

Northern Region-Grid Event Report for April 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) 400 KV Parbati_3(NH)-Parbati Pooling Banala(PG) (PKTCL) 2) 400KV Parbati_3(NH)-Sainj	HIMACHAL PRADESH	PKTCL, NHP, POWERGRID	1-Apr-20	20:54	2-Apr-20	9:42	12:48	400KV Banala-Parbati3 line tripped on B-N fault and at the same time 400KV Parbati 3-Sainj also tripped. Due to power evacuation problem unit-1(1130 MW) generation loss at Parbati3 hydro generating station. As per PMU, B-N fault with unsuccessful autoreclosing is observed in the system. In antecedent conditions, 400 KV Parbati_3(NH)-Sainj(HPI) & 400 KV Parbati_3(NH)-Parbati Pooling Banala(PG) (PKTCL) carrying 56MW & 180MW respectively.	130	0	GD-1	0
2	NR	1) 220 KV Jessore(HPI)-Pong(BB) (PG) Ckt-1 2) 220 KV Jalandhar-Pong (BB) Ckt-2 3) 220 KV Pong(BB)-Dasuya(PS) (BBMB) Ckt-2 4) 220 KV Pong(BB)-Dasuya(PS) (BBMB) Ckt-1	HIMACHAL PRADESH	BBMB, POWERGRID	1-Apr-20	21:12	1-Apr-20	23:03	1:51	220 KV Bus-2 tripped at Pong due to bursting of R phase CT of 220 kv Pong-Dasuya Ckt-3 resulting in tripping of Unit 3 & Unit 4 at 220 KV Pong(BB) along with other 220KV elements. As per PMU, R-N fault with delayed clearance of 320ms is observed. In antecedent conditions, 220 KV Jalandhar-Pong (BB) Ckt-2 & 220 KV Jessore(HPI)-Pong(BB) (PG) carrying 35MW & 15MW respectively.	126	0	GD-1	0
3	NR	1) 400 KV Nathpa Jhakra(HPI)-Rampur HE(PS) (PG) Ckt-1 2) 68.67 MW Rampur HEP - UNIT 1 3) 250 MW Nathpa-Jhakra HPS - UNIT 1 4) 400KV Bus 1 at Nathpa Jhakra(SI) 5) 400KV Bus 3 at Nathpa Jhakra(SI)	HIMACHAL PRADESH	POWERGRID, SIVNL	3-Apr-20	8:03	3-Apr-20	10:20	2:17	400KV Bus 1 & Bus 3 at Nathpa Jhakra(SI) tripped due to operation of Bus Bar protection leading to tripping of 400 KV Nathpa Jhakra(SI)-Rampur HE(PS) (PG) Ckt-1 & 250 MW Nathpa-Jhakra HPS - UNIT 1. At the same time, 68.67 MW Rampur HEP - UNIT 1 tripped on TOS. As per PMU, No fault is observed in the system. In antecedent conditions, 400 KV Nathpa Jhakra(SI)-Rampur HE(PS) (PG) Ckt-1 carrying 32MW.	250	0	GD-1	0
4	NR	1) 220 KV Amargah(NRSS XXX)-Ziankote(K) (PDD JK) Ckt-1 2) 220 KV Wagona(PG)-Ziankote(K) (PDD JK) Ckt-2	J & K	PDD JK, POWERGRID, NRSS29	6-Apr-20	13:17	6-Apr-20	13:40	0:23	220 KV Amargah(NRSS XXX)-Ziankote(K) (PDD JK) Ckt-1 tripped due to R-phase jumper snapping at Ziankote(K) end and 220 KV Amargah(NRSS XXX)-Ziankote(K) (PDD JK) Ckt-2 tripped due to overloading. At the same time, 220 KV Wagona(PG)-Ziankote(K) (PDD JK) Ckt-2 also tripped. As per PMU, R-N fault is observed in the system. In antecedent conditions, 220 KV Amargah(NRSS XXX)-Ziankote(K) (PDD JK) Ckt-1 & 2 carrying 178MW & 179MW and 220 KV Wagona(PG)-Ziankote(K) (PDD JK) Ckt-2 carrying 118MW.	0	500	GD-1	0.19
5	NR	1) 400 KV Akal-Kankani (RS) Ckt-2 2) 400 KV Merta-Kankani (RS) Ckt-1	RAJASTHAN	RRVNL	6-Apr-20	14:43	6-Apr-20	16:06	1:23	400 KV Merta-Kankani (RS) Ckt-1 tripped on B-N fault. 400 KV Akal-Kankani (RS) Ckt-2 also tripped. As per PMU, B-N fault is observed in the system. In antecedent conditions, 400 KV Merta-Kankani (RS) Ckt-1 & 400 KV Akal-Kankani (RS) Ckt-2 carrying 75MW & 22MW respectively.	0	0	GI-2	0
6	NR	1) 400 KV Saranath(UP)-Varanasi(PG) (PG) Ckt-1 2) 400 KV Saranath(UP)-Varanasi(PG) (PG) Ckt-2	UTTAR PRADESH	POWERGRID, UPPTCL	19-Apr-20	16:16	19-Apr-20	17:08	0:52	400 KV Saranath(UP)-Varanasi(PG) (PG) Ckt-1 tripped on R-N fault. At the same time, 400 KV Saranath(UP)-Varanasi(PG) (PG) Ckt-2 tripped on B-N fault. As per PMU, R-N fault followed by R-B fault is observed in the system.	0	0	GI-2	0
7	NR	1) 400/220 kv 315 MVA ICT 2 at Obra_B(UP) 2) 400/220 kv 315 MVA ICT 1 at Obra_B(UP)	UTTAR PRADESH	UPPTCL	19-Apr-20	19:40	19-Apr-20	22:02	2:22	400/220 kv 315 MVA ICT 1 & ICT 2 at Obra_B(UP) tripped due to operation of HV side high speed tripped relay. As per PMU, No fault is observed in the system.	0	0	GI-2	0
8	NR	1) 132 KV Pithoragarh(PG)-Almora(PTCUL) (PTCUL) Ckt-1 2) 132 KV Pithoragarh(PG)-Pithoragarh(PTCUL) (PTCUL) Ckt-1	UTTRAKHAND	PTCUL, POWERGRID	20-Apr-20	21:49	20-Apr-20	22:31	0:42	132 KV Pithoragarh(PG)-Pithoragarh(PTCUL) (PTCUL) Ckt-1 tripped on B Phase to N, Directional over current earth fault. At the same time, 132 KV Pithoragarh(PG)-Almora(PTCUL) (PTCUL) Ckt-1 tripped on B Phase trip relay, 86 operated. As per PMU, B-N fault is observed in the system.	0	70	GD-1	0.05
9	NR	1) 400 KV Anpara-Obra_B (UP) Ckt-1 2) 400 KV Obra_B-Rewa Road (UP) Ckt-1 3) 400 KV Obra_B-Sultanpur (UP) Ckt-1 4) 400/220 kv 315 MVA ICT 1 at Obra_B(UP) 5) 400KV Bus 2 at Obra_B(UP) 6) 200 MW Obra TPS - UNIT 11 7) 200 MW Obra TPS - UNIT 10 8) 200 MW Obra TPS - UNIT 9 9) 400KV Bus 1 at Obra_B(UP) 10) 400/220 kv 315 MVA ICT 2 at Obra_B(UP)	UTTAR PRADESH	UPPTCL	22-Apr-20	12:47	22-Apr-20	19:40	6:53	Due to blast and fire on B-phase 400KV CT of Unit - 12 at 400/220KV Obra_B(UP) resulting in tripping of all the Units, ICTs and Lines. As per PMU, B-N fault is observed in the system. Generation loss of around 450MW is observed.	450	0	GD-1	0
