

Northern Region-Event Report for September 2018

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) 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt-1 2) 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt-2	Haryana	POWERGRID	1-Sep-18	17:49	1-Sep-18	18:23	00:34	± 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt 1 & 2 tripped due to commutation fail at Kurukshetra and DC line pickup at Champa(PG); In antecedent condition, 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt 1 & 2 carrying 1200 MW each. As per PMU, fluctuations observed in the phase voltages.	Nil	Nil	GI-2	
2	NR	1) 500 MVA 400/220kV ICT 1 at Gorakhpur(UP) 2) 315 MVA 400/220kV ICT 2 Gorakhpur(UP) 3) 220kV Gorakhpur(UP)-Doria(UP) 4) 220kV Gorakhpur(UP)-Gorakhpur2(UP) ckt-1 5) 220kV Gorakhpur(UP)-Gorakhpur2(UP) ckt-2	Uttar Pradesh	UP	5-Sep-18	14:01	5-Sep-18	14:58	00:57	Bus bar protection operated on 220kV side of 400/220kV Gorakhpur(UP) resulting in tripping of 500 MVA 400/220kV ICT 1, 315 MVA 400/220kV ICT 2, 220kV Gorakhpur(UP)-Doria(UP), 220kV Gorakhpur(UP)-Gorakhpur2(UP) ckt-1 & 2. In antecedent condition, 500 MVA ICT 1, 315 MVA ICT 2 carrying 221 MW & 139 MW respectively. As per PMU, B-N fault followed by R-Y fault with delayed clearance is observed.	Nil	300	GD-1	0.28
3	NR	1) 1500 MVA 765/400kV ICT 1 at 765kV Ajmer(PG). 2) 400kV Ajmer(765kV)(PG)-AjmerII(RVPLN) ckt-1	Rajasthan	POWERGRID	6-Sep-18	8:03	6-Sep-18	10:38	02:35	R phase CT of 402 Tie bay blasted at 765kV Ajmer(PG) leads to tripping of 1500 MVA ICT 1 & 400kV Ajmer(765kV)(PG)-AjmerII(RVPLN) ckt-1. In antecedent condition, 1500 MVA ICT 1 & 400kV Ajmer(765kV)(PG)-AjmerII(RVPLN) ckt-1 carrying 26 MW & 27 MW respectively. As per PMU, R-N fault is observed with delayed clearance.	Nil	Nil	GI-2	
4	NR	1) 220kV Bus 2 at Cbganj(UP) 2) 220kV Cbganj(UP)-Sitarganj(PG) 3) 220kV Cbganj(UP)-Badun(UP) 4) 220kV Cbganj(UP)-Moradabad(UP) 5) 220kV Cbganj(UP)-Bareilly(UP) 6) 220kV Tanakpur(NHPC)-Sitarganj(PG)	Uttar Pradesh	UP, POWERGRID & NHPC	6-Sep-18	15:33	6-Sep-18	16:28	00:55	Bus fault occurred at 220kV CB Ganj(UP) leading to bus bar protection operation of 220kV Bus 2 at Cbganj(UP). At the same time, 220kV Tanakpur(NHPC)-Sitarganj(PG) also tripped on phase to earth fault. As per PMU, R-N fault observed. Also voltage dip in all the three phases is observed for about 1400ms.	Nil	Nil	GI-2	
5	NR	1) 400 kV G. Noida(400kV)-Dadri (NTPC) 2) 400 kV G. Noida(400kV)-Nawada(Haryana) 3) 400 kV G. Noida(400kV)-G. Noida 765 ckt-1 4) 400 kV G. Noida(400kV)- G. Noida 765 ckt-2 5) 400 kV Bus 1 at G. Noida(400 kV) 6) 400 kV Bus 2 at G. Noida(400 kV) 7) 1500 MVA 765/400 kV G.Noida(765 kV) ICT1	Uttar Pradesh	UP, NTPC & Haryana	6-Sep-18	22:40	6-Sep-18	23:42	01:02	Conductor of R phase 400 kV Bus-A at 400/220 kV G. Noida broke down but 400 kV bus-bar protection did not operate at the substation. It was found that none of the breaker opened from 400 kV G. Noida end. All the 400 kV connected lines from 400/220 kV G. Noida (UP) lines tripped from remote end. This resulted in loss of approx. 800-900 MW and frequency increasing from approx. 49.91 Hz to 50.12 Hz (thus a jump of approx. 0.11 Hz).	Nil	830	GD-1	
6	NR	1) 315 MVA 400/220kV Ajmer ICT 1 2) 315 MVA 400/220kV Ajmer ICT 3 3) 220kV Ajmer(RRVPLN)-Ajmer(RRVPLN) 4) 220kV Ajmer(RRVPLN)-Beawar(RRVPLN) 5) 220 kV Ajmer(RRVPLN)-Jethana(RRVPLN) ckt-1 6) 220 kV Ajmer(RRVPLN)-Jethana(RRVPLN) ckt-2	Rajasthan	Rajasthan	6-Sep-18	23:07	7-Sep-18	00:28	01:21	R-N fault occurred in 220 kV Ajmer Jethana ckt-1 resulting in LBB operation due to breaker struck of 220 kV Ajmer Jethana ckt-1. In antecedent condition, 315 MVA ICT 1 & ICT 3 carrying 112 MW & 113 MW respectively. As per PMU, Y-N fault observed.	Nil	Nil	GI-2	
7	NR	1) 200 MVA 400/132 kV ICT 1 at Agra South(UP). 2) 200 MVA 400/132 kV ICT 2 at Agra South(UP). 3) 200 MVA 400/132 kV ICT 3 at Agra South(UP). 4) 132kV Agra-Agra Cantt	Uttar Pradesh	UP	7-Sep-18	4:50	7-Sep-18	05:49	00:59	200MVA ICT 1,2 & 3 at 400kV Agra South(UP) tripped with a load loss of ~200MW, due to tripping of 132kV Agra-Agra Cantt line. The ICT's tripped due to IDMT DIR O/C and E/F protection operated. As per PMU, B-N fault observed.	Nil	200	GD-1	0.10
8	NR	1) 400 kV Rampur(NJPC)-Nallagarh(PG) ckt-2 2) Unit#3 at 400kV Nathpa-Jhakri(NJPC) 3) Unit#5 at 400kV Rampur(NJPC) 4) Unit#2 at 400kV Karcham Wangtoo	Himachal Pradesh	SJVNL, JSW & POWERGRID	7-Sep-18	16:20	7-Sep-18	16:36	00:16	400kV Rampur(NJPC)-Nallagarh(PG) ckt-2 tripped at 1620 hrs due to B-N Fault (71 kms from Rampur).Circuit-2 Auto-Recloser(AR) operated successfully but due to RPH maloperation breaker failed to closed. As reported by stations, due to the above incident, SPS operated at NJPC and Rampur causing tripping of unit#3 at Nathpa-Jhakri(NJPC)(generating 270MW), Unit#5 at 400kV Rampur(NJPC)(generating 76MW) & Unit#2 at 400kV Karcham Wangtoo(generating 248MW). As per PMU, B-N fault is observed.	594	Nil	GD-1	
9	NR	1. 220 kV Delina (J&K)-Zainakote (J&K) ckt 2. 220 kV Delina (J&K)-Amargarh (NRSS-29) ckt 3. 220 kV Delina (J&K)-Kishanganga (NHPC) ckt-1 4. 220 kV Delina (J&K)-Kishanganga (NHPC) ckt-2 5. 220/132 kV 160MVA ICT at Delina (J&K) 6. 3*110 MW units at Kishanganga HEP (NHPC)	Jammu & Kashmir	NHPC and PDD-J&K	13-Sep-18	18:10	14-Sep-18	10:03	15:53	220 kV Delina (J&K)-Amargarh (NRSS-29) ckt tripped on Y-B fault, 3.12Km from Amargarh station leading to tripping of generation at Kishanganga HEP (NHPC) due to loss of evacuation path. It seems from SCADA data that 220 kV Delina Bus-1 was already under outage and all the elements at 220/132 kV Delina (J&K) tripped. As per PMU, Y-B fault observed.	130	Nil	GD-1	
10	NR	1) 400kV Bus 2 at Bawana CCGT 2) 400kV Bahadurgarh(PG)-Bawana(GT) 3) STG1 at 400kV Bawana CCGT	Delhi	Delhi & POWERGRID	14-Sep-18	17:08	14-Sep-18	17:20	00:12	Bus bar protection operated at Bawana CCGT leading to tripping of 400kV Bus 2 at Bawana CCGT & 400kV Bahadurgarh(PG)-Bawana(GT). STG1 also tripped with heavy jerk. In antecedent condition, 400kV Bahadurgarh-Bawana(GT) carrying 13 MW and STG 1 generating 180 MW. As per PMU, No fault observed.	180	Nil	GD-1	
11	NR	1) 400kV Parbati(2) HEP(NHPC) - Sainj HEP(HPPCL) -1 2) 400 kV Bus 1 at Parbati(2) HEP(NHPC) 3) Unit#1 at 400kV Parbati(2) HEP(NHPC)	Himachal Pradesh	NHPC/HPPCL/P OWERGRID	16-Sep-18	19:10	16-Sep-18	21:11	02:01	400kV Parbati(2) HEP(NHPC) - Sainj HEP(HPPCL) -1 & 400 kV Bus 1 at Parbati(2) HEP(NHPC) tripped as LBB Operated due to High vibrations of Unit-1. In antecedent condition,400kV Parbati(2) HEP(NHPC) - Sainj HEP(HPPCL) -1 carrying 100 MW & Unit#1 generating 50 MW. As per PMU, voltage dip in all three phases is observed.	50	Nil	GD-1	
12	NR	1) 400 kV Bus 1 at 400kV Orail(UP) 2) 400kV Mainpuri 765(UP)-Orail(UP) ckt-1	Uttar Pradesh	UP	16-Sep-18	20:07	16-Sep-18	21:02	00:55	400kV Mainpuri 765(UP)-Orail(UP) ckt-1 tripped on Y-N fault, 34.9Km from Mainpuri 765(UP) end. At the same time, 400 kV Bus 1 at 400kV Orail(UP) also tripped. In antecedent condition, 400kV Mainpuri 765(UP)-Orail(UP) ckt-1 carrying 258 MW. As per PMU, Y-N fault observed.	Nil	Nil	GI-2	

