarh (UP) Ckt-1 also tripped from Panki end only on R-N fault. As per PMU, B-N phase to earth fault is observed. In antecedent condition, 400 KV Aligarh-Sikandrabad (UP) Ckt-1 & 400 KV Panki-Aligarh (UP) Ckt-1 carrying 38MW & 121MW respectively.	0	0	GI-2	0
25	NR	1)800 KV HVDC Kurukshetra(PG) Pole-03 2)800 KV HVDC Kurukshetra(PG) Pole-1	HARYANA	POWERGRID	31-Oct-20	16:47	31-Oct-20	18:04	1:17	As reported, 800 KV HVDC Kurukshetra(PG) Pole 1&3 tripped at 16:47Hrs due to VESDA protection operated in Pole 1 at Champa. As per PMU, no fault is observed. In antecedent condition, 800KV HVDC Kurukshetra(PG) Pole 1&3 carrying 412 & 425 respectively	0	0	GI-2	0

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				Date	Time	Date	Time						
1	WR	Tripping of 1.220 kV Bhandup-Mulund 2.220 kV Bhandup-Borivali 3.220/22 kv 50 MVA ICTs 1,2,3&4	MSETCL	5-Oct-20	12:46	5-Oct-20	12:58	0:12	At 220kV Bhandup substation, during the isolator operation of 220/22 kV ICT 4, flashover in earth switch chamber occurred and resulted in bus fault in 220 kV Bus 1. As the bus bar protection failed to operate, 220 kV Borivali and 220 kV Mulund feeders tripped on reverse zone protection operation and resulted in blackout of the substation.	Nil	83	GD-1	0.02
2	WR	Tripping of 1. +800 kV HVDC Champa-Kurukshetra Poles 1,2&4	PGCIL	10-Oct-20	10:23	10-Oct-20	11:05	0:42	At 10:23 Hrs, while manually blocking 800 kV HVDC Champa-Kurukshetra 3 at Champa end for replacement of faulty cards in valve based electronic panel at Kurukshetra, Pole-1 and Pole-2 blocked on CMAP protection operation and Pole-4 blocked on NBSGS over current protection operation.	Nil	Nil	GI-2	Nil
3	WR	Tripping of 1.400 kV Kalwa-Padghe 1&2 2.400 kV Kalwa-Kharghar 3.400 kV Pune-Kharghar 4.220 kV TAPS-Borivali 5.220 kV Temghar-Padghe 6.220 kV Boisar(PG)-Borivali 7.220 kV Kalwa-Salsette 1&2 8.220 kV Aarey- Borivali 1&2 9.220 kV Chembur-Trombay 1&2 10.220 kV Saki-TPC Saki 1&2 11.220 kV Versova-TPC 1&2 12.220 kV AEML Borivali- TPC Borivali and other 220 & 110 kV lines in Mumbai system	MSETCL/TPC/AEM	12-Oct-20	10:05	12-Oct-20	10:27	0:22	At 04:33 Hrs 400 kV Kalwa-Padghe 1 tripped on over Voltage at Kalwa end and emergency work permit was taken on the line at 05:54 Hrs by MSETCL for insulator replacement. At 09:45Hrs, Bhira PS unit(150MW) tripped on Butterfly Valve (BFV) open feedback failure. At 09:58 Hrs, 400 kV Kalwa-Padghe 2 tripped on R-E fault. The flow on 400kV Pune-Kharghar S/C increased from 726MW to 886MW and the flow of 400kV Kharghar-Kalwa S/C rose from 396MW to 676MW. At 10:02hrs, due to heavy sparking observed at Kharghar S/S, 400kV Pune-Kharghar was hand tripped by site. At the same time flow on 400kV Kharghar-Kalwa was seen on two phases R & B only due to Y-phase CT clamp open. 400kV Kharghar-Kalwa also was hand tripped from Kharghar S/S on an emergency basis as reported by MSLDC in their preliminary report. With these trippings, 400kV Kalwa and Kharghar were cut off from 400kV network of WR grid. Due to heavy power flow, the links of 220kV Padghe-Temghar-1&2, Tarapur-Borivali, 220kV Boisar(PG)-Borivali, 220kV Nagothane-Apta and the other 220kV links connected to Kalwa and Kharghar tripped resulting in formation of island of Borivali, Mulund, Kalwa, Kharghar, Uran, Temghar, Apta, Talaja, Adani system and TATA system. The island had a total generation of 1587 MW (1367 MW internal+220 MW Uran) and a load of around 3700 MW. As reported by TATA in their preliminary report, when the frequency dropped to 48.0 Hz, about 760 MW load shedding took place in their system. Due to the load generation imbalance in the island, Kalwa-Kharghar and TPC island collapsed. At 47.7 Hz AEML island got separated and survived with a load of around 400 MW.	1587	3700	GD-1	Detailed report awaited from MSLDC
