

### Major Grid Events for November 2017\_Northern Region

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 Standard	Energy Unreserved (in MU)
				Date	Time	Date	Time						
1	NR	1.400/220 kV Wagoora 315 MVA ICT 1 2.220 kV Pampore(JK)-Wagoora(PG) 1 3.220 kV Wagoora (PG) 220 kV Bus 1 4.400/220 kV Wagoora 315 MVA ICT 3	PGCIL/J&K	01-11-17	15:34	01-11-17	15:55	00:21	R-Y fault occurred on snapping of R phase conductor of 220kV Wagoora-Pampore ckt 1, resulted the operation of Busbar protection and tripped all 220kV elements of Wagoora station  From PMU, max dip observed in R-phase and fault clearing time approx 400msec	0	500	GD1	00:05
2	NR	1.400 kV Allahabad Rewa Road(400kV) - Panki 2.400 kV Kanpur(PG)-Panki(UP) 2 3.400 kV Kanpur(PG)-Panki(UP) 1 4.400 kV Panki-Unnao 5.400 kV Aligarh - Panki 6.400/220 kV Panki 240 MVA ICT 2 7.400/220 kV Panki 240 MVA ICT 1 8.400 kV 210MW Unchar Unit #3,4&5	UPPTCL/PGCIL	02-11-17	07:01	02-11-17	20:52	13:51	400kV Bus fault occurred on snapping of B-phase conductor at Panki-UP and caused tripping of all 400 kV lines of Panki(UP) station. Further, Unchar unit-3, 4 & 5 of 210MW were also tripped at the same time due to operation of differential protection .  From PMU, Max dip in all three phase. Fault clearance time: 440ms	500	0	GD1	00:00
3	NR	1.400 kV Jhakri(SJVNL)-Karchamwangtoo(JP) 2 2.400 kV Abdullapur-Karchamwangtoo 2 3.400 kV Abdullapur-Karchamwangtoo 1 4.400 kV Baspa(HP)-Karchamwangtoo(JP) 2	PGCIL/ JSW/ SVNL	04-11-17	16:00	04-11-17	16:29	00:29	Bus isolator of the shutdown line(Karcham-Jhakri-1) was by-mistakely taken into service condition for checking Auto-Reclosing function of the line breaker. Which paved the cause of flash over in CT terminals of the line and caused cascade tripping of all the lines connected to Karcham station  From PMU, Voltage dip in all three phase. Fault Duration: ~15second	520	0	GD1	00:00
4	NR	1.400 kV Dhuri(400kv) -Talwandi Sabo 2 2.400 kV Dhuri(400kv) -Talwandi Sabo 1 3.400kV Amritsar(PG)-Makhu(PSEB) -2 4.400kV 660MW Talwandisaboo Unit 2 & 3	PSEB	07-11-17	01:54	07-11-17	12:49	10:55	400kV Amritsar(PG)-Makhu(PSEB) -2,400kV Talwandi sabo-Dhuri ckt 2 and 400kV Talwandi sabo-Dhuri ckt 1 lines tripped on Phase to earth fault(suspected fog). Due to loss of major evacuation path, Units (2&3) of Talwandi saboo were aslo tripped.	600	0	GI2	00:00
5	NR	1.400 kV Aligarh(UP)-Sikandrabad 400(UP) 2. 500MVA 400/220 kV Aligarh ICT 2	UPPTCL	09-11-17	04:49	09-11-17	18:30	13:41	400kV Aligarh-Sikenderabad ckt 1 tripped on earth fault and at the same time 400/220kV 500MVA ICT-2tripped on Over flux  From PMU, Voltage dip in Y phase observed	0	0	GI2	00:00
6	NR	1.800 kV HVDC Champa(WR) - Kurukshetra(NR) line -2 2.800 kV HVDC Champa(WR) - Kurukshetra(NR) line -1 3. 400kV Kurukshetra- Abdullapur ckt1 4. 400kV Kurukshetra-Sonipat ckt 2 5. 400kV Kurukshetra- Malerkotla ckt 1	PGCIL	10-11-2017	03:26	10-11-2017	04:58	01:32	At 03:25hrs,all the 400kV lines of Kurukshetra station tripped on Over voltage ,further blocked Bi-pole 800kV HVDC Champa-Kurukshetra lines on loss of evacuation path	0	0	GI2	00:00
7	NR	1.400 kV Ratangarh (RVPNL) - Sikar (PG) - 1 2.400 kV Ratangarh (RVPNL) - Sikar (PG) - 2	PGCIL/RVPNL	10-11-2017	18:52	10-11-2017	19:14	00:22	No fault observed, 400kV Ratangarh-Sikar ckt 1 & 2 ripped on Over Voltage.	0	0	GI2	00:00
