Major Grid Events for Feb, 2018_Northern Region

			1	1	iviajor G	ria Events id	or reb, 2	2018_Northe	rn Region		1	T -	_
S. No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outag		Reviva		Outage Duration	Event (As reported)	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid	Energy Unserved (in
		(pp.o.,, oponos,	1.80,	Date	Time	Date	Time	Time	(r		(,	Standards	MU)
1	NR	1.800 kV HVDC Champa(WR) - Kurukshetra(NR) line -2 2.800 kV HVDC Champa(WR) - Kurukshetra(NR) line -1	PGCIL	02-02-2018	10:38	02-02-2018	13:17	02:39	At 10:38hrs, due to commutation failure both HVDC poles of Champa Kurukshetra tripped.	0	0	GI2	0.00
2	NR	1.400 kV Kurukshetra(PG)-Malerkotla(PG) 1 2.400 kV Jalandhar-Kurukshetra(PG) 1 3.400 kV Kurukshetra(PG) 400 kV Bus 2 (BB2)	PGCIL	02-02-2018	11:57	02-02-2018	13:19	01:22	At 11:57hrs, due to flashover in GIS disconnector, bus bar protection operated and caused tripping of 400kV Kurukshetra Bus 2, 400kV Jalandhar-Kurukshetra(PG) 1,400kV Kurukshetra(PG)-Malerkotla(PG) 1.From PMU, Max voltage dip observed in R phase.	0	0	GI2	0.00
3	NR	1.400/220 kV Malerkotla 315 MVA ICT 2 2.400/220 kV Malerkotla 315 MVA ICT 1 3.400/220 kV Malerkotla 500MVA ICT 3 4.220kV Bus of Malerkolta(PSTCL)	PGCIL/PS TCL	02-07-2018	08:25	02-07-2018	09:25	01:00	Due to Jumper snapping at 220 kV Amloh Line of 220kV Malerkolta(PSTCL) station, busbar protection operated and caused tripping of 220kV Bus along with ICTs	0	300	GD1	0.15
4	NR	1.400 kV Manesar-Neemrana 2 2.400 kV Neemrana-Sikar 1	PGCIL	02-11-2018	12:54	02-11-2018	13:00	00:06	At 12:54hrs, R phase to earth fault on 400kV Manesar-Neemaran 2 caused tripping of both the lines 400kV Manesar-Neemrana 2 and 400kV Neemrana-Sikar 1.At 14:38hrs again both 400kV lines (400kV Manesar-Neemrana ckt-2 and 400kVNeemrana-Sikar ckt-1) tripped on fault in 400kV Neemrana-Sikar ckt-1.	0	0	GI2	0.00
5	NR	1.400 kV Kishenpur-New Wanpoh - 3 2.400 kV New Wanpoh - Wagoora - 1 3.400 kV Kishenpur-New Wanpoh - 1 4.400 kV Kishenpur-New Wanpoh - 2 5.400 kV New Wanpoh - Wagoora - 2 6.400 kV Uri II(NHPC)-Wagoora(PG) 7.400 kV Uri II(NHPC)-Uri(NHPC) 8.400 kV Uri(NHPC)-Vagoora(PG) 1	PGCIL/NH PC	02-12-2018	11:24	02-12-2018	11:56	00:32	Due to relay non-operation on R-N fault of 400kV line Kishenpur- New Wangpoh 3 at Kishenpur station, all the lines who fed the fault tripped from remote end. The loss of Kishenpur caused imbalance in Valley (Generation-load) and tripped all the elements of valley including SVC at New Wangpoh.	120	600	GD1	0.16
6	NR	1.220 kV Salal(NHPC)-Kishenpur(PG) 3 2.220 kV Salal(NHPC)-Kishenpur(PG) 1 3.220 kV Salal(NHPC)-Kishenpur(PG) 4 4.220 kV Salal(NHPC)-Jammu(JK) 1 5.220 kV Salal(NHPC)-Kishenpur(PG) 2 6.220 kV Salal(NHPC)-Jammu(JK) 2 7.220kV Unit 3,4,&6 of Salal	NHPC/PG CIL/J&K	02-12-2018	18:46	02-12-2018	19:21	00:35	All feeders connected to Salal station tripped on Distance(Zone-1)protection. Whereas From Kishenpur PMU, voltage dip observed in R & Y phase voltage and fault cleared in 200msec.	200	0	GD1	0.00