4	WR	Tripping of 1.400 kV Raipur Bus 4 2.400 kV Raipur-Wardha 2	PGCIL	19-Oct-20	19:27	19-Oct-20	23:17	3:50	At 400 kV Raipur substation, 400kV Raipur-Wardha-2 and 400kV Raipur Bus-4 tripped due to LBB mal operation on 428 Tie bay (no feeder connected in dia of Raipur-Wardha-2 at Raipur)	Nil	Nil	GI-2	Nil
5	WR	Tripping of 1.220 kV Tivim-Mapusa 1 2.220 kV Tivim-Mapusa 2 3.110 kV Tivim-Ponda 2	Goa	25-Oct-20	14:03	25-Oct-20	15:54	1:51	220kV Mapusa-Tivim 2 tripped on B phase differential earth fault protection at Mapusa end only. At the same time 220kV Mapusa-Tivim 1 also tripped at Mapusa end only without any relay indication. 110 kV Tivim-Ponda 2 which was the only source feeding Tivim, tripped on over current protection operation at Ponda end only. 110 kV Tivim-Ponda 1 CB opened at Ponda end and the infeed to 110 kV Kadamba through T point became dead. With these trippings, 220 kV Tivim substation blacked out.	Nil	130	GD-1	0.21
6	WR	Tripping of 1.220 kV Ponda-Xeldem 2.220/110 kV Ponda ICTs 1,2&3 3.220 kV Ponda-Amona 1 4.220 kV Ponda-Mapusa 5.110 kV Ponda-Verna	Goa	26-Oct-20	13:01	26-Oct-20	13:14	0:13	At 12:34 Hrs, 220kV Ponda-Xeldem radial line was manually tripped at Ponda S/S due to break out of fire in scada control room. At 12:40 Hrs, 220/110 kV 100 MVA ICTs 1,2 & 3 at Ponda and 110 kV Ponda-Verna were manually tripped for safety purpose. At 13:01 hrs, 220 kV Ponda-Amona 1,2&3 and 220 kV Ponda-Mapusa were manually tripped at Ponda S/S. With these H/T 220 kV Ponda went blackout. 220 kV Ponda-Ambewadi is out of service due to reconfiguration of 220 kV Ponda-Ambewadi and Xeldem-Ambewadi at location TLN.230	Nil	180	GD-1	0.04
7	WR	Tripping of 1.220 kV Satna(MP)-Kotar 2.220 kV Satna(MP)-Chhatrapur 3.220 kV Satna(MP)-Satna(PG) 1,2&3 4.220/132kV Satna(MP) ICTs 1,2&3	MPPTCL	28-Oct-20	19:57	28-Oct-20	20:23	0:26	At 220 kV Satna(MP) substation, R phase CT of 220 kV Satna (PG) 1 blasted and resulted in tripping of all the elements connected to 220 kV Bus 1&2. As the bus bar protection was out of service, the 220 kV lines tripped on backup protection operation. 220 kV side B phase CT Post insulator of 220/132 kV Satna(MP) ICT 2 got damaged and it tripped on R-Y-B phase differential protection operation. 132 kV Kotar-Rampur Baghelan tripped at Rampur Baghelan end on Over current protection operation. 132 kV feeders at Satna(MP) were hand tripped due to source failure. With all these trippings, 220 kV Satna(MP) S/S became dark.	Nil	429	GD-1	0.16

Southern Region-Grid Event Report for October 2020

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)						
1	SR	i. 220kV Sabarigiri - Edamon Line-2 ii. 220kV Sabarigiri - Theni iii. 220kV Sabarigiri - Pallom iv. Unit#1,3&5 at sabarigiri GS	TANTRANSCO	1-Oct-20	18:07	1-Oct-20	21:00	2 hr 53 mins	Complete Outage of 220kV Sabarigiri GS of KSEB: Triggering incident was failure of R-phase CT connected to 220kV Sabarigiri - Edamon feeder-2. As reported LBB operated and all connected elements tripped at Sabarigiri end only resulting in complete outage of 220kV Sabarigiri station. Further details awaited.	220 MW	16 MW	GD-1	
