

Major Grid Events for December 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 Standards	Energy Unserviced (in MU)
				Date	Time	Date	Time	Time					
1	NR	1. 500 kV HVDC Rihand-Dadri Pole 2 2. 500 kV HVDC Rihand-Dadri Pole 1 3. 400 kV Dadri(NTPC)-Harsh Vihar(DTL) -2 4. 400 kV Dadri(NTPC)-Panipat(BBMB) 2 5. 400 kV Dadri(NTPC)-Maharanibagh(PG) 6. 400 kV Dadri(NTPC)-Harsh Vihar(DTL) -1 7. 400/220 kV Dadri 500 MVA ICT 1,2,3,4&5 8. 400 kV Dadri(HVDC) AC BUS A&B 9. 400 kV Dadri 400 kV Bus 1&2 10. Unit 1 & 5 of Dadri Gas 11. Unit 3 & 4 Dadri stage-1 12. Unit 1 & 2 Dadri Stage 2	PGCIL	09-12-2017	17:29	09-12-2017	19:55	02:26	400 kV Bus-2 was under shutdown for attending hotspots. Due to snapping of Y phase jumper of Unit-6 on Bus-1 B-phase, resulted into tripping of complete station on Bus bar protection	1300	100	GD1	0.12
2	NR	1. 400 kV Kishenpur-Moga 2 2. 400 kV Kishenpur-New Wanpoh - 4 3. 220 kV Bareilly(UP)-Dhauliganga(NHPC) 4. 220 kV Dhauliganga(NHPC)-Pithoragarh(PG) 5. 400/220 kV Bassi 315 MVA ICT 1 6. 400/220 kV Bassi 315 MVA ICT 2 7. 400 kV Bawana(GT)-Bhiwani (PG) 8. 400 kV Muzaffarnagar(UP)-Roorkee(PG) 9. 400 kV Rishikesh(UTT)-Roorkee(PG)	PGCIL	12-12-2017	00:51	12-12-2017	10:27	09:36	Multiple 400kV lines and ICT's tripped in NR on over voltage/Over flux respectively due to bad weather condition	0	0	GI2	0.00
3	NR	1. 400 kV Dehar (BBMB) - Panchkula (PG) 2. 400 kV Dehar (BBMB)-Rajpura (400kV) (PSEB) 3. 400/220kV 500MVA ICT at Dehar	BBMB	12-12-2017	11:35	12-12-2017	12:57	01:22	400kV Dehar Bus-2 was under shutdown. During testing at Dehar station, Bus bar protection of Bus -1 was wrongly operated. Resulted into tripping of 400kV Dehar-Panchkula , Dehar-Rajpura and 400/220kV 500MVA Dehar ICT. From PMU ,No fault Observed.	0	0	GI2	0.00
4	NR	1. 400 kV Aligarh(UP)-Sikandrabad 400(UP) 1 2. 400 kV Aligarh(UP)-Sikandrabad 400(UP) 2	UPPTCL	13-12-2017	01:23	13-12-2017	02:16	00:53	Multiple times(at 02:50 and 21:29 hrs) 400kV Aligarh-Sikandrabad D/C lines tripped on earth faults. From PMU, Y and B phase dip observed.	0	0	GI2	0.00
5	NR	1. 765 kV Anpara C-Unnao 2. 765/400 kV Unnao C 1000 MVA ICT 3	UPPTCL	14-12-2017	03:28	14-12-2017	04:51	01:23	765kV Anpara-unnao Line tripped on earth fault, subsequently Over current protection triggered at 1000MVA ICT3 of 765/400kV Unnao Station. From PMU, Max dip observed in B phase at 03:28 and fault clearing time approx 600msec. Further, At 05:47 765kV Unnao-Anpara line along with ICT-1 of Anpara tripped and fault clearing time approx 400msec.	0	100	GD1	0.07
6	NR	1. 220 kV Moga(PG)-Moga(PSEB) 3 2. 220 kV Moga(PG)-Moga(PSEB) 4 3. 220 kV Moga(PG)-Moga(PSEB) 2 4. 220 kV Moga(PG)-Moga(PSEB) 1	PSEB	16-12-2017	18:11	16-12-2017	19:35	01:24	Wave trap of 220kV Moga-bajakhana line busted, resulted into tripping of 220kV Moga(pg)-Moga(PSEB) 1,2,3&4 ckts From PMU, two faults observed, dip in Y phase first and R phase respectively. Fault clearing time approx 400msec	0	0	GI2	0.00
7	NR	1. 400 kV Agra-Kanpur 2. 400 kV Agra 400 kV Bus 1	PGCIL	18-12-2017	11:04	18-12-2017	11:40	00:36	400kV Agra Bus 1 tripped on false Bus bar protection. further, 400kV Agra-Auraiya line was opened on High Voltage and tie breaker was not in service, caused the tripping of 400kV Agra-kanpur line along with the Bus-1. From Pmu, No fault observed.	0	0	GI2	0.00
