

Northern Region-Grid Event Report for July 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 Standards	Energy Unreserved (in MU)
					Date	Time	Date	Time						
1	NR	1) 35 MW Budhil HPS (IPP) - UNIT 1 2) 35 MW Budhil HPS (IPP) - UNIT 2	HIMACHAL PRADESH	HP	1-Jul-20	11:35	7-Jul-20	16:40	149:05	DC supply failure resulted in tripping of both units at Budhil HEP.	70	0	GD-1	0
2	NR	1) 220 KV Bhiwani-Charkhi Dadri (BB) Ckt-2 2) 220 KV Bhiwani-Hissar (BB) Ckt-1 3) 220 KV Bhiwani(HV)-Bhiwani(BB) (HVPNL) Ckt-2 4) 220 KV Bhiwani(HV)-Bhiwani(BB) (HVPNL) Ckt-1 5) 220 KV Bhiwani-Charkhi Dadri (BB) Ckt-3 6) 400/220 kv 500 MVA ICT 1 at Bhiwani(BB) 7) 220KV Bus 2 at Bhiwani(BB) 8) 220KV Bus 1 at Bhiwani(BB) 9) 220 KV Bhiwani-Charkhi Dadri (BB) Ckt-1 10) 220 KV Bhiwani-Charkhi Dadri (BB) Ckt-4 11) 220 KV Bhiwani-Hissar (BB) Ckt-2	HARYANA	BBMB, HVPNL	1-Jul-20	12:45	1-Jul-20	13:20	0:35	Both 220kV buses at 400/220kv Bhiwani(BBMB) tripped on bus bar protection operation which resulted in tripping of all 220kV elements at Bhiwani(BBMB).	0	150	GD-1	0.09
3	NR	1) 800 KV HVDC Kurukshetra(PG) Pole-3 2) 800 KV HVDC Kurukshetra(PG) Pole-4	HARYANA	POWERGRID	2-Jul-20	10:41	2-Jul-20	11:55	1:14	DC supply failure resulted in blocking of 800 KV HVDC Kurukshetra(PG) Pole-3&4.	0	0	GI-2	0
4	NR	1) 220 KV Saharanpur(UP)-Khodri(UK) (UP) Ckt-1 2) 220 KV Sarsawan(UP)-Khodri(UK) (UP) Ckt-1 3) 220 KV Khodri(UK)-Majri(HP) (UK) Ckt-1	UTTARAKHAND, UTTAR PRADESH, HIMACHAL	PTCUL, UPPTCL	4-Jul-20	7:01	4-Jul-20	10:46	3:45	At Khodri, B-Phase Bus Isolator jumper damaged resulted in Bus bar protection operation. Multiple lines and units.	75	0	GD-1	0
5	NR	1) 220 KV RAPS_C(NP)-RAPS_B(NP) (NPCIL) Ckt-1 2) 220 KV RAPS_B(NP)-Sakatpura(RS) (RS) Ckt-1	RAJASTHAN	POWERGRID, RRVPNL	4-Jul-20	13:24	4-Jul-20	14:43	1:19	B-N fault occurred resulted in tripping of 220 KV RAPS_C(NP)-RAPS_B(NP) (NPCIL) Ckt-1 and 220 KV RAPS_B(NP)-Sakatpura(RS) (RS) Ckt-1 (Z-1 from RAPS-B end, fault at 17km from RAPS-B end).	0	0	GI-2	0
6	NR	1) 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-1 2) 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-2 3) 220 KV Wagoora(PG)-Ziankote(JK) (PDD JK) Ckt-1 4) 220 KV Wagoora(PG)-Ziankote(JK) (PDD JK) Ckt-2 5) 220 KV Wagoora(PG)-Pampore(PDD) (PDD JK) Ckt-2 6) 220 KV Wagoora(PG)-Pampore(PDD) (PDD JK) Ckt-1	J & K	PDD JK	5-Jul-20	20:18	5-Jul-20	22:00	1:42	At 20:19hrs, 220kv Amargarh-Ziankote D/C and 220kv Wagoora-Ziankote D/C tripped on over current. Further, at 20:59hrs, 220kv Wagoora-Pampore D/C tripped on over current.	0	400	GD-1	0.46
7	NR	1) 765 KV Bara-Mainpuri (UP) Ckt-2 2) 765/21 kv 825 MVA GT 2 at Bara(UP) 3) 660 MW Bara PPGCL TPS - UNIT 2	UTTAR PRADESH	UPPTCL	6-Jul-20	3:15	6-Jul-20	5:36	2:21	At Bara TPS(UP), B-N fault (Y-N as per PMU) occurred on 765kv Bara-Mainpuri line. Line A/R from Mainpuri end but failed to A/R from Bara end resulted in tripping of above line and running unit #2 due to loss of evacuation.	600	0	GD-1	0
8	NR	1) 220 KV Chamera_3(NH)-Chamba(PG) (PG) Ckt-1 2) 220 KV Chamera_3(NH)-Budhil(LB) (LB) Ckt-1	HIMACHAL PRADESH	Lanco Budhil, POWERGRID	6-Jul-20	17:21	6-Jul-20	17:43	0:22	Due to maloperation of relay during testing of SPS at Chamera-3 HEP, 220kv Chamera_3-Chamba(PG) ckt-1, 220kv Chamera_3-Budhil, running units at Chamera-3 and Budhil HEPs tripped.	225	0	GD-1	0
9	NR	1) 220 KV Mainpuri(PG)-Ferozabad(UP) (UP) Ckt-1 2) 220 KV Agra(PG)-Ferozabad(UP) (UP) Ckt-2	UTTAR PRADESH	UPPTCL	10-Jul-20	11:20	10-Jul-20	13:55	2:35	At 220kv Ferozabad(UP), R phase isolator clamp of 220kv main-bus of 220kv Ferozabad(UP)-Mainpuri(PG) melted resulted in tripping of both 220kv ckt viz. 220kv Ferozabad(UP)-Mainpuri(PG) and 220kv Ferozabad(UP)-Agra(PG).	0	0	GI-1	0
10	NR	1) 400/220 kv 315 MVA ICT 3 at Bareilly(UP) 2) 400 KV Bareilly(UP)-Bareilly(PG) (PG) Ckt-1 3) 400KV Bus 2 at Bareilly(UP) 4) 400KV Lucknow_1(PG)-Unnao(UP) (PG) Ckt-1	UTTAR PRADESH	POWERGRID, UPPTCL	11-Jul-20	14:19	11-Jul-20	15:20	1:01	LBB of 400kv Bareilly - Unnao ckt-1 operated which tripped 400kv Bus coupler and tripped 400kv PG-1 line and 315MVA ICT-3 connected to main bus-II. As per PMU, No fault is observed in the system. In antecedent conditions, 400 KV Bareilly(UP)-Bareilly(PG) (PG) Ckt-1 & 400KV Lucknow_1(PG)-Unnao(UP) (PG) Ckt-1 carrying 76MW & 255MW respectively.	0	0	GI-2	0
11	NR	1) 800 KV HVDC Kurukshetra(PG) Pole-4 2) 800 KV HVDC Kurukshetra(PG) Pole-2	HARYANA	POWERGRID	13-Jul-20	11:35	13-Jul-20	12:44	1:09	At 1135Hrs, Control got wrong status of HVHS breaker and generated CAT-B fault. Due to CAT-B fault Pole-2 & Pole-4 blocked. As per PMU, No fault is observed in the system.	0	0	GI-2	0
12	NR	1) 400/220 kv 500 MVA ICT 2 at Lucknow(UP) 2) 400/220 kv 500 MVA ICT 1 at Lucknow(UP)	UTTAR PRADESH	UPPTCL	14-Jul-20	2:31	14-Jul-20	3:22	0:51	Bus-Bar Protection operated at 220 kv Sub-Station Sarojini Nagar Lucknow due to which 400/220 kv 500 MVA ICT 1 & ICT 2 tripped at Lucknow(UP). As per PMU, R-N fault with delayed clearance is observed in the system. In antecedent conditions, 400/220 kv 500 MVA ICT 1 & ICT 2 at Lucknow(UP) carrying 168MW & 170MW respectively.	0	200	GD-1	0.17