2	SR	i. 220kV Pavagada - Thirumani line-2 (KSPDCL SS 6) ii. 66kV Feeder no-10 KSPDCL SS-6	KSPDCL	6-Oct-20	14:05	6-Oct-20	14:34	29 mins	Complete outage of 220/66kV KSPDCL SS-6 (Pavagada) of KSPDCL: Triggering incident was R -N fault in 66kV Feeder no-10 of KSPDCL SS-6. Feeder got tripped on operation of Earth fault overcurrent protection. At the same time, 220kV Pavagada - Thirumani line-2 tripped only at Pavagada end on operation of Zone-1 distance protection. This resulted in complete outage of 220/66kV KSPDCL SS-6 since the only connected feeder tripped.	179 MW	---	GD-1	
3	SR	i. 220kV Nandiyal - Kudgi NTPC line-3 ii. 220kV Nandiyal - Kudgi NTPC line-5 iii. 220kV Nandiyal - Kudgi NTPC line-6 iv. 220kV Nandiyal - GMNAvara-1 v. 220kV Nandiyal - Bagewadi-1&2 vi. 220kV GMNAvara - Bijapur-1&2 vii. 220kV Bjaapur - Indri-1&2	KPTCL	17-Oct-20	22:35	17-Oct-20	22:59	24 mins	Complete outage of 220kV Nandiyal, Bijapur and Indri substations of KPTCL: Triggering incident was failure of Y phase Metering CT connected to GM Navara - Nandiyal line-1. Bus bar protection operated at 220kV Nandiyal station and all connected elements tripped. There was supply failure at 220kV Indri and Bijapur stations since these station are radially fed from 220kV Nandiyal station.	68 MW	52 MW	GD-1	
4	SR	i. 220kV Jurala - Veltoor ii. 220kV Lower Jurala-Veltoor iii. 220kV Lower Jurala - Jurala-1,2,3	TSGENCO	31-Oct-20	4:23	31-Oct-20	5:05	42 mins	Complete outage of 220kV Jurala station of TSGENCO: Triggering incident was jumper cut in 220kV Jurala-Veltoor line. At the same time 220kV Lower Jurala- Veltoor, 220kV Lower Jurala- Jurala lines-1, 2 & 3 tripped. Running units at Jurala tripped due to loss of evacuating lines resulting in complete outage of Jurala station. Details are awaited.	200 MW	---	GD-1	
5	SR	i. 220kV Narendra - Bidnal ii. 220kV Narendra - Hubli-1&2 iii. 220kV Narendra - Kanaburgi-1&2 iv. 220/110kV, 100MVA ICT-1&2	KPTCL	31-Oct-20	23:47	31-Oct-20	1:28	1 hr 41 mins	Complete outage of 220kV Narendra station of KPTCL: Triggering incident was CT Blast in Bus-coupler Bay at 220kV Narendra SS. All connected elements at 220kV Narendra station tripped on Bus bar protection resulting in complete outage of the station. Details awaited.	---	40 MW	GD-1	
6	SR	i. HVDC Gazuwaka Pole-1 ii. HVDC Gazuwaka Pole-2	PGCIL	6-Oct-20	18:13	6-Oct-20	18:45	32 mins	Tripping of HVDC Gazuwaka Pole-1 and Pole-2: As reported, Pole-1 tripped on Station Interzone protection due to South side CW30Q50 Bay Y-Ph CT blast at Gazuwaka. Pole 2 Tripped on activation of Protective Y Block due to disturbance in Inverter side due to sustained commutation failure .	Power Loss: 400 MW	---	GI-2	---
7	SR	i. 230kV TTN Auto- TTPS line-1 and 2 ii. 230kV TTN Auto- Kayathar line-1 iii. 230kV/110kV Transformer-1 and 2 at TTN Auto SS iv. 400kV KKNPP - Tirunelveli line-2 v. 230kV KKNPP - TTPS vi. 230kV KKNPP - Sriperumbudur	TANTRANSCO / NPCIL	8-Oct-20	22:10	8-Oct-20	23:14	1 hr 4 mins	Multiple Tripping in 230kV/110kV TTN Auto SS of TANTRANSCO and 400kV/230kV Kudankulam Nuclear Power Plant (KKNPP) of NPCIL: Triggering incident was failure of R-phase CT of 230kV TTN Auto- TTPS line-2 at 230kV TTN Auto SS end at 22:10:12hrs. Bus-1 BBP operated at 230kV TTN Auto SS resulting in the tripping of all the connected elements since 230kV TTN Auto SS is under single bus configuration. 110kV TTN Auto Bus was intact during the event and hence no load loss was reported. Subsequently 400kV KKNPP Tirunelveli line-2 tripped only at KKNPP on operation of Power Swing protection.	---	---	GI-1	---