8	NR	1. 400 kV Alaknanda HEP - Vishnuprayag - 2 2. 400 kV Muzaffarnagar-Vishnuprayag 1 3. 400 kV Vishnuprayag 400 kV Bus 2 4. 400kV Vishnuprayag units 1 & 3	UPPTCL	20-12-2017	16:24	20-12-2017	19:04	02:40	400kV Vishnuprayag Bus-1 was under shutdown. 400kV Vishnuprayag-Alakanada , 400kV Vishnuprayag-Mujaffarnagar along with the generating units of Vishnuprayag tripped on Bus bar protection.	90	0	GD1	0.00

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				Date	Time	Date	Time	Time					
9	NR	1. 400 kV Allahabad Rewa Road - Banda 2 2. 400 kV Allahabad Rewa Road - Banda 1 3. 400/220 kV Banda 315 MVA ICT 1	UPPTCL	23-12-2017	14:26	23-12-2017	15:53	01:27	400kV Allahabad Rewa Road-Banda ckt 1 & 2 along with 315MVA at Banda tripped on Earth fault From PMU, max dip observed in R phase, fault clearing time approx 1160msec.	0	0	G12	0.00
10	NR	1. 400 kV Lucknow(UP)-Singrauli(NTPC) 2. 400 kV Lucknow-Unnao 3. 400 kV Lucknow(PG)-Lucknow(UP) 4. 400 kV Bareilly(PG)-Lucknow(UP) 5. 400/220 kV Lucknow Sarojininagar 315 MVA ICT 2 6. 400/220 kV Lucknow Sarojininagar 315 MVA ICT 1	UPPTCL	25-12-2017	17:23	25-12-2017	18:30	01:07	400kV Lucknow(UP) Bus B was under shutdown for retrofitting work. At 17:23 Hrs 400kV Lucknow(UP) Bus Isolator closed inadvertently caused earth fault on Bus-A resulted into complete outage of Lucknow(UP) station	0	0	G12	0.00
11	NR	1. 400 kV Sarnath(UP)-Varanasi(PG) 1 2. 400 kV Sarnath(UP)-Varanasi(PG) 2	PGCIL	27-12-2017	01:39	27-12-2017	02:35	00:56	400kV Varnasi-sarnath Ckt 1 & 2 and 765kV Varnasi-New Kanpur ckt 1 & 2 tripped on earth fault. From PMU, Max dip is in B phase. From weather data Eastern UP and Bihar was covered with dense Fog.	0	0	G12	0.00
12	NR	1. 400 kV Allahabad Rewa Road - Panki 2. 400 kV Allahabad Rewa Road - Banda 2 3. 400/220 kV Banda 315 MVA ICT 1	UPPTCL	29-12-2017	06:40	29-12-2017	07:56	01:16	400kV Rewa Road-Panki, 400kV Rewa Road-Banda and 315MVA 400/220kV ICT-1 at Banda tripped on fault (R-N) in 400kV Rewa Road-Panki line. From PMU, Max dip observed in R phase and fault clearing time approx 680msec.	0	0	G12	0.00
13	NR	1. 400 kV Allahabad Rewa Road - Banda 1 2. 400 kV Bara TPS- Allahabad Rewa Road 1 3. 400 kV Allahabad Rewa Road - Banda 2 4. 400 kV Allahabad Rewa Road - Obra 5. 400 kV Allahabad Rewa Road - Panki 6. 400/220 kV Banda 315 MVA ICT 1 7. 400/220 kV Allahabad Rewa Road 315 ICT 1	UPPTCL	30-12-2017	00:05	30-12-2017	18:40	18:35	400kV Rewa Road-Panki, 400kV Rewa Road-Banda D/C, 400kV Rewa Road-Obra and 315MVA 400/220kV Ict-1 at Banda tripped on LBB. From PMU, Max dip observed in R phase and fault clearing time approx 720msec.	0	0	G12	0.00

Major Grid Events for December 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 1.400 kV Varsana - Kansari 2.400 kV Varsana - Bhachau 2 3.400/220 KV 315 MVA Varsana ICT 1 4.400/220 KV 315 MVA Varsana ICT 2 5.400/220 KV 315 MVA Varsana ICT 3 6.400 kV 125 MVAR Varsana Bus reactor 7.400 kV Varsana Bus coupler 8.220kv Varsana - OPGS 1 9.220kv Varsana - OPGS 2 10.150 MW OPGS Unit 1 11.150 MW OPGS Unit 2	GETCO	05-12-2017	09:44	05-12-2017	11:20	01:36	400 kV Bus 2 and all associated elements got tripped due to Bus bar protection operation for R phase to Y phase fault.	180	Nil	GI-2	Nil