7	NR	1.220kV Maharani Bagh-Sarita Vihar 2.220kV Maharani Bagh-Masjid Moth 2 3.220kV Maharani Bagh-Electric lane 2 4.220kV Maharani Bagh-Gazipur 1 5.220/66kV Gazipur 100MVA ICT 1&2 6.220kV Unit 1 &3 of Pragati station	DTL/Pragat i	14/2/2018	17:46	14/02/2018	17:48	00:02	At 17:46 hrs, while availing planned shutdown of 400kV Bus 1 and 2 at Maharani Bagh by PGCIL, ICT-1 was opened from PGCIL end without load shifting at 220kV Maharani Bagh substaion,caused mini island with formation of Pragati generation with Sarita Vihar, Parkstreet, Masjid Moth, Electric lane and Gazipur. Moreover, around 100MW Load shed on UFR.At 17:48 hrs System was synchronized by switching 220kV BTPS-Sarita Vihar 1 & 2 .Along with that At 08:49hrs, R- Phase jumper of 220kv Bus Coupler snapped at 220kV Pragati caused Bus fault and tripped all the elements of Pragati station.	57	100	GD1	0.00
8	NR	1.400 kV Ajmer II(RVPNL)-Bhilwara 400(RVPNL) 2 2.400 kV Ajmer II(RVPNL)-Bhilwara 400(RVPNL) 1	RRVPNL	15-02-2018	11:59	15-02-2018	13:17	01:18	While availing planned shutdown of 400kV Bhilwara-Chabra line, Voltage shoot upto 440kV at Bhilwara end, and casused tripping of 400kV Bhilwara-Ajmer 1 &2.From Bassi PMU, Oscillations observed at 11:57hrs, and Voltage dip observed at 11:59hrs.	0	0	GI2	0.00

S. No	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outag	ge			Outage Duration	Event (As reported)	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid	Energy Unserved (in
		(Tripped/Manually Opened)	Agency	Date	Time	Date	Time	Time	(As reported)	LUSS (IVIVV)	(10100)	Standards	MU)
9	NR	1.220kV BTPS-Mehrauli 2 2.220kV BTPS-Okhla 2 3.220kV BTPS-Mehrauli 1 4.220kV Maharani Bagh-Masjid Moth 2 5.220kV BTPS-Ballabgarh 1 6.220kV BTPS-Ballabgarh 2 7.220kV Pragati-sarita Vihar 8.220kV Maharani bagh-Sarita Vihar 9.220kV Bus coupler of Mehrauli 10.220kV BTPS-Alwar 11.220kV Unit 1,2,3 of Pragati sttaion	DTL/Pragat i/BBMB	21-02-2018	12:28	21-02-2018	13:41	01:13	Due to delayed fault clearance of 220kV Mehrauli-BTPS ckt 2, all the lines of 220kV BTPS tripped on Zone-3 distance protection.Moreover,due to multiple trippings around BTPS,a small island of Pragati Generation with Parkstreet, Saritavihar & Gazipur formed.Along with that, 70MW load shed on UFR.But, Island had to be collapsed to proper syncronize with main grid.At 13:45hrs system was restored after getting Ballabgarh supply from BTPS and further extended to sarita Vihar and pragati station .	268	70	GD1	0.04
10	NR	1.400 kV Chamera I(NHPC)-Chamera II(NHPC) 2.400 kV Chamera II(NHPC)-Chamera pool(PG) 3.400 kV Chamera II(NHPC)-Kishenpur(PG)	NHPC/PG CIL	25-02-2018	00:24	25-02-2018	02:43	02:19	At 00:24hrs, 400kV Jallandhar-Chamba 2 tripped on R phase to earth fault, subsequently voltage shoot up at Chamera 2, all lines emintaing from Chamera 2 tripped on Over Voltage. From Moga PMU, Max voltage dip observed in R phase.	0	0	GI2	0.00

Major Grid Events for Feb, 2018_Western Region

_						iviajor G	IIIU EVE	ents for reb, 20	18_Western Region				
S.	No Reg	on Name of Elements	Owner/Ag	Outag	e	Reviva	ı	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards	Energy Unserved (MU)