10	NR	1) 400 KV Deepalpur(HKT)-Bawana(DV) (PG) Ckt-1 2) 400/220 kv 315 MVA ICT 2 at Bawana(DV) 3) 400 KV Mandola(PG)-Bawana(DV) (DV) Ckt-2 4) 400KV Bus 1 at Bawana(DV) 5) 400 KV Mandola(PG)-Bawana(DV) (DV) Ckt-1	NEW DELHI	DTL, POWERGRID	22-Apr-20	15:24	22-Apr-20	17:09	1:45	Fault occurred on R-phase Bus-1 CVT of 400/220KV Bawana(DV) with heavy blast sound and smoke reaching gantry tower above faulted Bus-1 CVT. Consequently 400KV Numerical Bus Bar Protection operated resulting in tripping of all Bus-1 CB connected to 400KV Bus-1. The smoke which rises up in air above the faulted Bus-1 CVT and got spread in both sides along the gantry top towards R-phase of Dipalpur line-conductor and B-phase of Mandola Ckt-1 line conductor which are crossing the 400KV Main Bus-1 from top of bus-1 transversally and eventually resulted in arcing of 400KV Deepalpur R-phase with gantry top and also between 400KV Mandola Ckt-1 Blue phase with gantry top. This incidence resulted in two consequent faults leading to tripping of both 400KV Bawana Deepalpur Ckt. and 400KV Bawana Mandola Ckt-1 by distance protection. Zone-1 R-phase and Blue phase respectively. 315 MVA ICT-2 was also tripped by 67N E/F protection relay. As per PMU, three faults i.e R-N fault, R-N fault followed by B-N fault is observed in the system. Load loss of around 120MW is observed as per SCADA data.	0	120	GD-1	0.2
11	NR	1) 765KV Bus 1 at Bara(UP) 2) 765KV Bus 2 at Bara(UP) 3) 660 MW Bara PPGL TPS - UNIT 3 4) 660 MW Bara PPGL TPS - UNIT 1 5) 660 MW Bara PPGL TPS - UNIT 2 6) 765/21 kv 825 MVA GT 3 at Bara(UP) 7) 765 KV Bara-Mainpur (UP) Ckt-2 8) 765/21 kv 825 MVA GT 1 at Bara(UP) 9) 765/400 kv 1500 MVA ICT 1 at Bara(UP) 10) 765/21 kv 825 MVA GT 2 at Bara(UP)	UTTAR PRADESH	UPPTCL	25-Apr-20	16:57	25-Apr-20	22:07	5:10	Complete outage at 765/400 kv Bara(UP) occurred due to Lightning stroke on B phase Breaker (710 No. Bay) at Bara and subsequent 765 kv bus bar protection operation. As per PMU, B-N fault with delayed clearance is observed in the system. In antecedent conditions, Unit#1, Unit#2 & Unit#3 at Bara(UP) generating 337MW, 359MW & 338MW respectively.	1030	0	GD-1	0
12	NR	1) 400 KV Singrauli(NT)-Anpara(UP) (PG) Ckt-1 2) 210 MW Anpara TPS - UNIT 1 3) 210 MW Anpara TPS - UNIT 2 4) 400 KV Anpara-Obra_B (UP) Ckt-1 5) 400 KV Obra_B-Sultanpur (UP) Ckt-1	UTTAR PRADESH	POWERGRID, UPPTCL, NTPC	26-Apr-20	5:27	26-Apr-20	8:03	2:36	210 MW Unit-1 & 2 tripped due to tripping of 400KV Bus-2 at Anpara (which tripped due to operation of LBB protection of Bus coupler at Anpara). As per PMU, R-N fault with delayed clearance is observed in the system. In antecedent conditions, Unit#1 & Unit#2 generating 143MW & 165MW respectively. 400 KV Singrauli(NT)-Anpara(UP) (PG) Ckt-1 carrying 446MW.	300	0	GD-1	0
13	NR	1) 400/220 kv 315 MVA ICT 1 at Muzaffarnagar(UP) 2) 400/220 kv 315 MVA ICT 2 at Muzaffarnagar(UP) 3) 400/220 kv 315 MVA ICT 3 at Muzaffarnagar(UP)	UTTAR PRADESH	UPPTCL	26-Apr-20	9:48	26-Apr-20	11:36	1:48	400/220 kv 315 MVA ICT 1, 315 MVA ICT 2 & 315 MVA ICT 3 at Muzaffarnagar(UP) tripped on back up over current & earth fault protection. ICTs tripped form 220KV side only. As per PMU, R-N fault followed by B-N fault with delayed clearance is observed in the system. In antecedent conditions, 400/220 kv 315 MVA ICT 1, 315 MVA ICT 2 & 315 MVA ICT 3 at Muzaffarnagar(UP) carrying 48MW, 53MW & 52MW respectively.	0	0	GI-2	0
14	NR	1) 400KV Bus 2 at Anpara(UP) 2) 210 MW Anpara TPS - UNIT 2 3) 400 KV Obra_B-Sultanpur (UP) Ckt-1 4) 400 KV Anpara-Obra_B (UP) Ckt-1 5) 400 KV Singrauli(NT)-Anpara(UP) (PG) Ckt-1 6) 210 MW Anpara TPS - UNIT 1	UTTAR PRADESH	POWERGRID, UPPTCL	28-Apr-20	2:59	28-Apr-20	4:23	1:24	2-2 fault in the 400 KV Anpara-Obra - Sultanpur line and due to delay in the opening of breaker at 400 KV Anpara, LBB protection operated. This led to the tripping of Bus Coupler, Bus Sectionalizer and 400 KV Bus 2 and all the elements connected to Bus Bar-2 including the Unit 1 and 2. As per PMU, R-N fault with delayed clearance is observed in the system. In antecedent conditions, Unit#1 & Unit#2 at Anpara generating 135MW & 162MW respectively. 400 KV Singrauli(NT)-Anpara(UP) (PG) Ckt-1 carrying 406MW.	350	160	GD-1	0.22
15	NR	1) 115 MW Salal HPS - UNIT 1 2) 115 MW Salal HPS - UNIT 2 3) 115 MW Salal HPS - UNIT 3 4) 115 MW Salal HPS - UNIT 4 5) 115 MW Salal HPS - UNIT 5 6) 115 MW Salal HPS - UNIT 6 7) 220 KV Kishenpur(PG)-Salal(NH) (PG) Ckt-3 8) 220 KV Salal(NH)-Jammu(PDD) (PG) Ckt-2 9) 220 KV Kishenpur(PG)-Salal(NH) (PG) Ckt-4 10) 220 KV Salal(NH)-Jammu(PDD) (PG) Ckt-1 11) 220 KV Kishenpur(PG)-Salal(NH) (PG) Ckt-2 12) 220 KV Kishenpur(PG)-Salal(NH) (PG) Ckt-1	J & K	NHP, POWERGRID	29-Apr-20	17:32	29-Apr-20	18:20	0:48	Complete outage of 220KV Salal(NH) occurred due to failure of one DC DR(DC Source) and changeover took 200ms time resulting into tripping of all six units and emanating 220KV circuits from Salal. As per PMU, No fault is observed in the system. In antecedent conditions, Unit#1, Unit#2, Unit#3, Unit#4, Unit#5 & Unit#6 generating 114MW, 116MW, 115MW, 107MW, 105MW & 111MW respectively.	600	0	GD-1	0