8	SR	i. 230kV Tirunelveli - Udayathur line ii. 230kV Tirunelveli - Edamon line-2 iii. 400/230kV ICT-2 at Tirunelveli	PGCIL / TANTRANSCO	12-Oct-20	13:45	12-Oct-20	14:20	35 mins	Tripping of 230kV Bus-1 at 400/ 230kV Tirunelveli station of PGCIL: Triggering incident was Y-B phase fault in 230kV Tirunelveli - Udayathur line. LBB of 230kV Bis-1 at Tirunelveli station operated due to breaker stuck position resulting in tripping of all Bus-1 connected elements.	---	---	GI-1	---
9	SR	i. 400kV KKNPP - Tirunelveli-2 ii. 230kV Kudankulam - TTPS iii. 230kV TTPS - Kayathar line-1 iv. Unit#1&2 at TTPS.	TANTRANSCO / NPCIL	30-Oct-20	17:40	30-Oct-20	19:11	1 hr 31 mins	Multiple Tripping in 230kV/110kV TTN Auto SS of TANTRANSCO and 400kV/230kV Kudankulam Nuclear Power Plant (KKNPP) of NPCIL: Triggering incident was tripping of 400kV Tirunelveli - Kudankulam line on power swing protection. After tripping of 400kV Tirunelveli - KKNPP line, 230kV KKNPP - Kayathar line tripped on B-N fault due to jumper cut. Subsequently , bus sectionalizer of Bus-1 tripped on over current protection and all connected elements tripped. TTPS Unit#1 and 2 also tripped during the event.	420 MW	---	GI-1	---

Eastern Region-Grid Event Report for October 2020

Sl. No.	Region	Name of major elements tripped	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards	Loss of Energy(in MU)
				Date	Time	Date	Time						
1	ER	220 kV Meramundali NALCO D/C 220 kV Meramundali TTPS D/C 220 kV Meramundali Bhanjanga S/C 220 kV Meramundali Duburi S/C 220 kV Meramundali Narsingapur S/C 220 kV Meramundali Tata Steel D/C 220/132 kV ICT – 1 at Meramundali 220 kV bus coupler at Meramundali	OPTCL	1-Oct-20	4:07	1-Oct-20	5:27	1:20	On 30th September 2020 at 22:36 hrs, 220 kV Meramundali – NALCO - 1 tripped on overcurrent protection. It was charged at 00:05hrs on the next day i.e. 01st October 2020. At 01:35 hrs, sparking was noticed on this circuit at Meramundali end switchyard due to which GRIDCO SLDC advised NALCO to reduce the loading of this circuit. At 04:07 hrs, Line side pipe bus at Meramundali end of the above-mentioned circuit got broken and fell on the ground along with the breaker jumper causing line fault at Meramundali S/S. Bus jumper of 220 kV bus 1 at Meramundali also got damaged at several places due to this event leading to bus fault at 220 kV bus 1 at Meramundali. All the feeders and ICTs connected with 220 kV bus 1 at Meramundali tripped along with bus coupler tripped one by one. All the feeders and ICTs connected to 220 kV bus 2 at Meramundali remained in service. Prior to the event, 220 kV NALCO and Tata Steel captive load substations were connected to the rest of the grid via 220 kV NALCO Meramundali D/C and 220 kV Tata Steel Meramundali D/C. Tripping of both 220 kV NALCO Meramundali D/C and 220 kV Tata Steel (Bhusan Steel) Meramundali D/C during the event has resulted in the isolation of these loads from the system resulting in GD – 1 category event.	0	280	GD-1	0.37
2	ER	400 kV Rangpo-Dikchu S/C & Dikchu Unit 1 & 2 220 kV Jorethang – New Melli – 2 & Jorethang Unit 1 & 2 132 kV Rangpo-Chujachen – 2 & Chujachen Unit 1 & 2	ISTS	1-Oct-20	14:47	1-Oct-20	15:20	0:33	On 1st Oct 2020 at 14:03 hrs, 132 kV Rangpo-Chujachen - 1 tripped due to B phase to earth fault. Charging attempt was taken at 14:32 hrs but the line could not be charged. Chujachen HEP was connected to the rest of the grid via 132 kV Rangpo-Chujachen – 2, 220 kV Jorethang – New Melli – 1 was under emergency shutdown. Hence, Jorethang HEP was connected to the rest of grid via 220 kV Jorethang – New Melli – 2. At 14:47 hrs, 400 kV Rangpo-Dikchu S/C tripped due to B phase to earth fault. Tripping of 400 kV Rangpo – Dikchu S/C (only outgoing feeder connected to 400 kV bus 1 at Dikchu), resulted in the isolation of both units from the grid leading to tripping of both running units at Dikchu HEP. At the same time, 220 kV Jorethang – New Melli – 2 and 132 kV Rangpo-Chujachen – 2 also got tripped resulting in total power failure at Jorethang and Chujachen HEP also. System was subsequently restored.	269	0	GD-1	0.00