2	WR	Tripping of 1.400 kV Padghe – Bableshtar D/C 2.400 kV Padghe – Kalwa D/C 3.400 kV Padghe – Tarapur D/C 4.400 kV Padghe – Boisar 5.400 kV Padghe – Nagothane D/C 6.400/220 kv 315 MVA Padghe ICT 1,2,3 7.400/220 kv 600 MVA Padghe ICT 4 8.400/220 kv 500 MVA Padghe ICT 5 9.400 kV Padghe- Chandrapur HVDC IC D/C 10.400 kv 80 MVAR Bus reactor at Padghe 11.220 kv Padghe-Wada 12.220 kv Padghe-Kamba 13.220 kv Padghe-Kalwa 14.220 kv Padghe-Jambhul D/C 15.220 kv Kalwa – Colourchem 15.220 kv Kalwa – Temghar 16.220 kv Ghatkar – Jindal 17.220 kv Padghe - Nashik 18.400 kv SSP – Asoj 19. 400 kv Bus 1 & 2 and 400 kv Bus Coupler.	MSETCL	09-12-2017	12:58	09-12-2017	13:25	00:27	400 TBC blast at Padghe substation resulted in Bus bar protection and tripping of both the 400 kv Buses.Followed by this tripping, 220 kv Kalwa-Colourchem tripped due to conductor snapping. After these tripping 220 kv network below Padghe got overloaded and tripped on Overcurrent protection and resulted in complete blackout of Padghe substation.	Nil	1483	GD-1	2.9940
3	WR	Tripping of 1.400/220 kv 500 MVA Deepnagar ICT 1 2.400/220kv 500 MVA Deepnagar ICT 2 3.400 kv Deepnagar-Aurangabad 4.400 kv Deepnagar-Khadka 1 5.500 MW GT 4 at Deepnagar 6.400kv Deepnagar Bus 2	MSETCL/ Mahagenco	09-12-2017	05:21	09-12-2017	07:02	01:41	400 kv R phase line CT of 400/220 kv 500 MVA ICT 1 burst at Deepnagar substation resulted in tripping of the elements mentioned in column 1.500 MW GT 4 was hand tripped on emergency measure by the generating power plant. 400 kv Khadka 1 line was tripped as the relay seen the reverse zone fault in Zone 1.	321	Nil	GI-2	Nil
4	WR	Tripping of 1.220KV Bus-1 @Chhegaon 2.220KV Bus-2 @Chhegaon 3.400KV Chhegaon-Singhaji S/C 4.400KV B/R at Chhegaon 5.400/220KV ICT-1 @Chhegaon 6.400/220KV ICT-2 @Chhegaon 7.220KV Chhegaon-Khandwa-I 8.220KV Chhegaon-Khandwa-II 9.220KV Chhegaon-Nimrani-I 10.220KV Chhegaon-Nimrani-II 11.220KV Chhegaon-Singhaji-I 12.220KV Chhegaon-Singhaji-II 13.220KV Chhegaon-Omkareshwar S/C 14.220KV Omkareshwar-NimraniBurwaha tap 15.220/132 KV Chhegaon 160MVA ICT 1 16.220/132 KV Chhegaon 160MVA ICT 2 17.220/132 KV Chhegaon 160MVA ICT 3 18.600 MW Singhaji unit-1 19.600 MW Singhaji-unit-2	MPPTCL/ MPPGCL	14-12-2017	02:37	14-12-2017	03:35	00:58	220 kv Bus coupler CB blasted at Chhegaon resulted in tripping of all the 220 kv emanating lines.	700	173	GI-2	0.0589

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						
5	WR	Tripping of 1.220 kV Indore East-Dewas 2.220 kV Astha-Dewas 2 3.220/33 kV 100 MVA Indore East ICT	MPPTCL	30-12-2017	15:56	30-12-2017	16:50	00:54	Unwanted operation of 220 kV Bus Bar protection resulted in blackout of the Indore East substation.	Nil	46	GD-1	0.0414
6	WR	Tripping of 1.220/66 kV 100 MVA Sachin ICT 1 2.220/66 kV 100 MVA Sachin ICT 2 3.220/66 kV 100 MVA Sachin ICT 3 4.220/66 kV 100 MVA Sachin ICT 4	GETCO	31-12-2017	17:41	31-12-2017	18:15	00:34	Metallic kite fell over 66 kV Bus bars 1&2 of Sachin substation and all the 220/66 kV ICTs tripped from 66 kV side.	Nil	349	GI-1	0.285016667