**Western Region-Event Report for April 2020**

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 Chandrapur-Bhadrawati 1&4 2.400 kv Chandrapur-Chandrapur 2 3.400 kv Chandrapur-Parli 3(MH) 4.400 kv Chandrapur-Chandrapur HVDC 1 5.400/220 kv Chandrapur ICT 1	MSETCL	1-Apr-20	17:25	1-Apr-20	18:50	1:25	At 400/220 kv Chandrapur s/s, R-phase insulator string of 400 kv Bus-2 near Chandrapur 2 circuit 1 bay blasted and resulted in tripping of all the elements connected to 400 kv Bus 2 on Bus bar Protection (ABB RADSS Scheme) operation	NII	NII	GI-2	NII
2	WR	Tripping of 1.220 kv Dhuvaran-Vartej 2.132 kv Dhuvaran-Limbdi 1&2	GSECL	5-Apr-20	13:27	5-Apr-20	14:25	0:58	At 11:36 Hrs, 220 kv Dhuvaran-Kasor tripped on B-E fault, followed by the tripping of 132 kv Dhuvaran-Dhandhuka1&2 on SPS operation at Dhuvaran to avoid overloading of ICTs. At 13:09 Hrs, 132 kv Dhuvaran-Mehmdvad tripped on B-E fault. At 13:15 Hrs, 132 kv Dhuvaran-Undel tripped on B-E fault. At 13:27 Hrs, 220 kv Dhuvaran-Vartej tripped on B-E fault and at the same time 132 kv Dhuvaran-Limdi Line – 1 & 2 tripped on Over Voltage Protection. Due to above tripping, all running machines at Dhuvaran tripped on over speed as no power evacuation path available and Solar plant tripped due to tripping of inverters on Under Voltage.	411	50	GD-1	0.0483
3	WR	Tripping of 1.220 kv Badnagar-Badnawar 1&2 2.220 kv Badnagar-Pithampur 3.220 kv Badnagar-Indore 4.220/132 kv 160 MVA Badnagar ICTs 1&2	MPPTCL	13-Apr-20	6:31	13-Apr-20	7:12	0:41	At 220/132 kv Badnagar s/s, at 06:31:01 Hrs, R phase CT of 220/132 kv 160 MVA ICT 2 blasted and resulted in R phase fault. The fault was cleared by ICT differential protection operation. After one second, due to the B phase fault(fault may be due to smoke and fumes created with blasting of CT) all the connected 220 kv lines tripped from remote end on Zone 2 distance protection operation.	NII	39	GI-1	0.0267
4	WR	Tripping of 1.400 kv Koradi-Satpura 2.400 kv Koradi-Bhusawal 3.400 kv Koradi-Bhilai 4.400/220 kv Koradi ICT 1	MSETCL	16-Apr-20	11:28	16-Apr-20	12:00	0:32	At 400/220 kv Koradi s/s, outage on main bay of Bhusawal ckt was availed for replacement of faulty air pressure switch. During the shifting of Bhusawal feeder on TBC, due to CT switching relay malfunction, Bus-1 tripped along with all the connected elements on BB protection operation.	NII	NII	GI-2	NII
5	WR	Tripping of 1.220 kv Chhatarpur Bus 2.220 kv Chhatarpur-Satna(MP) s/c 3.220 kv Chhatarpur-Satna(PG) s/c 4.220/132 kv 160 MVA Chhatarpur ICT 1&2	MPPTCL	17-Apr-20	12:28	17-Apr-20	13:20	0:52	At 220/132 kv Chhatarpur s/s, B-phase CT of 220/132kv ICT-1 blasted and resulted in tripping of Bus along with connected elements on BB protection operation.	NII	NII	GI-1	NII
6	WR	Tripping of 1.400 kv JP Bina-Bina(PG) 2.400 kv JP Bina-Bina(MP)	JP Bina	18-Apr-20	19:58	18-Apr-20	22:34	2:36	400 kv JP Bina-Bina(PG) and 400 kv JP Bina-Bina(MP) tripped from Bina(PG) and Bina(MP) end respectively on R-E fault. Due to the tripping of these line 400 kv JP Bina station got blacked out. As there was no generation at JP Bina during the event, no fault was fed for the fault from JP Bina end and CB remained in closed condition.	NII	NII	GD-1	NII
7	WR	Tripping of 1.400 kv Dhariwal-Parli(PG) 2.400 kv Dhariwal-Bhadrawati 3.300 MW Dhariwal Unit 2	Dhariwal	19-Apr-20	2:14	19-Apr-20	4:04	1:50	400 kv Dhariwal-Bhadrawati tripped on R-E fault at 02:13 Hrs. 400 kv Dhariwal-Parli(PG) tripped on R-E fault at 02:14 Hrs. Due to the loss of evacuation path Dhariwal unit 2(300MW) tripped.	215	NII	GD-1	NII
8	WR	Tripping of 1.220 kv Padghe-Temghar 2 2.220 kv Padghe-Pal s/c 3.220 kv Padghe-Nalaspura s/c 4.220 kv Padghe- Jindal 5.220 kv Padghe- Nashik 2	MSETCL	24-Apr-20	18:08	24-Apr-20	19:12	1:04	At 400/220 kv Padghe s/s, LV side Y phase suspension string of 400/220 kv ICT 3 decapped & came into contact with R phase conductor of 220kv Bus 2 and resulted in tripping of all the elements connected to 220 kv Padghe Bus 2 on bus bar protection operation	NII	NII	GI-1	NII
9	WR	Tripping of 1.220 kv Jabalpur-Sukha 1&2 2.220 kv Jabalpur- Narsinghpur 1&2 3.220 kv Jabalpur-Panagar 4.220 kv Jabalpur-Jabalpur 2	MPPTCL	24-Apr-20	19:15	24-Apr-20	20:06	0:51	At 400/220 kv Jabalpur s/s, due to R-B fault in 220 kv Bus 2, all the elements connected to it tripped on Bus bar protection operation.	NII	NII	GI-1	NII
