

Grid incidents/Disturbances/Events for Month of March-2017

Northern Region													
S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event <i>(As reported)</i>	Genera tion Loss(M W)	Load Loss(MW)	Category as per CEA Grid Standards	Energy Unserviced (MU)
				Date	Time	Date	Time	Time					
1	NR	1) 400kV Obra-Sultanpur 2) 400kV Obra-Bara 3) 400/220kV 240MVA ICT-1 4)400kV Obra TPS Unit #9	Uttar Pradesh (UP)	3-Mar-17	22:16	3-Mar-17	22:59	00:43	Earth fault occurred at Unit #9 Obra TPS, leads to tripping of 400kV Obra-Sultanpur, 400kV Obra-Bara and 240MVA 400/220kV ICT-1 by Bus-Bar protection. From PMU, it is observed that the fault cleared after 500ms, voltage dip in all three phase was same.	180	85	GD-1	0.004
2	NR	1)400kV Jhatikara-Mundka ckt 1 2)400kV Jhatikara-Mundka ckt 2 3)400kV Mundka-Bawana Ckt-II 4)400kV Daultabad-Jhajjar ckt-1 5)400/220kV 315MVA ICT-IV at Mundka 6)220/66kV 160MVA ICT-III at Mundka 7) CCGT Bawana Unit #4 8)CCGT Bawana STG-2 9)220kV Mundka- Najafgarh Ckt. 10) Unit-1&2 of Jhajjar	Delhi	8-Mar-17	14:11	8-Mar-17	14:45	00:34	R-phase jumper of wave trap of 400kV Bawana-Mundka ckt-1 snapped. It resulted into open conductor fault. From DR, raise in R phase conductor observed in 400kV Jhatikara-Mundka D/C, 400kV Mundka-Bawana ckt-2, 400kV Daultabad-Jhajjar ckt-1 tripped on DEF (directional earth fault) protection. 400kV Daultabad-Jhajjar ckt-2 was already under shut down. 400/220kV 315MVA ICT-1 at Mundka, 220/66kV 160MVA ICT-III at Mundka also tripped at the same time. CCGT Bawana generators were also tripped by back up earth fault protection. Unit-1,2 at Jhajjar also tripped on HV back-up earth fault. Unit-3 of Jhajjar was already under outage.Entire load of 220kV Najafgarh was being fed by 220kV Mundka-Najafgarh ckt. After tripping all lines at Mundka end, 220kV Mundka-Najaffgarh line tripped by UFR.	250	120	GD-1	0.02
3	NR	1)400kV Nallagarh(PG)-Rampur(SJVNL) ckt 1 2)400kV Nallagarh(PG)-Rampur (SVNL) ckt 2 3)400kV Jhakri(SJVNL)-Rampur(SJVNL) ckt2 4)400kV Jhakri(SJVNL)-Rampur(SJVNL)ckt1 5)400kV Jhakri(SJVNL)-Karchamwangtoo(JP) ckt2 6)Baspa(HP)-Karchamwangtoo(JP) ckt2	SJVNL/J SW(Karc ham)/ POWER GRID	8-Mar-17	13:19	8-Mar-17	20:26	07:07	Flash over occurred in Bus Bar-1, G-1 compartment (Blue-phase) fo Rampur Bus resulted in operation of bus bar protection first at Bus-1 later at Bus-2 leads to tripping of 400kV Nallagarh(PG)-Rampur(SJVNL) -1 &2, Jhakri(SJVNL)-Rampur(SJVNL)-1&2 whereas Jhakri(SJVNL)-Karchamwangtoo(JP) 2 and Baspa(HP)-Karchamwangtoo(JP) 2 tripped on over voltage.	Nil	Nil	GI-2	Nil
4	NR	1)765kV Anpara-C-Unnao 2) 765/400kV 1000MVA ICT 1	Uttar Pradesh (UP)	9-Mar-17	15:31	9-Mar-17	17:27	01:56	765/400kV 1000MVA ICT at Anpara end tripped due to operation differential protection of transformer. 765kV Anpara-C- Unnao Ckt also tripped at the same time.	Nil	Nil	GI-2	Nil