	lieg ileg	nume of Elements	ency	Date	Time	Date	Time	Time		Generation 2000 (11111)	2000 2000 ()	category as per destatation as	zneigy enserved (mey
:	1 W	Tripping of 1.220 kV Lalpar-Morbi 2.220 kV Lalpar-SMPR 3.220 kV/66 kV 100 MVA Lalpar ICT182 4.220 kV/132 kV 100 MVA Lalpar ICT 5.220 kV Morbi-Shivlakha 2	GETCO	02-02-2018	06:45	02-02-2018	08:48	02:03	Due to fog, 220 kV Lalpar-Morbi and 220 kV Morbi- Shivlakha 2 tripped and resulted in complete blackout of Lalpar substation.	Nil	To be updated by GETCO	Gl-1	To be updated by GETCO
:	2 W	Tripping of 1.20 kV Khaparkeda-New khaparkeda 1 2.20 kV Khaparkeda-Koradi 3.220 kV Khaparkeda-Buttibori 4.220 kV Khaparkeda-Buttibori 5.220 kV Khaparkeda-Surya lakshmi 1 6.250 MVA 15.75kV/220 kV GT 1 7.40 MVA 220 kV/6.6 kV ST-1	MSETCL	03-02-2018	15:26	03-02-2018	15:45	00:19	Bus bar protection operated at 220kV Khaparkheda S/s that resulted in tripping of all the elements connected to 220 kV Bus 1 . Bus bar protection has maloperated, as no differential current was found during the event.	142	Nil	GI-1	Nil
:	3 W	Tripping of 1.765kV/400 kV 1500 MVA Pune(GIS) ICT 1 2.400 kV Pune(GIS)-Pune(PG) 2&4 3.400 kV Pune(GIS)-Aurangabad 1 4.400 kV Pune(GIS)-Parli 2	PGCIL	08-02-2018	16:06	08-02-2018	17:09	01:03	Bus-I at 400kV Pune(PG) tripped at 16:06hrs and resulted in tripping of elements connected to 400 kV Bus 1 due to pick-up of Binary input of peripheral unit of Main-II Bus bar protection. This binary input is assigned for SF6 lockout of 89A isolator of 400kV Pune(Talegaon)-II. However no such lockout was observed.	Nil	Nil	GI-2	Nil
	4 W	Tripping of 1.400 kV Khandwa-Betul 1&2 2.400 kV Khandwa-Seoni 1&2 3.400 kV Khandwa-Rajgarh 1&2 4.400 kV Khandwa-Itarsi 1&2 5.400 kV Khandwa-Indore 1&2 7.220 kV Khandwa-Indore 1&2 7.220 kV Khandwa-Chhegaon 2 8.220 kV Khandwa-Chegaon 2 8.220 kV Khandwa-Vepnagar 9.400 kV 80 MVAR Veloda Bus reactor 10.400 kV 50MVAR Soja Bus reactor 11.400 kV 50MVAR Vadavi Bus reactor	PGCIL	13-02-2018	17:57	13-02-2018	18:19	00:22	400 kV Khandwa-Rajgarh 1 was opened on Voltage regulation and during the line opening, the Y phase pole of tie breaker burst and resulted in tripping of the elements mentioned at 400kV Khandwa.	Nil	Nil	GI-2	Nil
!	5 W	Tripping of 1.220 kV Tillari-Amona 2.220 kV Mahalakshmi-Amona 3.220 kV Amona-Ponda 2 4.220/132 kV 100 MVA Amona ICT(BHEL) 5.220/132 kV 100 MVA Amona ICT(CGL)	Goa	19-02-2018	06:45	19-02-2018	07:58	01:13	R phase LA of 220 kV Amona-Ponda 2 burst at Ponda end and the CB at Amona end did not trip during the event. This resulted in LBB operation of 220 kV Amona-Ponda 2 and tripping of 220 kV Tillari and Mahalakshmi feeders and ICTs connected to 220 kV Bus 2 at Amona S/s.	Nil	95	GI-2	0.0713
	6 W	Tripping of 1.220 kV Nagothane-Wadkhal 2 2.220 kV Nagothane-IPCL 3.400 kV/220 kV/33 kV 315 MVA Nagothane ICT 2	MSETCL	19-02-2018	11:41	19-02-2018	14:30	02:49	220 kV Main Bus 2 bus bar protection operated, resulted in tripping of the elements connected at 220 kV Nagothane S/s.	Nil	Nil	GI-1	Nil