10	WR	Tripping of 1.765 kv Dharamjaygarh-Jharsuguda 1,2,3&4 2.765 kv Dharamjaygarh- Ranchi 2 3.765 kv Dharamjaygarh-Champa 1&2 4.765 kv Dharamjaygarh-Bilaspur 5.765 kv Dharamjaygarh-Jabalpur 1&3 6.400 kv Dharamjaygarh- Balco 1&2 7.300 MW Balco Units 1,2,3&4 8.135 MW Balco CPP2 Units 1,2&3	PGCIL	27-Apr-20	0:51	27-Apr-20	3:49	2:58	At 765/400 kv Dharamjaygarh s/s, external flash over of B phase CT of 765/400 kv ICT 1 Main bay occurred creating B phase fault and the main protection ie, Bus bar protection/ICT differential protection did not operate. As the main protection did not clear the fault, all the connected 765 kv lines tripped on reverse protection/Zone 2 distance protection operation from remote end. 400kv Dharamjaygarh-Balco 1&2 tripped from Balco end on DEF protection operation. Balco islanding was unsuccessful due to tripping of Balco smelter load during islanding. During the event, total Balco generation of 1200 MW (288 MW injection into grid and balance captive gen. catering to smelter load) tripped.	288	900 MW (Balco smelter load)	GD-1	NII

**Southern Region-Grid Event Report for April 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)	Time					
1	SR	i. 220kV Hiriyur PG - Gowribidanur line-1 ii. 220kV Hiriyur PG - Gowribidanur line-2 iii. 220kV Madhugiri - Gowribidanur line-1	KPTCL	4-Apr-20	14:15	4-Apr-20	15:02	47 mins	Complete outage of 220kV Gowribidanur SS and 220kV KIADB SS of KPTCL: Triggering incident was R - Y fault in 220kV Gowribidanur - KIADB line. As per the information received, at 220kV Gowribidanur end, fault was sensed in Zone-2 and breaker didn't open because of suspected breaker struck condition and due to absence of LBB/BBP protection at 220kV Gowribidanur end, fault was cleared by tripping of all the lines connected to 220kV Gowribidanur SS at remote ends on operation of Zone-3 distance protection. This resulted in complete loss of supply at 220kV Gowribidanur SS. Since 220kV KIADB SS was radially fed 220kV Gowribidanur SS, this further resulted in complete loss of supply at 220kV KIADB SS.	----	125 MW	GD-1	0.0979
2	SR	i. 220kV Areakode - Kanhirode line 220kV Areakode - Orkattery line	ii. KSEB	6-Apr-20	19:54	6-Apr-20	20:05	11 mins	Complete outage of 220kV Kanhirode SS, 220kV Mylatty SS, 220kV Thaliparamba SS, 220kV Ambalathara SS, 220kV Nallalam GS and 220kV Orkattery SS of KSEB at 19:54 Hrs on 06-04-2020: During antecedent conditions, 220kV Thaliparamba SS, 220kV Ambalathara SS, 220kV Mylatty SS and 220kV Kanhirode SS were radially fed from 400kV/220kV Kozhikode SS and 220kV Nallalam GS due to bus split operation at 220kV Areakode SS. Also, 220kV Orkattery SS was fed from 220kV Areakode SS and 220kV Kanhirode SS. Triggering incident was RY fault in 220kV Areakode Kanhirode line and 220kV Areakode Orkattery line. Tripping of 220kV Areakode Kanhirode line and 220kV Areakode Orkattery line resulted in complete loss of supply at 220kV Kanhirode SS, 220kV Thaliparamba SS, 220kV Mylatty SS, 220kV Ambalathara SS, 220kV Nallalam GS and 220kV Orkattery. After the tripping of 220kV lines, 400kV Mysore Kozhikode line-2 tripped on operation of OV St-1 protection at Kozhikode end and DT was received at Mysore end.	22 MW	235 MW	GD-1	0.43
3	SR	i. 220kV Pothencode - Kattakada line-1 & 2 220kV/110kV 200MVA transformers 1, 2 and 3 at Pothencode iii. 220kV/110kV 200MVA transformer 1 at Kattakada	ii. KSEB	14-Apr-20	10:32	14-Apr-20	10:57	25 mins	Complete outage of 220kV Kattakada SS and Multiple Tripping in 220kV Pothencode SS of KSEB : Triggering incident was RN fault in 220kV switchyard of Kattakada SS. Both 220kV Pothencode Kattakada line-1 & 2 tripped on operation of DEF protection at Pothencode end and Distance Reverse Zone protection at Pothencode end. At the same time, 220kV/110kV 200MVA transformers 1, 2 and 3 at Pothencode and 220kV/110kV 200MVA transformer# 1 at Kattakada also got tripped on operation of non-directional backup Earth fault protection . Tripping of 220kV Pothencode Kattakada line-1 & 2 resulted in complete loss of supply at 220kV Kattakada SS since it is radially fed from Pothencode SS.	----	186 MW	GD-1	0.08
4	SR	i. 400kV Chandalurpur - Bhoopalapally line-2 ii. 400kV Chandalurpur - Gajwel line-2 400kV Chandalurpur - Tippapur line-2 Chandalurpur - Tukkapur line-1	iii. iv. 400kV TSTRANSCO	18-Apr-20	11:48	18-Apr-20	14:14	2 Hrs 26 mins	Complete outage of 400kV Chandalurpur station of TSTRANSCO: During pre-commissioning activities of the 400kV Consumer Bus at Chandalurpur, R-phase Bus fault occurred. (Details awaited). In absence of bus bar protection at the 400kV Consumer Bus, three of the four connected 400kV lines at Chandalurpur tripped on operation of reverse zone protection. Remote end of the lines tripped on Zone-2 distance protection. 400kV Gajwel - Chandalurpur line-2 tripped on Zone-1, distance protection. This resulted in complete outage of 400kV Chandalurpur station.	----	----	GD-1	----