3	ER	220 kV Rengali PH – TSTPP S/C and 220 kV Rengali PH – TTPS S/C 220 kV Rengali PH – Rengali Switchyard (OPTCL) - 1 220 kV Rengali Switchyard (OPTCL) - Barkote S/C 220 kV Rengali Switchyard (OPTCL) Tarkera S/C Unit # 1, 2, 3 & 5 at Rengali PH	OPTCL	10-Oct-20	16:10	10-Oct-20	17:15	1:05	220 kV Rengali Power House (PH) – Rengali Switchyard (OPTCL) – 2 was under shutdown. On 10th October 2020 at 16:08 hrs, 220 kV Rengali Switchyard (OPTCL) - Barkote S/C and 220 kV Rengali Switchyard (OPTCL) Tarkera S/C tripped due to R phase to earth fault and B phase to earth fault respectively. It was reported that top conductor (R phase) of 220 kV Rengali Switchyard (OPTCL) - Barkote S/C snapped at location no 336. At the same time, 220 kV Rengali PH – TSTPP S/C and 220 kV Rengali PH – TTPS S/C and 220 kV Rengali PH – Rengali Switchyard (OPTCL) – 1 tripped on overvoltage from Rengali PH end. Subsequently all the running units at Rengali PH tripped and GD – 1 occurred at Rengali PH. 220 kV Rengali Switchyard remained connected to rest of grid through 220 kV Rengali PG – Rengali SY D/C.	190	0	GD-1	0.00
4	ER	400 kV Teesta V - Rangpo - 1 220 kV Jorethang - New Melli D/C Jorethang unit 1	ISTS	30-Oct-20	13:15	30-Oct-20	13:24	0:09	At 13:15 hrs on 30-10-2020, 400 kV TEESTA V - Rangpo line-1 tripped. At the same time, 220 kV Jorethang- New Melli D/C tripped at Jorethang end only resulting in total power failure at Jorethang HEP.	48	0	GD-1	0.00

North Eastern Region-Grid Disturbances Report for October 2020

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	132 kV Balipara - Tenga line	NEEPCO & DoP, AP	04-Oct-20 17:15	04-Oct-20 17:38	23 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara - Tenga line. At 17:15 Hrs on 04.10.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	21	0	0.0081	GD 1
2	NER	132 kV Lekhi - Pare Line	POWERGRID & DoP AP	05-Oct-20 03:56	05-Oct-20 04:25	29 mins	Capital area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Lekhi - Pare Line. (132 kV Pare - Itanagar line & 132 kV Ranganadi - Itanagar line were under outage due to tower collapse since 12.07.20 & 132 kV Nirjuli - Gohpur line was kept open to control loading of 132 kV Lekhi - Pare Line). At 03:56 Hrs on 05.10.20, 132 kV Lekhi - Pare Line tripped. Due to tripping of this element, Capital area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	15	0	0.007	GD 1
3	NER	220 kV BTPS - Rangia 1&2 lines	AEGCL	05-Oct-20 05:50	05-Oct-20 05:59	9 mins	Rangia area of Assam Power System was connected with the rest of NER Grid through 220 kV BTPS - Rangia 1&2 lines, 132 kV Rangia - Motonga line and 132 kV Dhaligaon- Bornagar line. 132 kV Kamalpur -Rangia D/C, 132 kV Rangia- Rowta line, 132 kV Rowta - Sipajhar line and 132kV Nalbari-Dhaligaon line were kept open due to system requirement. At 05:50 Hrs on 05.10.2020, 220 kV BTPS - Rangia 1&2 lines, 132 kV Rangia - Motonga line and 132 kV Dhaligaon- Bornagar line tripped. Due to tripping of these elements, Rangia area of Assam Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area."	0	80	0	0.0120	GD 1