8	NR	1.400 kV Makhu -Mukatsar -2 2.400 kV Mukatsar -Talwandi Sabo - 2	PSEB	11-11-2017	23:46	12-11-2017	00:10	00:24	400kV Mukatsar-T.Sabo ckt-2 tripped on B-N fault.Whereas 400kV Mukatsar-Makhu ckt 2 whose reverse zone wrongly configured and tripped along with 400kV Mukatsar-T.saboo ckt 2.	0	0	GI2	00:00

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 Standard	Energy Unserviced (in MU)
				Date	Time	Date	Time	Time					
9	NR	1.400 kV Nakodar - Talwandi Sabo-1 2.400 kV Dhuri(400kv) -Talwandi Sabo 2 3.400 kV Dhuri(400kv)-Talwandi Saboo 1 4.Moga(PG)-Talwandi Sabo(PSEB) 5.400kv 660MW Talwandisaboo Unit 1, 2 & 3	PSEB	12-11-2017	06:45	12-11-2017	06:54	00:09	Multiple lines emanating from Talwandi Sabo TPS tripped on Earth fault ,resulted into tripping of all three(660MW) running units of Talwandi Sabo on loss of evacuation path.  From Pmu, Observed, at 06:45 Max dip in R phase and at 07:13, Max dip in Y-phase	1000	0	GD1	00:00
10	NR	1.400 kV Nakodar - Talwandi Sabo-1 2.400 kV Moga(PG) -Talwandi Sabo(PSEB) 3.400 kV Mukatsar -Talwandi Sabo - 2 4.400 kV Dhuri(400kv) -Talwandi Sabo 1 5.400 kV Moga(PG) -Talwandi Sabo(PSEB) 6.400 kV Dhuri(400kv) -Talwandi Sabo 2	PSEB	13-11-2017	04:17	13-11-2017	05:49	01:32	400kV T.Sabo-Mukhtsar-2 tripped on over voltage whereas 400kV T.Sabo-Dhuri-1 tripped on B-N fault  From PMU, Max dip observed in B phase.	0	0	GI2	00:00
11	NR	1.400 kV 135MW Rajwest Unit#4 ,5,6,7 & 8 2.400 kV Rajwest-Barmer 3.400 kV Rajwest-Jodhpur Ckt 1 & 2 4.400 kV/220kv 315MVA ICT 2	Rajasthan/JSW	15-11-2017	09:21	15-11-2017	11:34	02:13	While availing planned shutdown of 400kV Rajwest-Barmer line,its line breaker was opened. Resulted sudden increment of loading in 400/220kV 315MVA ICT and tripped on Over-current protection. Due to loss of power evacuation path, all units of Rajwest tripped	500	0	GD1	00:00
12	NR	1.400 kV Panki-Unnao 2.400 kV Allahabad Rewa Road(400kv) - Panki 3.400 kV Kanpur(PG)-Panki(UP) 2 4.400/220 kV Panki 240 MVA ICT 2 5.400/220 kV Panki 240 MVA ICT 1	UPPTCL	16-11-2017	16:42	16-11-2017	18:19	01:37	During testing work of replaced CT's of 400kV Aligarh-Panki line, 400kV Bus Bar Protection was mal-operated .Resulted into complete outage of 400kV Panki sttaion.	0	0	GI2	00:00
13	NR	1.400/220 kV Panipat 450 MVA ICT 1&2 2.220 kV Panipat-Dhulkote 1& 2 3.220 kV Panipat-Narela 2 4.220 kV Panipat TPS(HVPLN)-Panipat(BBMB) 1,2,3&4 5.220 kV Chhajpur(HVPLN) - Panipat(BBMB) 1&2 6.220 kV Panipat-Narela 1&3 7.220 kV Panipat-Kurukshehra	BBMB/HVPLN	19-11-2017	11:29	19-11-2017	12:56	01:27	Busted R phase CVT of 220kV Panipat-Thermal 3 line at panipat station, resulted complete outage of 220kV lines of 400/220kV Panipat station on Bus-bar protection  From PMU, Max dip observed in R-phase, fault clearing time approx 320msec	0	0	GI2	00:00
14	NR	1.400 kV Bassi(PG)-Sikar(PG) 1 2.400 kV Bassi-Jaipur South-1 &2 3.400 kV Bassi(PG)-Heerapura(RVPLN) 2	PGCIL/Rajasthan	26-11-2017	21:12	26-11-2017	21:27	00:15	400 KV Heerapura- Bassi Circuit 2 tripped on B-phase to earth fault. Along with that 400kV Bassi-Sikar and 400kV Bassi-jaipur South ckt 1 &2 also tripped  From PMU, Max dip observed in B-phase, seems Auto-reclosure un-successful	0	0	GI2	00:00
15	NR	1.400 kV Bikaner-Didwana 1 2.400 kV Bikaner-Suratgarh	RRVPLN	28-11-2017	04:02	28-11-2017	05:32	01:30	B-N fault occurred resulted in tripping of 400kV Bikaner-Suratgarh and 400kV Bikaner-Deedwana  From PMU, No fault Observed	0	0	GI2	00:00