S.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 Unreserved (MU)
				Date	Time	Date	Time	Time					
5	NR	1)400kV Alaknanda HEP(UP)-Srinagar(UTT) 1 2)400kV Alaknanda HEP(UP)-Srinagar(UTT) 2 3)400kV Muzaffarnagar-Vishnuprayag 1	Uttar Pradesh (UP)/UTTARA KHAND	9-Mar-17	18:02	9-Mar-17	19:28	01:26	Due to R-phase to earth fault, 400kV Alaknanda HEP(UP)-Srinagar(UTT) 1&2 and 400kV Muzaffarnagar-Vishnuprayag 1 lines tripped.	Nil	Nil	GI-2	Nil
6	NR	1) 400kV Kurukshetra(PG) –Abdullapur 1 2) 400kV Kurukshetra(PG) –Abdullapur 2 3)400kV Kurukshetra(PG)-Sonipat 1 4)400kV Kurukshetra(PG)-Sonipat 2 5)400kV Kurukshetra(PG)-Malerkotla(PG) 2	POWER GRID	10-Mar-17	21:12	10-Mar-17	21:34	00:22	800kV HVDC Champa-Kurukshetra Pole -1 blocked and its necessary filters were not tripped. Due to Filterbanks MVAR, over voltage occurred on the bus and tripped 400kV Kurukshetra(PG) –Abdullapur 1&2; 400kV Kurukshetra(PG)-Sonipat 1&2 and 400kV Kurukshetra(PG)-Malerkotla(PG) 2 by over voltage protection whereas other lines were already under shut-down.	Nil	Nil	GI-2	Nil
7	NR	1) 400kV AlaknandaHEP-Muzaffarnagr ckt 2 2) 400kV Alaknanda HEP-Srinagar ckt 1	Uttarakhand/Uttar Pradesh (UP)/Alaknanda	14-Mar-17	15:53	14-Mar-17	17:52	01:59	400kV Alaknanda HEP - Muzaffarnagar - 2 line tripped by Y-B phase to ground fault.along with 400kV Alakanda HEP-Muzaffarnagar-2, 400kV Alakanada HEP- Srinagar-1 also tripped by the same fault.From PMU, almost similar dip observed in all three phases	Nil	Nil	GI-2	Nil
8	NR	1) 400kV Kurukshetra(PG) –Abdullapur 1 2) 400kV Kurukshetra(PG) –Abdullapur 2 3)400kV Kurukshetra(PG)-Sonipat 1 4)400kV Kurukshetra(PG)-Malerkotla(PG) 1	POWER GRID	14-Mar-17	00:19	14-Mar-17	01:06	00:47	While ramping down power flow of HVDC CHampa-Kurukshetra Pole-1, non-tripping of un-wanted filter banks by RPC leads to rise in Voltage. Over voltage occurred and tripped 400kV Kurukshetra(PG) –Abdullapur 1; Kurukshetra(PG)-Malerkotla(PG) 1; Kurukshetra(PG)-Sonipat 1 and Kurukshetra(PG) –Abdullapur 2 .whereas other lines were already under shut-down.	Nil	Nil	GI-2	Nil
9	NR	1) 400kV Ballabgarh-Kanpur 1 2) 400kV Ballabgarh-Kanpur 3 3) FSC of Ballabgarh-Kanpur ckt-1 4) 400kV Ballabgarh-Kanpur ckt-1 5) 220kV Samaypur-Ballabgarh (BBMB) ckt-3	POWER GRID	14-Mar-17	10:58	14-Mar-17	11:36	00:38	Blasts in FSC at Ballabgarh end of 400kV Ballabgarh-Kanpur ckt 1 leads to tripping of 400kV Ballabgarh-Kanpur ckt-1&3 and 400kV Ballabgarh-Kanpur ckt-2 tripped due to failure of B-phase signal column at Ballabgarh. From PMU, First max dip observed in Blue phase and second max dip observed in Y phase. 220kV Samaypur-Ballabgarh (BBMB) ckt-3 also tripped from 220kV Samaypur (BBMB) end.	NIL	Nil	GI-2	Nil

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Genera tion Loss(M W)	Load Loss(MW)	Category as per CEA Grid Standards	Energy Unservd (MU)
				Date	Time	Date	Time	Time					
10	NR	1) 220kV Abdullapur-Yamunanagar DC RTP-1 2) 220kV Abdullapur-Yamunanagar DC RTP-1 3) 220kV Abdullapur-Railways-1 4) 220kV Abdullapur-Railways-2 5) 220kV Abdullapur-Jorian-1 6) 220kV Abdullapur-Jorian-2 7) 220kV Abdullapur-Teppla-1 8) 220kV Abdullapur-Teppla-2 9) 400/220kV 315MVA ICT-2,3,4	POWER GRID/ Haryana	18-Mar-17	10:40	18-Mar-17	10:48	00:08	Bus-bar protection operated at 220kV side at 400/220kV Abdullapur(PG) leads to tripping of 400/220kV 315MVA ICT's 2,3,4 and all 220kV feeders connected to 400/220kV Abdullapur(PG).	NIL	20	GD-1	0.003
11	NR	1) 400kV Patiala-Ludhiana1, 2) 400kV Patiala-Panchkula 2, 3) 400kV Patiala-Nallagarh, 4) 400/220kV 315MVA ICT2 5) 400/220kV 500MVA ICT3	POWER GRID/ Punjab	18-Mar-17	13:49	18-Mar-17	13:54	00:05	400kV Patiala-Panchkula ckt-1 was already tripped due to over voltage protection and Bus-1 of 400kV Patiala(PG) was already in shutdown, all 400kV lines were connected to 400kV Patiala(PG) bus-2. 400kV Patiala-Ludhiana ckt-1 tripped due to operation of DEF element of Main-2 relay. During restoration of this line from Patiala (PG) end, LBB protection operation leads to tripping of all main CB connected to 400kV bus-2 of Patiala (PG). 400/220kV ICT-2&3 tripped due to already tripped tie CB in the dia and 400kV Patiala-Panchkula ckt-2 tripped due to incomplete dia.	NIL	Nil	GI-2	Nil
12	NR	1) 220kV Samaypur-Ballabgarh-I 2) 220kV Samaypur-Ballabgarh-2 3) 220kV Samaypur-FGPP-II 4) 220kV Samaypur-Ch Dadri 5) 400/200kV 315MVA ICT-II 6) 400/200kV 315MVA ICT-IV 7) 220kV Samaypur-Palli-I 8) 220kV Samaypur- Palwal-I 9) 220kV Samaypur-Ballabgarh-3 10) 220kV Ballabgarh- BTPS CKT- I 11) 220kV Ballabgarh- BTPS CKT- 2	POWER GRID /BBMB	20-Mar-17	10:22	20-Mar-17	11:20	00:58	220kV Bus-bar protection operated at 220kV Samaypur(BBMB) leads to tripping 220kV Samaypurpur-Ballabgarh ckt-1 ,2,3, 220kV Samaypur (BBMB)-FGPP ckt-2, 220kV Samaypur (BBMB)-Palli ckt-1, 220kV Samaypur (BBMB)-Badshahpur ckt-1, 220kV Samaypur (BBMB)- Palwal ckt-1, 220kV Samaypur (BBMB)-Charkhi Dadri, 400/220kV ICT 2 & 4 of Ballabgarh(PG) . Ballabgarh substation got isolated from Samaypur substation due to tripping of Ballabgarh- Samaypur (BBMB) ckt-I, II & III. All the load of B.T.P.S -I, II and 220/66kV, 100 MVA T/Fs 1, 2, 3 came on 220kV Ballabgarh-Dadri Ckt which all of sudden rose up to 756 A. As conductor size of 220kV Ballabgarh- Dadri Ckt is 0.3 inch square, increase in sudden load resulted into sheering of ending cone of Y-Phase at Tower no -505. 220kV Ballabgarh- BTPS CKT- I &II were tripped manually	150	300	GD-1	0.375
13	NR	1) 400kV Allahabad-Rihand 2) 400kV Allahabad-Fatehpur-2	POWER GRID /NTPC	24-Mar-17	09:54	24-Mar-17	10:15	00:21	Back-up impedance protection of Line Reactor of 400kV Allahabad end of 400kV Allahabad-Rihand line operated. As other 400kV bus of Allahabad(PG) was under planned outage. ie 400kV Allahabad-Rihand and 400kV Allahabad-Fatehpur ckt-2 was connected with one main breaker through live bus. 400kV Allahabad-Rihand and 400kV Allahabad-Fatehpur ckt-2 tripped due to opening of main CB after operation of reactor protection. From PMU, No significant fault observed, back-up impedance protection was mal-operated due to non-operation of voltage changeover logic during 400kV Allahabad (PG) bus shutdown.	NIL	Nil	GI-2	Nil