5	SR	i. 230 kV Karaikudi - Karambyam line ii. 230kV Thiruvarur - Karambyam line iii. 230kV Thiruvarur - Kumbakonam line iv. 230kV Thiruvarur - NPPL line v. 230kV Thiruvarur - PPN line vi. 230 kV Thiruvarur - Thanjavur line vii. 230kV/110kV Transformers#1,2 and 3 at Thiruvarur	TANTRANSCO	19-Apr-20	4:14	19-Apr-20	4:30	16 mins	Complete outage of 230kV/110kV Karambyam SS and Multiple Tripping in 230kV/110kV Thiruvarur SS of TANTRANSCO: During antecedent conditions, 230kV Karambyam SS was fed from 230kV Thiruvarur SS and 230kV Karaikudi SS. Triggering incident was YN fault in 230kV Karaikudi Karambyam line. At the same time, bus fault occurred at 230kV Thiruvarur SS due to snapping of B phase dropper conductor of 230 kV Thanjavur Thiruvarur line near Bus-1 side isolator and Bus-1 BBP operated resulting in the tripping of all the elements connected to 230kV Thiruvarur SS. Since 230kV Thiruvarur SS was under single bus operation, this resulted in de-energization of 230kV bus at Thiruvarur SS. Tripping of 230kV Karaikudi Karambyam line and 230kV Thiruvarur Karambyam line resulted in complete loss of supply at 230kV Karambyam SS	----	340 MW	GD-1	0.09
6	SR	i. 230kV Karambyam - Karaikudi line	KPTCL	19-Apr-20	7:12	19-Apr-20	7:54	42 mins	Complete outage of 230kV Karambyam SS of TANTRANSCO: In the antecedent 230kV Karambyam - Thiruvarur line was out of service. Triggering incident was Y-phase insulator flashover of 230kV Karaikudi - Karambyam line and the line tripped on distance protection. This resulted in complete loss of supply at 230kV Karambyam station.	----	200 MW	GD-1	0.14

**Eastern Region-Grid Event Report for April 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 Tashiding - Rangpo S/C 220 kV Rangpo - New Melli - S/C 132 kV Rangpo Gangtok D/C 132 kV Rangpo Chujachen D/C	ISTS	1-Apr-20	18:23	1-Apr-20	18:57	0:34	At 18:23 hrs, 220 kV Rangpo - New Melli - S/C got tripped due to R and Y phase to earth fault in the circuit near to Rangpo end. In addition to this, 132 kV Rangpo Gangtok D/C also got tripped simultaneously with this fault. As Gangtok load was radially supplied from Rangpo through 132 kV Rangpo-Gangtok D/C so with their tripping, total power failure occurred at Gangtok city. At same time, 220 kV Rangpo - Tashiding S/C also got tripped only from Tashiding end sensing the same R and Y phase to earth fault in zone - 1 resulting total power failure at Tashiding - Jorehang - New Melli section and tripping of running unit at Tashiding due to loss of evacuation path. After these, at 18:28 hrs. 132 kV Rangpo Chujachen - D/C tripped from both ends on Y and B phase to earth fault. The fault was in circuit 1 based on which Chujachen has issued trip command in zone 1 and send DT to remote end. However, at the same time due to receipt of Direct trip from remote end , circuit 2 got tripped from Rangpo end. This led to black out of 132 kV Chujachen Hydro Power substation.	35	28	GD-1	0.0159
2	ER	220 kV Balimela - Jayanagar T/C 220 kV Balimela - Malkangiri S/C All Running Units at Balimela HPS and Unit 4 at Upper Kolab HPS	OPTCL	3-Apr-20	3:19	3-Apr-20	4:47	1:28	At 03:19 hrs. all running units and connected 220 kV feeders at Balimela HEP tripped on operation of bus bar protection of 220 kV bus 2 at Balimela (only bus 2 was in service at the time of disturbance) due to bursting of B phase bus CT (SL attached in annexe 1) at Balimela end of 220 kV Balimela - Jayanagar - 1. On inspection, SF6 circuit breaker, post insulator, line isolator (both 3P and 4P) and line CT of 220 kV Balimela - Jayanagar - 1 at Balimela end were also found in damaged condition.	245	0	GD-1	0.0000
3	ER	220 kV TTPS - Patratu TPS(PTPS) S/C Tenughat Unit 1 and 2	JUSNL	14-Apr-20	12:47	14-Apr-20	13:05	0:18	220 kV Tenughat (TTPS) Biharshariff S/C tripped on 12:32 hrs. due to B phase to earth fault. At 12:46 hrs, 220 kV Tenughat (TTPS) - Patratu (PTPS) S/C tripped on earth fault from PTPS end resulting in tripping of both running units at TTPS due to loss of the only available evacuation path. With this 220 kV Tenughat substation got black out.	299	0	GD-1	0.0000
4	ER	220 kV Santaldih TPS (STPS) - Chandil S/C 220 kV Ranchi - Chandil S/C 220 kV Ramchandrapur - Chandil S/C	JUSNL	15-Apr-20	17:20	15-Apr-20	18:00	0:40	At 17:20 hrs., 220 kV Santaldih TPS (STPS) - Chandil S/C, 220 kV Ranchi - Chandil S/C and 220 kV Ramchandrapur - Chandil S/C tripped. At same time, flush at LT side of one 100 MVA, 220/132 kV ICT was observed and all four 132 kV feeders connected to Chandil were hand tripped resulting total power failure at Chandil end	0	35	GD-1	0.0233
5	ER	220 kV Parulia Durgapur (PG) D/C 220 kV Parulia Tamla D/C 220 kV Parulia Muchipara D/C 220 kV Parulia Waria D/C	DVC	17-Apr-20	10:50	17-Apr-20	13:55	3:05	At 10:49 hrs. 220 kV Waria - Parulia - 1 tripped on B phase to earth fault. At the same time all connected 220 kV lines tripped from Parulia end due to operation of bus bar protection. Around 30 kV dip has been observed in B phase voltage at Durgapur PMU data at the time of the disturbance. No auto-reclose operation has been captured in PMU data.	0	25	GD-1	0.0771