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					Date	Time	Date	Time						
13	NR	1) 315 MVA ICT 3 at 400kV Sarnath(UP) 2) 400kV Sarnath(UP)-Varanasi(PG) ckt-2 3) 220kV Sarnath(UP)-Sahupuri(UP) 4) 220kV Sarnath(UP)-Gajokhar(UP) 5) 220kV Sarnath(UP)-Gajipur(UP) 6) 220kV Sarnath(UP)-Azamgarh(UP)	Uttar Pradesh	UP	17-Sep-18	11:30	17-Sep-18	11:40	00:10	Due to flashover at Ghazipur end of 220kV Sarnath(UP)-Gajipur(UP), 315 MVA ICT 3 at 400kV Sarnath(UP) & 400kV Sarnath(UP)-Varanasi(PG) ckt-2 tripped along with 220kV elements. As per PMU, delayed clearance of around 2.5s is observed. In antecedent conditions, 315 MVA ICT 3 at 400kV Sarnath(UP) & 400kV Sarnath(UP)-Varanasi(PG) ckt-2 carrying 222 MW & 12 MW respectively.	Nil	650	GD-1	0.11
14	NR	1) 315 MVA ICT 2 at 400kV Gorakhpur(UP) 2) 500 MVA ICT 1 at 400kV Gorakhpur(UP) 3) 400kV Gorakhpur(PG)-Gorakhpur(UP) ckt-1 4) 400kV Gorakhpur(PG)-Gorakhpur(UP) ckt-2 5) 400kV Azamgar(UP)-Gorakhpur(UP)	Uttar Pradesh	UP & POWERGRID	17-Sep-18	16:57	17-Sep-18	18:33	01:36	Bus fault occurred due to snapping of R phase insulator string of Transfer Bus Coupler during shifting of 400 kV Gorakhpur(PG)-Gorakhpur(UP) ckt-2 on Transfer Bus at Gorakhpur(UP) leading to tripping of all ICTs and 400kV transmission line connected with 400kV Gorakhpur(UP). As per PMU, R-N fault observed with delayed clearance. In antecedent condition, 500 MVA ICT 1 & 315 MVA ICT 2 carrying 263 MW & 165 MW respectively.	Nil	225	GD-1	0.36
15	NR	1) 400 kV Patiala(PG)-Patran(PTCL) ckt-1 2) 400 kV Patiala(PG)-Patran(PTCL) ckt-2 3) 400 kV Kaithal(PG)-Patran(PTCL) ckt-1 4) 400 kV Kaithal(PG)-Patran(PTCL) ckt-2 5) 500 MVA ICT 1 at 400 kV Patran(PTCL) 6) 500 MVA ICT 2 at 400 kV Patran(PTCL)	Punjab	PTCL & POWERGRID	18-Sep-18	11:12	18-Sep-18	12:00	24.32	Due to DC Failure at 400 kV Patran(PTCL); 400 kV Patiala(PG)-Patran(PTCL) 1 & 2, 400 kV Kaithal(PG)-Patran(PTCL) 1& 2 tripped & 500 MVA ICT 1 & ICT 2 tripped; As per PMU, No fault observed. In antecedent conditions, 500 MVA ICT 1 & ICT 2 carrying 68 MW each.	Nil	Nil	GI-2	
16	NR	1) 220kV Kishenpur(PG)-Ramban(JK) 2) 220kV Mirbazar(JK)-Ramban(JK)	Jammu & Kashmir	POWERGRID & JK	21-Sep-18	15:15	21-Sep-18	17:16	02:01	220kV Kishenpur(PG)-Ramban(JK) & 220kV Mirbazar(JK)-Ramban(JK) tripped on B-N fault at a distance of 12.46km from Ramban towards Kishenpur. As per PMU, Y-N fault followed by B-N fault is observed. In antecedent condition, 220kV Kishenpur(PG)-Ramban(JK) carrying 82 MW.	Nil	Nil	GI-2	
17	NR	1) 400kV Bus 2 at Dadri(Th).2 2) 400kV Dadri(NTPC)-Kaithal(PG)	Uttar Pradesh	NTPC & POWERGRID	23-Sep-18	19:54	24-Sep-18	09:57	14:03	400kV Bus-bar-2 protection operated at Dadri Thermal leading to tripping of 400kV Bus 2 & 400kV Dadri(NTPC)-Kaithal(PG). As per PMU, R-N fault observed. In antecedent condition, 400kV Dadri(NTPC)-Kaithal(PG) carrying 43 MW.	Nil	Nil	GI-2	
18	NR	1) 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt-1 2) 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt-2	Haryana	POWERGRID	24-Sep-18	16:51	24-Sep-18	17:42	00:51	800kV HVDC Champa(PG)-Kurukshetra(PG) ckt 1 & 2 tripped due to DC Earth fault in auxiliary DC panel at Champa(PG) end; In antecedent condition, 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt 1 & 2 carrying 650 MW each. As per PMU, fluctuations observed in the phase voltages. Both circuits again tripped at 1816 Hrs due to same reason.	Nil	Nil	GI-2	
19	NR	1) 400kV RosaTPS (UP)-Shajahanpur(PG) ckt-2 2) 200 MVA ICT1 at 400/220kV Rosa(UP) 3) 200 MVA ICT2 at 400/220kV Rosa(UP)	Uttar Pradesh	UP	24-Sep-18	20:37	24-Sep-18	21:36	00:59	400kV RosaTPS (UP)-Shajahanpur(PG) ckt-2 tripped on phase to earth fault. At the same time, 200 MVA ICT1 & ICT2 at 400/220kV Rosa(UP) tripped due to operation of Differential protection. In antecedent condition, both ICTs carrying 64MW each. As per PMU, Y-N fault is observed.	Nil	Nil	GI-2	
20	NR	1) 220kV Bus 3 at 400/220kV Mandola(PG) 2) 220kV Bus 4 at 400/220kV Mandola(PG) 3) 500 MVA ICT 1 at 400/220kV Mandola(PG) 4) 500 MVA ICT 3 at 400/220kV Mandola(PG) 5) 220kV Mandola(PG)-Wazirabad(DTL) ckt-1 6) 220kV Mandola(PG)-Wazirabad(DTL) ckt-2 7) 220kV Mandola(PG)-Wazirabad(DTL) ckt-4	Delhi	POWERGRID & Delhi	25-Sep-18	10:54	25-Sep-18	17:44	06:50	220kV Mandola(PG)-Wazirabad(DTL) ckt-1 tripped on R-N fault. 220kV Mandola(PG)-Wazirabad(DTL) ckt-3 was under shutdown and line was earthed at both ends, due to which current through line CT which was earthed from both sides flowed. This current flow in 220kV Mandola(PG)-Wazirabad(DTL) ckt-3 caused SOTF optd in this line. As CB was already open and current was continuous through CT, LBB operated. 220kV Bus 4 tripped on LBB protection. Due to CT selection relay contacts malfunction trips of bus 4 and 3 got coupled resulting in bus 3 tripping. 220kV Mandola(PG)-Wazirabad(DTL) ckt-1 tripped on R-N fault. As per PMU, R-N fault is observed. In antecedent condition, 500 MVA ICT 1 & ICT 3 carrying 157 MW & 154 MW respectively.	Nil	139	GD-1	
21	NR	1) 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt-1 2) 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt-2	Haryana	POWERGRID	25-Sep-18	11:54	25-Sep-18	12:29	00:35	800kV HVDC Champa(PG)-Kurukshetra(PG) ckt 1 & 2 tripped due to Filter Control block due to filter power limit alarm because of malfunction of RPC; In antecedent condition, 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt 1 & 2 carrying 150 MW each. As per PMU, fluctuations observed in the phase voltages.	Nil	Nil	GI-2	
22	NR	1) 220kV Bus 2 at 400/220kV Jalandhar(PG) 2) 315 MVA ICT 2 at 400/220kV Jalandhar(PG) 3) 220kV Dasuya(PSTCL)-Jalandhar(PG) ckt-2 4) 220kV Hamirpur(PG)-Jalandhar(PG) ckt-2 5) 220kV Jalandhar(PG)-Kartarpur(PSTCL)	Punjab	POWERGRID & Punjab	25-Sep-18	13:32	25-Sep-18	14:19	00:47	Bus bar protection of 220kV Bus 2 operated due to mal operation during S/D of 500 MVA ICT-3 at Jalandhar leading to tripping of 315 MVA ICT 2 and 220kV lines. As per PMU, No fault is observed. In antecedent condition, 315 MVA ICT 2 at 400/220kV Jalandhar(PG) carrying 84 MW.	Nil	50	GD-1	0.04
23	NR	1) 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt-1 2) 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt-2	Haryana	POWERGRID	26-Sep-18	16:37	26-Sep-18	17:53	01:16	800kV HVDC Champa(PG)-Kurukshetra(PG) ckt 1 & 2 tripped during testing; In antecedent condition, 800kV HVDC Champa(PG)-Kurukshetra(PG) ckt 1 & 2 carrying 150 MW each. As per PMU, fluctuations observed in the phase voltages.	Nil	Nil	GI-2	
24	NR	1) 220kV Bairasuil(NHPC)-Pong(BBMB) 2) 220kV Bairasuil(NHPC)-Jasor(HP) 3) Unit#1(60MW) at 220kV Bairasuil(NHPC) 4) Unit#3(60MW) at 220kV Bairasuil(NHPC)	Himachal Pradesh	NHPC, BBMB & HP	27-Sep-18	18:17	27-Sep-18	18:58	00:41	LBB operated while synchronizing Unit#1(60MW) at 220kV Bairasuil(NHPC) due to problem in breaker leading to tripping of 220kV Bairasuil(NHPC)-Pong(BBMB), 220kV Bairasuil(NHPC)-Jasor(HP), Unit#1 & Unit#3. In antecedent condition, Unit#1 & #3 generating 59 MW & 57 MW respectively. As per PMU, No fault is observed.	117	Nil	GD-1	