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 December 2017_Southern 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 Standards	Energy Unserviced (MU)
				Date	Time	Date	Time	Time					
1	SR	1.230kV Madurai - Sembatty 2. 230kV Madurai - Kinnimangalam 3. 230kV Madurai - TTPS 4. 230kV Madurai - Ind bharath 5. 230kV Madurai - Nallamanaickanpatty 6. 230kV Madurai - Kayathar 7. 230kV Madurai - Renganathapuram 8. 230kV Madurai - Pasumalai 9. 230kV Madurai - Theni 10. 230kV Madurai - Amuthapuram 11. 400/230 ICT-1, 2 &3	TANTRANSCO	28-Dec-17	02:25	28-Dec-17	03:06	00:41	Complete outage of 230kV Madurai (Checknurani) Substation. Y-phase limb of circuit breaker connected to 230kV Checknurani – TTPS line-2 failed (burst) due to which bus bar protection operated. This resulted in tripping of all the 230kV Lines connected to the Bus	Nil	Nil	GD-1	NIL
2	SR	1. 220kV Madakathra - Malaparamba 2. 220kV Madakathra - Palakkad 3. 220kV Madakathra - Shoranur 4. 400/220kV ICT-1 5. 220/110kV ICT-1	KSEB	29-Dec-17	14:56	29-Dec-17	15:38	00:42	Mutiple tripping at 220kV Madakathra. 220kV Madakkathra-Malaparamba Feeder tripped at Madakkathara end due to Y-phase to ground fault, LBB protection trip acted and the entire bus connected was isolated.	Nil	Nil	GI-1	NIL

Grid Events for December 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	400 kV Jeerat - New Chanditala S/C 400 kV KTRP - New Chanditala S/C 400 kV New Chanditala - Kharagpur D/C	WBSETCL	6-Dec-17	09:09	6-Dec-17	09:56	00:47	At 09:09 hrs due to operation of bus bar differential protection of both bus I & II at New Chanditala, All elements connected to New Chanditala i.e. 400 kV Jeerat - New Chanditala S/C, 400 kV KTRP - New Chanditala S/C, 400 kV New Chanditala - Kharagpur D/C along with both bus I & II and 400/220 kV ICTs at New Chanditala tripped. In PMU data Y-N fault has been observed at the time of the disturbance.	0	0	0.0000	0.0000	GI-II
2	ERLDC	220 kV Madhepura - Purnea D/C	BSPTCL	6-Dec-17	18:22	6-Dec-17	18:50	00:28	At 18:22 hrs, total power failure occurred at 220/132 kV Madhepura S/S due to tripping of 220 kV Madhepura - Purnea D/C resulting interruption of supply at Supaul, Sonebarsa, Madhepura, Saharsa, Kushaha(Nepal) & Udaikashigunj. No load loss occurred at Kataiya & Phorbisganj as they were fed from Old Purnea.	0	170	0.0000	0.0793	GD-I
3	ERLDC	400 kV Gorakhpur - Motihari D/C 400/132 kV ICT I & II at Motihari	ISTS	9-Dec-17	10:57	9-Dec-17	12:24	01:27	At 10:57 hrs, all lines connected to 400/132 kV Motihari S/S tripped due to operation of bus bar protection of both bus I & II. It was reported that motorized earth switch connected to main bay of 125 MVar B/R I (connected to bus II) became grounded resulting operation of bus bar operation at both buses. In PMU data, delayed cleared three phase fault has been observed.	0	174	0.0000	0.2523	GD-I
4	ERLDC	220 kV Patna - Sipara D/C 220 kV Khagul Sipara S/C	BSPTCL	13-Dec-17	16:43	13-Dec-17	17:02	00:19	At 16:43 hrs 220 kV Patna - Sipara D/C and 220 kV Khagul Sipara S/C tripped due to spurious bus bar protection operation at Sipara S/S resulting total power failure at Sipara S/S.	0	226	0.0000	0.0716	GD-I