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Genera tion Loss(M W)	Load Loss(MW)	Category as per CEA Grid Standards	Energy Unservd (MU)
				Date	Time	Date	Time	Time					
14	NR	1) 765kV Balia-Lucknow 2) 765kV Balia-Varnasi 3) 765kV Balia-Gaya	POWER GRID	24-Mar-17	13:25	24-Mar-17	13:53	00:28	765kV Balia-Lucknow, 765kV Balia-Varanasi and 765kV Balia-Gaya tripped by LBB protection operation during testing of 765kV Bus-1 (under S/D) at 765kV Balia(PG). From PMU, No significant fault observed. It may be due to human error.	NIL	Nil	GI-2	Nil
15	NR	1) 400/220kV 315MVA ICT-2 at Bhilwara station 2) 400/220kV 315MVA ICT-1 at Bhilwara station	Rajasthan	25-Mar-17	18:40	25-Mar-17	21:53	03:13	Y-phase CT of 400/220kV 315MVA ICT-2 blasted at Bhilwara station, leads to tripping of 315MVA ICT-2 by back up earth fault/over current protection whereas 400/220kV ICT-1 tripped on over load.	NIL	400	GD-1	0.067
16	NR	1) 220kV Panipat-Charkhi Dadri 2) 220kV Panipat TPS(HVPNL)-Panipat(BBMB) 3) 220kV Panipat-Narela 2 4) 400/220kV 450MVA ICT 2	BBMB/ Haryana	26-Mar-17	16:27	26-Mar-17	18:12	01:45	The conductor of 33kV Sanal Road snapped in the yard and tripped by over current protection. At the same time bus-bar protection for 220kV bus-2 (RHS) at Panipat (BBMB) also operated. 400/220kV 450MVA ICT-2, 220kV Panipat-Charkhi Dadri, 220kV Panipat TPS(HVPNL)-Panipat(BBMB) ckt-2, 220kV Panipat-Narela 2 tripped.	NIL	Nil	GI-2	Nil
17	NR	1) 220kV Heerapura-NPH 2) 220kV Heerapura-Sanganer 3) 220kV Heerapura-Phulera 4) 400/220kV 250MVA ICT 1 5) 400/220kV 250MVA ICT 3 6) 400/220kV 250MVA ICT 4	Rajasthan	29-Mar-17	04:53	29-Mar-17	05:58	01:05	At 04:53 hrs Y-phase CT of 220kV Heerapura-NPH line bursted at Heerapura station. Bus Bar Protection also operated at 220kV Heerapura station. Due to 220kV side Y-phase CT blasted, tripped Heerapura-NPH LINE by line differential protection. 220kV Heerapura-PHULERA LINE, Bus sectionalizer & coupler tripped by E/F protection and 400/220kV 250MVA ICT-1 ,3, 4 at 400kV Heerapura station. 220kV Heerapura-SANGANER LINE also tripped	NIL	210	GD-1	0.23

Western Region							
Sl No.	Category of Grid Disturbance	Affected Area	Time and Date of occurrence of Grid Disturbance	Time and Date of Restoration	Duration	Loss of generation / loss of load during the Grid Disturbance	Brief details of the event (pre fault and post fault system conditions)
	(GD-I to GD-V)					(MW)	
1	GI-2	Sukha	02-03-17, 21:17:00	02-03-17, 23:10:00	01:53	Load Loss: NIL, Generation Loss: NIL	Tripping of 1. 400/220kV ICT -2 at Jabalpur 2. 400/220kV ICT -1 at Jabalpur 3. 220kV Sukha-Jabalpur-1 4. 220kV Sukha-Jabalpur-2 5. 220kV Sukha-Narsinghpur-2 6. 220kV Sukha-Panagar-2 7. 220kV Bus-2 due to B-Ph CT bursted on 220kV Side of 400/220kV ICT -2 (Jabalpur_PG) at Sukha(MP)
2	GD-1	Vadodara	14-03-17, 18:19:00	14-03-17, 19:33:00	01:14	Load Loss: NIL, Generation Loss: NIL	Tripping of 1. 400 kV Bus 2 2. 400 kV Vadodra-Pirana 1 3. 400 kV Vadodra-Pirana 2 4. 400 kV Vadodra-Asoj 1 5. 400 kV Vadodra-Asoj 2 6. 765/400 ICT 1 7. 765/400 ICT 2 due to configuration issue in Busbar Bay units of Extension bays leading to Blackout at 400 kV Vadodara S/S.
3	GD-1	Goa	16-03-17, 06:18:00	16-03-17, 06:56:00	00:38	Load Loss: 140 MW, Generation Loss: NIL	Tripping of 1. 220 kV Mapusa-Ponda 2. 220 kV Mapusa-Amona 3. 220 kV Amona-Ponda-1 due to faults (B-N)
4	GI-2	Bableshtar	18-03-17, 16:30:00	18-03-17, 17:33:00	01:03	Load Loss: NIL, Generation Loss: NIL	Tripping of 1. Bableshtar-Dhule-2 2. Bableshtar-Aurnagabad 3. Bableshtar-Padghe-2 4. 400/220 kV ICT-2 5. 400/220 kV ICT-3 due to operation of busbar protection due to Ektuni-Bableshtar-2 conductor snapping on Bableshtar bus 1

