

## Northern Region-Grid Event Report for September 2019

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) 220kV Wagoora(PG)-Zainkote(JK) ckt-2 2) 220kV Amargarh(NRSS29)-Zainkote(JK)	Jammu & Kashmir	J&K, NRSS29 & POWERGRID	3-Sep-19	18:25	3-Sep-19	18:41	00:16	220kV Wagoora(PG)-Zainkote(JK) ckt-2 & 220kV Amargarh(NRSS29)-Zainkote(JK) tripped on B-N fault. As per PMU, B-N fault is observed in the system. In antecedent conditions, 220kV Wagoora(PG)-Zainkote(JK) ckt-2 & 220kV Amargarh(NRSS29)-Zainkote(JK) carrying 36MW & 122MW respectively.	200		GD-1	0.05
2	NR	1) 500 MVA ICT 4 at 400/220kV Ballabgarh(PG) 2) 220kV Faridabad(NTPC)-Samaypur(BBMB) ckt-2 3) 220kV Ballabgarh(BBMB)-Samaypur(BBMB) ckt-1 4) 220kV Ch.Dadri(BBMB)-Samaypur(BBMB)	Haryana	BBMB, NTPC & POWERGRID	6-Sep-19	21:18	6-Sep-19	22:34	01:16	Heavy spark occurred at Y phase Bus Isolator of 220 kV samaypur ICT-4, which lead to the operation of Bus Bar protection at 220kV Samaypur(BBMB) and tripping of 500 MVA ICT 4, 220kV Faridabad(NTPC)-Samaypur(BBMB) ckt-2, 220kV Ballabgarh(BBMB)-Samaypur(BBMB) ckt-1 & 220kV Ch.Dadri(BBMB)-Samaypur(BBMB). As per PMU, R-Y fault is observed in the system. In antecedent conditions, 500 MVA ICT 4 at 400/220kV Ballabgarh(PG) carrying 210MW.			GI-2	
3	NR	1) 220kV Chirawa(Raj)-Khetri(Raj) 2) 220kV Chirawa(Raj)-Hisar(BBMB) 3) 220/132kV ICT 1 at 220kV Chirawa(Raj) 4) 220/132kV ICT 2 at 220kV Chirawa(Raj)	Rajasthan	Rajasthan & BBMB	9-Sep-19	11:16	9-Sep-19	12:30	01:14	220kV Chirawa(Raj)-Hisar(BBMB) tripped due to B-Ph line isolator finger was burnt & there was sparking on clamp of its wave trap. Load was restored through 132kV Hisar-Sadulpur-Chirawa line at 11.55 hrs. 220kV Chirawa(Raj)-Bhadra(Raj) was under open condition from Bhadra end. As per PMU, B-N fault is observed with delayed clearance is observed in the system. In antecedent conditions, 220kV Chirawa(Raj)-Hisar(BBMB) carrying 197MW.	150		GD-1	0.10
4	NR	1) 220 KV Khodri(UTT)-Majri(HP) 2) 60MW Unit#1, #2, #3 & #4 at 220kV Chibro(UTT) 3) 30MW Unit#1, #2, #3 & #4 at 220kV Khodri(UTT)	Uttarakhand & Himachal Pradesh	Uttarakhand & HP	9-Sep-19	11:42	9-Sep-19	12:25	00:43	Generation loss of about 300 MW in Uttarakhand occurs due to tripping of Chibro and Khodri Hydro plants after tripping of 220 KV Khodri(UK)-Majri(HP) line on B-N fault, FC-9.609 kA. Generation restored by 12.25 hrs. In HP, Load loss of 118 MW reported by SLDC. As per PMU, B-N fault with no auto-reclosing is observed. In antecedent conditions, Generation at 220kV Chibro(UTT) & 220kV Khodri(UTT) was 202MW & 89MW respectively. 220 KV Khodri(UTT)-Majri(HP) carrying 112MW.	290	112	GD-1	0.08