13	NR	1) 220 KV Bhiwadi(PG)-Bhiwadi(RS) (RS) Ckt-1 2) 220 KV Bhiwadi(PG)-Bhiwadi(RS) (RS) Ckt-2	RAJASTHAN	RRVPNL	16-Jul-20	15:22	16-Jul-20	16:37	1:15	220 KV Bhiwadi(PG)-Bhiwadi(RS) (RS) Ckt-1 tripped on B-N fault, 1.42 Km from Bhiwadi(PG) end. 220 KV Bhiwadi(PG)-Bhiwadi(RS) (RS) Ckt-2 tripped on Z2, R-N fault, 7.26 Km from Bhiwadi(PG) end. As per PMU, R-B fault followed by R-N fault is observed in the system. In antecedent conditions, 220 KV Bhiwadi(PG)-Bhiwadi(RS) (RS) Ckt-1 & 2 carrying 137MW & 129MW respectively.	0	275	GD-1	0.34
14	NR	1) 110 MW Vishnuparyag HPS - UNIT 4 2) 110 MW Vishnuparyag HPS - UNIT 2 3) 110 MW Vishnuparyag HPS - UNIT 1 4) 110 MW Vishnuparyag HPS - UNIT 3	UTTAR PRADESH	UPPTCL	17-Jul-20	3:22	17-Jul-20	5:08	1:46	All the four nos. unit at 4X100 kv Vishnuprayag (Hydro generating Station) tripped due to butterfly valve closed. Generation loss 400 MW (approx.). As per PMU, No fault is observed in the system. In antecedent conditions, 400kv Vishnuprayag-Alaknanda & 400kv Vishnuprayag-Muzaffarnagar carrying 121MW & 390MW respectively.	400	0	GD-1	0

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15	NR	1) 400/220 kV 500 MVA ICT 1 at Bhiwani(BB) 2) 220KV Bus 1 at Bhiwani(BB) 3) 220KV Bus 2 at Bhiwani(BB)	HARYANA	BBMB	18-Jul-20	11:45	18-Jul-20	12:08	0:23	220 Bus Bar protection operated on Bus I and II at Bhiwani(BBMB) s/s. All 220kV lines tripped along with ICT-1 (500MVA). As per PMU, Y-N fault with delayed clearance is observed in the system. In antecedent conditions, 400/220 kV 500 MVA ICT 1 at Bhiwani(BB) carrying 262MW.	0	250	GD-1	0.09
16	NR	1) 220 KV Meerut(PG)-Nara(UP) (PG) Ckt-1 2) 220KV Bus 1 at Meerut(PG) 3) 400/220 kV 315 MVA ICT 1 at Meerut(PG) 4) 220 KV Meerut(PG)-Modipuram(UP) (PG) Ckt-1 5) 220 KV Meerut(PG)-Charla(UP) (UP) Ckt-1 6) 220 KV Meerut(PG)-Jagruti Vihar (UP) (UP) Ckt-1 7) 400/220 kV 315 MVA ICT 3 at Meerut(PG)	UTTAR PRADESH	POWERGRID, UPPTCL	18-Jul-20	13:34	18-Jul-20	14:55	1:21	At 13:35 Hrs, R-N phase fault detected in 220 kV Meerut-Nara but fault could not be cleared by its 220 kV CB and resulted in operation of LBB which tripped 220 kV BUS-I at Meerut and tripping of all associated elements. As per PMU, R-N fault with delayed clearance is observed in the system. In antecedent conditions, 400/220 kV 315 MVA ICT 1 at Meerut(PG) & 400/220 kV 315 MVA ICT 3 at Meerut(PG) carrying 117MW & 118MW respectively.	0	0	GI-2	0
17	NR	1) 400 KV Gorakhpur(PG)-Muzaffarpur(PG) (POWERLINK) Ckt-1 2) 400 KV Gorakhpur(PG)-Muzaffarpur(PG) (POWERLINK) Ckt-2	UTTAR PRADESH	POWERLINK	20-Jul-20	7:06	20-Jul-20	8:25	1:19	400 KV Gorakhpur(PG)-Muzaffarpur(PG) (POWERLINK) Ckt-1 tripped on B-N fault, F/C-2.279KA, F/D-287 km from Gorakhpur end. At the same time, 400 KV Gorakhpur(PG)-Muzaffarpur(PG) (POWERLINK) Ckt-2 also tripped. As per PMU, B-N fault with delayed clearance is observed in the system. In antecedent conditions, 400 KV Gorakhpur(PG)-Muzaffarpur(PG) (POWERLINK) Ckt-1 & 2 carrying 309MW & 313MW respectively.	0	0	GI-2	0
18	NR	1) 220 KV Akal-Amarsagar 2) 220 KV Amarsagar-Mada 3) 220 KV Amarsagar-Dechu	RAJASTHAN	RRVPNL	20-Jul-20	20:50	20-Jul-20	23:05	2:15	As reported by SLDC Rajasthan, 220kV Amarsagar-Dechu, 220kV Amarsagar-Mada and 220kV Amarsagar-Akal tripped at 20.50 Hrs due to snapping of Main bus jumper at 220kV Amarsagar. As per PMU, R-B fault is observed in the system. Wind generation loss of approx. 1200 MW observed as per SCADA. No load loss reported.	1200	0	GD-1	0
19	NR	1) 400/220 kV 500 MVA ICT 1 at Bhadla(RS) 2) 400/220 kV 500 MVA ICT 3 at Bhadla(RS)	RAJASTHAN	RRVPNL	22-Jul-20	12:50	22-Jul-20	13:21	0:31	400/220 kV 500 MVA ICT 1 at Bhadla(RS) & 400/220 kV 500 MVA ICT 3 at Bhadla(RS) tripped due to operation of over current protection. As per PMU, fluctuations in voltage is observed in the system. In antecedent conditions, 400/220 kV 500 MVA ICT 1 at Bhadla(RS) & 400/220 kV 500 MVA ICT 3 at Bhadla(RS) carrying 541MW & 535MW respectively.	1400	0	GD-1	0
20	NR	1) 220 KV Saharanpur(PG)-Sarsawan(UP) (UP) Ckt-1 2) 220 KV Khara(UP)-Saharanpur(PG) (UP) Ckt-1	UTTAR PRADESH	UPPTCL	24-Jul-20	11:24	24-Jul-20	14:47	3:23	Load loss of around 300 MW Occurred due to tripping of all the emanating 220 kV lines at Nanauta (UP). As observed from SCADA, tripping of 220 kV Shamli- Nanauta line occurred initially which lead to tripping of 220kV Nanauta-Saharanpur(PG) due to overloading. As per PMU, Y-B fault followed by three phase fault is observed in the system. In antecedent conditions, 220kV Nanauta-Saharanpur(PG) & 220 kV Shamli- Nanauta carrying 194MW & 43MW respectively.	0	300	GD-1	1