5	GD-1	Vav	21-03-17, 17:15:00	21-03-17, 17:40:00	00:25	Load Loss: 298 MW, Generation Loss: NIL	Tripping of 1. 220/66 kV 100 MVA Transformer-1 2. 220/66 kV 100 MVA Transformer-2 3. 220/66 kV 100 MVA Transformer-3 4. 220/66 kV 100 MVA Transformer-4 5. 220/66 kV 100 MVA Transformer-5 6. 220/66 kV 100 MVA Transformer-6 due to blasting of 10 MVar capacitor bank
6	GI-1	Chorania	22-03-17, 00:42:00	22-03-17, 14:00:00	13:18	Load Loss: NIL, Generation Loss: NIL	Tripping of 1. 220 kV Chorania-Limbdi-1 2. 220 kV Chorania-Limbdi-2 due to fire in R-Ph CVT of 220 kV Chorania-Limbdi-1
7	GD-1	Mahalgaon	24-03-17, 21:57:00	24-03-17, 22:24:00	00:27	Load Loss: 70 MW, Generation Loss: NIL	Tripping of 1. 220 kV Gwalior(Mahalgaon-MP)-Gwalior(PG)-2 2. 220 kV Gwalior(MP)-Gwalior(PG)-1 3. 220 kV Gwalior(MP)-Datia 4. 220 kV/132 kV ICT-1 5. 220 kV/132 kV ICT-2 6. 220 kV/132 kV ICT-3 due to R-Phase CT of Gwalior(Mahalgaon-MP)- Gwalior(PG)-2 blasted at Mahalgaon-MP
8	GD-1	Solapur	29-03-17, 16:25:00	29-03-17, 16:31:00	00:07	Load Loss: 300 MW, Generation Loss: NIL	Tripping of 1. 400/220 kV ICT-1 2. 400/220 kV ICT-2 at Solapur-MS, tripped while checking Bus Bar Protection
9	GD-1	Goa	31-03-17, 04:37:00	31-03-17, 05:03:00	00:26	Load Loss: 200 MW, Generation Loss: NIL	Tripping of 1. 220 kV Mapusa-Ponda 2. 220 kV Mapusa-Amona 3. 220 kV Mahalaxmi-Ammona 4. 220 kV Tillari-Ammona due to fault

Southern Region

Sl. No	Brief Particulars	TRIPPING DATE	TRIPPING TIME	Date of Restoration	Restoration Time	Outage Duration	Category	Generation / load loss	Energy unserved (MU's)	Remarks
1	Complete outage of 220kV Kalamashery Substation.	08-03-2017	11:36	08-03-2017	11:57	00:21	GD-1	load loss : 400 MW	0.07	Incident has occurred due to operational error at 220kV substation. Operator had accidentally closed the bus #2 isolator of the already earthed 110/66kV, 63 MVA transformer #2 while isolating 110kV bus #1 for attending works on isolator of 220/110kV No.2 transformer, thereby causing a dead three phase short circuit formed on 110kV bus. This resulted in flashing of one stack of the bus II isolator of 110/66kV transformer #2. The fault was cleared by the operation of over current relays of all 220/110kV transformers at Kalamasserry end. All the 66 kV feeders and 110kV feeders were also tripped by feeder protection at Kalamasserry end resulted in the total supply failure at 220kV substation Kalamasserry and its feeding area. Bus bar protection scheme is not available for 110kV bus at Kalamasserry. Fault cleared in 1000ms as observed from PMU data plots
2	Complete outage of 220kV Malaparamba, Arekode, Kanhirode, Thalipparambu, Mylatty substations.	29-03-2017	12:57	29-03-2017	13:09	00:12	GD-1	load loss : 350 MW	0.058	220kV Madakathara-Malaparamba line tripped on a R-phase to earth fault. 220kV Madakathara-Areacode tripped due to overloading. This further led to loss of supply to 220kV Malaparamba, Arekode, Kanhirode, Thalipparambu, Mylatty substations. Fault cleared in 400ms as observed from PMU data plots

Southern Region

Sl. No	Brief Particulars	TRIPPING DATE	TRIPPING TIME	Date of Restoration	Restoration Time	Outage Duration	Category	Generation / load loss	Energy unserved (MU's)	Remarks
3	Complete outage of 220kV Nallalam, Arekode, Kanhirode, and Orkattery substations.	31-03-2017	09:40	31-03-2017	09:55	00:15	GD-1	load loss : 400 MW	0.066	All the outgoing feeders of 220kV Nallalam substation tripped due to failure of Bus PT supply to distance relays. 220kV khanirode-Areacode line tripped due to over-loading. This further led to loss of supply to 220kV Arekode, Kanhirode, and Orkattery substations.
4	Multiple Tripping at 220kV N'Sagar (Talapalli) Substation of APTRANSCO	07-03-2017	16:02	07-03-2017	16:30	00:28	GI-1	----	----	Suspected mal-operation of LBB relay of 400/200kV N'sagar ICT#3 at 220kV N'sagar end resulted in bus-2 and bus-4 bus bar protection operation at 220kV N'sagar end. All elements connected to bus-2 and 4 got tripped
5	Tripping of 220kV lines and Units at Sharavathy Generating Station of KPCL	16-03-2017	12:45	16-03-2017	12:57	00:12	GI-1	Gen loss : 384 MW	----	220kV East wing bus bar protection operated due to operational error. Without isolating the trip positive the emergency trip pulse was extended during testing. 220kV Sharavathy-Talaguppa-1, Sharavathy-Talaguppa-3, Sharavathy-Balligavi & Sharavathy-Sirsi-1 lines and 4 Nos (2 to 5) generator units and sectionalizer breaker were connected to East north bus