5	ERLDC	220 kV Patna - Sipara D/C	BSPTCL	13-Dec-17	17:19	13-Dec-17	17:36	00:17	After the initial disturbance at Sipara at 16:43 hrs, during restoration 220 kV Patna Sipara D/C tripped again at 17:19 hrs while extending power to Khagul and supply to Sipara S/S got interrupted again.	0	100	0.0000	0.0283	GD-I
6	ERLDC	132 kV Malda - Malda D/C	WBSETCL	15-Dec-17	06:01	15-Dec-17	06:20	00:19	At 06:01 hrs 132 kV Malda - Malda - II tripped from both ends (PG end: R-N, F/C 9 kA; WB end: R-B-N, 11.38 km). At same time 132 kV Malda - Malda - I (R-B-N, 3.69 km from WB end) also tripped from WB end. This circuit was later manually opened from PG end. 220/132 kV ATR I & II at Malda (PG) also tripped on operation of back up directional O/C relay. Line length of 132 kV Malda - Malda D/C is 10 km. It is suspected fault was at 132 kV Malda - Malda - I and this was not cleared from PG end resulting tripping of ICTs in back up O.C. 132 kV Malda - Malda - II tripped due to operation of non directional high set o/c protection.	0	55	0.0000	0.0174	GD-I
7	ERLDC	220 kV Muzaffarpur - Hazipur - II	BSPTCL	20-Dec-17	13:52	20-Dec-17	14:13	00:21	220 kV Muzaffarpur - Hazipur - I was under shut down. At 13:52 hrs 220 kV Muzaffarpur - Hazipur - II tripped in Y-B-N fault resulting total power loss at Hazipur, Siwan, Chapra & Amnour.	0	130	0.0000	0.0455	GD-I
8	ERLDC	132 kV Purnea - Purnea - I & II 220/132 kV ICT - I & III at Purnea (PG)	ISTS	22-Dec-17	10:49	22-Dec-17	11:58	01:09	220/132 kV ICT - II at Purnea (PG), 132 kV Purnea - Purnea - II and 132 kV Purnea - Kishangunj were under shutdown. At 10:49 hrs, 220/132 kV Purnea S/S became dead due to tripping of 132 kV Purnea - Purnea - I & II (Relay indication 67N & 86 at PG end) and 220/132 kV ICT - I & III at Purnea (PG) (Relay indication 67N & 86 for ICT III and O/C & 86 IB = 4.2 kA for ICT I).	0	90	0.0000	0.1035	GD-I
9	ERLDC	220 kV Biharsharif - Khijasarai D/C 220/132 kV ATR - II at Biharsharif	BSPTCL	22-Dec-17	17:10	22-Dec-17	17:35	00:25	220 kV Gaya - Bodhgaya D/C were under shutdown. 220 kV Biharsharif - Khijasarai - II tripped from both ends (BSF end: Y-N, Z-L, 1.6 km, 18 kA; Khijasarai end: Y-N, 36.4 km) due to Y phase jumper snapping at location no 237. At the same time, 220 kV Biharsharif - Khijasarai - I tripped from the both ends (BSF end: Y-N, O/C, fault duration: 18.39 ms; Khijasarai end: E/F) and 220/132 kV ATR - II at Biharsharif tripped due to operation of differential relay (Fault duration 73 ms). As Bodhgaya was radially fed through 220 kV Biharsharif - Khijasarai - Bodhgaya D/C, total power failure occurred at 220/132 kV Bodhgaya S/S after tripping of 220 kV Biharsharif - Khijasarai D/C.	0	135	0.0000	0.0563	GD-I

List of Grid Disturbance for December 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 Aizawl - Melriat Line	POWERGRID	02-Dec-17 03:05:00	02-Dec-17 03:52:00	00:47:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Aizawl - Melriat line. At 03:05 Hrs on 02.12.2017, 132 kV Aizawl- Melriat 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	18	0.000	0.014	GD-I