	7 W	Tripping of 1. 220/132kV, 200MVA Eklahare(Nasik) ICT 1 2. 220/132kV, 150MVA Eklahare(Nasik) ICT 2 3. 220/132kV, 200MVA Eklahare(Nasik) ICT 6 4. 132kV Eklahare(Nasik)-Ojhar-1 &2	MSETCL	19-02-2018	12:41	19-02-2018	13:02	00:21	LBB of 132 kV Eklahare(Nasik)-Ojhar 1 operated and resulted in tripping of all the 132 kV elements connected to the 132 kV Bus	Nil	93	GI-1	0.0419

S No.	Region	Name of Elements	Owner/Ag	Outage	2	Reviva	ı	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards	Energy Unserved (MU)
3.140	Region	Name of Elements	ency	Date	Time	Date	Time	Time		Generation 2033 (WWV)	Loud Loss (MIN)	category as per cen standards	Energy onserved (wo)
8	WR	Tripping of 1.220 kV Nagothane-Posco 2.220 kV Nagothane-SPCL 3.220 kV Nagothane-Wadkhal 1 4.220 kV Nagothane-MSL 5.220 kV Nagothane-ACCIL 6.400 kV/220 kV/33 kV 315 MVA Nagothane ICT 2	MSETCL	19-02-2018	13:12	19-02-2018	14:02	00:50	220 kV Main Bus 1 bus bar protection operated, resulted in tripping of the elements connected at 220 kV Nagothane S/s.	NII	To be updated by MSETCL	GD-1	To be updated by MSETCL

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

Grid Disturbances in SR for February 2018

S.No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Out	age	Rev	ival	Outage Duration	Event	Generatio n Loss	Load Loss	Category as per CEA	Energy Unserved
		оренецу	Agency	Date	Time	Date	Time	Time	(As reported)	(MW)	(MW)	Grid	(MU)
1	SR	1. 220kV Sedam - Humnabad Ckt-1&2 2. 220kV Sedam - Tandur 3. 220kV Sedam - Raichur TPS ckt-1 &2 4. 220kV Sedam - Shahapur	KPTCL	1-02-18	17:46	1-02-18	18:34	48 mins	Complete outage of 220kV Sedam, Shahapur, Shahabad, Kapanoor, Humnabad and Halabarga Stations of KPTCL: Triggering incident was high resistance fault in 110kV Sedam - Chittapur line near Sedam end. Line DEF operated and backup OC protection of 100MVA transformer operated at Sedam end. But line breaker and transformer HV breaker didn't open due to problem in trip circuit. This resulted in cascade tripping of upstream feeders and power supply was lost to six 220kV stations of KPTCL.		410	GD -1	
2	SR	1. 230 KV Hosur - Shoolagiri 2. 230 KV Hosur - Mettur 3. 230 KV Hosur - Yerrahandahalli 4. 100 MVA, 230 / 110 KV Auto Tr. I 5. 100 MVA, 230 / 110 KV Auto Tr. II 6. 100 MVA, 230 / 110 KV Auto Tr. III	APTRANSC O	19-02-18	1:41	19-02-18	2:24	42 mins	Complete outage of 230kV Hosur SS of TANTRANSCO: Triggering incident was failure of Y phase HV CT in 100 MVA Auto Transformer – 3. Bus Bar Protection operated and all the 230kV feeders & Auto Transformers connected in 230kV Bus got tripped.		174	GD -1	
3	SR	1. 220kV Gajwel-Minpur Ckt-1 2. 220/132kV, 100MVA ICT-1 3. 220/132kV, 160MVA ICT-2 4. 220kV Gajwel – Kondapaka ckt 5. 400/220kV, 315MVA ICT-1 6. 220/132kV, 160MVA ICT-3 7. 220kV Gajwel – Medchal ckt-1 8. 400/220kV. 315MVA ICT-2	TSTRANS CO	18-02-01	16:13	18-02-01	16:37	24 mins	Multiple Tripping at 220kV Gajwel substation: B phase to earth fault due to earth rod not removed after maintenance work, 220kV Busbar-1 protection acted. All elements connected to Bus-1 tripped. 220/132kV, 160MVA ICT- 2 connected to Bus-2 also tripped due to Over Load.			GI-1	