Southern Region

Sl. No	Brief Particulars	TRIPPING DATE	TRIPPING TIME	Date of Restoration	Restoration Time	Outage Duration	Category	Generation / load loss	Energy unserved (MU's)	Remarks
6	Multiple Tripping at 220kV Ghanapur (Hyderabad) Substation of TSTRANSCO	16-03-2017	20:26	16-03-2017	21:00	00:34	GI-1	-----	-----	Bus bar protection got operated during the failure of B-ph LA in 220kV Ghanapur-Chandrayangutta-1 and Y-ph LA in 220kV Ghanapur-Chandrayangutta-2. Suspected maloperation of bus bar protection for a through fault.
7	Tripping of running unit of RTPS U#4 , 400kV RTPS BTPS, and 400kV RTPS Munirabad line	16-03-2017	01:18	16-03-2017	03:14	01:56	GI-1	Gen loss : 190 MW	-----	400kV RTPS-YTPS, 400kV RTPS Munirabad and Unit#4 RTPS tripped due to bus-2 bus bar protection at 400kV RTPS. Suspected maloperation of bus bar protection for a through fault.
8	Multiple Tripping at 220kV Vizhag Switching Station (VSS) of APTRANSCO	27-03-2017	10:16	27-03-2017	10:27	00:11	GI-1	-----	-----	Y-B fault was in 220kV VSS Gangavaram line. However bus-2 bus bar protection operated at 220kV VSS end, resulting in the tripping of all the elements connected to bus-2 including 400/220kV ICT#1 at Vizag. Suspected maloperation of bus bar protection for a through fault.

Eastern Region											
Sr No	GD/ GI	Date	Time	S/S involved	Affected System	Summary	Load loss	Gen loss	Energy unserved	Restoration time	Duration
1	GD - I	03-03-2017	13:25	Biharshariff	ISTS & BSPTCL	At 13:25 hrs, 400/220 kV 315 MVA ICT-I, II, III at Biharshariff along with 220 kV Biharshariff – Begusarai D/C tripped from Biharshariff end due to fault in 220 kV Begusarai – Ujiarpur – I which tripped from Ujiarpur only.	350	0	Yet to be received	13:58	00:33
2	GD - I	04-03-2017	13:21	Biharshariff	ISTS & BSPTCL	At 13:21 hrs, tripping of 400/220 kV 315 MVA ICT-I, II, III at Biharshariff along with 220 kV Biharshariff – Begusarai I and 220 kV Tenughat Biharshariff S/C resulted power loss at Biharshariff, Begusarai, Fatua, Patna, Darbhanga including traction load of 60 MW (approx.) at Khagaria, Samastipur, Barh, Fatua and Mukama.	435	0	Yet to be received	13:50	00:29
3	GD - I	17-03-2017	10:22	SEL	ISTS & OPTCL	At 10:22 hrs, 400 kV SEL – Rourkela S/C tripped from both ends due to Y phase jumper snapping at Loc. No-88/0 (8.16 km from SEL end). At the same time, 400 kV SEL – Meramundali – I (Ckt – II was under s/d) tripped from Meramundali end (did not trip from SEL end) and all the three 400 kV SEL internal smelter feeders tripped on E/F	800	0	Yet to be received	10:27	00:05

Eastern Region											
Sr No	GD/ GI	Date	Time	S/S involved	Affected System	Summary	Load loss	Gen loss	Energy unserved	Restoration time	Duration
4	GD - I	29-03-2017	09:32	Bakreswar	WBSETCL	During diversion of 400 kV GT #2 through bus tie, 400 kV BkTPP – Arambag S/C, 400/220 kV IBT – I, 400 kV bus tie and 400 kV B/C along with GT#2 tripped due to operation of bus bar protection relay (96) of MB#1 at BkTPP.	0	200	0	09:52	00:20
5	GD - I	30-03-2017	13:55	Arrah	BSPTCL	At 13:55 Hrs, all three 220/132 KV ICT's at Ara (2*100 MVA, 1*160 MVA) tripped on overflux. At the same time, 220 KV Ara-Sasaram (BSEB) and 220 KV Sasaram (BSEB)-Sasaram (PG) tripped from Sasaram (BSEB) end only. Consequently, a load loss of 62 MW fed from Ara occurred. High voltage was persisting in the affected areas due to very low demand	62	0	Yet to be received	15:07	01:12