4	NER	132 kV Hailakandi-Panchgram line, 132 kV Dullavchera-Hailakandi line &132 kV Hailakandi-Silchar D/C lines.	AEGCL	09-Oct-20 14:20	09-Oct-20 14:30	10 mins	Hailakandi area of Assam Power System was connected with the rest of NER Grid through 132 kV Hailakandi-Panchgram line, 132 kV Dullavchera-Hailakandi line &132 kV Hailakandi-Silchar D/C lines. At 14:20 Hrs on 09.10.2020, 132 kV Hailakandi-Panchgram line, 132 kV Dullavchera-Hailakandi line &132 kV Hailakandi-Silchar D/C Lines 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.	0	24	0	0.0040	GD 1
5	NER	132 kV Balipara - Tenga line	NEEPCO & DoP, AP	10-Oct-20 08:04	10-Oct-20 08:39	35 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara - Tenga line. At 08:04 Hrs on 10.10.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	18	0	0.0100	GD 1
6	NER	132 kV Lekhi - Pare Line	POWERGRID & DoP AP	10-Oct-20 12:23	10-Oct-20 12:47	24 mins	Capital area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Lekhi - Pare Line. (132 kV Pare - Itanagar line & 132 kV Ranganadi - Itanagar line were under outage due to tower collapse since 12.07.20 & 132 kV Nirjuli - Gohpur line was kept open to control loading of 132 kV Lekhi - Pare Line). At 12:23 Hrs on 10.10.20, 132 kV Lekhi - Pare Line tripped. Due to tripping of this element, Capital area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	42	0	0.0070	GD 1
7	NER	132 kV Khleihriat - Leshka D/C lines	MePTCL and MePGCL	12-Oct-20 14:36	12-Oct-20 15:31	55 mins	Leshka Power Station of Meghalaya Power System was connected with rest of NER Grid through 132 kV Khleihriat - Leshka D/C lines. At 14:36 hrs of 12.10.2020, 132 kV Khleihriat - Leshka D/C tripped. Due to tripping of these lines, Leshka Power Station of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	84	0	0.077	0.0000	GD 1
8	NER	132kV New Umtru - Umtru line and 132kV New Umtru - EPIP II line.	MePTCL and MePGCL	13-Oct-20 16:42	13-Oct-20 16:56	14 mins	New Umtru Power Station of Meghalaya Power System was connected with rest of NER Grid through 132kV New Umtru - Umtru line and 132kV New Umtru - EPIP II line. At 16:42 hrs of 13.10.2020, 132kV New Umtru - Umtru line and 132kV New Umtru - EPIP II lines tripped. Due to tripping of these lines, New Umtru Power Station of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	40	0	0.009	0.0000	GD 1
9	NER	132 kV Umtru - Umiam St III- 1 & 2 lines and 132 kV Nongstoin - Mawngap 1 line	MePTCL	14-Oct-20 14:47	14-Oct-20 15:00	13 mins	Part of Meghalaya Power System (NEHU, NEIGRIHMS, Mustem, Mawlyndep, Mawlai, Mawngap and Umiam substations) and Umiam St I, Umiam St II, Umiam St III and Umiam St IV Generating stations were connected with rest of NER Grid through 132 kV Umtru - Umiam St III- 1 & 2 lines and 132 kV Nongstoin - Mawngap 1 line. 132 kV Umtru - Umiam St IV- 1 & 2 lines were under planned shutdown since 09:00 Hrs on 14.10.2020. 132 kV Khleihriat - Mustem line and 132 kV Khleihriat - NEIGRIHMS line were under outage since 14:27 Hrs and 14:31 Hrs on 14.10.2020 respectively. At 14:47 Hrs on 14.10.20, 132 kV Umtru - Umiam St III- 1 & 2 lines and 132 kV Nongstoin - Mawngap 1 line tripped. Due to tripping of these elements, part of Meghalaya Power System and Umiam St I, Umiam St II, Umiam St III and Umiam St IV Generating stations were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	43	88	0.009	0.0190	GD 1