16	NR	1.400 kV Anpara-Sarnath 2 2.400 kV Sarnath(UP)-Varanasi(PG) 1&2 3.400/220 kV Sarnath 315 MVA ICT 1&3	UPPTCL	29-11-2017	01:22	29-11-2017	02:15	00:53	At 1:17hrs power flow of 400kV Sarnath- Varnasi ckt 2 became zero, at 1:22hrs 400kV Sarnath- Anpara ckt2, 400kV Sarnath- Varnasi ckt1, 315MVA ICT 1 &3 tripped on Bus-bar protection.  From PMU, No fault observed	0	0	GI2	00:00
17	NR	1.765/400 kV Unnao C 1000 MVA ICT 1,2 &3 2.400 kV Panki-Unnao 3.400 kV Lucknow(PG)-Unnao(UP) 1&2 4.400 kV Bareilly-Unnao 1&2 5.400 kV Agra-Unnao 6.400 kV Lucknow-Unnao 7.400/220 kV Unnao 315 MVA ICT 1&2 8.400 kV Unnao 63 MVAR (400kV) Bus Reactor 1	UPPTCL	30-11-2017	17:50	30-11-2017	20:52	03:02	at 17:50hrs all 400kV Lines of 765/400kV Unnao station tripped on Busbar-protection (Bus1 & 2)  From Pmu, No fault observed	0	0	GI2	00:00

### Major Grid Events for November 2017\_ Western Region

S.No	Region	Name of Elements	Owner/Agency	Outage		Revival		Outage Duration Time	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA	Energy Unserved (MU)
				Date	Time	Date	Time						
1	WR	Tripping of 1. 144 MW Gandhar GT-2 2.144 MW Gandhar GT-3 3.224 MW Gandhar ST	NTPC	09-11-2017	17:37	09-11-2017	19:38	02:01	Gas supply line problem led to flame failure and tripping of generating units	410	Nil	GI-1	Nil
2	WR	Tripping of 1.800 kV HVDC Champa-Kurukshetra Pole 1 2.800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	10-11-2017	03:25	10-11-2017	04:58	01:33	Line Winding Under Voltage protection operation resulted in tripping of HVDC Bi-pole	Nil	Nil	GI-2	Nil
3	WR	Tripping of 1.220 kV Belwandi-A"Nagar 1 2.220/132 kV 100 MVA Belwandi ICT 1 3.220 kV Belwandi Bus Coupler 4.132 kV Belwandi-Kukadi	MSETCL	10-11-2017	13:03	10-11-2017	17:11	04:08	LBB operation resulted in tripping of 220 kV Bus 1 which is due to the non clearance of fault at 132 kV side of Kukadi line.	Nil	Nil	GI-1	Nil
4	WR	Tripping of 1.220 kV Wardha(MS)-Dhamangaon 2.220 kV Wardha(MS)-Wardha(PG) 3.220 kV Wardha(MS)-Bhugaon 4.220 kV Wardha(MS)-Bhutibori 5.220 kV Wardha(MS)-Railway 1 6.220 kV Wardha(MS)-Abhjeet D/C 7.220 kV Wardha(MS)-Warora 8.220 kV Wardha(MS)-Yevatmal 9.220 kV Badnera-Dhamangaon	MSETCL	10-11-2017	22:01	10-11-2017	22:25	00:24	R phase CT of 220 kV Wardha-Dhamangaon burst and caught fire resulted in Bus bar protection operation and tripping of all the lines connected to 220 kV system of Wardha(MS)	Nil	14	GD-1	0.0056
5	WR	Tripping of 1.400 kV Amreli-Jetpur D/C 2.400 kV Amreli-Hadala 3.400 kV Amreli-Chorania 4.400/220 kV 315 MVA Amreli ICT 1 5.400/220 kV 315 MVA Amreli ICT 2 6.400/220 kV 315 MVA Amreli ICT 3 7.400/220 kV 315 MVA Amreli ICT 4 8.400 kV 125 MVAR Bus reactor 2 9.400 kV 50 MVAR Bus reactor 1	GETCO	12-11-2017	12:50	12-11-2017	13:35	00:45	While taking out 400 kV 125 MVAR Bus reactor, Bus bar protection operated at Amreli Substation and all the elements connected to 400 kV Bus 1 and 2 tripped.	Nil	Nil	GI-2	Nil
6	WR	Tripping of 1.220 kV OSP-Nirmanani 2.220 kV OSP-Barwaha 3.220 kV OSP-Juluwania 4.220 kV OSP-Chhagaon 5.220 kV OSP-Khandwa	NHDC	19-11-2017	05:43	19-11-2017	08:47	03:04	B phase CT of Bus Coupler bursted which resulted in Bus bar protection operation and tripping of all the outgoing lines from OSP	Nil	Nil	GI-1	Nil
7	WR	Tripping of 1. 220 kV Amona-Ponda 2 2.220 kV Tillari-Amona 3.220 kV Mahalakshmi-Amona	Goa	20-11-2017	05:30	20-11-2017	06:50	01:20	220 kV Amona-Ponda 2 tripped on pole discrepancy at Amona end and at the same time the other two circuits, 220 kV Tillari-Amona and 220 kV Mahalakshmi-Amona were tripped at Amona end.	Nil	Nil	GI-1	Nil