21	NR	1) 400/220 kV 315 MVA ICT 1 at Bikaner(RS) 2) 400/220 kV 315 MVA ICT 2 at Bikaner(RS)	RAJASTHAN	RRVPNL	24-Jul-20	17:49	24-Jul-20	19:19	1:30	The incident occurred due to the closing of line CB of 220 kV BKN-GJNR-1 feeder with the EB switch closed at 17:49:05 hrs. Due to this the 220 kV side Bus Bar protection operated resulting in the opening of CB's of 220 kV side of ICT1, ICT2 and other 220 kV feeders connected to the Bus. As per PMU, Y-B fault is observed in the system. In antecedent conditions, 400/220 kV 315 MVA ICT 1 & ICT 2 at Bikaner(RS) carrying 157MW & 162MW respectively.	0	200	GD-1	0.3
22	NR	1) 220 KV Tanakpur(NH)-CBGanj(UP) (PG) Ckt-1 2) 220 KV Sitarganj(PG)-CBGanj(UP) (PG) Ckt-1 3) 220KV Bus 1 at CBGanj(UP) 4) 220KV Bus 2 at CBGanj(UP) 5) 31.42 MW Tanakpur HPS - UNIT 1 6) 31.4 MW Tanakpur HPS - UNIT 2 7) 31.4 MW Tanakpur HPS - UNIT 3 8) 70 MW Dhauliganga HPS - UNIT 1 9) 70 MW Dhauliganga HPS - UNIT 2 10) 70 MW Dhauliganga HPS - UNIT 3	UTTAR PRADESH ; UTTRAKHAND	NHPC, POWERGRID	26-Jul-20	12:09	26-Jul-20	12:56	0:47	220 kV CBganj-Badaun tripped resulting in operation of Bus bar protection at CBganj causing tripping of both bus along with all 220kV line from substation.90 MW Unit 1, Unit 2 and unit 3 of NHPC TANAKPUR tripped at 12:09 Hrs along with tripping of 220kV Bus 1 and 2 at CBganj, 220 kV CBGANJ-SITARGANJ line, and CBGANJ-TANAKPUR line tripped on Zone-4 protection. 210MW Unit 1,2 and Unit 3 of NHPC DHAULIGANGA also tripped. 220KV BAREILLY(UP)- PANTNAGAR(UK), and 132KV SITARGANJ(PG)- SITARGANJ(UK) tripped resulting in load loss of 200MW in Uttarakhnad control area. As per PMU, R-B fault with delayed clearance is observed in the system. Load loss of around 300MW also observed in UP control area.	300	500	GD-1	0.39
23	NR	1) 400 KV Singrauli(NT)-Lucknow(UP) (PG) Ckt-1 2) 400/220 kV 500 MVA ICT 1 at Lucknow(UP) 3) 400 KV Unnao-Lucknow (UP) Ckt-1 4) 400KV Bus 1 at Lucknow(UP) 5) 400/220 kV 500 MVA ICT 2 at Lucknow(UP) 6) 400KV Bus 2 at Lucknow(UP) 7) 400 KV Lucknow_1(PG)-Lucknow(UP) (PG) Ckt-1 8) 400 KV Lucknow(UP)-Bareilly(PG) (PG) Ckt-1 9) 50 MVAR Bus Reactor No 1 at 400KV Lucknow(UP)	UTTAR PRADESH	POWERGRID, UPPTCL	28-Jul-20	17:38	28-Jul-20	18:58	1:20	400kV bus bar protection operated at 400/220kV Lucknow(UP) due to falling of kite wire on 400kV bus-coupler which caused operation of 400kV bus bar protection and tripped the associated elements. As per PMU, R-B fault is observed in the system. In antecedent conditions, 400/220 kV 500 MVA ICT 1 & 500 MVA ICT 2 at Lucknow(UP) carrying 226MW & 231MW respectively.	0	0	GI-2	0
24	NR	1) 220 kV Bhadla-Baap 2) 220 kV Bhadla-Badsid 3) 220 kV Bhadla-Saurya Urja Ckt-1 4) 220 kV Bhadla-Saurya Urja Ckt-2	RAJASTHAN	RRVPNL	29-Jul-20	16:01	29-Jul-20	16:35	0:34	tripping of 220kV Bhadla(RS)-Badsid, 220kV Bhadla(RS)-Saurya Urja (Ckt 1&2) and 220kV Bhadla-Baap transmission lines lead to a generation loss of approximately 500MW. Supply failed due to snapping of jumper between Main Bus-I and Main Bus-I isolator at 220kV Bhadla. As per PMU, B-N fault is observed in the system.	500	0	GD-1	0

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					Date	Time	Date	Time						
25	NR	1) 130 MW Parbati III HEP - UNIT 3 2) 130 MW Parbati III HEP - UNIT 2 3) 400 KV Parbati_2(NH)-Parbati Pooling Banala(PG) (PKTCL) Ckt-1 4) 130 MW Parbati III HEP - UNIT 4 5) 130 MW Parbati III HEP - UNIT 1 6) 400 KV Parbati_2(NH)-Sainj(HP) (UNDEF) Ckt-1 7) Parbati II HEP - UNIT 2 8) 200 MW Parbati II HEP - UNIT 4 9) 50 MW Sainj HEP - UNIT 1 10) 50 MW Sainj HEP - UNIT 2	HIMACHAL PRADESH	HP, NHPC, PSTCL	29-Jul-20	23:11	30-Jul-20	0:54	1:43	Fire Incident occurred at Bus Duct at Parbati II station leading to tripping of 400 KV Parbati_2(NH)-Parbati Pooling Banala(PG) (PKTCL) Ckt-1 and units at 400kV Parbati II, 400kV Parbati III & 400kV Sainj. Hydro generation loss of 700 MW(approx.) occurred at Parbati III(520MW), Parbati II(72MW) and Sainj(108MW). As per PMU, R-N fault with delayed clearance is observed in the system. In antecedent conditions, 400 KV Parbati_2(NH)-Parbati Pooling Banala(PG) (PKTCL) is carrying 212MW.	700	0	GD-1	0
26	NR	1) 220 KV Akal-Amarsagar 2) 220KV Akal-Mada 3) 220KV Amar Sagar-Mada	RAJASTHAN	RRVPL	31-Jul-20	19:47	31-Jul-20	19:52	0:05	R-Phase jumper of 220KV Amar Sagar-Akal line broken leading to tripping of 220KV Amar Sagar-Akal, 220KV Akal-Mada & 220KV Amar Sagar-Mada. As per PMU, R-N fault is observed in the system. 220KV Amar Sagar-Akal, 220KV Akal-Mada & 220KV Amar Sagar-Mada carrying 198MW, 215MW & 180MW respectively. Wind generation loss of around 700MW is observed(as per SCADA data).	700	0	GD-1	0

Western Region-Event Report for July 2020

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				Date	Time	Date	Time	Time					
1	WR	Tripping of 1.220 kV Gandhar-Haldarwa 1&3 2.400/220 kV 500 MVA Gandhar ICT 1 3.144.3 MW Gandhar GT 1 4.224.5 MW Gandhar ST-4	NTPC	12-Jul-20	20:18	12-Jul-20	21:46	1:28	At 400/220 kV Gandhar Power station, 220 kV Bus 1 and all connected elements tripped on busbar protection operation for external fault (Y-E fault) on 220 kV Haldarwa-Jhambua line. Busbar protection operation for through fault was due to the wiring defect in Y phase of Bus 1 Transformer Measurement Differential (Tmd) unit in busbar relay and the same was rectified during joint testing done by NTPC& GETCO on 27-07-20.	117	Nil	GI-1	Nil