6	ER	400 kV GMR - Meramundali S/C	OPTCL	18-Apr-20	19:34	18-Apr-20	22:11	2:37	GMR unit # 3 was connected to rest of the grid via 400 kV Meramundali - GMR S/C. At 19:34 hrs, 400 kV GMR - Meramundali S/C tripped on B phase to earth fault (fault location at 4 km from Meramundali) resulting tripping of this unit.	249	0	GD-1	0.0000
7	ER	400 kV Barh - Motihari - 2	ISTS	19-Apr-20	20:54	19-Apr-20	21:20	0:26	400/132 kV Motihari was connected to rest of the grid via 400 kV Barh - Motihari - 2 (Others lines are under breakdown due to tower-collapse) and radial load of 132 kV Betya, 132 kV Motihari (Bihar) and 132 kV Raxaul was supplied through 400/132 kV ICT - 2 at Motihari. At 20:54 hrs. 400 kV Barh - Motihari - 2 got tripped due to Y phase to earth fault resulting in total power failure at 400/132 kV Motihari along with 132 kV Motihari, 132 kV Betya and 132 kV Raxaul and other surrounding areas.	0	140	GD-1	0.0607
8	ER	400 kV Teesta III - Kishangunj S/C	ISTS	21-Apr-20	11:00	21-Apr-20	12:39	1:39	At 09:30 hrs, 400 kV Teesta III - Dikchu S/C tripped from both ends. Due to problem in relay line could not be charged from Dikchu end and line was idle charged from Teesta III end. At 11:00 hrs, 400 kV Teesta III - Kishangunj S/C tripped from Teesta III end on operation of over voltage stage I protection and from Kishangunj end due to DT receipt.	0	0	GD-1	0.0000
9	ER	400 kV bus - 2 at JITPL Unit #1 and #2 at JITPL	ISTS	21-Apr-20	18:29	22-Apr-20	5:22	10:53	At 18:26 hrs. successful auto-reclose of 400 kV JITPL - Angul - 2 occurred at JITPL end for transient R phase to earth fault. At 18:29 hrs. both running units at JITPL tripped because of operation of bus bar protection of bus 2 at JITPL due to CT failure	749	0	GI-2	0.0000
10	ER	220 kV TTPS - Biharshariff S/C 220 kV TTPS - Patratu TPS(PTPS) S/C Tenughat Unit 1 and 2	JUSNL	22-Apr-20	20:12	22-Apr-20	21:32	1:20	At 20:12 hrs. 220 kV Tenughat (TTPS) - Patratu (PTPS) S/C tripped from PTPS end detecting a B phase to earth fault in zone 1. At same time, 220 kV TTPS - Biharshariff S/C tripped from Biharshariff end in 350 ms on zone - 2 distance protection. Due to tripping of both circuits, both the running units at TTPS tripped due to loss of evacuation path and total power failure occurred at TTPS	313	50	GD-1	0.0667
11	ER	400 kV Barh - Motihari - 2	ISTS	26-Apr-20	8:42	26-Apr-20	9:45	1:03	400/132 kV Motihari was connected to rest of the grid via 400 kV Barh - Motihari - 2 (Others lines are under breakdown due to tower-collapse) and radial load of 132 kV Betya, 132 kV Motihari (Bihar) and 132 kV Raxaul was supplied through 400/132 kV ICT - 2 at Motihari. During the event, 400 kV Barh - Motihari - 2 got tripped due to Y phase to earth fault resulting in total power failure at 400/132 kV Motihari along with 132 kV Motihari, 132 kV Betya and 132 kV Raxaul and other surrounding areas.	0	80	GD-1	0.0840
12	ER	400 kV Barh - Motihari - 2	ISTS	26-Apr-20	11:10	26-Apr-20	11:15	0:05	400/132 kV Motihari was connected to rest of the grid via 400 kV Barh - Motihari - 2 (Others lines are under breakdown due to tower-collapse) and radial load of 132 kV Betya, 132 kV Motihari (Bihar) and 132 kV Raxaul was supplied through 400/132 kV ICT - 2 at Motihari. During the event, 400 kV Barh - Motihari - 2 got tripped due to Y phase to earth fault resulting in total power failure at 400/132 kV Motihari along with 132 kV Motihari, 132 kV Betya and 132 kV Raxaul and other surrounding areas.	0	80	GD-1	0.0067
13	ER	220 kV TTPS - Patratu TPS(PTPS) S/C Tenughat Unit 1 and 2	JUSNL	28-Apr-20	6:29	28-Apr-20	9:09	2:40	At 06:12 hrs auxiliary transformer of unit 1 at TTPS at tripped due to mal operation of differential relay resulted tripping of Tenughat Unit 1. At 06:29 hrs, all feeders connected to Bus 2 including Tenughat Unit #2, 220 kV TTPS - Patratu (PTPS) S/C, Station Transformer 2 at TTPS and 220 kV Bus coupler beaker at TTPS tripped due to operation LBB operation at TTPS. However, Tenughat station supply remains intact through 220 kV TTPS - Biharshariff S/C which was connected to 220 kV Bus-1 at TTPS.	300	50	GI-1	0.1333
14	ER	220 kV Santaldih TPS (STPS) - Chandil S/C 220 kV Ranchi - Chandil S/C 220 kV Ramchandrapur - Chandil S/C	JUSNL	30-Apr-20	19:37	30-Apr-20	21:18	1:41	At 19:37 hrs, all 220 kV lines and 220/132 kV ATRs tripped at Chandil due to burst 100 MVA 220/132 kV ICT - 3 at Chandil and total power failure occurred at Chandil and its nearby areas. Due to testing of other ICTs, initially power was extended to affected area from Manique (DVC) by 21:18 hrs.	0	145	GD-1	0.2441