2	NER	132 kV Dimapur (PG) - Dimapur (DoP, Nagaland) 2 Line	POWERGRID & DoP, Nagaland	02-Dec-17 06:16:00	02-Dec-17 06:21:00	00:05:00	Dimapur area of Nagaland Power System was connected with rest of NER Grid through 132 kV Dimapur (PG)-Dimapur (DoP, Nagaland) II line. 132 kV Dimapur (PG)-Dimapur (DoP, Nagaland) I line is under long outage. At 06:16 Hrs on 02.12.2017, 132 kV Dimapur (PG)-Dimapur (DoP, Nagaland) I line tripped. Due to tripping of this element, Dimapur area was separated from rest of NER Grid and subsequently collapsed due to no source in this area	0	29	0.000	0.002	GD-I
3	NER	132 kV Palatana - Udaipur Line & 132 kV Monarchak-Rokhia Line	NEEPCO, TSECL, TPGL & OTPC	03-Dec-17 02:08:00	03-Dec-17 02:20:00	00:12:00	Udaipur and Rabindranagar area of Tripura Power System was connected with rest of NER Grid through 132 kV Udaipur-Palatana line. 132 kV Monarchak-Rokhia line. 66 kV Gakulnagar-Udaipur line, 66 kV Belonia-Bagafa line and 66 kV Amarpur - Gumti line kept open for system requirement. At 02:08 Hrs on 03.12.2017, 132 kV Udaipur-Palatana line & 132 kV Monarchak-Udaipur line tripped. Due to tripping of these elements, Udaipur and Rabindranagar area were separated from rest of NER Grid and subsequently collapsed due to no source in these area.	101	14	0.335	0.003	GD-I
4	NER	132 kV Aizawl - Melriat Line	POWERGRID	04-Dec-17 04:15:00	04-Dec-17 04:50:00	00:35:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Aizawl - Melriat line. At 04:15 Hrs on 04.12.2017, 132 kV Aizawl- Melriat 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	19	0.000	0.011	GD-I
5	NER	132 kV Aizawl - Melriat Line	POWERGRID	04-Dec-17 05:10:00	04-Dec-17 05:31:00	00:21:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Aizawl - Melriat line. At 05:10 Hrs on 04.12.2017, 132 kV Aizawl- Melriat 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	16	0.000	0.006	GD-I
6	NER	132 kV Aizawl - Luangmual Line	POWERGRID	11-Dec-17 03:50:00	11-Dec-17 04:40:00	00:50:00	Lungmual area of Mizoram Power System was connected with rest of NER Grid through 132 kV Aizawl - Lungmual line. At 03:50 Hrs on 11.12.2017, 132 kV Aizawl -Lungmual line tripped. Due to tripping of this element, Lungmual area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	18	0.000	0.015	GD-I
7	NER	132 kV Aizawl - Melriat Line	POWERGRID	11-Dec-17 08:49:00	11-Dec-17 09:04:00	00:15:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Aizawl - Melriat line. At 08:49 Hrs on 11.12.2017, 132 kV Aizawl- Melriat 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	0.000	0.009	GD-I
8	NER	400 kV Azara - Silchar Line, 132 kV Badarpur - Khleihriat line, 132 kV Haflong (PG) - Jiribam line, 132 kV Dimapur (PG) - Imphal (PG) line, 132 kV Lumshnong - Panchgram line	NETC, AEGCL, POWERGRID & MePTCL	17-Dec-17 06:37:00	17-Dec-17 06:54:00	00:17:00	Southern Part of NER power system consisting of power systems of Tripura, Southern part of Assam, Manipur, Mizoram and South Comilla (Bangladesh) were connected with rest of NER Grid through 400 kV Silchar - Azara line, 132 kV Badarpur - Khleihriat line, 132 kV Haflong - Jiribam line, 132 kV Dimapur - Imphal line and 132 kV Lumshnong - Panchgram line. 400 kV Silchar - Byrnihat line was under outage since 06:27 Hrs on 17.12.2017. 