10	NER	132 kV Along - Pasighat line	DoP, Arunachal Pradesh	15-Oct-20 09:42	15-Oct-20 17:28	7 hrs 46 mins	"Pasighat area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Along - Pasighat line. At 09:42 Hrs on 15.10.2020, 132 kV Along - Pasighat line tripped. Due to tripping of this element, Pasighat area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area."	0	13	0	0.1010	GD 1
11	NER	132 kV Lekhi - Pare Line	POWERGRID & DoP AP	15-Oct-20 12:56	15-Oct-20 13:17	21 mins	"Capital area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Lekhi - Pare Line. (132 kV Pare - Itanagar line & 132 kV Ranganadi - Itanagar line were under outage due to tower collapse since 12.07.20 & 132 kV Nirjuli - Gohpur line was kept open to control loading of 132 kV Lekhi - Pare Line). At 12:56 Hrs on 15.10.20, 132 kV Lekhi - Pare Line tripped. Due to tripping of this element, Capital area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area."	0	30	0	0.0110	GD 1
12	NER	132 kV Balipara - Tenga line	NEEPCO & DoP, AP	16-Oct-20 11:07	16-Oct-20 11:20	13 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara - Tenga line. At 11:07 Hrs on 16.10.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	17	0	0.0040	GD 1
13	NER	132 kV Balipara - Tenga line	NEEPCO & DoP, AP	17-Oct-20 12:48	17-Oct-20 13:02	14 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara - Tenga line. At 12:48 Hrs on 17.10.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	19	0	0.0044	GD 1
14	NER	132 kV Ningthoukhong - Churachandpur 1 & 2 lines	MSPCL	19-Oct-20 01:54	19-Oct-20 02:04	10 mins	Churachandpur area of Manipur Power System was connected with the rest of NER Grid through 132 kV Ningthoukhong - Churachandpur 1 & 2 lines. 132 kV Kakching - Kongba line kept open for system requirement. At 01:54 Hrs on 19.10.2020, 132 kV Ningthoukhong - Churachandpur 1&2 lines tripped. Due to tripping of these elements, Churachandpur Area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	14	0	0.0020	GD 1

North Eastern Region-Grid Disturbances Report for October 2020

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
15	NER	132 KV Mariani(AS) - Golaghat line	AEGCL	19-Oct-20 03:58	19-Oct-20 04:17	19 mins	"Golaghat & Bokajan areas of Assam Power System were connected with the rest of NER Grid through 132 KV Mariani(AS) - Golaghat line. 132 KV Bokajan -Dimapur(PG) line kept open to facilitate long shutdown of 220/132 kV, 100 MVA ICT-1 at Dimapur (PG) Substation.At 03:58 Hrs on 19.10.2020, 132 KV Mariani(AS) - Golaghat line tripped. Due to tripping of this element, Golaghat & Bokajan areas of Assam Power System were separated from rest of NER Grid and subsequently collapsed due to no source in these areas."	0	25	0	0.0080	GD 1
16	NER	132 KV Mariani(AS) - Golaghat line	AEGCL	19-Oct-20 05:18	19-Oct-20 06:19	1 hrs 1 mins	"Golaghat & Bokajan areas of Assam Power System were connected with the rest of NER Grid through 132 KV Mariani(AS) - Golaghat line. 132 KV Bokajan -Dimapur(PG) line kept open to facilitate long shutdown of 220/132 kV, 100 MVA ICT-1 at Dimapur (PG) Substation.At 05:18 Hrs on 19.10.2020, 132 KV Mariani(AS) - Golaghat line tripped. Due to tripping of this element, Golaghat & Bokajan areas of Assam Power System were separated from rest of NER Grid and subsequently collapsed due to no source in these areas."	0	15	0	0.0150	GD 1
17	NER	132 kV Balipara - Tenga line	NEEPCO & DoP, AP	23-Oct-20 03:51	23-Oct-20 04:08	17 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara - Tenga line.At 03:51 Hrs on 23.10.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	18	0	0.0050	GD 1