8	WR	Tripping of 1. 50 MW SSP CHPH Unit 1 2.50 MW SSP CHPH Unit 3 3.50 MW SSP CHPH Unit 5 4.220 kV SSP-RBPH 1 5.220 kV SSP CHPH Bus Coupler	SSP	20-11-2017	17:14	20-11-2017	17:52	00:38	SSP CHPH Unit 3 LBB protection operation resulted in tripping of Unit 1 and 5 along with the 220 kV Bus Coupler	101	Nil	GI-1	Nil
9	WR	Tripping of 1.800 kV HVDC Champa-Kurukshetra Pole 1 2.800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	21-11-2017	21:15	21-11-2017	21:39	00:24	Transient Over Voltage control protection operation resulted in tripping of HVDC Bi-Pole	Nil	Nil	GI-2	Nil
10	WR	Tripping of 1.660 MW APL Unit 7	APL	27-11-2017	08:35	27-11-2017	15:15	06:40	While taking Outage of 500 kV HVDC Mundra-Mohendargarh Pole 1 ,the flow in the sectionaliser between Phase 3 and 4 increased above 1000 MW and Mundra Unit 7 tripped on SPS operation.SPS was deactivated before taking outage, however due to DC Cable problem the trip signal extended.	622	Nil	GI-2	Nil
11	WR	Tripping of 1.220 kV Malanpur-Gwalior(PG) D/C 2.220 kV Malanpur-Morena D/C 3.220 kV Malanpur-Auraiya 4.220 kV Malanpur-Mahagaon 5.220/132 kV 160 MVA Malanpur ICT 1&2	MPPTCL	30-11-2017	04:01	30-11-2017	05:21	01:20	B phase PT of 220 kV Bus 1 bursted and resulted in tripping of all the elements connected in 220 kV Bus1 and 2	Nil	Nil	GI-1	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.*

### Major Grid Events for November 2017 \_Southern Region

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration Time	Event (As reported)	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards	Energy Unserviced (MU)
				Date	Time	Date	Time						
1	SR	1. 400/220kV ICT-1,2 & 3 2. 220kV Talaguppa - Sharavaty 1,2 3. 220kV Talaguppa - Gerusoppa 1,2	KPTCL	13-Nov-17	12:10	13-Nov-17	13:10	01:00	All elements connected to 220kV Bus at 400/220kV Talaguppa station tripped.	Nil	Nil	GI-1	Nil
2	SR	1. 230kV Madurai - Sembatty 2. 230kV Madurai - Kinnimangalam 3. 230kV Madurai - TTPS 4. 230kV Madurai - Meelavittam 5. 230kV Madurai - Ind Bharath 6. 230kV Madurai - Nallamanaickanpatty 7. 230kV Madurai - Kayathar 8. 230kV Madurai - Renganathapuram 9. 230kV Madurai - Pasumalai 10. 230kV Madurai - Theni 11. 400/230kV ICT-1 & 2	TANTRANSCO	24-Nov-17	12:10	24-Nov-17	13:00	00:50	All elements connected to 230kV Main Bus-B at 400/230kV Madurai station tripped	Nil	Nil	GI-1	Nil
3	SR	1. 220kV Guttur - Chitradurga 2. 220kV Guttur - Ranibennur 3. 220kV Guttur - Devenagere 1,2,3 4. 220kV Guttur - Itagi 5. 220kV Guttur - Haveri 1,2 6. 400/220kV ICT-1&2	KPTCL	30-Nov-17	09:03	13-Nov-17	09:45	00:42	All elements connected to 220kV Bus at 400/220kV Guttur substation tripped. There was jumper cut due to which bus bar protection operated.	Nil	Nil	GI-1	Nil
4	SR	1. 220kV Ghanapur - Moulali 2. 220kV Ghanapur - Chandrayangutta -2 3. 220kV Ghanapur - Nagole ckt-2 4. 220kV Ghanapur - Hayatnagar ckt-2 5. 220/132kV ICT-2 6. 400/220kV ICT-2 & 4	TSTRANSCO	30-Nov-17	12:02	30-Nov-17	13:14	01:12	Multiple element tripping at 220kV Hyderabad (Ghanapur) station. Bus bar protection operated	Nil	Nil	GI-1	Nil

### Grid Events for November 2017\_Eastern Region

Sl. No.	Region	Name of major elements	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	ERLDC	220 kV Darbhanga - Motipur D/C and 220 kV MTPS - Motipur D/C	BSPTCL	02-11-17	13:18	02-11-17	13:25	00:07	At 13:18 Hrs total power failure occurred at Motipur, Musari, Darbhanga, Madhubani, Jainagar, Phoolparas due to tripping of 220 KV Darbhanga-Motipur D/C due to Y-B-N fault. At the same time, 220 KV Muzaffarpur (MTPS)-Motipur D/C also tripped.	0	66	0.0000	0.0077	GD-I