2	WR	Tripping of Koyna Stage IV Units 1,2,3&4(250MW each)	MSPGCL	14-Jul-20	14:10	14-Jul-20	18:54	4:44	At 400kV Koyna Stage IV Hydro power station, short circuit in DC distribution box resulted in the failure of control DC of butterfly valves. Hence, the valves closed and resulted in the tripping of all Units 1,2,3&4 of 250MW each.	975	Nil	GI-2	Nil
3	WR	Tripping of 1.400 kV Jejuri-Lonikhand 2.400kV Jejuri- New Koyna Stage IV 3. 220 kV Jejuri-Phursungi 1&2	MSETCL	23-Jul-20	20:28	24-Jul-20	6:19	9:51	400kV Jejuri-Lonikhand line tripped on B-E fault due to conductor snapping at location 28 at 17:01 Hrs. 400 kV Jejuri-New Koyna stage IV tripped on B-E fault due to conductor snapping at location 11 at 20:28 Hrs. At the same time, 220kV Jejuri-Phursungi 1&2 tripped at Phursungi end on reverse power flow protection. With the tripping of these lines, 400 kV Jejuri Bus Voltage increased to 448 kV and 400/220 kV ICTs 1,2&3 were H/T to control high voltage at Jejuri substation at 20:33 Hrs. Load trimming scheme operated at 220/132kV Walchandnagar due to overloading of 220 kV Lonand-Kandalgaon line and 42 MW load was curtailed.	Nil	Nil	GI-2	Nil
4	WR	1.400 kV Kalwa-Padighe 1&2 2.400 kV Kalwa-Kharghar 3.400 kV Kalwa-Pune 4.400/220 kV Kalwa ICTs 1,2,3&4	MSETCL	26-Jul-20	10:04	26-Jul-20	10:48	0:44	At 400/220 kV Kalwa substation, Y phase CT of 400 kV Bus coupler blasted and resulted in tripping of all the elements on busbar protection operation.	Nil	Nil	GI-2	Nil
5	WR	Tripping of 1.220/66 kV 100MVA Kharadpada ICTs 2&3 2.66 kV Kharadpada-Athal	DNH	28-Jul-20	13:13	28-Jul-20	13:22	0:09	At 220/66 kV Kharadpada substation, 66 kV Kharadpada-Athal tripped on B-E fault. At the same time, 220/66 kV Kharadpada ICTs 2&3 tripped on Directional Earth fault protection operation. Due to the tripping of the ICTs, 142 MW load at 66 kV side got affected.	Nil	142	GI-1	0.0213
6	WR	Tripping of 1.400 kV Mapusa Bus 1 2.400 kV Kolhapur-Mapusa 1	PGCIL	28-Jul-20	18:47	28-Jul-20	19:26	0:39	At 400 kV Mapusa substation, 400 kV Mapusa Bus 1 tripped on LBB operation of 400 kV Kolhapur 1 Main bay during the B-E fault on 400 kV Kolhapur-Mapusa 1. LBB timer was found faulty during testing and the same was replaced.	Nil	Nil	GI-2	Nil

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1	SR	i. 220kV Kadakola - Kaniyampeta 220kV Kadakola - Mysore 1&2 220kV Kadakola - Chamrajnagar 1 & 2	ii. iii. KPTCL	5-Jul-20	4:31	5-Jul-20	8:54	4 Hrs 23 mins	Complete outage of 220kV Kadakola substation of KPTCL. In the antecedent all elements were connected to 220kV Bus A at Kadakola station since 220kV Bus-B was under maintenance. As reported bus bar protection of 220kV Bus A operated due to suspected DC ground resulting in tripping of all connected elements at 220kV Kadakola. Details awaited.	----	50 MW	GD-1	----
2	SR	i. 400kV Kolar - Thiruvallur 400kV Kolar - Hosur 1&2 iii. 400kV Kolar - Somanahalli iv. 400/220kV Kolar ICT-1&2 400kV Kolar - Hoody 1&2 400/220kV Hoody ICT-1,2&3 vii. HVDC Talcher- Kolar Pole-1&2	ii. v. vi. KPTCL, PGCIL	16-Jul-20	1:58	16-Jul-20	2:42	44 mins	Complete Outage of 400kV/220kV Kolar SS of SR-2, 400kV/220kV Hoody SS of KPTCL and Tripping of HVDC Talchar Kolar Pole-1 and 2 : In the antecedent, 400kV Kolar – NP Kunta line was open under voltage regulation. As reported, all connected lines at 400kV Kolar tripped on operation of overvoltage protection. Due to loss of voltage in AC side HVDC Talcher – Kolar Pole-1 and Pole-2 tripped on pole control reference voltage protection. There was complete loss of supply at 400/220kV Hoody substation since the station was radially fed from Kolar. In the antecedent conditions, 400kV Hoody-Yelahanka and 400kV Hoody – Nelamangala were under planned shutdown due to construction works of 400kV Pavagada – Devenahalli line by PGCIL.	----	870 MW	GD-1	0.6380
3	SR	i. 220kV Narnoor - AP Carbides ii. 220kV Narnoor - Somrajpally iii. 220kV Narnoor - Brahmakotkur iv. 400/220kV ICT-2 at Narnoor	APTRANSCO	15-Jul-20	2:16	15-Jul-20	4:33	2 hrs 17 mins	Tripping of 220kV Bus-2 at 400/220kV Narnoor station of APTRANSCO : Triggering incident was fault in Y-phase isolator of 220kV Bus-2. This resulted in operation of bus bar protection of 220kV Bus-2 at Narnoor station. All elements connected to 220kV Bus-2 tripped.	----	----	GI-1	----
4	SR	i. 220kV Kadakola - Mysore Line-2 ii. 220kV Kadakola - Chamrajnagar Line-2 iii. 100MVA ICT-2 at Kadakola	KPTCL	17-Jul-20	5:02	17-Jul-20	6:40	1 hr 38 mins	Tripping of 220kV Bus-2 at Kadakola station of KPTCL: 220kV Bus-2 at Kadakola station tripped due to mal operation of Y-phase bus bar differential relay resulting in tripping of all elements connected to Bus-2 at Kadakola station.	----	----	GI-1	----