North Eastern Region-Grid Disturbances Report for April 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 Melriat(PG)-Zuangtui line.	POWERGRID	02-Apr-20 19:22	02-Apr-20 19:58	0:36:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Melriat(PG)-Zuangtui line. At 19:22 Hrs on 02.04.20, 132 kV Melriat(PG)-Zuangtui line tripped. Due to tripping of this element, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	47	0	0.028	GD I		
2	NER	132 kV Dimapur(PG) - Dimapur(DoP, Nagaland) I and II Lines.	POWERGRID & DoP, Nagaland	03-Apr-20 12:15	03-Apr-20 12:39	0:24:00	Dimapur area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Dimapur(PG) - Dimapur(DoP, Nagaland) I and II Lines. At 12:15 Hrs on 03.04.20, 132 kV Dimapur(PG) - Dimapur(DoP, Nagaland) I and II Lines tripped. Due to tripping of these elements, Dimapur area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	41	0	0.016	GD 1		
3	NER	132 kV Imphal(Yurembam)-Karong line, 132 kV Dimapur-Kohima line and 132 kV Doyang-Sanis lines	POWERGRID, Do P Nagaland and MSPCL	04-Apr-20 11:13	04-Apr-20 11:20	0:07:00	Kohima area of Nagaland Power System & Karong Area of Manipur Power System were connected with the rest of NER Grid through 132 kV Doyang-Sanis line, 132 kV Dimapur - Kohima line and 132 kV Imphal(Yurembam)-Karong Line. At 11:13 Hrs on 04.04.2020, 132 kV Dimapur-Kohima line, 132 kV Doyang-Sanis line & 132 kV Imphal(Yurembam)-Karong lines tripped. Due to tripping of these elements, Kohima & Karong areas were separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	0	30	0	0.0040	GD I		
4	NER	132 kV Imphal(Yurembam)-Karong line and 132 kV Doyang-Sanis lines	MSPCL and DoP Nagaland	04-Apr-20 13:36	04-Apr-20 14:12	0:36:00	Kohima area of Nagaland Power System & Karong Area of Manipur Power System were connected with the rest of NER Grid through 132 kV Doyang-Sanis line and 132 kV Imphal(Yurembam)-Karong Line (132 kV Dimapur - Kohima line was under emergency shutdown w.e.f. 12:42 Hrs on 04.04.20) At 13:36 Hrs on 04.04.2020, 132 kV Imphal(Yurembam)-Karong line & 132 kV Doyang-Sanis lines tripped. Due to tripping of these elements, Kohima & Karong areas were separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	0	28	0	0.0170	GD 1		
5	NER	132 kV Lumshnong-Panchgram line and 132 kV Khleihriat- Lumshnong line.	MePTCL & AEGCL	07-Apr-20 09:27	07-Apr-20 09:47	0:20:00	Lumshnong area of Meghalaya Power System was connected with rest of NER Grid through 132 kV Lumshnong-Panchgram line and 132 kV Khleihriat- Lumshnong line. At 09:27 Hrs on 07.04.2020, 132 kV Lumshnong-Panchgram and 132 kV Khleihriat- Lumshnong lines tripped. Due to tripping of these elements, Lumshnong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	20	0	0.0070	GD 1		
6	NER	132 kV Kohima-Dimapur line & 132 kV Sanis-Wokha line	POWERGRID, MSPCL & DoP, Nagaland	07-Apr-20 09:34	07-Apr-20 09:50	0:16:00	Kohima area of Nagaland Power System & Karong Area of Manipur Power System were connected with the rest of NER Grid through 132 kV Sanis-Wokha line and 132 kV Dimapur - Kohima line(132 kV Imphal(Yurembam)-Karong line was declared faulty w.e.f 13:35 Hrs of 04.04.2020) At 09:34 Hrs on 07.04.2020, 132 kV Dimapur-Kohima & 132 kV Sanis-Wokha lines tripped. Due to tripping of these elements, Kohima area and Karong area were separated from the rest of NER Grid and subsequently collapsed due to load generation mismatch in these areas.	6	12	0.002	0.0030	GD 1		
7	NER	132 kV Lumshnong-Panchgram and 132 kV Khleihriat- Lumshnong lines	MePTCL & AEGCL	08-Apr-20 10:55	08-Apr-20 11:06	0:11:00	Lumshnong area of Meghalaya Power System was connected with rest of NER Grid through 132 kV Lumshnong-Panchgram line and 132 kV Khleihriat- Lumshnong line. At 10:55 Hrs on 08.04.2020, 132 kV Lumshnong-Panchgram and 132 kV Khleihriat- Lumshnong lines tripped. Due to tripping of these elements, Lumshnong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	21	0	0.0040	GD 1		
8	NER	132 kV Monarchak- Udaipur line and 132 kV Monarchak - Rokhia lines	TSECL	15-Apr-20 13:38	15-Apr-20 13:58	0:20:00	Rabindranagar area of Tripura Power System & Monarchak Power Staion were connected with rest of NER Grid through 132 kV Monarchak- Udaipur line and 132 kV Monarchak - Rokhia line. At 13:38 Hrs on 15.04.20, 132 kV Monarchak- Udaipur line and 132 kV Monarchak - Rokhia line tripped. Due to tripping of these elements, Rabindranagar area of Tripura Power System & Monarchak Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	56	5	0.019	0.0020	GD 1		
9	NER	132 kV Loktak- Ningthoukhong line and 132 kV Imphal - Ningthoukhong lines	MSPCL	15-Apr-20 16:00	15-Apr-20 16:10	0:10:00	Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kV Loktak- Ningthoukhong line and 132 kV Imphal - Ningthoukhong line(132 kV Kakching - Kongba line kept open for over-loading of 132 kV Loktak- Ningthoukhong line) At 16:00 Hrs on 15.04.20, 132 kV Loktak- Ningthoukhong line and 132 kV Imphal - Ningthoukhong lines 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	12	0	0.0020	GD 1		