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					Date	Time	Date	Time						
25	NR	1) 220kV Parichha(UP)-Orai(UP) ckt-1 2) 220kV Parichha(UP)-Orai(UP) ckt-2 3) 220kV Parichha(UP)-Orai(UP) ckt-3 4) 220kV Parichha(UP)-Jhansi(UP) ckt-1 5) 220kV Parichha(UP)-Jhansi(UP) ckt-2 6) 220kV Parichha(UP)-Bharthana(UP) 7) 220kV Parichha(UP)-Mahoba(UP) 8) Unit#3 & #4(210MW) at 220kV Parichha(UP) 9) Unit#6(250MW) at 220kV Parichha(UP)	Uttar Pradesh	UP	28-Sep-18	10:58	28-Sep-18	12:52	01:54	B-N fault occurred on 220kV Parichha(UP)-Jhansi(UP) ckt-2 due to which trip coil of this circuit at 220kV Parichha(UP) burnt causing bus fault at 220kV Parichha(UP) resulting into tripping of all 220kV lines and generating units. As per PMU, Voltage dip in all the three phases in observed. In antecedent conditions, Unit#3 & #4 generating 113 MW & 109 MW respectively.	530	Nil	GD-1	
26	NR	1) 220kV Hisar(PG)-Hisar-IA(HVPLN) ckt-1 2) 220kV Hisar(PG)-Hisar-IA(HVPLN) ckt-2 3) 220kV Hisar(BBMB)-Hisar-IA(HVPLN) ckt-1 4) 220kV Hisar(BBMB)-Hisar-IA(HVPLN) ckt-2	Haryana	Haryana, BBMB & POWERGRID	28-Sep-18	11:45	28-Sep-18	13:15	01:30	220kV Bus-bar protection operated at Hisar(I/A) due to blasting of Y-ph CT of 220kV Hisar(I/A)-Masudpur ckt-2 leading to tripping of 220kV Hisar(PG)-Hisar-IA(HVPLN) ckt-1 & 2, 220kV Hisar(BBMB)-Hisar-IA(HVPLN) ckt-1 & 2. As per PMU, Y-N fault is observed. In antecedent condition, 220kV Hisar(PG)-Hisar-IA(HVPLN) ckt-1 & 2 carrying 111 MW & 113 MW respectively.	Nil	Nil	GI-2	
27	NR	1) 400kV Akal(Raj)-Jodhpur(Raj) 2) 400kV Jodhpur(Raj)-Merta(Raj) ckt-1 3) 400kV Bus 1 at 400kV Jodhpur(Raj)	Rajasthan	Rajasthan	29-Sep-18	04:07	29-Sep-18	06:25	02:18	Differential Protection of Busbar-1 operated at 400kV Jodhpur(Raj) leading to tripping of 400kV Akal(Raj)-Jodhpur(Raj) & 400kV Jodhpur(Raj)-Merta(Raj) ckt-1. As per PMU, No fault is observed. In antecedent conditions, 400kV Jodhpur(Raj)-Merta(Raj) ckt-1 carrying 84 MW.	Nil	Nil	GI-2	
28	NR	1) 400kV Allahabad(PG)-Fatehpur(PG) ckt-1 2) 400kV Allahabad(PG)-Fatehpur(PG) ckt-2 3) 400kV Allahabad(PG)-Fatehpur(PG) ckt-3 4) 400kV Allahabad(PG)-Mainpuri(PG) ckt-1 5) 400kV Allahabad(PG)-Singrauli(PG) 6) 315 MVA ICT 1 & ICT 2 at 765kV/400kV Fatehpur(PG) 7) 1500 MVA ICT 3 & ICT 4 at 765kV/400kV Fatehpur(PG) 8) 220kV Fatehpur(PG)-Fatehpur(UP) ckt-1	Uttar Pradesh	POWERGRID & UP	29-Sep-18	12:18	29-Sep-18	12:39	00:21	315 MVA ICT 1 & ICT 2 at 765kV/400kV Fatehpur(PG) tripped due to operation of directional earth fault. At the same time other 400kV lines and 1500 MVA ICT3 & ICT 4 also tripped. As per PMU, Y-N fault is observed. In antecedent conditions, 1500 MVA ICT 3 & ICT 4 carrying 141 MW & 139 MW respectively.	Nil	220	GD-1	0.08
29	NR	1) 200 MVA ICT 1 at 400/132kV Mau(UP) 2) 200 MVA ICT 2 at 400/132kV Mau(UP)	Uttar Pradesh	UP	29-Sep-18	20:37	29-Sep-18	21:18	00:41	200 MVA ICT 1 & ICT 2 at 400/132kV Mau(UP) tripped due to overloading. As per PMU, Fluctuations observed in the phase voltages. In antecedent conditions, 200 MVA ICT 1 & ICT 2 carrying 155 MW & 169 MW respectively.	Nil	250	GD-1	0.17