Eastern Region-Grid Event Report for July 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	400 kv BRBCL – Sasaram – 1 Unit 1 and 2 at BRBCL	ISTS	1-Jul-20	5:50	1-Jul-20	10:05	4:15	BRBCL, a 4 x 250 MW thermal power plant is connected to rest of the grid via 400 kv BRBCL – Sasaram D/C. 400 kv BRBCL – Sasaram – 2 was under break down due to rectification of tower bending. Unit 1 and 2 were in running condition at BRBCL. At 05:50 hrs., 400kv Sasaram-BRBCL #1 tripped on R and Y phase fault. Both the units got tripped due to loss of evacuation path. Heavy rain, thundering and lightning was reported at the time of the event.	410	0	GD-1	0.0000
2	ER	220 kv Joda – TTPS D/C 220 kv Ramchandrapur – Joda S/C 220 kv Joda – JSPL - Jamshedpur S/C	OPTCL	4-Jul-20	13:19	4-Jul-20	14:02	0:43	At 12:47 hrs 220 kv Joda – TTPS - 1 tripped on Y and B phase to earth fault. At 13:00 hrs it was charged from Joda end successfully. But while charging this circuit from TTPS on R phase to earth fault, it tripped on B phase to earth fault from TTPS end. At 13:06 hrs 220 kv Joda – TTPS – 2 tripped from both ends on R phase to earth fault. At 13:19 hrs 220 kv Joda – Ramchandrapur end tripped from both ends on Y phase to earth fault. At same time, 220 kv Jamshedpur – JSPL – Joda feeder tripped from Jamshedpur end in overcurrent protection. Weather condition was normal at the time of the event.	0	110	GD-1	0.1003
3	ER	400 kv Rangpo – Kishangunj S/C 220 kv Jorethang – New Melli D/C 220 kv Tashiding – Rangpo S/C Unit 1 and 2 at JLHEP	ISTS	4-Jul-20	14:24	4-Jul-20	14:28	0:04	At 14:24 hrs 400 kv Rangpo – Kishangunj S/C tripped from both ends. Directional Earth fault protection operated at Rangpo and DT was received at Kishangunj. At same time, 220 kv JLHEP – New Melli D/C and 220 kv Tashiding Rangpo S/C tripped on earth fault protection at Jorethang and Tashiding end respectively. As a result both the running units at Jorethang tripped due to loss of evacuation path	104	0	GD-1	0.0000
4	ER	400 kv BRBCL – Sasaram – 2 765/400 kv ICT at Sasaram 400 kv bus 1 at Sasaram Unit 2 and 3 at BRBCL	ISTS	7-Jul-20	23:58	8-Jul-20	3:56	3:58	BRBCL, a 4 x 250 MW thermal power plant is connected to rest of the grid via 400 kv BRBCL – Sasaram D/C. 400 kv BRBCL – Sasaram – 1 was charged from Sasaram end. During synchronizing this line from BRBCL end, 400 kv bus 1 at Sasaram got tripped resulting in tripping of 400 kv BRBCL – Sasaram – 2, 765/400 kv ICT at Sasaram. Unit 2 and 3 were in running condition at BRBCL prior to the event. Both the units tripped due to loss of evacuation path.	425	0	GD-1	0.0000
5	ER	400 kv Barh – Motihari – 2	ISTS	8-Jul-20	2:19	8-Jul-20	2:50	0:31	400/132 kv Motihari substation is connected to rest of the grid via 400 kv Barh – Motihari – 2 (Others lines are under breakdown due to tower-collapse) and its radial load of 132 kv Betiya, 132 kv Motihari (Bihar) and 132 kv Raxaul are being supplied through 400/132 kv ICT – 2 at Motihari. At 02:19 hrs 400 kv Barh – Motihari – 2 tripped due to B phase to earth fault. The tripping has led to loss of supply to Betiah/Raxaul/Motihari as being the single source of supply causing Grid Disturbance 1 (GD-1) category event.	0	248	GD-1	0.1281
6	ER	400 kv Arambag – New Chanditala S/C 400 kv Arambag – Bakreswar S/C 400 kv Arambag Kolaghat S/C 400/220 kv ICT – 1, 2, 3 and 4 at Arambag 220 kv Arambag – Midnapore D/C 220 kv Arambag – Domjur – 1 220 kv Arambag Howrah S/C 220 kv Arambag – Rishra S/C 132 kv Arambag Tarakeswar D/C 132 kv Arambag – Raina D/C 132 kv Arambag – Brisingha - 2	WBSETCL	10-Jul-20	8:45	10-Jul-20	9:11	0:26	At 08:45 hrs, 400 kv Arambag – New Chanditala S/C, 400 kv Arambag – Bakreswar S/C, 400 kv Arambag Kolaghat S/C and 400/220 kv ICT – 1, 2, 3 and 4 at Arambag tripped. At same time, all 220 kv lines connected to Arambag s/s and some 132 kv lines also tripped during this event. Flash over was reported at B phase pole of 220 kv side breaker of 315 MVA 400/220 kv ICT – 4 at Arambag.	0	61	GI-2	0.0264
7	ER	HVDC Talcher Kolar pole 1 and 2	ISTS	16-Jul-20	1:58	16-Jul-20	3:36	1:38	At 01:58hrs, both poles of Talcher-Kolar HVDC tripped due to un-availability of 400kv bus voltage at Kolar end. Before tripping flow was 500MW. SPS acted and generation reduction happened at JITPL(150MW) and GMR (269MW). No generation reduction in Talcher Stg-2.	419	0	GI-2	0.0000
8	ER	400 kv Teesta III – Dikchu S/C 400 kv Rangpo-Dikchu S/C 400 kv Rangpo-Kishanganj S/C Units 1, 2, 3, 4, 5 and 6 at Teesta III HEP Both units 1 and 2 at Dikchu HEP	ISTS	16-Jul-20	16:27	16-Jul-20	17:13	0:46	400 kv Teesta III Kishanganj S/C was taken under shutdown on emergency basis at 15:49 hrs for gas density monitor replacement work at Kishanganj end. To ensure maximum power evacuation, 400 kv buses at Rangpo were split. Teesta III and Dikchu were connected to 400 kv bus 1 at Rangpo through 400 kv Dikchu – Rangpo S/C. their generation was evacuated through 400 kv Rangpo Kishanganj S/C. All other elements at Rangpo S/S were connected to 400 kv bus 2. Generation at Teesta V, Jorethang, Tashiding, Chujachen HEP was being evacuated through 400 kv Rangpo – Binaguri D/C. At 16:27 hrs, 400 kv Teesta III – Dikchu S/C, 400 kv Rangpo-Dikchu S/C, 400 kv Rangpo-Kishanganj S/C tripped resulting total power failure at Teesta III and Dikchu HEP.	1390	0	GD-1	0.0000