NER Region														
Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time						
1	NER	132 kV Dimapur (PG) - Kohima line	DoP Nagaland & POWERGRID	3-Mar-17	11:36	3-Mar-17	11:52	0:16	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Kohima-Karong line & 66 kV Tuensang-Likimro line kept open for system requirement). At 11:36 hrs on 03/03/2017 ,132 kV Dimapur(PG)-Kohima line 1 tripped.Due to tripping of this element, Capital area was separated from rest of NER Grid and subsequently collapsed due to no source in this area	0	10	0	0.003	GD-I
2	NER	132 kV Balipara - Khupi Line	NEEPCO & DoP AP	3-Mar-17	18:05	3-Mar-17	19:10	1:05	Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 18:05 Hr on 03.03.17, 132 kV Balipara- Khupi line tripped. Due to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	22	0	0.028	GD-I
3	NER	400 kV Biswanath Chariali - Ranganadi 2 Line	POWERGRID	4-Mar-17	13:32	4-Mar-17	14:08	0:36	Ziro and capital area of Arunachal Pradesh and part of Gohpur area of Assam were connected with rest of NER Grid through 132 kV Biswanath Chariali-Ranganadi line 2 (132 kV Biswanath Chariali-Ranganadi line 1 was kept open for system requirement).At 13:32 hrs on 04.03.17 , 132 kV Rangandi-Biswanath Chariali line 2 tripped. Due to tripping of this line, Ziro and capital area of Arunachal Pradesh and part of Gohpur area of Assam were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	39	0	0.038	GD-I
4	NER	132 kV Dimapur (PG) - Kohima Line	POWERGRID & DoP Nagaland	4-Mar-17	13:55	4-Mar-17	14:07	0:12	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Kohima-Karong line & & 66 kV Tuensang-Likimro line kept open for system requirement). At 13:55 Hr on 04/03/2017 ,132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area was separated from rest of NER Grid and subsequently collapsed due to no source in this area	0	11	0	0.003	GD-I
5	NER	132 kV Dimapur (PG) - Kohima Line	POWERGRID & DoP Nagaland	4-Mar-17	16:17	4-Mar-17	16:25	0:08	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Kohima-Karong line & & 66 kV Tuensang-Likimro line kept open for system requirement). At 16:17 hrsr on 04/03/2017 ,132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area was separated from rest of NER Grid and subsequently collapsed due to no source in this area	0	19	0	0.006	GD-I
6	NER	132 kV Lekhi - Nirjuli Line	DoP AP; POWERGRID	4-Mar-17	16:40	4-Mar-17	16:55	0:15	Nirjuli area of Arunachal Pradesh and part of Gohpur load of Assam were connected with rest of NER Grid through 132 kV Lekhi-Nirjuli line(Bus Coupler CB of Gohpur was kept open for system requirement). At 16:40 Hr on 04.03.2017, 132 kV Lekhi-Nirjuli line tripped.Due to tripping of this element,Nirjuli area of Arunachal Pradesh and part of Gohpur load of Assam were isolated from NER grid due to no source in this area.	0	33	0	0.008	GD-I

Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time						
7	NER	132 kV Balipara - Khupi Line	NEEPCO	4-Mar-17	17:47	4-Mar-17	18:15	0:28	Khupi area of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 17:47 hrs on 04.03.17,132 kV Balipara- Khupi line tripped. Due to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	22	0	0.016	GD-1
8	NER	132 kV Itanagar (Chimpu) - Lekhi Line	DoP AP	5-Mar-17	03:42	5-Mar-17	03:56	0:14	Itanagar load of Arunachal Pradesh was connected with rest of NER Grid through 132 kV Lekhi-Itanagar line . Due to tripping of this element, Itanagar area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	16	0	0.004	GD-1
9	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,Umiam Stage I Unit 1 & Umiam Stage 2 unit 1	POWERGRID, MePTCL & MePGCL	5-Mar-17	08:33	5-Mar-17	08:49	0:16	Khliehriat area (Khliehriat, Leshka, Mustem, NEIGRIHMS, NEHU, Umiam, Umiam Stage-I, Umiam Stage-II, Mawlai & Nongostoin stations) of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines(132 kV Umiam Stage I-Umiam Stage II D/C lines & 132 kV Nongostoin-Nangalibra line kept open for system requirement) . At 08:33 Hrs on 05.03.2017 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	12	82	0.022	0.023	GD-1
10	NER	132 kV Loktak - Ningthoukhong Line	MSPDCL & NHPC	5-Mar-17	17:52	5-Mar-17	18:21	0:29	Ningthoukhong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line (132 kV Kakching-Kongba line & 132 kV Imphal(PG)-Ningthoukhong line was kept open for system constraint). At 17:52 Hr on 05/03/2017, 132 kV Loktak-Ningthoukhong line tripped. Due to tripping of these elements, Ningthoukhong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	30	0	0.029	GD-1
11	NER	132 kV Dimapur (PG) - Kohima Line	DoP Nagaland & POWERGRID	6-Mar-17	13:41	6-Mar-17	13:49	0:08	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Kohima-Karong line & 66 kV Tuengsang-Likimro line kept open for system requirement). At 13:41 Hr on 06/03/2017 ,132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area was separated from rest of NER Grid and subsequently collapsed due to no source in this area	0	14	0	0.002	GD-1
12	NER	132 kV Dimapur (PG) - Kohima Line	DoP Nagaland & POWERGRID	6-Mar-17	13:51	6-Mar-17	14:37	0:46	Capital area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Kohima line (132 kV Kohima-Karong line &66 kV Tuengsang-Likimro line kept open for system requirement). At 13:51 Hr on 06/03/2017 ,132 kV Dimapur(PG)-Kohima line tripped. Due to tripping of this element, Capital area was separated from rest of NER Grid and subsequently collapsed due to no source in this area	0	10	0	0.009	GD-1

Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time						
13	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I & II Lines, 132 kV EPIP II - Killing (Byrnihat) I & II Lines	POWERGRID & MePTCL	7-Mar-17	00:24	7-Mar-17	00:36	0:12	Meghalaya system except Mendipathar area was connected with rest of NER Grid through 132 kV EPIP II-Byrnihat I & II lines, 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines (132 kV Nongstoin-Nangalbira line was kept open for system requirement. At 00:24 Hrs on 07.03.2017 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II , EPIPII-Byrnihat I & II lines tripped. Due to tripping of these elements, Meghalaya system except Mendipathar area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	64	0	0.027	GD-I
14	NER	132 kV Silchar - Hailakandi Line, 132 kV Dharmanagar - Dullavcherra Line	POWERGRID, AEGCL& TSECL	10-Mar-17	18:27	10-Mar-17	18:52	0:25	Hailakandi area of Assam was connected with rest of NER Grid through 132 kV Dullavcherra-Dharmanagar line &132 kV Silchar-Hailakandi line. At 18:27 hrs on 10.03.2017 ,132 kV Dullavcherra-Dharmanagar line & 132 kV Silchar- Hailakandi line tripped. Due to tripping of these elements, Hailakandi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	12	0	0.005	GD-I
15	NER	220 kV Mariani (PG) - Mokokchung (PG) 2 Line, 132 kV Doyang - Mokokchung (Nagaland) 1 Line	DoP Nagaland & POWERGRID	11-Mar-17	00:02	11-Mar-17	00:34	0:32	Mokokchung area of Nagaland was connected with rest of NER Grid through 132 kV Doyang-Mokokchung (NA) & 220 kV Mariani(PG)-Mokokchung (PG) II lines. (132 kV Mokokchung(NA)-Marianai(AS) is under long outage, 220 kV Mariani(PG)-Mokokchung (PG) I line kept open from 21:51 Hrs of 08.03.17 to control over voltage & 66 kV Tuengsang-Likimro line kept open for system requirement). At 00:02 hrs on 11.03.2017 ,132 kV Doyang-Mokokchung (NA) & 220 kV Mariani(PG)-Mokokchung (PG) II lines tripped. Due to tripping of these elements, Mokokchung area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	23	0	0.022	GD-I
16	NER	132 kV Dimapur (PG) - Dimapur (Nagaland) Line	DoP Nagaland & POWERGRID	11-Mar-17	00:43	11-Mar-17	00:52	0:09	Dimapur area of Nagaland was connected with rest of NER Grid through 132 kV Dimapur(PG)-Dimapur(Nagaland) I line (132 kV Dimapur(PG)-Dimapur(Nagaland) II line is under outage from 16th April 2016) . At 00:43 hrs on 11.03.2017 , 132 kV Dimapur(PG)-Dimapur(Nagaland) line tripped.Due to tripping of these element, Dimapur area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	20	0	0.007	GD-I
17	NER	132 kV Doyang - Mokokchung (Nagaland) Line	DoP Nagaland, NEEPCO	11-Mar-17	02:08	11-Mar-17	05:32	3:24	Mokokchung area of Nagaland was connected with rest of NER Grid through 132 kV Doyang-Mokokchung (NA) line (220 kV Mariani(PG)-Mokokchung (PG) I line kept open from 21:51 Hrs of 08.03.17 to control over voltage & 220 kV Mariani(PG)-Mokokchung (PG) II line was tripped at 00:02 Hrs on 11.03.17) . At 02:08 hrs on 11.03.2017 ,132 kV Doyang-Mokokchung (NA) line tripped.Due to tripping of these elements, Mokokchung area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	10	0	0.034	GD-I

Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time						
18	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I & II Lines	POWERGRID & MePTCL	18-Mar-17	13:12	18-Mar-17	13:27	0:15	Khliehriat area (Khliehriat, NEHU, LHEP, Mustem, NEIGRIHMS & Umiam stations) of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines (132 kV Umiam-Umiam Stage-1 and 132 kV Nehu-Mawlai was kept open for system requirement). At 13:12 Hrs on 18.03.2017 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines tripped. Due to tripping of these elements, Khliehriat area (Khliehriat, NEHU, LHEP, Mustem, NEIGRIHMS & Umiam stations) of Meghalaya separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	46	0	0.014	GD-I
19	NER	132 kV Khliehriat (PG) - Khliehriat (ME) I & II Lines,LHEP Unit 1	POWERGRID, MePGCL & MePTCL	18-Mar-17	19:12	18-Mar-17	19:17	0:05	Khliehriat area (Khliehriat, NEHU, LHEP, Mustem, NEIGRIHMS & Umiam stations) of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II ,Umiam-Umiam Stage I and Nehu-Mawlai lines . At 19:12 Hrs on 18.03.2017 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II ,Umiam-Umiam Stage I and Nehu-Mawlai lines tripped. Due to tripping of these elements, Khliehriat area (Khliehriat, NEHU, LHEP, Mustem, NEIGRIHMS & Umiam stations) was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	6	73	0.003	0.013	GD-I
20	NER	132 kV Loktak - Ningthoukhong Line	MSPCL	20-Mar-2017	12:37:00	20-Mar-2017	12:58:00	0:21	Ningthoukhong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line (132 kV Kakching-Kongba line & 132 kV Imphal(PG)-Ningthoukhong line kept open for system constraint). At 12:37 Hrs on 20.03.17, 132 kV Loktak-Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	23	0	0.006	GD-I
21	NER	400 kV Silchar-Palatana I&II lines,132 kV AGTPP-Kumarghat line, 132 kV Gamaitilla-Ambassa line ,132 kV Agartala-Dhalabil line, AGTPP Units 2,3,4,STG-1 & STG-2, Palatana GTG 1&2 and STG 1&2 ,Rokhia Units 7 & 8 ,Baramura Unit 5, Gumti Unit 2 & Monarchak GTG	NETCL,POWERGRID,NEEPCO, OTPC & TSECL	20-Mar-2017	13:54:00	20-Mar-2017	14:40:00	0:46	Tripura System except P K Bari area along with AGTPP,Palatana & Bangladesh systems (PK Bari,Kamalpur & Ambassa substations) was connected with rest of NER Grid through 400 kV Silchar-Palatana D/C lines,132 kV AGTPP-Kumarghat line, 132 kV Gamaitilla-Ambassa line ,132 kV Agartala-Dhalabil line. At 13:54 Hrs on 20.03.17, 400 kV Silchar-Palatana D/C lines,132 kV AGTPP-Kumarghat line, 132 kV Gamaitilla-Ambassa line & 132 kV Agartala-Dhalabil line tripped. Tripura System except P K Bari area along with AGTPP,Palatana & Bangladesh systems (PK Bari,Kamalpur & Ambassa substations) separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	757 (AGTPP: 95, Palatana:53 6, Baramura: 21, Gumti: 4, Monarchak: 63, Rokhia: 38)	146 (Tripura) & 69 (Bangladesh)	0.214	0.114	GD-II

Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time						
22	NER	132 kV Imphal-Imphal I & 2 lines	POWERGRID, MSPCL	23-Mar-2017	14:24:00	23-Mar-2017	14:42:00	0:18	Capital area & Karong area of Manipur were connected with rest of NER Grid through 132 kV Imphal-Imphal I & II lines (132 kV Kakching-Kongba line 132 kV Karong-Kohima line kept open for system requirement). At 14:24 Hrs on 23.03.17, 132 kV Imphal-Imphal I II lines tripped. Due to tripping of these elements, Capital area & Karong area were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	41	0	0.018	GD-I
23	NER	132 kV AGTPP - Kumarghat Line, 132 kV AGTPP-Agartala I&2 lines, AGTPP Units 1,2	NEEPCO & POWERGRID	25-Mar-2017	10:20:00	25-Mar-2017	10:41:00	0:21	AGTPP Power Station was connected with rest of NER Grid through 132 kV AGTPP-Agartala I & II lines & 132 kV AGTPP-Kumarghat line. At 10:20 Hr on 25.03.17, 132 kV AGTPP-Agartala I & II lines & 132 kV AGTPP-Kumarghat line tripped. Due to evacuation problem, AGTPP was blacked out.	27	0	0.005	0	GD-I
24	NER	132 kV AGTPP-Kumarghat line, 132 kV Aizawl - Kumarghat Line ,132 kV Badarpur - Kumarghat Line & 132 kV Kumarghat - P K Bari Line	POWERGRID & TSECL	25-Mar-2017	10:19:00	25-Mar-2017	10:37:00	0:18	Kumarghat substation was connected with rest of NER Grid through 132 kV AGTPP-Kumarghat line (132 kV Kumarghat-Badarpur line tripped at 10:01 Hrs ,132 kV Kumarghat-P K Bari line tripped at 10:19 Hrs 132 kV Kumarghat-Aizawl line tripped at 10:16 Hrs on 25.03.17 and these lines were not restored) . At 10:20 Hr on 25.03.17, 132 kV AGTPP-Kumarghat line tripped. Due to tripping of this line, Kumarghat Substation was blacked out.	0	0	0	0	GD-I
25	NER	132 kV Aizawl-Zuangtui line	POWERGRID	25-Mar-2017	10:47:00	25-Mar-2017	11:30:00	0:43	Zuangtui area of Mizoram was connected with rest of NER Grid through 132 kV Aizawl- Zuangtui line. At 10:47 Hrs on 25.03.17, 132 kV Aizawl- 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	35	0	0.072	GD-I
26	NER	132 kV Loktak-Ningthoukhong line	MSPCL	25-Mar-2017	12:04:00	25-Mar-2017	12:35:00	0:31	Ningthoukhong area of Manipur was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line (132 kV Imphal(PG)-Ningthoukhong line & 132 kV Kakching-Kongba line kept open for system requirement). At 12:04 Hr on 25.03.17, 132 kV Loktak-Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	14	0	0.007	GD-I
27	NER	132 kV Khliehriat - MLHEP-I& II lines & 132 kV Khliehriat-Lumshnong line	MePTCL	29-Mar-17	07:47	29-Mar-17	08:02	0:15	Lumshnong area of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat- Lumshnong line (132 kV Panchgram-Lumshnong line was kept open for system requirement). LHEP was connected with rest of NER Grid through 132 kV Khliehriat - MLHEP-I& II lines. At 07:47 Hrs on 29.03.2017 ,132 kV Khliehriat (PG) - Khliehriat (ME) I & II Lines, 132 kV Khliehriat- MLHEP-I& II lines & 132 kV Khliehriat- Lumshnong line tripped. Due to tripping of these elements, Panchgram area & LHEP station of Meghalaya were separated from rest of NER Grid and subsequently collapsed due to no source in this areas.	0	12	0	0.004	GD-I

Sl. No.	Region	Name of Element	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
				Date	Time	Date	Time	Time						
28		132 kV Silchar - Hailakandi Line	POWERGRID	30-Mar-17	10:37	30-Mar-17	11:13	0:36	Hailakandi area of Assam was connected with rest of NER Grid through 132 kV Silchar- Hailakandi line(132 kV Dullavcherra-Dharmanagar line kept open for system requirement). At 10:37 Hr on 30.03.17, 132 kV Silchar- Hailakandi line tripped. Due to tripping of this element, Hailakandi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	10	0	0.007	GD-I
29	NER	132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU-NEIGRIHMS line & 132 kV NEHU-Mustem line	POWERGRID & MePTCL	31-Mar-17	15:08	31-Mar-17	15:14	0:06	Khliehriat area (Mustem,LHEP,Khliehriat & NEIGRIHMS stations) of Meghalaya was connected with rest of NER Grid through 132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU-NEIGRIHMS line & 132 kV NEHU-Mustem line (132 kV Khliehriat-Lumshnong line was kept open for system requirement). At 15:08 Hrs on 31.03.2017 ,132 kV Khliehriat (PG)-Khliehriat (MePTCL) I & II lines,132 kV NEHU-NEIGRIHMS line & 132 kV NEHU-Mustem line tripped. Due to tripping of these elements, Khliehriat area (Mustem,LHEP,Khliehriat & NEIGRIHMS stations) of Meghalaya separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	23	0	0.002	GD-I