Western Region-Event Report for September 2018

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				Date	Time	Date	Time	Time					
1	WR	Tripping of 1.±800 kV HVDC Champa-Kurukshetra Pole 1 2.±800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	01-09-2018	17:48	01-09-2018	18:21	00:33	±800 kV HVDC Champa Kurukshetra Bi pole tripped due to commutation failure at Kurukshetra end.	Nil	Nil	GI-2	Nil
2	WR	Tripping of 1.400 KV Amreli-Jetpur ckt 2 2.400/220KV 315MVA Amreli ICTs 2&3 3.400 KV Amreli 50 MVAR Bus reactor 4.400 KV Amreli 125 MVAR Bus reactor	GETCO	02-09-2018	18:24	02-09-2018	20:32	02:08	At 400kV Amreli s/s Bus 1 and associated elements tripped on Bus bar protection operation due to the sparking observed between clamp of flyover bus and IPS pipe on Post Insulator(PI) of BUS-1 side of 400KV Bus coupler.	Nil	Nil	GI-2	Nil
3	WR	Tripping of 1.220/66 kV 160 MVA Kharadpada ICT 1&4 2.220/66 kV 100 MVA Kharadpada ICT 2&3	DNH	03-09-2018	09:20	03-09-2018	09:40	00:20	220/66 kV ICTs at Kharadpada substation tripped only on HV side on master trip relay operation and all the 66 kV side elements tripped during the event.	Nil	365	GI-1	0.58425
4	WR	Tripping of 1.400/220 kV 315 MVA Betul ICT 1 2.400/220 kV 315 MVA Betul ICT 2 3.400 kV 125 MVAR Betul BR	PGCIL	19-09-2018	12:58	19-09-2018	13:58	01:00	At Betul substation, MP Discom changed the phase sequence without any intimation which resulted in tripping of Battery charger followed by fluctuations in DC Voltage and tripping of 400/220 kV 315 MVA ICT 1&2, 400 kV 125 MVAR BR.	Nil	Nil	GI-2	Nil
5	WR	Tripping of 1.±800 kV HVDC Champa-Kurukshetra Pole 1 2.±800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	24-09-2018	16:51	24-09-2018	17:42	00:51	±800 kV HVDC Champa-Kurukshetra Pole 2 was blocked for testing purpose. At the same time Pole 1 also blocked on Control malfunction.	Nil	Nil	GI-2	Nil
6	WR	Tripping of 1.±800 kV HVDC Champa-Kurukshetra Pole 1 2.±800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	24-09-2018	18:16	24-09-2018	22:28	04:12	±800 kV HVDC Champa Kurukshetra Bi pole tripped due to DC earth fault in auxiliary DC panel at Champa end.	Nil	Nil	GI-2	Nil
7	WR	Tripping of 1.220 kV Pedhambe(Koyna stage III)- Adlab 2.220 kV Pedhambe(Koyna stage III)-Pophali (Koyna stage 1&2)ckt-2 3.220 kV Pedhambe(Koyna stage III)-Oni 4.220 kV Pedhambe(Koyna stage III)-Nerale 5.80 MW Koyna Unit 11&12	MSEGCL	24-09-2018	16:13	24-09-2018	16:30	00:17	At 220kV Pedhambe, all the elements connected to the 220 kV Bus section 2 tripped on Pole discrepancy of Unit 11 CB.	160	Nil	GI-1	Nil
8	WR	Tripping of 1.±800 kV HVDC Champa-Kurukshetra Pole 1 2.±800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	25-09-2018	11:54	25-09-2018	12:29	00:35	±800 kV HVDC Champa Kurukshetra Bi pole tripped on Filter control blocking due to Filter Power limit .	Nil	Nil	GI-2	Nil
9	WR	Tripping of 1. 220KV Kasor - Botad 2. 220KV Savarkundla - GPPC-2 3. 220KV Savarkundla - Dhokadva 4. 220KV Timbdi - Dhokadva 5. 132KV Limbdi - CCP - 1 6. 132KV Gondal - Jasdand 7. 132 KV Karamsa-Nadiad 8. 132 KV Ranasan-Vatva line 1 &2 9.220 KV Kasor-Dhuvaran	GETCO	25-09-2018	13:09	25-09-2018	13:14	00:05	Due to tripping of multiple lines around sourashtra area, 220 KV Dhokadva, 220 KV Sagapara, 220 KV Otha, 220KV Varte, 220KV BECL SY, 220KV GPPC SY, 220KV Sintex, 220KV Botad, 220 KV Vallabhipur (132KV Bus was healthy), 132KV Paliyad, 132KV Padavala & 132KV Jasdand S/S along with 120 Nos of 66KV Sub-Station were remained in dark.	68	859	GD-1	0.1938
10	WR	Tripping of 1. 500 MW Vindhyachal Unit 8 2.400 kV Vindhyachal-Korba ckt 2 3.400 kV Vindhyachal-Satna ckt 2 4.400 kV Vindhyachal-Jabalpur ckt 2	NTPC	27-09-2018	12:21	27-09-2018	13:54	01:33	At 400kV Vindhyachal, to attend trip coil alarm which appeared on Main bay of Vindhyachal Unit 8, the unit was transferred to transfer bay. While transferring Unit 8 from main Bus 4 to transfer bus, bus bar protection operated and all the elements connected to the main bus 4 tripped.	493	Nil	GI-2	Nil