5	NR	1) 315MVA ICT 1 at 400/220kV Obra TPS(UP) 2) 315MVA ICT 2 at 400/220kV Obra TPS(UP)	Uttar Pradesh	UP	11-Sep-19	11:58	11-Sep-19	14:39	102:19	315MVA ICT 1 & 315MVA ICT 2 at 400/220kV Obra TPS(UP) tripped on operation of directional over current protection. As per PMU, fluctuations observed in the phase voltages. In antecedent conditions, 315MVA ICT 1 & 315MVA ICT 2 carrying 199MW & 194MW respectively.	350	200	GD-1	0.53
6	NR	1) 220kV Fatehabad(HVPLN)-Rania(HVPLN) 2) 220kV Fatehabad(HVPLN)-Fatehabad(PG) ckt-1 3) 220kV Fatehabad(HVPLN)-Fatehabad(PG) ckt-2 4) 220kV Fatehabad(HVPLN)-Hisar(PG) ckt-1 5) 220kV Fatehabad(HVPLN)-Hisar(PG) ckt-2	Haryana	Haryana & POWERGRID	13-Sep-19	8:41	13-Sep-19	09:53	01:12	220kV R-Phase LA of 220kV Fatehabad(HVPLN)-Rania(HVPLN) at Fatehabad end damaged leading to tripping of 220kV Fatehabad(HVPLN)-Rania(HVPLN), 220kV Fatehabad(HVPLN)-Fatehabad(PG) ckt-1 & 2, 220kV Fatehabad(HVPLN)-Hisar(PG) ckt-1 & 2. As per PMU, R-N fault is observed in the system. In antecedent conditions, 220kV Fatehabad(HVPLN)-Rania(HVPLN) carrying 60MW.	300		GD-1	0.30
7	NR	1) 220kV Wagoora(PG)-Zainkote(JK) ckt-2 2) 220kV Amargarh(NRSS29)-Zainkote(JK)	Jammu & Kashmir	J&K, NRSS29 & POWERGRID	15-Sep-19	15:28	15-Sep-19	16:46	01:18	220kV Wagoora(PG)-Zainkote(JK) ckt-2 tripped on Y-B fault, 25.24km from wagoora end. At the same time, 220kV Amargarh(NRSS29)-Zainkote(JK) tripped on Phase to earth fault, 18.28 Km from amargarh end. From SCADA data, it seems that 220kV Delina-Ziankote and 120MW Unit#3 at Uri-1 also tripped. As per PMU, Y-B fault with delayed clearance is observed in the system. In antecedent conditions, 220kV Wagoora(PG)-Zainkote(JK) ckt-2 carrying 56MW.	30	200	GD-1	0.26
8	NR	1) 220kV Bhadla(PG)-Saurya Urja ckt-1 2) 220kV Bhadla(PG)-Azure 3) 220kV Bhadla(PG)-TPREL 4) 220kV Bhadla(PG)-Mahoba	Rajasthan	POWERGRID & Rajasthan	16-Sep-19	12:56	16-Sep-19	13:47	00:51	220kV Bhadla(PG)-TPREL & 220kV Bhadla(PG)-Mahoba tripping occurred due to R phase Voltage Dip from PGCL end. At the same time, 220kV Bhadla(PG)-Saurya Urja ckt-1 & 220kV Bhadla(PG)-Azure also tripped. As per PMU, Y-N fault is observed in the system. In antecedent conditions, 220kV Bhadla(PG)-Saurya Urja ckt-1 carrying 131MW.	1050		GD-1	