Major Grid Events for Feb, 2018_Eastern Region

Sl. No.	Region	Name of major elements	Owner / Agency	Outag		Rev		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid
			J,	Date	Time	Date	Time	Time		(,				Standards
1	ERLDC	220 kV TVNL - Patratu S/C 220 kV Patratu - Hatia D/C 132 kV Hatia - Hatia T/C 132 kV Namkum - Hatia S/C 220/132 kV ICT - I at Patratu	JUSNL	9-Feb-18	15:00	9-Feb-18	17:08	02:08	220/132KV ICT-II at Patratu and 132 KV Namkum Hatia(2) S/C were under shutdown. At 15:00 hrs 220 kV TVNL - Patratu S/C (at Patratu end), 220 kV Patratu - Hatia D/C (Ckt - I at Patratu end and Ckt - II at Hatia end), 132 kV Hatia - Hatia T/C, 132 kV Namkum - Hatia S/C (at Hatia end), 220/132 kV ICT - I at Patratu tripped along with unit - I at TVNL. As per PMU data, initially fault was in B phase (fault clearing time 500 ms approx). After (around 200 ms later the initial fault) clearing the fault in B phase, another fault was observed in Y phase (fault clearing time <100 ms)	180	200	0.3840	0.4267	GD-I
2	ERLDC	220 kV Mejia Barojora D/C 220 kV Mejia - Kalyaneswari T/C 220 kV Mejia - Burnpur - I 220 kV Waria - Mejia - D/C 220 kV Mejia - Muchipara - D/C	DVC	19-Feb-18	18:12	19-Feb-18	18:35	00:23	At 18:12 hrs, all the running units at Mejia (U#2, #3 & #6) along with all connected lines trpped due to bus fault at Mejia S/S	630	288	0.2415	0.1104	GD-I

Grid Disturbances in NER Grid for February 2018

e1			0/	Outa	ge	Date and Time of	Reviva	ıl	Date and Time of	Onton		G	T 4 T	C	Load Loss	Category as
No.	Region	Name of Element	Owner / Agency	Date	Time	Tripping	Date	Time	Restoration	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	in MU	per CEA Grid
1	NER	132 kV Lekhi - Nirjuli Line	DoP, Arunachal Pradesh & POWERGRI D	01-Feb-2018	05:46:00	01-Feb-18 05:46:00	01-Feb-2018	06:55:00	01-Feb-18	01:09:00	Nirjuli area of Arunachal Pradesh Power System and Gohpur Area of Assam Power System were connected with rest of NER Grid through 132 kV Lekhi-Nirjuli line (Bus Coupler CB of Gohpur kept open for system requirement). At 05:46 Hrs on 01.02.2018, 132 kV Lekhi-Nirjuli line tripped. Due to tripping of this element, Nirjuli and Gohpur areas were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	0	20	0.000	0.023	Standards GD-I
2	NER	132 kV Badarpur - Kolasib Line & 132 kV Aizawl - Kolasib Line	POWERGRI D	02-Feb-2018	22:27:00	02-Feb-18 22:27:00	02-Feb-2018	23:37:00	02-Feb-18 23:37:00	01:10:00	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 22:27 Hrs on 02.02.2018, 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.	41	8	0.048	0.009	GD-I
3	NER	132 kV Doyang - Sanis Line	DoP, Nagaland	03-Feb-2018	14:03:00	03-Feb-18 14:03:00	03-Feb-2018	15:04:00	03-Feb-18 15:04:00	01:01:00	Capital and Wokha areas of Nagaland Power System were connected with rest of NER Grid through 132 kV Doyang - Sanis line. 132 kV Karong - Kohima line kept idle charged from Kohima, 132 kV Dimapur(PG) - Kohima line was not in service (Cause: handtripped on emergency basis due to fire in RTU panel at Dimapur Substation at 13:29 Hrs on 15.01.2018) & 66 kV Tuensang - Likhimro line kept open (Cause: construction activities). At 14:03 Hrs on 0.3.02.2018, 132 kV Doyang - Sanis line tripped. Due to tripping of this element, Capital and Wokha areas were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	0	27	0.000	0.027	GD-I