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

Southern Region-Event Report for September 2018

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 Unserved (MU)
				Date	Time	Date	Time	Time					
1	SR	1. 220kV Nagjheri - Hubli Line-2 2. 220kv Nagjheri - Hubli Line-1 3. 220kV Nagjheri - Bidnal 4. 220kV Nagjheri - Hubli Line-3 5. Unit # 3&4 at Nagjheri 6. 220kV Nagjheri - Ambewadi Line-1&2 7. 220kV Ambewadi - Ponda line-1&2	KPCL and KPTCL	17-Sep-18	14:37	17-Sep-18	15:25	00:48	Complete Outage of 220kV Nagjheri and Ambewadi stations: 220kV lines connected to Nagjheri generating station got tripped due to subsequent transient faults. Running units # 3 and #4 at Nagjheri got tripped on over frequency protection operation due to tripping of evacuating lines resulting in complete outage of 220kV Nagjheri. 220kV Nagjheri being the only source to 220kV Ambewadi station, since 220kV Ambewadi Narendra line 1&2 were under shutdown during antecedent condition, tripping of units at 220kV Nagjheri resulted in the loss of supply to 220kV Ambewadi station.	332 MW	90 MW	GD-1	---
2	SR	1. Unit# 3,4 & 6 at Nagjheri	KPCL	3-Sep-18	10:11	3-Sep-18	10:25	00:14	Multiple tripping at 220kV Nagjheri Station: Unit # 3,4 and 6, station transformer and North Bus sectionalizer at Nagjheri tripped due to control DC supply interruption. As verbally informed the control DC supply was switched OFF inadvertently which resulted in trippings at Nagjheri.	435 MW	----	GI-1	---

Eastern Region-Event Report for September 2018

Sl. No.	Region	Name of major elements	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	ERLDC	220 kV JLHEP - New Melli D/C 220 kV Tashiding - New Melli S/C	JLHEP	4-Sep-18	12:00	4-Sep-18	12:14	00:14	At 12:00 hrs , 220 kV Jorethang - New Melli D/C tripped on RYBN fault resulting tripping of all running units of Jorethang due to loss of evacuation path. 220 Kv Tashiding New Melli S/C tripped at same time on R-Y-B-N fault.	97	0	GD-I	0.0000
2	ERLDC	220 kV JLHEP - New Melli D/C 220 kV Tashiding - New Melli S/C	JLHEP	16-Sep-18	11:13	16-Sep-18	11:28	00:15	220 kV Jorethang - New Melli D/C & 220 Kv Tashiding New Melli S/C tripped at 11:13 hrs resulting tripping of all running units of Jorethang due to loss of evacuation path.	97	0	GD-I	0.0000
3	ERLDC	220 kV Purnea - Purnea D/C 220/132 kv ICTs at Old Purnea (PG) 132 kV Purnea - Purnea T/C	BSPTCL	16-Sep-18	15:38	16-Sep-18	16:16	00:38	220 kV Purnea - Purnea D/C tripped from New Purnea end along with 220/132 kv ICTs and 132 kV Purnea - Purnea T/C at Old Purnea (PG) S/S. Failure of Y phase CT of 132 kV Purnea - Tribenigunj S/C at Tribenigunj reported at same time.	0	178	GD-I	0.1127
4	ERLDC	220 kV Purnea - Purnea D/C 220/132 kv ICTs at Old Purnea (PG) 132 kV Purnea - Purnea T/C 220/132 kv ICT at Kishangunj	BSPTCL	16-Sep-18	20:52	16-Sep-18	21:06	00:14	220 kV Purnea - Purnea D/C tripped from New Purnea end along with 220/132 kv ICTs and 132 kV Purnea - Purnea T/C at Old Purnea (PG) S/S. At the same time, 220/132 kv ICTs at Kishangunj tripped leading to a load loss around 212 MW at Kishangunj and its surrounding area	0	407	GD-I	0.0950
5	ERLDC	220 kV Katapalli Sadaipalli S/C 220 kV Bolangir-Sadaipalli S/C	OPTCL	17-Sep-18	10:59	17-Sep-18	11:11	00:12	At 10:52 hrs 220 kV Katapalli Sadaipalli S/C tripped. While taking charging attempt of this line, 220 kV Bolangir-Sadaipalli S/C tripped resulting load loss at Sadaipalli.	0	121	GD-I	0.0242
6	ERLDC	400 kV Teesta III - Dikchu S/C	TPTL	22-Sep-18	14:38	22-Sep-18	16:00	01:22	400 kV Teesta III Dikchu S/C tripped at 14:38 hrs on B-N fault. Relay indication at Teesta III: B-N, F/C 9.1 KA, 15.6 km from Teesta III; at Dikchu: B-N, Z-IV, E/F, F/C 9.195 KA, -700 m from Dikchu. On investigation it was found some of the bushes/plantation came in to contact with B phase conductor in the out yard between ICT & GIS at Dikchu. Both units at Dikchu tripped on differential protection though overvoltage and over speed protection operated correctly. O/C earth fault protection of 400/132 kv ICT picked up but did not tripped as time delay (1.2 s) was more than fault clearing time.	96	0	GD-I	0.0000
7	ERLDC	400 KV Alipurduar- Binaguri I 400 KV Alipurduar- Bongaigaon II	ENICL	25-Sep-18	14:40	3-Oct-18	17:42	195:02:00	400 KV Alipurduar- Binaguri I and 400 KV Alipurduar- Bongaigaon II are on a multi circuit tower. R phase conductor of 400 KV Alipurduar - Binaguri I broke and fell on 400 KV Alipurduar - Bongaigaon II (between loc. 8 & 9, 3 KM from Alipurduar) resulting tripping of both the circuits at same time.	0	0	GI-II	0.0000
8	ERLDC	220 kV TVNL - PTPS S/C 220 kV TVNL - Biharshariff S/C	JUSNL	27-Sep-18	13:14	27-Sep-18	13:40	00:26	220 kV TVNL - PTPS S/C and 220 kV TVNL - Biharshariff S/C tripped on same time resulting tripping running unit (unit #1) at Tenughat end.	159	0	GD-I	0.0000