2	ERLDC	132 kV Birpara - Birpara D/C	WBSETCL	03-11-17	14:43	03-11-17	15:07	00:24	Total power failure occurred at 132 KV Birpara S/S (WB) when 132 KV Birpara-Birpara D/C tripped due to failure of B phase LA of 132 KV Birpara-Birpara-II at WB end. At same time, 132 KV Birpara-Birpara-I tripped from WB end on directional E/F	0	70	0.0000	0.0280	GD-I
3	ERLDC	220 kV Tashiding - New Melli S/C 220 kV Tashiding - Rangpo S/C	ISTS	12-11-17	01:36	12-11-17	02:54	01:18	At 01:30 hrs 220 kV Tashiding - New Melli S/C and 220 kV Tashiding - Rangpo S/C tripped in Y-N fault resulting generation loss of 40 MW due to loss of evacuation path.	40	0	0.0520	0.0000	GD-I
4	ERLDC	132 kV Banka – Sultanganj D/C	BSPTCL	13-11-17	02:50	13-11-17	03:04	00:14	Total power failure occurred at Sultanganj and Hatidah after tripping of 132 kV Banka – Sultanganj D/C, Ckt I tripped from Sultanganj only and Ckt II tripped from Banka only.	0	38	0.0000	0.0089	GD-I
5	ERLDC	220 kV TVNL - Patratu S/C 220 kV Hatia - Patratu D/C	JUSNL	23-11-17	11:56	23-11-17	12:05	00:09	220 kV main bus II at Patratu was under shutdown. So all elements were connected to main bus I. At 11:55 hrs 220 kV TVNL - Patratu S/C and 220 kV Hatia - Patratu D/C tripped resulting total loss of power supply at 220/132 kV Patratu S/S. Delayed fault clearance was observed in Y & B phases. During restoration both units at TVNL were tripped at 12:52 hrs. Voltage fluctuation was reported at TVNL bus.	0	145	0.0000	0.0218	GD-I
6	ERLDC	400 kV Alipurduar - Bongaigaon - I (Circuit II was opened) 400 kV Alipurduar Binaguri D/C 220 kV Alipurduar - Birpara D/C	ISTS	26-11-17	04:34	26-11-17	06:37	02:03	400 kV Alipurduar Bongaigaon - II and 220 kV Alipurduar Salakati D/C were out of service. At 04:40 hrs 400 kV Alipurduar - Bongaigaon - I, 400 kV Alipurduar Binaguri d/C and 220 kV Alipurduar - Birpara D/C tripped due to overvoltage. HVDC Alipurduar - Agra Bipole blocked (antecedent flow was 150 MW per pole). As a result 400/220 kV Alipurduar S/S became dead.	0	0	0.0000	0.0000	GI-II
7	ERLDC	132 kV Sagbari-Melli S/C 132 kV Siliguri-Melli S/C 132 kV Rangpo-Melli S/C	Sikkim	29-11-17	05:52	29-11-17	07:10	01:18	Due to flashing of PG clamp of line bay of 66 kV Kalimpong - Melli S/C, 132 kV Sagbari-Melli S/C, 132 kV Siliguri-Melli S/C and 132 kV Rangpo-Melli S/C were switched off resulting total power failure at 132/66 kV Melli S/S and its surrounding area	0	32	0.0000	0.0416	GD-I
8	ERLDC	400 kV Sasaram - Biharshariff - II 400/220 kV 315 MVA ICT - II at Sasaram HVDC Sasaram B/B converter	ISTS	29-11-17	17:19	29-11-17	20:16	02:57	At 17:19 hrs due to bus bar protection operation at Sasaram bus IV, 400 kV Sasaram - Biharshariff - II, 400/220 kV 315 MVA ICT - II at Sasaram and HVDC Sasaram B/B converter tripped. Other elements were connected to another bus to their tie CB. As per PMU data, fault clearing time is 240 ms approx. (generally observed in the case of LBB).	0	0	0.0000	0.0000	GI-II

**List of Grid Disturbance for November 2017 for NER Grid**

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Restoration	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid
1	NER	132 kV Sarusujai - Kahilipara 1, 2 & 3 Lines	AEGCL	03-11-2017 17:03	03-11-2017 17:14	00:11:00	Kahilipara area of Assam Power System and Motonga area of Bhutan Power System were connected with rest of NER Grid through 132 kV Sarusajai - Kahilipara 1, 2 & 3 lines. 132 kV Kahilipara-Umtru 1 & 2 lines were kept open since 10:08 Hrs on 03.11.2017, 132 kV Rangia-Bornagar line and 132 kV Rangia-Nalbari line kept open (Cause: Low Voltage), 132kV Rangia -Sipajhar line, 132 kV Rangia- Rowta line and 132 kV Sisugram - Kamalpur line kept open (Cause: Overloading of 132 kV Rangia (AEGCL) - Motonga (BPC, Bhutan) line). At 17:03 Hrs on 03.11.2017, 132 kV Sarusajai - Kahilipara 1, 2 & 3 lines tripped. Due to tripping of these elements, Kahilipara area of Assam Power System and Motonga area of Bhutan Power System were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	0	136	0.000	0.025	GD-I
2	NER	132 kV Sarusujai - Kahilipara 1 & 2 Lines	AEGCL	03-11-2017 17:20	03-11-2017 17:24	00:04:00	Kahilipara area of Assam Power System and Motonga area of Bhutan Power System were connected with rest of NER Grid through 132 kV Sarusajai - Kahilipara 1 & 2 lines. 132 kV Sarusajai - Kahilipara 3 line was under outage since 17:03 Hrs on 03.11.2017, 132 kV Kahilipara-Umtru 1 & 2 lines were kept open since 10:08 Hrs on 03.11.2017, 132 kV Rangia-Bornagar line and 132 kV Rangia-Nalbari line kept open (Cause: Low Voltage), 132 kV Rangia - Sipajhar line, 132 kV Rangia- Rowta line and 132 kV Sisugram - Kamalpur line kept open (Cause: Overloading of 132 kV Rangia (AEGCL) - Motonga (BPC, Bhutan) line). At 17:20 Hrs on 03.11.2017, 132 kV Sarusajai - Kahilipara 1 & 2 lines tripped. Due to tripping of these elements, Kahilipara, area of Assam Power System and Motonga area of Bhutan Power System were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	0	136	0.000	0.009	GD-I
3	NER	220 kV Kopili - Misa 1 & 3 Lines, 132 kV Badarpur - Khliehriat 1 Line, 132 kV Khliehriat - Mustem 1 Line & 132 kV Khandong - Umranshu 1 Line	POWERGRID, AEGCL, MePTCL and NEEPCO	09-11-2017 12:14	09-11-2017 12:29	00:15:00	Khliehriat area of Meghalaya Power System, Khandong, Kopili and Umrangsho area of Assam Power System were connected with rest of NER Grid through 220 kV Kopili - Misa 1 & 3 lines, 132 kV Badarpur - Khliehriat (PG) line & 132 kV NEHU - Mustem line. 132 kV NEIGRIHMS - Khliehriat line was under shutdown since 09:00 Hrs on 09.11.17, 220 kV Misa - Kopili 2 line was under shutdown since 10:29 Hrs on 09.11.17, 132 kV Lumshong - Panchgram line kept open (Cause: over loading), 132 kV Haflong - Umrangsho line was under shutdown since 10:39 Hrs on 09.11.17. At 12:14 Hrs on 09.11.2017, 220 kV Kopili - Misa 1 & 3 lines, 132 kV Badarpur - Khliehriat (PG) line & 132 kV NEHU - Mustem line tripped. Due to tripping of these elements, Khliehriat area of Meghalaya Power System, Khandong, Kopili and Umrangsho area of Assam Power System were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	275	25	0.344	0.009	GD-II
4	NER	132 kV Aizawl - Kolasib Line and 132 kV Badarpur - Kolasib Line	POWERGRID and P&ED, Mizoram	16-11-2017 20:36	16-11-2017 21:08	00:32:00	Kolasib area of Mizoram Power System was connected with rest of NER Grid through 132 kV Kolasib-Badarpur line & 132 kV Kolasib-Aizwal line. At 20:36 Hrs on 16.11.2017, 132 kV Kolasib-Badarpur line & 132 kV Kolasib-Aizwal line tripped. Due to tripping of these elements, Kolasib area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	31	3	0.031	0.002	GD-I