4	NER	132 kV Palatana - Udaipur Line and 132 kV Agartala - Rokhia 1 & 2 Lines	TSECL	04-Feb-2018	11:40:00	04-Feb-18 11:40:00	04-Feb-2018	12:09:00	04-Feb-18 12:09:00	00:29:00	Monarchak Power Station, Rokhia Power Station, Udaipur and Rabindranagar areas of Tripura Power System were connected with rest of NER Grid through 132 kV Palatana - Udaipur line, 132 kV Agartala - Rokhia 1& II. Lines, 66 kV Rokhia - Badarghat line kept open (Cause: phase sequence issue), 66 kV Amarpur - Gumti line kept open (Cause: phase sequence issue) and 66 kV Udaipur - Gokulnagar line kept open (Cause: phase sequence issue). At 11:40 Hrs on 40.11.2018, 132 kV Palatana - Udaipur line, 132 kV Agartala - Rokhia 1& II Lines tripped. Due to tripping of these elements, Monarchak Power Station, Rokhia Power Station, Udaipur and Rabindranagar areas of Tripura Power System were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	156	20	0.051	0.010	GD-I
5	NER	132 kV Ambassa - Gamaitilla Line, 132 kV AGTCCPP - Kumarghat Line, 132 kV Badarpur - Kumarghat Line, 132 kV Aizawl - Kumarghat Line & 132 kV P K Bari - Silchar I Line	POWERGRI D & TSECL	04-Feb-2018	12:23:00	04-Feb-18 12:23:00	04-Feb-2018	12:43:00	04-Feb-18 12:43:00	00:20:00	Kumarghat area (Kumarghat, Dharmanagar, Kailashahar, Ambasa, P K Bari) of Tripura Power System and Dullavchera area of Assam Power System were connected with rest of NER Grid through 132 kV AGTCCPP - Kumarghat Line, 132 kV Badarpur - Kumarghat Line, 132 kV P K Bari - Silchar I Line and 132 KV Ambassa - Gamaitilla Line. 132 kV Dullavcherra - Hailakandi was under continuous shutdown from Apr, 2016 (Cause: Tower collapsed), 132 kV P K Bari - Silchar II line was under outage since 06:07 Hrs on 02.04.2017 due to tower collapsed at Loc No. 124, 125, 126, 137, 138 and 139, 132 kV Kamalpur - Ambassa line kept open at Ambassa end and 132 kV P K Bari - Kamalpur line was under shutdown from 12:15 Hrs on 04.02.18 as informed by TSECL. At 12:23 Hrs on 04.02.2018, 132 kV AGTPP - Kumarghat Line, 132 kV Badarpur - Kumarghat Line, 132 kV Aizawl - Kumarghat Line, 132 kV P K Bari - Silchar I Line and 132 KV Ambassa - Gamaitilla Line tripped. Due to tripping of these elements, Kumarghat area of Tripura Power System and Dullavchera area of Assam Power System were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	50	14	0.087	0.017	GD-I