9	ER	400 kv Alipurduar - Jigmelling D/C	ISTS	19-Jul-20	23:18	19-Jul-20	23:58	0:40	At 23:18 Hrs, 400 kv Alipurduar-Jigmelling D/C tripped on spurious DT receive at Alipurduar end resulting in tripping of Mangdechu units #1 and #2 due to loss of evacuation path. Generation loss at Mangdechu was 777 MW. No generation or load loss was reported in Indian grid during this event.	0	0	GI-2	0.0000
10	ER	400 kv Muzaffarpur-Gorakhpur D/C 400 kv Muzaffarpur-New Purnea-D/C 400 kv Muzaffarpur-Biharshariff D/C 220 kv Muzaffarpur – Hajipur D/C 220 kv Muzaffarpur – MTPS - 1 220 kv Darbhanga (DMTCL) – Darbhanga D/C, 220 kv Darbhanga (DMTCL) – Motipur D/C 220 kv Darbhanga (DMTCL) – Laukahi - 1 220 kv Darbhanga (DMTCL) – Samastipur – S/C	ISTS	20-Jul-20	7:06	20-Jul-20	7:49	0:43	At 07:06 hrs. B phase to earth fault occurred at 400 kv Muzaffarpur-Gorakhpur – 2. B pole of tie breaker at Muzaffarpur end got did not open. Due to delay in LBB operation, fault was getting fed and to clear the fault, 400 kv Muzaffarpur-Gorakhpur – 1, 400 kv Muzaffarpur-New Purnea-2, 400 kv Muzaffarpur-Biharshariff D/C and 220 kv Muzaffarpur – Hajipur D/C tripped. Fault clearing time was around 500 ms. Tripping of 220 kv Muzaffarpur – Hajipur D/C resulted total power failure at Hajipur and chapra. At 07:08 hrs, 220 kv Darbhanga (DMTCL) – Darbhanga D/C, 220 kv Darbhanga (DMTCL) – Motipur D/C, 220 kv Darbhanga (DMTCL) – Laukahi - 1, 220 kv Darbhanga (DMTCL) – Samastipur S/C tripped due to overvoltage problem resulting total power failure at Darbhanga and its nearby areas.	0	300	GD-1	0.2150
11	ER	400 kv Alipurduar - Jigmelling D/C	ISTS	22-Jul-20	1:32	22-Jul-20	4:10	2:38	At 01:32 hrs 400 kv Alipurduar Jigmelling D/C tripped due to R & B phase fault. Prior to the tripping, schedule to Mangdechu generating units were 762 MW. There was no load or generation loss reported in Indian grid at the time of the event.	0	0	GI-2	0.0000
12	ER	220 kv Darbhanga (DMTCL)-Darbhanga (Bihar) D/C 220 kv Dharbanga-Mushahari-1	BSPTCL	22-Jul-20	12:15	22-Jul-20	12:50	0:35	220 kv Darbhanga (BSPTCL) to Mushahari – 2 was idle charged from Mushahari end. At 12:15 hrs 220 kv Darbhanga (DMTCL) – Darbhanga (BSPTCL) D/C tripped from DMTCL end only. At same time 220 kv Darbhanga (BSPTCL) to Mushahari – 1 also tripped. Later it was reported that Y – Phase Bushing to Gantry tower conductor of 220 kv Darbhanga (DMTCL) – Darbhanga (BSPTCL) – 2 melted and fault occurred.	0	250	GD-1	0.1458

North Eastern Region-Grid Disturbances Report for July 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 Imphal (MSPCL) - Yiangangpokpi D/C	MSPCL	01-Jul-20 04:25	01-Jul-20 04:32	0:07:00	Yiangangpokpi Area of Manipur Power System was connected with the rest of NER Grid through 132 kV Imphal (MSPCL) - Yiangangpokpi D/C. 132 kV Thoubal - Kakching kept opened to avoid over-loading of 132 kV Loktak- Ningthoukhong line. At 04:25 Hrs on 01.07.2020,132 kV Imphal (MSPCL) - Yiangangpokpi D/C tripped. Due to tripping of these element, Yiangangpokpi Area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	17	0	0.0019	GD 1
2	NER	132 kV Along - Pasighat line	DoP, Arunachal Pradesh	01-Jul-20 04:25	01-Jul-20 05:00	0:35:00	Pasighat area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Along - Pasighat line. At 04:25 Hrs on 01.07.2020, 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	14	0	0.0081	GD 1
3	NER	132 kV Loktak - Ningthoukhong line and 132 kV Imphal (PG) - Ningthoukhong line	MSPCL	04-Jul-20 12:00	04-Jul-20 12:18	0:18:00	Ningthoukhong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Loktak - Ningthoukhong line and 132 kV Imphal(PG) - Ningthoukhong line. 132 kV Kongba - Kakching line was kept opened to avoid over-loading of 132 kV Loktak- Ningthoukhong line. At 12:00 Hrs on 04.07.2020,132 kV Loktak - Ningthoukhong line and 132 kV Imphal (PG) - Ningthoukhong line tripped. Due to tripping of these elements, Ningthoukhong Area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	21	0	0.0060	GD 1
4	NER	132 kV Aizawl - Melriat(PG) line and 132 kV Silchar - Melriat (PG) 1 & 2 lines	POWERGRID & P&ED, Mizoram	05-Jul-20 12:36	05-Jul-20 13:06	0:30:00	Melriat (PG) Substation and Zuangtui Area of Mizoram Power System were connected with rest of NER Grid through 132 kV Aizawl - Melriat(PG) line and 132 kV Silchar - Melriat (PG) 1 & 2 lines. At 12:36 Hrs on 05.07.20,132 kV Aizawl - Melriat(PG) line and 132 kV Silchar - Melriat (PG) 1 & 2 lines tripped. Due to tripping of these elements, Melriat (PG) and Zuangtui Area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	32	0	0.0160	GD 1