10	NER	132 kV Doyang Sanis line	DoP Nagaland	15-Apr-20 16:27	15-Apr-20 17:18	0:51:00	Kohima area of Nagaland Power System & Karong Area of Manipur Power System were connected with the rest of NER Grid through 132 kV Doyang-Sanis line (132 kV Dimapur - Kohima line & 132 kV Imphal(Yurembam)-Karong line were under force outage) At 16:27 Hrs on 15.04.2020, 132 kV Doyang Sanis line tripped. Due to tripping of this element, Kohima area was separated from the rest of NER Grid and subsequently collapsed due to load generation mismatch in these areas.	6	25	0.005	0.0210	GD 1		
11	NER	132 kV Badarpur-Kolasib line & 132 kV Aizawl - Kolasib lines	PGCIL	25-Apr-20 16:37	25-Apr-20 17:15	0:38:00	Kolasib area of Mizoram Power System and Tural Power Station were connected with the rest of NER Grid through 132 kV Badarpur-Kolasib line & 132 kV Aizawl - Kolasib line. At 16:37 Hrs on 25.04.2020, 132 kV Badarpur-Kolasib line & 132 kV Aizawl - Kolasib lines tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	16	2	0.01	0.0010	GD 1		
12	NER	132 kV Balipara-Tenga line	NEEPCO & DoP, Arunachal Pradesh	27-Apr-20 18:00	27-Apr-20 18:22	0:22:00	Khupi area of Arunachal Pradesh Power System and Dikshi HEP were connected with the rest of NER Grid through 132 kV Balipara-Tenga line. At 18:00 Hrs on 27.04.2020, 132 kV Balipara-Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System and Dikshi HEP were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	7.5	15	0.003	0.0060	GD 1		
13	NER	132 kV Ranganadi - Itanagar (Chimpu) line and 132 kV Pare - Itanagar (Chimpu) line	NEEPCO & DoP, Arunachal Pradesh	27-Apr-20 18:06	27-Apr-20 18:40	0:34:00	Capital area (Itanagar area) of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Ranganadi-Itanagar (Chimpu) line and 132 kV Pare - Itanagar (Chimpu) line(132 kV Lekhi - Itanagar (Chimpu) line kept open due to CT restriction at Lekhi). At 18:06 Hrs on 27.04.2020, 132 kV Ranganadi - Itanagar (Chimpu) line and 132 kV Pare - Itanagar (Chimpu) line tripped. Due to tripping of these elements, Capital area (Itanagar 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	0.0070	GD 1		
14	NER	132 kV Dharmanagar - Dullavcherra Line & 132 kV Dharmanagar - P K Bari Line	AEGCL & TSECL	28-Apr-20 17:27	28-Apr-20 17:52	0:25:00	Dharmanagar area of Tripura Power System was connected with the rest of NER Grid through 132 kV Dharmanagar - Dullavcherra Line & 132 kV Dharmanagar - P K Bari Line. At 17:27 Hrs on 28.04.2020, 132 kV Dharmanagar - Dullavcherra Line & 132 kV Dharmanagar - P K Bari Line tripped. Due to tripping of these elements, Dharmanagar area of Tripura Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	10	0	0.0040	GD 1		
15	NER	132 kV Ranganadi-Ziro line.	PGCIL	30-Apr-20 21:16	30-Apr-20 21:29	0:13:00	Ziro area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Ziro line. At 21:16 Hrs on 30.04.2020, 132 kV Ranganadi - Ziro line tripped. Due to tripping of this element, Ziro area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	27	0	0.0060	GD 1		

**North Eastern Region-Grid Incidences Report for April 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 6	NEEPCO	05-Apr-20 11:58	05-Apr-20 12:45	0:47:00	AGBPP Unit-6 tripped at 11:58 Hrs on 05-04-20 due to High Vibration . Revision done from Block No.52 on 05-04-20	27	0	0.021	0	GI 2
2	NER	BgTPP Unit -2	NTPC	06-Apr-20 09:53	06-Apr-20 10:30	0:37:00	BgTPP Unit-2 tripped at 09:53 Hrs on 06-04-20 due to loss of supply to Cooling fan of GT (Problem in Cooling fan control panel). Revision done from Block No. 43 on 06-04-20	113	0	0.070	0	GI 2
3	NER	Loktak Unit 2	NHPC	07-Apr-20 16:12	07-Apr-20 17:15	1:03:00	Loktak Unit-2 tripped at 16:12 Hrs on 07-04-20 due to bursting of B-Phase LA . Revision done from Block No. 70 on 07-04-20.	35	0	0.040	0	GI 1
4	NER	AGTCCPP - UNIT 6	NEEPCO	16-Apr-20 15:37	43937.6875	0:53:00	AGTCCPP - UNIT 6 tripped at 15:37 Hrs on 16-04-20 due to Console Trip (Vacuum Pressure Low). Revision done from Block No. 67 on 16-04-20	13	0	0.011	0	GI 1
5	NER	Palatana GTG-1 and STG-1	OTPC	21-Apr-20 13:31	21-Apr-20 14:15	0:44:00	Palatana Module 1(GTG-1 and STG-1) tripped at 13:31 Hrs on 21-04-20 due to Fire Detector Trouble in Zone-III protection. Revision done from Block No 58 on 21-04-20.	317	0	0.230	0	GI 2
6	NER	AGBPP Unit-6 & Unit-9	NEEPCO	24-Apr-20 03:14	24-Apr-20 04:00	0:46:00	AGBPP Unit-6 tripped at 03:14 Hrs on 24-04-20 due to excessive vibration. Subsequently, Unit-9 tripped due to outage of GTG-5 & GTG-6. Revision done from Block No.17 on 24-04-20	44	0	0.033	0	GI 2
7	NER	AGBPP Unit-6	NEEPCO	27-Apr-20 14:30	27-05-20 15:15	0:45:00	AGBPP Unit- 6 tripped at 14:30 Hrs on 27-04-20 due to Flame detector failure. Revision done from Block No 62 on 27-04-20.	26	0	0.020	0	GI 2
8	NER	AGBPP Unit-6	NEEPCO	28-Apr-20 14:22	28-Apr-20 15:00	0:38:00	AGBPP Unit-6 tripped at 14:22 Hrs on 28-04-20 due to loss of flame. Revision done from Block No.61 on 28-04-20	30	0	0.020	0	GI 2