Grid Disturbances in NER Grid for September 2018

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							
1	NER	132 kV Badarpur - Panchgram 1 Line, 132 kV Lumshnong - Panchgram 1 Line and 132 kV Hailakandi-Panchgram 1 Line	POWERGRID, AEGCL & MePTCL	01-Sep-2018	22:27:00	01-Sep-18	22:48:00	00:21	Panchgram area of Assam Power System was connected with rest of NER Grid through 132 kV Badarpur - Panchgram line, 132 kV Lumshnong - Panchgram line and 132 kV Hailakandi - Panchgram line. 132 kV Srikona-Panchgram line kept idle charged due to Tower collapse. At 22:27 Hr on 01.09.2018, 132 kV Badarpur - Panchgram line, 132 kV Lumshnong - Panchgram line and 132 kV Hailakandi - Panchgram line tripped. Due to tripping of these elements, Panchgram area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	30	0.000	0.011	GD-I
2	NER	132 kV Dimapur (PG) - Kohima Line	POWERGRID & DoP, Nagaland	02-Sep-2018	13:31:00	02-Sep-2018	13:47:00	00:16	Capital area of Nagaland Power System was connected with rest of NER Grid through 132 kV Dimapur(PG) - Kohima (DoP, Nagaland) line. 132 kV Karong - Kohima line kept idle charged from Kohima (due to Overloading of 132 kV Dimapur (PG) - Kohima Line), 132 kV Wokha - Kohima line was kept open (Cause : improper relay co-ordination of 132 kV Dimapur - Kohima - Wokha link) and 66 kV Tuensang - Likhimro line kept open (Cause : construction activities). At 13:31 Hrs on 02.09.2018, 132 kV Dimapur(PG) - Kohima (DoP, Nagaland) line tripped. Due to tripping of this element, Capital area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	22	26	0.006	0.007	GD-I
3	NER	132 kV Loktak - Ningthoukhong Line and 132 kV Imphal (PG) - Loktak Line	POWERGRID & MSPCL	04-Sep-2018	14:28:00	04-Sep-2018	14:44:00	00:16	Loktak Power Station and Ningthoukhong-Rengpang area of Manipur Power System were connected with rest of NER Grid through 132 kV Loktak - Ningthoukhong line and 132 kV Loktak - Imphal line. 132 kV Jiribam - Loktak line was under approved Shutdown since 08:39 Hrs dated 02.09.18. (132 kV Imphal(PG) - Ningthoukhong line and 132 kV Kakching - Kongba line kept open to control overloading of 132 kV Loktak - Ningthoukhong line).132 kV Rengpang - Jiribam(MSPCL) line was kept open. At 14:28 Hrs on 04.09.2018, 132 kV Loktak - Ningthoukhong line and 132 kV Loktak - Imphal line tripped. Due to tripping of this element, Loktak Power Station and Ningthoukhong-Rengpang area of Manipur Power System were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	105	56	0.028	0.015	GD-I
4	NER	132 kV Monarchak - Rokhia Line and 132 kV Monarchak - Udaipur Line	TSECL	04-Sep-2018	17:43:00	04-Sep-2018	18:29:00	00:46	Monarchak Power Station and Rabindranagar area of Tripura Power System were connected with rest of NER Grid through 132 kV Monarchak - Udaipur Line & 132 kV Monarchak - Rokhia Line. At 17:43 Hrs on 04.09.2018, 132 kV Monarchak - Udaipur Line & 132 kV Monarchak - Rokhia Lines tripped. Due to tripping of these elements, Monarchak Power Station and Rabindranagar area were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	103	7	0.079	0.005	GD-I
5	NER	132 kV Loktak - Ningthoukhong Line	MSPCL	05-Sep-2018	12:55:00	05-Sep-2018	13:15:00	00:20	Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kV Loktak - Ningthoukhong line. 132 kV Imphal(PG) - Ningthoukhong line and 132 kV Kakching - Kongba line kept open to control overloading of 132 kV Loktak - Ningthoukhong line. At 12:55 Hrs on 05.09.2018, 132 kV Loktak - Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	56	0.000	0.019	GD-I
6	NER	132 kV Dimapur (PG) - Kohima Line	POWERGRID & DoP, Nagaland	06-Sep-2018	20:25:00	06-Sep-2018	20:30:00	00:05	Capital area of Nagaland Power System was connected with rest of NER Grid through 132 kV Dimapur(PG) - Kohima (DoP, Nagaland) line. 132 kV Karong - Kohima line kept idle charged from Kohima (due to Overloading of 132 kV Dimapur (PG) - Kohima Line), 132 kV Wokha - Kohima line was kept open (Cause : improper relay co-ordination of 132 kV Dimapur - Kohima - Wokha link) and 66 kV Tuensang - Likhimro line kept open (Cause : construction activities). At 20:25 Hrs on 06.09.2018, 132 kV Dimapur(PG) - Kohima (DoP, Nagaland) 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.	24	32	0.002	0.003	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							
7	NER	132 kV Balipara - Khupi Line	NEEPCO & DoP, AP	11-Sep-2018	12:18:00	11-Sep-2018	12:40:00	00:22	Khupi area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 12:18 Hrs on 11.09.2018, 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	0.000	0.015	GD-I
8	NER	132 kV Balipara - Khupi Line	NEEPCO & DoP, AP	11-Sep-2018	17:42:00	11-Sep-2018	18:46:00	01:04	Khupi area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Balipara- Khupi line. At 17:42 Hrs on 11.09.2018, 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	25	0.000	0.027	GD-I
9	NER	220 kV Mariani (PG) - Misa 1 Line and 132 kV Doyang-Mokokchung (DoP, Nagaland) line	POWERGRID & DoP, Nagaland	19-Sep-2018	00:43:00	19-Sep-2018	00:58:00	00:15	Mokokchung area of Nagaland was connected with rest of NER Grid through 220 kV Mariani (PG) - Misa lines and 132 kV Doyang-Mokokchung (DoP, Nagaland) line. 132 kV AGBPP - Mariani (PG) line is under outage since 16:55 Hrs on 17.09.18 due to insulator failure. 132 kV Mokokchung(DoP, Nagaland)-Mariani(AS) is under long outage & 66 kV Tuengsang-Likimro line kept open for system requirement. At 00:43 Hrs on 19.09.2018, 220 kV Mariani (PG) - Misa line and 132 kV Doyang-Mokokchung (DoP, Nagaland) 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	18	0.000	0.005	GD-I
10	NER	220/132 kV, 100 MVA ICT 1 & 2 at Dimapur (PG), 220/132 kV, 30 MVA ICT 1 & 2 at Mokokchung (PG) and 132 kV Dimapur - Bokajan 1 Line	POWERGRID & AEGCL	19-Sep-2018	12:55:00	19-Sep-2018	13:13:00	00:18	Doyang Power Station and Nagaland Power System were connected with rest of NER Grid through 220/132 kV, 100 MVA ICT 1 & 2 at Dimapur (PG), 220/132 kV, 30 MVA ICT 1 & 2 at Mokokchung (PG) and 132 kV Dimapur - Bokajan 1 Line. 132 kV Dimapur - Imphal Line is under outage since 18:22 Hr on 25.07.18. 132 kV Karong - Kohima line kept idle charged from Kohima (due to Overloading of 132 kV Dimapur (PG) - Kohima Line). 132 kV Mokokchung(DoP, Nagaland)-Marianai(AS) is under long outage. At 12:55 Hrs on 19.09.2018, 220/132 kV, 100 MVA ICT 1 & 2 at Dimapur (PG), 220/132 kV, 30 MVA ICT 1 & 2 at Mokokchung (PG) and 132 kV Dimapur - Bokajan Line tripped. Due to tripping of these elements, Doyang Power Station and Nagaland Power System were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in these areas.	22	76	0.007	0.050	GD-I
11	NER	132 kV Lekhi - Nirjuli Line	DoP AP & POWERGRID	19-Sep-2018	18:25:00	19-Sep-2018	19:48:00	01:23	Nirjuli area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Lekhi - Nirjuli Line. 132 kV Gohpur - Nirjuli line was kept opened for overloading of 132 kV Lekhi - Nirjuli Line. At 18:25 Hrs on 19.09.2018, 132 kV Lekhi - Nirjuli Line tripped. Due to tripping of this element, Nirjuli area was separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	0	36	0.000	0.029	GD-I