132 kV Karong - Kohima line kept open due to overloading of 132 kV Dimapur (PG) - Kohima (DoP, Nagaland) line. At 06:37 Hrs on 17.12.2017, 400 kV Silchar - Azara line tripped. Due to non - operation of SPS-3, Palatana was not able to reduce generation to the desired level and eventually 132 kV Badarpur - Khleihriat line, 132 kV Haflong - Jiribam line and 132 kV Dimapur - Imphal line also tripped on over-current. Due to tripping of these elements, power systems of Tripura, Southern part of Assam, Manipur, Mizoram and South Comilla (Bangladesh) were separated from rest of NER Grid. At 06:37:08 hrs both Gas Turbine Generators of Palatana run back started due to over frequency and finally GTG-1 & GTG-2 breakers tripped at 06:37:09 Hrs & 06:37:10 Hrs respectively on over frequency. STG-1 & STG-2 of Palatana tripped at 06:37:25 Hrs and 06:37:27 Hrs respectively on under-frequency. Due to tripping of Palatana Units, 132 kV Silchar - Srikona I & II, 132 kV Silchar - Hailakandi I & II lines, 132 kV Badarpur - Panchgram line tripped on SPS-1 at 06:37:27 Hrs and subsequently collapsed due to load generation mismatch.	841	433	2.784	0.498	GD - III
9	NER	132 kV Melriat - Zuangtui 1 Line	POWERGRID	18-Dec-17 10:37:00	18-Dec-17 10:51:00	00:14:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Melriat - Zuangtui line. At 10:37 Hrs on 18.12.2017, 132 kV Melriat - 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	0.000	0.008	GD-I
10	NER	132 kV Melriat - Zuangtui 1 Line	POWERGRID	18-Dec-17 10:37:00	18-Dec-17 10:51:00	00:14:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Melriat - Zuangtui line. At 10:37 Hrs on 18.12.2017, 132 kV Melriat - 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	0.000	0.008	GD-I

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
11	NER	132 kV Dimapur (PG) - Kohima (DoP, Nagaland) Line	POWERGRID & DoP, Nagaland	18-Dec-17 10:38:00	18-Dec-17 11:00:00	00:22:00	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 10:38 Hrs on 18.12.2017, 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.	4	22	0.001	0.008	GD-I
12	NER	132 kV Balipara - Khupi Line	NEEPCO & DoP, Arunachal Pradesh	18-Dec-17 16:50:00	18-Dec-17 17:50:00	01:00:00	Khupi area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Balipara-Khupi line. At 16:50 Hrs on 18.12.2017, 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	26	0.000	0.026	GD-I
13	NER	132 kV Loktak - Ningthoukhong Line	MSPCL	21-Dec-17 11:15:00	21-Dec-17 11:26:00	00:11:00	Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kV Loktak - Ningthoukhong 1 Line. 132 kV Imphal - Ningthoukhong line & 132 kV kakching-Kongba line kept open (Cause: overloading of 132 kV Loktak-Ningthoukhong line). At 11:15 Hr on 21.12.2017, 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	44	0.000	0.016	GD-I
14	NER	400/132/33 kV Ranganadi - Transformer 1 & 2	NEEPCO	30-Dec-17 16:37:00	30-Dec-17 17:00:00	00:23:00	Ziro area, Lekhi area & Capital area of Arunachal Pradesh Power System and Gohpur Area of Assam Power System were connected with rest of NER Grid through Ranganadi 400/132 kV Transformer 1 & 2. Bus Coupler CB of Gohpur kept open to prevent overloading of 132 kV Ranganadi - Lekhi line. At 16:37 Hrs on 31.12.2017, 400/132 kV ICT 1 & 2 at Ranganadi tripped. Due to tripping of these elements, Ziro area, Lekhi area, Capital area of Arunachal Pradesh & Gohpur area of Assam were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	83	0.000	0.059	GD-I