5	NER	132 kV Dimapur (PG) - Kohima (DoP, Nagaland) Line	POWERGRID & DoP, Nagaland	23-11-2017 15:04	23-11-2017 15:29	00:25:00	Capital area of Nagaland Power System was connected with rest of NER Grid through 132 kV Dimapur(PG) - Kohima line. 132 kV Karong - Kohima line kept idle charged from Kohima, 132 kV Wokha - Kohima line was kept open (Cause : improper relay co-ordination of 132 kV Dimapur-Kohima-Wokha link) & 66 kV Tuensang - Likhimro line kept open (Cause : construction activities). At 15:04 Hrs on 23.11.2017, 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 load generation mismatch.	16	16	0.007	0.016	GD-I
6	NER	132 kV Dimapur (PG) - Kohima (DoP, Nagaland) Line	POWERGRID & DoP, Nagaland	30-11-2017 12:34	30-11-2017 12:48	00:14:00	Capital area of Nagaland Power System was connected with rest of NER Grid through 132 kV Dimapur(PG) - Kohima line. 132 kV Karong - Kohima line kept idle charged from Kohima, 132 kV Wokha - Kohima line was kept open (Cause : improper relay co-ordination of 132 kV Dimapur-Kohima-Wokha link) & 66 kV Tuensang - Likhimro line kept open (Cause : construction activities). At 12:34 Hrs on 30.11.2017, 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 load generation mismatch.	8	19	0.002	0.004	GD-I

## List of Grid Incidents during November 2017 for NER Grid

S.No.	Region	State(s) Involved	Name of Elements	Owner / Agency	Outage		Date & Time	Revival		Date & Time	Outage Duration	Event (Brief Details)	Generation Loss	Load Loss	Energy Unreserved	Category as per CEA Grid
					Date	Time		Date	Time							
					Date	Time	Date & Time	Date	Time	Date & Time	Outage Duration	Event (Brief Details)	Generation Loss	Load Loss	Energy Unreserved	Category as per CEA Grid
1	NER	AGBPP	AGBPP Unit 3	NEEPCO	03-Nov-2017	15:37:00	03-Nov-17 15:37:00	03-Nov-17	16:15:00	03-Nov-17 16:15:00	00:38:00	AGBPP Unit 3 tripped at 15:37 Hrs on 03.11.2017 due to GT Electrical trip (86 T2). (Revision of schedule from Block No.66 on 03.11.17)	28	0	0.018	GI-II
2	NER	Khandong	Khandong Unit 2	NEEPCO	03-Nov-2017	16:28:00	03-Nov-17 16:28:00	03-Nov-17	17:15:00	03-Nov-17 17:15:00	00:47:00	Khandong Unit 2 tripped at 16:28 Hrs on 03.11.2017 due to Rotor Earth Fault. (Revision of schedule from Block No.70 on 03.11.17)	25	0	0.020	GI-I
3	NER	BgTPP	BgTPP Unit 2	NTPC	05-Nov-2017	15:45:00	05-Nov-17 15:45:00	05-Nov-17	16:15:00	05-Nov-17 16:15:00	00:30:00	BgTPP Unit 2 tripped at 15:45 Hrs on 05.11.2017 due to Loss of flame. (Revision of schedule from Block No.66 on 05.11.17)	129	0	0.065	GI-II
4	NER	BgTPP	BgTPP Unit 2	NTPC	05-Nov-2017	22:45:00	05-Nov-17 22:45:00	05-Nov-17	23:30:00	05-Nov-17 23:30:00	00:45:00	BgTPP Unit 2 tripped at 22:45 Hrs on 05.11.2017 due to Loss of fuel. (Revision of schedule from Block No.95 on 05.11.17)	195	0	0.146	GI-II
5	NER	BgTPP	BgTPP Unit 1	NTPC	07-Nov-2017	01:51:00	07-Nov-17 01:51:00	07-Nov-17	02:30:00	07-Nov-17 02:30:00	00:39:00	BgTPP Unit 2 tripped at 01:41 Hrs and Unit1 tripped at 01:51 Hrs on 07.11.2017 due to problem in Auxiliary supply. (Revision of schedule from Block No.11 on 07.11.17)	180	0	0.280	GI-II
			BgTPP Unit 2	NTPC	07-Nov-2017	01:41:00	07-Nov-17 01:41:00	07-Nov-17	02:30:00	07-Nov-17 02:30:00	00:49:00		200			
6	NER	BgTPP	BgTPP Unit 2	NTPC	08-Nov-2017	23:56:00	08-Nov-17 23:56:00	09-Nov-17	00:30:00	09-Nov-17 00:30:00	00:34:00	BgTPP Unit 2 tripped at 23:56 Hrs on 08.11.2017 due to Mill Trip. (Revision of schedule from Block No.3 on 09.11.17)	60	0	0.034	GI-II
7	NER	BgTPP	BgTPP Unit 2	NTPC	10-Nov-2017	15:45:00	10-Nov-17 15:45:00	10-Nov-17	16:30:00	10-Nov-17 16:30:00	00:45:00	BgTPP Unit 2 tripped at 15:45 Hrs on 10.11.2017 due to Drum level low. (Revision of schedule from Block No.67 on 10.11.17)	228	0	0.171	GI-II