12	NER	132 kV AGTCCPP-Agartala 1 & 2 lines, 132 kV Agartala - Surajmaninagar 1 & 2 Lines, 132 kV Agartala - Budhjungnagar Line and 132 kV Agartala - Dhalabil Line	POWERGRID & TSECL	20-Sep-2018	01:37:00	20-Sep-2018	01:48:00	00:11	Tripura Power System consisting of Capital area, Udaipur area, Rabindranagar area, Monarchak Power Station and Rokhia area were connected with rest of NER Grid through 132 kV AGTCCPP-Agartala 1 & 2 lines, 132 kV Agartala - Surajmaninagar 1 & 2 Lines, 132 kV Agartala - Budhjungnagar Line and 132 kV Agartala - Dhalabil Line. 132 kV Palatana - Udaipur Line and 66 kV Rokhia - Badarghat line kept open for system requirement. At 01:37 Hrs on 20.09.2018, 132 kV AGTCCPP-Agartala 1 & 2 lines, 132 kV Agartala - Surajmaninagar 1 & 2 Lines, 132 kV Agartala - Budhjungnagar Line and 132 kV Agartala - Dhalabil Line tripped. Due to tripping of these elements, capital area, Rabindranagar area, Monarchak Power Station and Rokhia area were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in these areas.	186	65	0.034	0.017	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							
13	NER	132 kV AGTCCPP-Agartala 1 line, 132 kV Agartala - Rokhia 1 & 2 lines and 132 kV Kamalpur – Dhalabil line	POWERGRID & TSECL	20-Sep-2018	13:57:00	20-Sep-2018	14:15:00	00:18	Capital and Dhalabil areas of Tripura Power System were connected with rest of NER Grid through 132 kV AGTCCPP-Agartala 1 line, 132 kV Agartala - Rokhia 1 & 2 lines and 132 kV Kamalpur – Dhalabil line. (132 kV Agartala - Surajmaninagar 1 & 2 Lines, 132 kV Agartala - Budhjungnagar Line and 132 kV Agartala - AGTCCPP 2 Lines were not restored after tripping). At 13:57 Hrs on 20.09.2018, 132 kV AGTCCPP-Agartala 1 line, 132 kV Rokhia – Agartala 1 & 2 lines and 132 kV Kamalpur – Dhalabil line tripped. Due to tripping of these elements, Capital and Dhalabil areas were separated from rest of NER Grid and subsequently collapsed due to no source in this areas.	95	72	0.046	0.034	GD-I
14	NER	132 kV Rokhia-Agartala 1 & 2 lines and 132 kV Monarchak - Rokhia Line	TSECL	20-Sep-2018	19:26:00	20-Sep-2018	19:55:00	00:29	Rokhia area was connected with rest of NER Grid through 132 kV Rokhia-Agartala 1 & 2 lines and 132 kV Monarchak - Rokhia Line. 66 kV Rokhia -Badarghat line and 66 kV Bagafa - Belonia line kept open for system requirement. At 19:26 Hrs on 20.09.2018, 132 kV Rokhia-Agartala 1 & 2 lines and 132 kV Monarchak - Rokhia Line tripped. Due to tripping of these elements, Rokhia area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	101	30	0.048	0.014	GD-I
15	NER	132 kV Doyang - Sanis Line	DoP Nagaland	21-Sep-2018	11:56:00	21-Sep-2018	12:22:00	00:26	Capital - Sanis area of Nagaland Power System was connected with rest of NER Grid through 132 kV Doyang - Sanis line. 132 kV Dimapur - Kohima line is under shutdown (OCC approved) since 06:36 Hrs of 21.09.18. 132 kV Karong - Kohima line kept idle charged from Kohima (due to Overloading of 132 kV Dimapur (PG) - Sanis Line). 66 kV Tuensang - Likhimro line kept open (Cause : construction activities). At 11:56 Hrs on 21.09.2018, 132 kV Doyang - Sanis line tripped. Due to tripping of this element, Capital - Sanis area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	20	0.000	0.029	GD-I
16	NER	132 kV Doyang - Sanis Line	DoP Nagaland	21-Sep-2018	18:07:00	21-Sep-2018	18:24:00	00:17	Capital - Sanis area of Nagaland Power System were connected with rest of NER Grid through 132 kV Doyang - Sanis line. 132 kV Dimapur - Kohima line is under shutdown (OCC approved) since 06:36 Hrs of 21.09.18. 132 kV Karong - Kohima line kept idle charged from Kohima (due to Overloading of 132 kV Dimapur (PG) - Sanis Line). 66 kV Tuensang - Likhimro line kept open (Cause : construction activities). At 18:07 Hrs on 21.09.2018, 132 kV Doyang - Sanis line tripped. Due to tripping of this element, Capital - Sanis area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	24	0.000	0.007	GD-I
17	NER	132 kV Karong - Kohima Line	MSPCL & DoP Nagaland	21-Sep-2018	22:35:00	22-Sep-2018	00:15:00	01:40	Capital area of Nagaland Power System were connected with rest of NER Grid through 132 kV Karong - Kohima line. 132 kV Dimapur - Kohima line is under shutdown (OCC approved) since 06:36 Hrs of 21.09.18. 132 kV Wokha - Kohima line was under outage at 18:07 Hrs on 21.09.18. 66 kV Tuensang - Likhimro line kept open (Cause : construction activities). At 22:35 Hrs on 21.09.2018, 132 kV Karong - 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	15	0.000	0.025	GD-I
18	NER	132 kV Doyang-Mokokchung (DoP, Nagaland) and 132 kV Mokokchung (DoP, Nagaland)-Mokokchung (PG) 1 & 2 lines	POWERGRID & DoP, Nagaland	24-Sep-2018	20:29:00	24-Sep-2018	21:02:00	00:33	Mokokchung area of Nagaland was connected with rest of NER Grid through 132 kV Doyang-Mokokchung (DoP, Nagaland) and 132 kV Mokokchung (DoP, Nagaland)-Mokokchung (PG) 1 & 2 lines. 132 kV Mokokchung(NA)-Marianai(AS) is under long outage & 66 kV Tuensang-Likhimro line kept open for system requirement). At 20:29 Hr on 24.09.18 ,132 kV Doyang-Mokokchung (DoP, Nagaland) and 132 kV Mokokchung (DoP, Nagaland)-Mokokchung (PG) 1 & 2 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	15	0.000	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							
19	NER	132 kV Doyang - Sanis Line	DoP, Nagaland	26-Sep-2018	19:19:00	26-Sep-2018	21:00	01:41	Capital - Sanis area of Nagaland Power System were connected with rest of NER Grid through 132 kV Doyang - Sanis line. 132 kV Dimapur - Kohima line is under shutdown (OCC approved) since 06:36 Hrs of 21.09.18. 132 kV Karong - Kohima line kept idle charged from Kohima (due to Overloading of 132 kV Dimapur (PG) - Sanis Line). 66 kV Tuensang - Likhimro line kept open (Cause : construction activities). At 19:19 Hrs on 26.09.2018, 132 kV Doyang - Sanis line tripped. Due to tripping of this element, Capital - Sanis area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	19	38	0.032	0.064	GD-I
20	NER	132 kV Palatana-Surajmaninagar line,132 kV Agartala - Budjungnagar Line and 132 kV Jirania Budjungnagar line	POWERGRID & TSECL	27-Sep-2018	14:17:00	27-Sep-2018	14:30:00	00:13	Comilla area of Bangladesh Power System and Budhjangnagar area of Tripura Power System were connected with rest of NER Grid through 132 kV Palatana-Surajmaninagar line, 132 kV Agartala - Budjungnagar 1 Line and 132 kV Jirania Budjungnagar line. 132 kV Agartala - Surajmaninagar 1 & 2 Lines were under outage since 14:15 Hrs on 27.09.2018. At 14:17 Hrs on 27.09.2018, 132 kV AGTCCPP-Agartala 1 & 2 lines, 132 kV Palatana - Surajmaninagar Line, 132 kV Agartala - Budjungnagar Line and 132 kV Jirania Budjungnagar line tripped. Due to tripping of these elements, Comilla area of Bangladesh Powwer System and Budhjangnagar area of tripura Power System were separated from rest of NER Grid and subsequently collapsed due to no source in these area.	131	157	0.028	0.034	GD-I