5	NER	220 kV and 132kV Buses of Balipara (PG) Substation	POWERGRID	09-Jul-20 12:53	09-Jul-20 14:55	2:02:00	Khupi Area of Arunachal Pradesh Power System and 220 kV and 132 kV Buses of Balipara (PG) Substation were connected with rest of NER Grid through 400/220 kV, 315 MVA ICT-1 & 2 and 220 kV Balipara-Sonabil T/L. At 12:53 Hrs on 09.07.2020, 400/220kV ICT-1 & ICT-2 at Balipara and 220 kV Balipara-Sonabil line tripped while availing planned shutdown of 220 kV Balipara-Sonabil T/L causing bus dead of 220 kV & 132 kV Bus at Balipara. Due to tripping of these elements, 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	5	0	0.0100	GD 1
6	NER	132 kV Lumshnong - Panchgram line	AEGCL, MEPTCL	12-Jul-20 08:01	12-Jul-20 08:18	0:17:00	Lumshnong Area of Meghalaya Power System was connected to the rest of NER grid through 132 kV Lumshnong - Panchgram line. 132 kV Khliehriat - Lumshnong line tripped on Earth Fault at 08:00 Hrs of 12.07.2020. At 08:01 hrs of 12.07.2020, 132 kV Lumshnong - Panchgram line tripped. Due to tripping of this element, Lumshnong Area of Meghalaya Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	25	0	0.0070	GD 1
7	NER	132 kV Lumshnong - Panchgram line	AEGCL, MEPTCL	12-Jul-20 19:53	12-Jul-20 20:02	0:09:00	Lumshnong Area of Meghalaya Power System was connected to the rest of NER grid through 132 kV Lumshnong - Panchgram line. 132 kV Khliehriat - Lumshnong line tripped on Earth Fault at 08:01 Hrs of 12.07.2020. At 19:53 hrs of 12.07.2020, 132 kV Lumshnong - Panchgram line tripped. Due to tripping of this element, Lumshnong Area of Meghalaya Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	27	0	0.0040	GD 1
8	NER	132 kV Along - Daporjio line	DOP , Arunachal Pradesh	16-Jul-20 18:51	16-Jul-20 19:05	0:14:00	Along area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Along - Daporjio line. At 18:51 Hrs on 16.07.2020,132 kV Along - Daporjio line tripped. Due to tripping of this element, Along area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	24	0	0.0056	GD 1
9	NER	132 kV Imphal (MSPCL) - Karong Line and 132 kV Karong - Kohima Line	MSPCL & DoP Nagaland	17-Jul-20 15:53	17-Jul-20 16:24	0:31:00	Karong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Imphal (MSPCL) - Karong Line and 132 kV Karong - Kohima Line. At 15:53 Hrs on 17.07.2020, 132 kV Imphal (MSPCL) - Karong Line and 132 kV Karong - Kohima Line tripped. Due to tripping of these elements, Karong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	11	0	0.0060	GD 1
10	NER	132 kV Yiangangpokpi-Imphal(Yurembam) D/C	MSPCL	19-Jul-20 10:37	19-Jul-20 10:42	0:05:00	Yiangangpokpi area of Manipur Power System was connected with the rest of NER Grid through 132 kV Yiangangpokpi-Imphal(Yurembam) D/C. At 10:37 Hrs on 19.07.2020,132 kV Yaingangpokpi-Imphal(Yurembam) D/C tripped. Due to tripping of these elements, Yiangangpokpi area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	24	0	0.0020	GD 1
11	NER	132 kV Umiam st-III - Umtru I & II lines 132 kV Umiam st-IV - Umtru I & II lines 132 kV EPIP II - Umtru I & II lines 132 kV EPIP II - New Umtru line 132 kV Umiam st-II - Umiam st-I line 132 kV Umiam - Umiam st-I line and Umiam-NEHU line	MePTCL & MePGCL	20-Jul-20 11:50	20-Jul-20 11:58	0:08:00	Umtru and New Umtru Power Station of Meghalaya Power System were connected with the rest of NER Grid through 132 kV Umiam st-III - Umtru I & II lines, 132 kV Umiam st-IV - Umtru I & II lines, 132 kV EPIP II - Umtru I & II lines and 132 kV EPIP II -New Umtru line.[132 kV Umtru- Sarusajai DC was idle charged from Sarusajai end since 20-06-2020 & 132 kV Umtru- Kahlipara DC was idle charged from Kahlipara end since 09-04-2020]. Umiam area of Meghalaya Power System was connected with the rest of NER Grid through 132 kV Umiam - Umiam st-I line and Umiam-NEHU line. Umiam Stage-II Power Station was connected with the rest of NER Grid through 132 kV Umiam st-II - Umiam st-I line. At 11:50 Hrs on 20.07.2020, 132 kV Umiam st-III - Umtru I & II lines, 132 kV Umiam st-IV - Umtru I & II lines, 132 kV EPIP II - Umtru I & II lines, 132 kV EPIP II -New Umtru line, 132 kV Umiam st-II - Umiam st-I line, 132 kV Umiam - Umiam st-I line and Umiam-NEHU line tripped. Due to tripping of these elements, Umiam area, Umtru and New Umtru Power Station of Meghalaya Power System were separated from rest of NER Grid and subsequently collapsed due load generation mismatch.	126	30	0.0168	0.0040	GD 1
12	NER	132 kV Yiangangpokpi- Kongba line	MSPCL	23-Jul-20 11:03	23-Jul-20 11:18	0:15:00	Kongba area of Manipur Power System was connected with the rest of NER Grid through 132 kV Yiangangpokpi- Kongba line. 132 kV Kakching - Kongba line kept open for system requirement. At 11:03 Hrs on 23.07.2020, 132 kV Yiangangpokpi- Kongba line tripped. Due to tripping of this element, Kongba area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	20	0	0.0050	GD 1