8	NER	AGBPP	AGBPP Unit 2	NEEPCO	13-Nov-2017	20:17:00	13-Nov-17 20:17:00	13-Nov-2017	21:15:00	13-Nov-17 21:15:00	00:58:00	AGBPP Unit 2 tripped at 20:17 Hrs on 13.11.2017 due to Minimum SF6 gas pressure lockout. (Revision of schedule from Block No.86 on 13.11.17)	27	0	0.026	GI-II
9	NER	BgTPP	BgTPP Unit 2	NTPC	18-Nov-2017	13:47:00	18-Nov-17 13:47:00	18-Nov-2017	14:30:00	18-Nov-17 14:30:00	00:43:00	BgTPP Unit 2 tripped at 13:47 Hrs on 18.11.2017 due to both ID Fan tripped. (Revision of schedule from Block No.59 on 20.11.17)	138	0	0.099	GI-II
10	NER	AGTCCPP	AGTCCPP Unit 1	NEEPCO	18-Nov-2017	21:01:00	18-Nov-17 21:01:00	18-Nov-17	21:45:00	18-Nov-17 21:45:00	00:44:00	AGTCCPP Unit 1 tripped at 21:01 Hrs on 18.11.2017 due to Neutral Voltage Displacement Relay operation. (Revision of schedule from Block No.88 on 18.11.17)	16	0	0.012	GI-I
11	NER	Kopili	Kopili Unit 1	NEEPCO	20-Nov-2017	15:00:00	20-Nov-17 15:00:00	20-Nov-2017	16:00:00	20-Nov-17 16:00:00	01:00:00	Kopili Unit 1 tripped at 15:00 Hrs on 20.11.2017 due to Excitation Failure. (Revision of schedule from Block No.65 on 20.11.17)	43	0	0.043	GI-II
12	NER	AGBPP	AGBPP Unit 4 & Unit 8	NEEPCO	20-Nov-2017	23:30:00	20-Nov-17 23:30:00	21-Nov-17	00:15:00	21-Nov-17 00:15:00	00:45:00	AGBPP Unit 4 & 8 tripped at 23:30 Hrs on 20.11.2017 due to tripping of Gas booster. (Revision of schedule from Block No.02 on 21.11.17)	42	0	0.032	GI-II
13	NER	AGBPP	AGBPP Unit 6	NEEPCO	20-Nov-2017	23:51:00	20-Nov-17 23:51:00	21-Nov-17	00:30:00	21-Nov-17 00:30:00	00:39:00	AGBPP Unit 6 tripped at 23:51 Hrs on 20.11.2017 due to tripping of Gas booster. (Revision of schedule from Block No.03 on 21.11.17)	32	0	0.021	GI-II
14	NER	Khandong	Khandong Unit 2	NEEPCO	23-Nov-2017	12:30:00	23-Nov-17 12:30:00	23-Nov-2017	13:15:00	23-Nov-17 13:15:00	00:45:00	Khandong Unit 2 tripped at 12:30 Hrs on 23.11.2017 due to Rotor earth fault. (Revision of schedule from Block No.54 on 23.11.17)	25	0	0.019	GI-I
15	NER	AGBPP	AGBPP Unit 4 and Unit 5	NEEPCO	24-Nov-2017	10:10:00	24-Nov-17 10:10:00	24-Nov-2017	11:00:00	24-Nov-17 11:00:00	00:50:00	AGBPP Unit 4 & Unit 5 tripped at 10:10 Hrs on 24.11.2017 due to low fuel gas pressure. (Revision of schedule from Block No.45 on 24.11.17)	45	0	0.051	GI-II
16	NER	AGTCCPP	AGTCCPP Unit 2	NEEPCO	24-Nov-2017	16:02:00	24-Nov-17 16:02:00	24-Nov-2017	17:00:00	24-Nov-17 17:00:00	00:58:00	AGTCCPP Unit 2 tripped at 16:02 Hrs on 24.11.2017 due to generator cooling problem. (Revision of schedule from Block No.69 on 24.11.17)	16	0	0.015	GI-I
17	NER	Kopili	Kopili Unit 1	NEEPCO	27-Nov-2017	03:07:00	27-Nov-17 03:07:00	27-Nov-2017	03:45:00	27-Nov-17 03:45:00	00:38:00	Kopili Unit 1 tripped at 03:07 Hrs on 27.11.2017 due to field supply failure. (Revision of schedule from Block No.16 on 27.11.17)	43	0	0.027	GI-II
18	NER	BgTPP	BgTPP Unit 2	NTPC	27-Nov-2017	21:24:00	27-Nov-17 21:24:00	27-Nov-2017	22:15:00	27-Nov-17 22:15:00	00:51:00	BgTPP Unit 2 tripped at 21:24 Hrs on 27.11.2017 due to Excitation failure. (Revision of schedule from Block No.90 on 27.11.17)	220	0	0.187	GI-II
19	NER	BgTPP	BgTPP Unit 2	NTPC	29-Nov-2017	05:39:00	29-Nov-17 05:39:00	29-Nov-2017	06:30:00	29-Nov-17 06:30:00	00:51:00	BgTPP Unit 2 tripped at 05:39 Hrs on 29.11.2017 due to tripping of Feed water pump. (Revision of schedule from Block No.27 on 29.11.17)	200	0	0.170	GI-II