18	NER	132 kV Imphal (Yurembam) - Karong line and 132 kV Kohima - Karong line.	MSPCL & DoP, Nagaland	24-Oct-20 09:08	24-Oct-20 09:25	17 mins	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Imphal(Yurembam) - Karong line and 132 kV Kohima - Karong line.At 09:08 Hrs on 24.10.2020, 132 kV Imphal(Yurembam) - Karong line and 132 kV Kohima - Karong line tripped. Due to tripping of these elements, Karong area of Manipur Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	13	0	0.0037	GD 1
19	NER	132 kV Balipara - Tenga line	NEEPCO & DoP, AP	29-Oct-20 11:37	29-Oct-20 11:47	10 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara - Tenga line.At 11:37 Hrs on 29.10.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	19	0	0.0032	GD 1
20	NER	132 kV Imphal(MA) - Karong line and 132 kV Karong-Kohima line	MSPCL	30-Oct-20 09:39	30-Oct-20 10:18	39 mins	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Imphal(MA) - Karong line and 132 kV Karong-Kohima line.At 09:39 Hrs on 30.10.2020, 132 kV Imphal(MA) - Karong line and 132 kV Karong-Kohima line tripped. Due to tripping of these elements, Karong area of Manipur Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	10	0	0.0065	GD 1

North Eastern Region-Grid Incidences Report for October 2020

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-2	NEEPCO	03-Oct-20 02:35	03-Oct-20 04:30	1 hrs 55 mins	AGBPP Unit-2 tripped at 02:35 Hrs on 03-10-2020 due to tripping of Gas Compressor 3 (Due to breaking of Fan belt of Cooling system). Revision done from Block No.19 on 03-10-2020	24	0	0.05	0	GI 2
2	NER	AGTCCPP Unit 3	NEEPCO	08-Oct-20 01:13	08-Oct-20 03:00	1 hrs 47 mins	AGTCCPP Unit 3 tripped at 01:13 Hrs on 08-10-20 due to Gas Fuel Control Pressure low. Revision done from Block No.13 on 08-10-20	20	0	0.36	0	GI 1
3	NER	Kameng Unit I and II	NEEPCO	08-Oct-20 12:19	08-Oct-20 14:30	2 hrs 11 mins	Kameng Unit I and II tripped at 12:19 Hrs on 08-10-20 due to Gas Fuel Control Pressure low. Revision done from Block No.59 on 08-10-20	300	0	0.66	0	GI 2
4	NER	AGTCCPP Unit-3	NEEPCO	09-Oct-20 01:02	09-Oct-20 02:00	58 mins	AGTCCPP Unit-3 tripped at 01:02 Hrs on 09-10-2020 due to Flame fault. Revision done from Block No.9 on 09-10-2020	20	0	0.02	0	GI 1
5	NER	AGTCCPP Unit-5	NEEPCO	14-Oct-20 01:25	14-Oct-20 03:30	2 hrs 5 mins	AGTCCPP Unit-5 tripped at 01:25 Hrs on 14-10-2020 due to Lube oil pressure low. Revision done from Block No.15 on 14-10-2020.	19	0	0.04	0	GI 1
6	NER	AGTCCPP Unit-6	NEEPCO	14-Oct-20 01:45	14-Oct-20 03:30	1 hrs 45 mins	AGTCCPP Unit- 6 tripped at 01:45 Hrs on 14-10-2020 due to Exhaust steam pressure high. Revision done from Block No.15 on 14-10-2020.	22	0	0.04	0	GI 1
7	NER	Kameng Unit-1	NEEPCO	14-Oct-20 04:47	14-Oct-20 07:00	2 hrs 13 mins	Kameng Unit-1 tripped at 04:47 Hrs on 14-10-2020 due to Faulty field Breaker. Revision done from Block No.29 on 14-10-2020.	155	0	0.34	0	GI 2
8	NER	Kameng Unit I	NEEPCO	20-Oct-20 07:31	20-Oct-20 09:00	1 hrs 29 mins	Kameng Unit I tripped at 07:31 Hrs on 20-10-20 due to Reverse Power Protection Operation . Revision of schedule done from Block No.37 on 20-10-20	150	0	0.22	0	GI 2
9	NER	BgTPP Unit 3	NTPC	20-Oct-20 12:22	20-Oct-20 15:02	2 hrs 40 mins	BgTPP Unit 3 tripped at 12:22 Hrs on 20-10-20 due to tripping of primary air fan . Revision of schedule done from Block No.57 on 20-10-20	130	0	0.35	0	GI 2
10	NER	AGTCCPP U-3 & 6	NEEPCO	23-Oct-20 12:03	23-Oct-20 14:00	1 hrs 57 mins	AGTCCPP Units 3 & 6 tripped at 12:03 Hrs on 23-10-20 due to tripping of cooling fan. Revision done from Block No.57 on 23-10-20	15	0	0.03	0	GI 1