13	NER	220 kV BTPS - Rangia 1&2 lines and 132 kV Rangia - Motonga line	AEGCL & POWERGRID	23-Jul-20 11:45	23-Jul-20 11:48	0:03:00	Rangia and Kamalpur areas of Assam Power System were connected with the rest of NER Grid through 220 kV BTPS - Rangia 1&2 lines and 132 kV Rangia - Motonga line. 132 kV Kamalpur - Kahlipara line and 132 kV Kamalpur - Sisugram line kept open for system requirement. 132 kV Rangia - Sipajhar line was radial due to bus split at Sipajhar. 132 kV Dhaligaon - Bornagar line was kept idle charged from Dhaligaon end and 132 kV Rangia - Nalbari line was idle charged from Rangia end. At 11:45 Hrs on 23.07.2020, 220 kV BTPS - Rangia 1&2 lines and 132 kV Rangia - Motonga line tripped. Due to tripping of these elements, Rangia and Kamalpur areas of Assam Power System were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	0	150	0	0.0080	GD 1

North Eastern Region-Grid Disturbances Report for July 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
14	NER	220 kV BTPS - Rangia 1&2 lines 132 kV Rangia - Motonga line	AEGCL & POWERGRID	23-Jul-20 12:48	23-Jul-20 12:58	0:10:00	Rangia and Kamalpur areas of Assam Power System were connected with the rest of NER Grid through 220 kV BTPS - Rangia 1&2 lines and 132 kV Rangia - Motonga line. 132 kV Kamalpur - Kahilpara line and 132 kV Kamalpur - Sisugram line kept open for system requirement. 132 kV Rangia - Sipajhar line was radial due to bus split at Sipajhar. 132 kV Dhaligaon - Bornagar line was kept idle charged from Dhaligaon end and 132 kV Rangia - Nalbari line was idle charged from Rangia end. At 12:48 Hrs on 23.07.2020, 220 kV BTPS - Rangia 1&2 lines and 132 kV Rangia - Motonga line tripped. Due to tripping of these elements, Rangia and Kamalpur areas of Assam Power System were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	0	150	0	0.0250	GD 1
15	NER	Kongba area of Manipur Power System	MSPCL	29-Jul-20 10:58	29-Jul-20 11:18	0:20:00	Kongba area of Manipur Power System was connected with the rest of NER Grid through 132 kV Yiangangpokpi- Kongba line. 132 kV Kakching - Kongba line kept open for system requirement. At 10:58 Hrs on 29.07.2020, 132 kV Yiangangpokpi- Kongba line tripped. Due to tripping of this element, Kongba area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	23	0	0.0080	GD 1
16	NER	132 kV Ningthoukhong - Churachandpur D/C	MSPCL	31-Jul-20 09:46	31-Jul-20 10:02	0:16:00	Churachandpur Area of Manipur Power System was connected with the rest of NER Grid through 132 kV Ningthoukhong - Churachandpur D/C. 132 kV Kakching - Kongba line kept open for system requirement. At 09:46 Hrs on 31.07.2020, 132 kV Ningthoukhong - Churachandpur D/C 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	24	0	0.0060	GD 1
17	NER	132 kV New Umtru - Umtru line 132 kV New Umtru - EPIP II line 132 kV Umium III-Umium IV ckt I 132 kV Umium III-Umium IV ckt II 132 kV Umium IV- Umtru ckt I 132 kV EPIP II-EPIP I ckt I 132 kV EPIP II-EPIP I ckt II.	MePTCL	31-Jul-20 18:36	31-Jul-20 18:45	0:09:00	New Umtru Area of Meghalaya Power System was connected with the rest of NER Grid through 132 kV New Umtru - Umtru line and 132 kV New Umtru - EPIP II line. At 18:36 Hrs on 31.07.2020, 132 kV New Umtru - Umtru line and 132 kV New Umtru - EPIP II line tripped. Due to tripping of these elements, New Umtru Area of Meghalaya Power System consisting of New Umtru HEP U-I and New Umtru HEP U-II was separated from rest of NER Grid and subsequently collapsed due to load-generation mismatch. At the same time, the following transmission lines tripped: 132 kV Umium III-Umium IV ckt I, 132 kV Umium III-Umium IV ckt II, 132 kV Umium IV- Umtru ckt I, 132 kV EPIP II-EPIP I ckt I, 132 kV EPIP II-EPIP I ckt II. At the same time, the following generations tripped: Umiam Stage 1 U-I, Umiam Stage 1 U-II, Umiam Stage 1 U-III, Umiam Stage 1 U-IV, Umiam Stage 2 U-I, Umiam Stage 2 U-II, thus giving a total of 96 MW (including New Umtru HEP U-I and New Umtru HEP U-II) generation loss in Meghalaya Power System	96	0	0.0144	0.0000	GD 1

North Eastern Region-Grid Incidences Report for July 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	Kameng HEP - Unit 1 & 2	NEEPCO	05-Jul-20 09:00	05-Jul-20 10:30	1:30:00	Kameng HEP - Unit 1 & 2 tripped due to Differential Protection Operated in GT HV side at 09:00 Hrs on 05-07-20. Revision done from Block No.43 on 05-07-20.	300	0	0.450	0	GI 2
2	NER	AGBPP Units 2, 4 & 8	NEEPCO	13-Jul-20 20:37	13-Jul-20 22:30	1:53:00	AGBPP Units 2, 4 & 8 tripped at 20:37 Hrs on 13-07-20 due to tripping of GBC-3. Revision done from Block No.91 on 13-07-20.	85	0	0.160	0	GI 2
3	NER	Kameng HEP - Unit 1 & 2	NEEPCO	17-Jul-20 05:05	17-Jul-20 07:00	1:55:00	Kameng HEP - Unit 1 & 2 tripped due to operation of Differential Protection at 05:05 Hrs on 17-07-20. Revision done from Block No.29 on 17-07-20.	304	0	0.582	0	GI 2
4	NER	Kameng HEP - Unit 1	NEEPCO	23-Jul-20 21:59	23-Jul-20 23:30	1:31:00	Kameng HEP - Unit 1 tripped at 21:59 Hrs on 23-07-20 due to Governor pressure imbalance. Revision done from Block No.95 on 23-07-20.	150	0	0.228	0	GI 2