6	NER	132 kV Doyang - Sanis Line	DoP, Nagaland	08-Feb-18	13:05:00	08-Feb-18 13:05:00	08-Feb-18	14:02:00	08-Feb-18 14:02:00	00:57:00	Capital and Wokha areas of Nagaland Power System were connected with rest of NER Grid through 132 kV Doyang - Sanis line. 132 kV Karong - Kohima line kept idle charged from Kohima, 132 kV Dimapur(PG) - Kohima line was not in service (Cause: handtripped on emergency basis due to fire in RTU panel at Dimapur S/S at 13:29 Hrs on 15.01.2018) & 66 kV Tuensang - Likhimro line kept open (Cause: construction activities). At 13:05 Hrs on 08.02.2018, 132 kV Doyang - Sanis line tripped. Due to tripping of this element, Capital and Wokha areas were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	0	12	0.000	0.011	GD-I
7	NER	132 kV Balipara - Khupi Line	NEEPCO & DoP,Arunach al Pradesh	13-Feb-2018	13:24:00	13-Feb-18 13:24:00	13-Feb-18	13:54:00	13-Feb-18 13:54:00	00:30:00	Khupi area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Balipara - Khupi line. At 13:20 Hrs on 13.02.18, 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	23	0.000	0.012	GD-I
8	NER	132 kV Dimapur (PG) - Dimapur (DoP, Nagaland) II Line	DoP, Nagaland	14-Feb-2018	17:45:00	14-Feb-18 17:45:00	14-Feb-2018	20:37:00	14-Feb-18 20:37:00	02:52:00	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 17:45 Hrs on 14.02.18, 132 kV Dimapur (PG)-Dimapur (DoP, Nagaland) II 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	39	0.000	0.112	GD-I

SI			Owner /	Outa	ge	Date and Time of	Reviva	ıl	Date and Time of	Outage		Generation	Load Loss	Generation	Load Loss	Category as
No	Region	Name of Element	Agency	Date	Time	Tripping	Date	Time	Restoration	Duration	Event	Loss (MW)	(MW)	Loss in MU	in MU	per CEA Grid Standards
9	NER	132kV Dimapur(PG) - Bokajan Line & 132kV Bokajan - Golaghat Line	AEGCL	18-Feb-2018	23:10:00	18-Feb-18 23:10:00	18-Feb-2018	23:25:00	18-Feb-18 23:25:00	00:15:00	Bokajan area of Assam Power System was connected with rest of NER Grid through 132 kV Dimapur(PG) - Bokajan line and 132 kV Bokajan - Golaghat line. At 23:10 Hrs, 132 kV Dimapur(PG) - Bokajan line and 132 kV Bokajan - Golaghat line tripped. Due to tripping of this element, Bokajan area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	11	0.000	0.003	GD-I
10	NER	132 kV Aizawl - Kolasib Line & 132 kV Badarpur - Kolasib Line	POWERGRI D	21-Feb-2018	12:19:00	21-Feb-18 12:19:00	21-Feb-2018	12:44:00	21-Feb-18 12:44:00	00:25:00	Turial Power Station, Serlui B Power Station and Kolasib area of Mizoram Power System were connected with rest of NER Grid through 132 kV Kolasib-Badarpur line & 132 kV Kolasib-Aizawl line. At 12:19 Hrs on 21.02.2018, 132 kV Kolasib-Badarpur line & 132 kV Kolasib-Aizawl line tripped. Due to tripping of these elements, Turial Power Station, Serlui B Power Station and Kolasib area were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	46	4	0.019	0.002	GD-I
11	NER	132 kV Agartala - Rokhia 1 & 2 Lines, 132 kV Monarchak - Rokhia Line, 132 kV P K Bari - Kamalpur Line and 132 kV Dhalabil - Kamalpur Line	POWERGRI D & TSECL	26-Feb-2018	04:46:00	26-Feb-18 04:46:00	26-Feb-2018	04:57:00	26-Feb-18 04:57:00		Rokhia Power Station, Boxnagar and Kamalpur areas of Tripura power system were connected with rest of NER Grid through through 132 kV Monarchak - Rokhia Line, 132 kV Agartala - Rokhia 1 & 2 Lines, 132 kV P K Bari - Kamalpur Line and 132 kV Dhalabil - Kamalpur Line, 132 kV Ambassa - Kamalpur Line kept open at Ambassa end, 66 kV Rokhia - Badarghat line kept open (Cause: phase sequence issue) and 66 kV Bagafa - Belonia line kept open (Cause: phase sequence issue), 66 kV Rokhia - Belonia line bypassed at 132 kV Rabindranagar Substation through jumper. At 04:46 Hrs on 26.02.2018, 132 kV Monarchak - Rokhia Line, 132 kV Agartala - Rokhia 1 & 2 Lines, 132 kV P K Bari - Kamalpur Line and 132 kV Dhalabil - Kamalpur Line tripped. Due to tripping of these elements, Rokhia Power Station, Boxnagar and Kamalpur areas of Tripura power system were separated from rest of YER Grid and subsequently collapsed due to load genaration mismatch in these areas.	57	7	0.026	0.011	GD-I
12	NER	132 kV Dimapur (PG) - Kohima (DoP, Nagaland) Line	POWERGRI D & DoP, Nagaland	26-Feb-2018	16:51:00	26-Feb-18 16:51:00	26-Feb-2018	17:06:00	26-Feb-18 17:06:00	00:15:00	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, 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 16:51 Hrs on 26.02.2018, 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.	0	28	0.000	0.007	GD-I

							List	of Grid In	cidents du	ring Feb 2018						
					Outag	ge		Rev	ival		_		Generatio	Load	Energy	Category
S.No	Region	State(s) Involved	Name of Elements	Owner / Agency	Date	Time	Outage Date & Time	Date	Time	Restoration Date & Time	Outage Duration	Event (Brief Details)	n Loss (MW)	Loss MW	d (MU)	as per CEA Grid Standards
1	NER	Kopili	Kopili Unit 2	NEEPCO	03-Feb-2018	16:41:00	03-Feb-18 16:41:00	03-Feb-18	18:00:00	03-Feb-18 18:00:00		Kopili Unit 2 tripped at 16:41 Hrs on 03.02.18 due to Excitation problem. (Revision of schedule from Block No.73 on 03.02.2018)	47	0	0.062	GI-II
2	NER	Kopili	Kopili Unit 4	NEEPCO	14-Feb-2018	17:38:00	14-Feb-18 17:38:00	14-Feb-2018	18:30:00	14-Feb-18 18:30:00	00:52:00	Kopili Unit 4 tripped at 17:38 Hrs on 14.02.18 due to operation of Differential protection. (Revision of schedule from Block No.75 on 14.02.18)	37	0	0.032	GI-II
3	NER	AGTCCPP	AGTCCPP Unit 2 & STG-1	NEEPCO	17-Feb-2018	07:42:00	17-Feb-18 07:42:00	17-Feb-2018	08:15:00	17-Feb-18 08:15:00	00:33:00	AGTCCPP Unit II and STG-I tripped at 07:42 Hrs on 17.02.18 due to Generator Control System Problem. (Revision of schedule from Block No.34 on 17.02.18)	22	0	0.012	GI-I
4	NER	AGTCCPP	AGTCCPP STG	NEEPCO	18-Feb-2018	15:25:00	18-Feb-18 15:25:00	18-Feb-2018	16:15:00	18-Feb-18 16:15:00	00:50:00	AGTCCPP STG II tripped at 15:25 Hrs on 18.02.18 due to high rear shaft vibration (Revision of schedule from Block No. 66 on 18.02.18).	20	0	0.016	GI-I
5	NER	Kopili	Kopili Unit 1	NEEPCO	26-Feb-2018	22:10:00	26-Feb-18 22:10:00	26-Feb-2018	23:00:00	26-Feb-18 23:00:00		Kopili Unit 1 tripped at 22:10 Hrs on 26.02.18 due to Stator Earth Fault. (Revision of schedule from Block No.93 on 26.02.18)	47	0	0.039	GI-II
6	NER	BgTPP	BgTPP Unit 2	NTPC	26-Feb-2018	23:08:00	26-Feb-18 23:08:00	26-Feb-2018	23:30:00	26-Feb-18 23:30:00	00:22:00	BgTPP Unit 2 tripped at 23:08 Hrs on 26.02.18 due to primary air header pressure low. (Revision of schedule from Block No.95 on 26.02.18)	195	0	0.072	GI-II