List of Grid Incidents during December 2017 for NER Grid

S.No.	Region	State(s) Involved	Name of Elements	Owner / Agency	Outage		Revival		Outage Duration	Event (Brief Details)	Generation Loss (MW)	Load Loss	Energy Unserved	Category as per CEA Grid
					Date	Time	Date	Time						
1	NER	Ranganadi	Ranganadi Unit 2	NEEPCO	01-Dec-2017	22:42:00	01-Dec-17	23:15:00	00:33:00	Ranganadi Unit 2 tripped at 22:42 Hrs on 01.12.2017 due to high bottom guide bearing temperature. (Revision of schedule from Block No.94 on 01.12.17)	110	0	0.061	GI-II
2	NER	Kopili	Kopili Unit 1	NEEPCO	03-Dec-2017	07:28:00	03-Dec-2017	08:00:00	00:32:00	Kopili Unit 1 tripped at 07:28 Hrs on 03.12.2017 due to Excitation problem. (Revision of schedule from Block No.33 on 03.12.17)	41	0	0.022	GI-II
3	NER	Kopili	Kopili Unit 1	NEEPCO	03-Dec-2017	11:08:00	03-Dec-2017	12:00:00	00:52:00	Kopili Unit 1 tripped at 11:08 Hrs on 03.12.2017 due to Excitation problem. (Revision of schedule from Block No.49 on 03.12.17)	41	0	0.036	GI-II
4	NER	AGTCCPP	AGTCCPP GTG 4	NEEPCO	06-Dec-2017	10:00:00	06-Dec-2017	10:45:00	00:45:00	AGTCCPP GTG 4 at 10:00 Hrs on 06.12.2017 due to low steam pressure. (Revision of schedule from Block No.44 on 06.12.17)	24	0	0.018	GI-I
5	NER	AGTCCPP	AGTCCPP STG-1	NEEPCO	07-Dec-2017	13:34:00	07-Dec-2017	14:15:00	00:41:00	AGTCCPP STG-1 tripped at 13:34 Hrs on 07.12.2017 due to Generator Breaker Control circuit problem. (Revision of schedule from Block No.58 on 07.12.17)	9	0	0.006	GI-I
6	NER	BgTPP	BgTPP Unit 2	NTPC	11-Dec-2017	11:15:00	11-Dec-2017	12:00:00	00:45:00	BgTPP Unit 2 tripped at 11:15 Hrs on 11.12.2017 due to Primary air fan failure. (Revision of schedule from Block No.49 on 11.12.17)	206	0	0.155	GI-II
7	NER	Kopili	Kopili Unit 4	NEEPCO	12-Dec-2017	17:33:00	12-Dec-2017	18:15:00	00:42:00	Kopili Unit 4 tripped at 17:33 Hrs on 12.12.2017 due to lube oil temperature high. (Revision of schedule from Block No.74 on 12.12.17).	45	0	0.032	GI-II
8	NER	AGTCCPP	AGTCCPP GTG - 1	NEEPCO	26-Dec-2017	05:14:00	26-Dec-2017	05:45:00	00:31:00	AGTCCPP GTG - 1 tripped at 05:14 Hrs on 26.12.2017 due to Over Frequency and Under Voltage. (Revision of schedule from Block No. 24 on 26.12.17).	17	0	0.009	GI-I
9	NER	Palatana	Palatana GTG-1 & STG - 1	OTPC	26-Dec-2017	21:53:00	26-Dec-2017	22:30:00	00:37:00	Palatana GTG 1 and STG I tripped at 21:53 Hrs on 26.12.2017 due to GTG bearing oil leakage. (Revision of schedule from Block No. 91 on 26.12.17).	270	0	0.167	GI-II
10	NER	AGTCCPP	AGTCCPP GTG-3 & STG-2	NEEPCO	27-Dec-2017	18:19:00	27-Dec-2017	19:45:00	01:26:00	AGTCCPP GTG 3 & STG 2 tripped at 18:19 Hrs on 27.12.2017 due to Turbine compartment fan problem. (Revision of schedule from Block No. 80 on 27.12.17).	22	0	0.032	GI-I
11	NER	AGBPP	AGBPP STG 1 & 2	NEEPCO	30-Dec-2017	13:40:00	30-Dec-2017	14:15:00	00:35:00	AGBPP STG 1 & 2 tripped at 13:40 Hrs on 30.12.2017 due to tripping of gas booster. (Revision of schedule from Block No.58 on 30.12.17).	42	0	0.025	GI-II