List of Grid Incidents of NER during September 2018

S.No	Region	State(s) Involved	Name of Elements	Owner / Agency	Outage		Revival		Outage Duration	Event (Brief Details)	Generation Loss (MW)	Load Loss MW	Energy Unserviced (MU)	Category as per CEA Grid Standards
					Date	Time	Date	Time						
1	NER	AGBPP	AGBPP Unit 2 and Unit 4	NEEPCO	04-Sep-2018	20:33:00	04-Sep-2018	21:45:00	01:12:00	AGBPP Unit 2 and 4 tripped at 20:33 Hrs on 04.09.2018 due to compressor fan belt failure. (Revision of schedule from Block No.88 on 04.09.2018)	56	0	0.067	GI-II
2	NER	AGBPP	AGBPP Unit 2	NEEPCO	05-Sep-2018	02:15:00	05-Sep-2018	03:00:00	00:45:00	AGBPP Unit 2 tripped at 02:15 Hrs on 05.09.2018 due to minimum Breaker Oil. (Revision of schedule from Block No.13 on 05.09.2018).	29	0	0.022	GI-II
3	NER	AGBPP	AGBPP Unit 6	NEEPCO	06-Sep-2018	19:01:00	06-Sep-2018	19:45:00	00:44:00	AGBPP Unit 6 tripped at 19:01 Hrs on 06.09.2018 due to maloperation of Emergency stop push bottom trip. (Revision of schedule from Block No.80 on 06.09.2018).	25	0	0.018	GI-II
4	NER	Loktak	Loktak Unit 1	NHPC	09-Sep-2018	17:56:00	09-Sep-2018	20:45:00	02:49:00	Loktak Unit 1 tripped at 17:56 Hrs on 03.09.18 due to cooler valve problem. (Revision of schedule from Block No.84 on 09.09.2018).	35	0	0.098	GI-I
5	NER	BgTTP	BGTTP Unit 1	NTPC	12-Sep-2018	10:21:00	12-Sep-2018	11:00:00	00:39:00	BgTTP Unit 1 tripped at 10:21 Hrs on 12.09.2018 due to operation of Stator Inter-turn fault due to earthquake. (Revision of schedule from Block No.45 on 12.09.2018).	157	0	0.102	GI-II
6	NER	Khandong	Khandong Unit 2	NEEPCO	13-Sep-2018	04:49:00	13-Sep-2018	05:30:00	00:41:00	Khandong Unit 2 tripped at 04:49 Hrs on 13.09.2018 due to rotor earth fault. (Revision of schedule from Block No.23 on 13.09.2018).	20	0	0.014	GI-I
7	NER	AGBPP	AGBPP Unit 3, Unit 5, Unit 6 and Unit 9	NEEPCO	16-Sep-2018	12:42:00	16-Sep-2018	13:30:00	00:48:00	AGBPP Unit 3, 5, 6 and 9 tripped at 12:42 Hrs on 16.09.2018 due to operation of differential protection. (Revision of schedule from Block No.55 on 16.09.2018).	119	0	0.095	GI-II

S.No	Region	State(s) Involved	Name of Elements	Owner / Agency	Outage		Revival		Outage Duration	Event (Brief Details)	Generation Loss (MW)	Load Loss MW	Energy Unreserved (MU)	Category as per CEA Grid Standards
					Date	Time	Date	Time						
8	NER	AGBPP	AGBPP Unit 3, Unit 4 and Unit 8	NEEPCO	18-Sep-2018	00:55:00	18-Sep-2018	02:15:00	01:20:00	AGBPP Unit 3, 4 and 8 tripped at 00:55 Hrs on 18.09.2018 due to tripping of gas booster compressor. (Revision of schedule from Block No.10 on 18.09.2018).	54	0	0.072	GI-II
9	NER	Kopili	Kopili Unit 4	NEEPCO	18-Sep-2018	07:44:00	18-Sep-2018	08:45:00	01:01:00	Kopili Unit 4 tripped at 07:44 Hrs on 18.09.2018 due to rotor earth fault. (Revision of schedule from Block No.36 on 18.09.2018).	44	0	0.045	GI-II
10	NER	Kopili	Kopili Unit 1	NEEPCO	22-Sep-2018	09:42:00	22-Sep-2018	10:45:00	01:03:00	Kopili Unit 1 tripped at 09:42 Hrs on 22.09.2018 due to bursting of R-ph bushing. (Revision of schedule from Block No.44 on 22.09.2018).	50	0	0.053	GI-II
11	NER	Kopili	Kopili Unit 3	NEEPCO	25-Sep-2018	11:22:00	25-Sep-2018	12:15:00	00:53:00	Kopili Unit 3 tripped at 11:22 Hrs on 25.09.18 due to very high UGB temperature. (Revision of schedule from Block No. 50 on 25.09.18)	44	0	0.039	GI-II
12	NER	Kopili	Kopili Unit 4	NEEPCO	28-Sep-2018	05:55:00	28-Sep-2018	06:45:00	00:50:00	Kopili Unit 4 tripped at 05:55 Hrs on 28.09.18 due to Rotor earth fault . (Revision of schedule from Block No.28 on 28.09.18)	42	0	0.035	GI-II
13	NER	AGTCCPP	AGTCCPP Unit 3 & STG-2	NEEPCO	30-Sep-18	22:50:00	01-Oct-18	00:00:00	01:10:00	AGTCCPP Unit 3 & STG-2 tripped at 22:50 Hrs on 30.09.2018 due to Gas detection level high. (Revision of schedule from Block No.1 on 01.10.2018).	29	0	0.034	GI-I