9	NR	1) 800kV HVDC Agra(PG)-Biswanath Cheriall(PG) line 1 2) 800kV HVDC Agra(PG)-Biswanath Cheriall(PG) line 2	Uttar Pradesh & Eastern Region	POWERGRID	16-Sep-19	13:01	16-Sep-19	13:26	00:25	800kV HVDC Agra(PG)-Biswanath Cheriall(PG) line 1 & 2 tripped on DC line earth fault, 187.5km from BNC end. As per PMU, Fluctuations observed in the phase voltages. In antecedent conditions, 800kV HVDC Agra(PG)-Biswanath Cheriall(PG) line 1 & 2 carrying 926MW & 932MW respectively.			GI-2	
10	NR	1) 400kV Anpara(UP)-Mau(UP) 2) 400kV Anpara(UP)-Sarnath(UP) ckt-2	Uttar Pradesh	UP	17-Sep-19	20:36	17-Sep-19	21:41	01:05	400kV Anpara(UP)-Sarnath(UP) ckt-2 tripped on B-N fault, 102.02km from Anpara. At the same time, 400kV Anpara(UP)-Mau(UP) also tripped on Y-N fault, 96.05km from Anpara end. As per PMU, Y-N fault with unsuccessful auto-reclosing is observed. In antecedent conditions, 400kV Anpara(UP)-Mau(UP) & 400kV Anpara(UP)-Sarnath(UP) ckt-2 carrying 365MW & 500MW respectively.			GI-2	
11	NR	1) 220kV Fatehabad(HVPLN)-Rania(HVPLN) 2) 220kV Fatehabad(HVPLN)-Fatehabad(PG) ckt-1 3) 220kV Fatehabad(HVPLN)-Hisar(PG) ckt-1 4) 220kV Fatehabad(HVPLN)-Hisar(PG) ckt-2	Haryana	Haryana & POWERGRID	18-Sep-19	13:12	18-Sep-19	14:26	01:14	220kV Fatehabad(HVPLN)-Hisar(PG) ckt-1 & 2 tripped on B-N fault, 86km from Hisar end. From SCADA data, it seems that 220kV Fatehabad(HVPLN)-Fatehabad(PG) ckt-1 & 220kV Fatehabad(HVPLN)-Rania(HVPLN) also tripped. As per PMU, B-N fault is observed in the system. In antecedent conditions, 220kV Fatehabad(HVPLN)-Hisar(PG) ckt-1 & 2 carrying 40MW each.			GI-2	
12	NR	1) 220kV Bus 4 at 220kV Unchahar(NTPC) 2) 220kV Unchahar(NTPC)-Kanpur(PG) ckt-2 3) 220kV Unchahar(NTPC)-Kanpur(PG) ckt-4 4) 210MW Unit#4 at 220kV Unchahar(NTPC) 5) 500MVA ICT 1 at 400/220kV Unchahar(NTPC)	Uttar Pradesh	NTPC & POWERGRID	27-Sep-19	4:40	27-Sep-19	07:50	03:10	Fault in 220kV Unchahar(NTPC)-Kanpur(PG) ckt-2 observed leading to tripping of 220kV Bus 4 at 220kV Unchahar(NTPC) due to operation of Bus-bar protection. 220kV Unchahar(NTPC)-Kanpur(PG) ckt-4 & 210MW Unit#4 at 220kV Unchahar(NTPC) also tripped. As per PMU, Y-N fault with delayed clearance and unsuccessful autoreclosing is observed. In antecedent conditions, 220kV Unchahar(NTPC)-Kanpur(PG) ckt-2 & 4 carrying 44MW & 46MW respectively.	120		GD-1	
13	NR	1) 400kV Anpara(UP)-Sarnath(UP) Ckt-2 2) 315MVA ICT 1 at 400/220kV Sarnath(UP) 3) 220/132kV 160MVA ICT4 at Sarnath(UP)	Uttar Pradesh	UP	27-Sep-19	5:41	27-Sep-19	06:52	01:11	400kV Anpara(UP)-Sarnath(UP) Ckt-2 tripped on Y-N fault. At the same time, 315MVA ICT 1 at 400/220kV Sarnath(UP) also tripped due to operation of differential protection. As per PMU, Y-N fault with no autoreclosing is observed. In antecedent conditions, 400kV Anpara(UP)-Sarnath(UP) Ckt-2 & 315MVA ICT 1 carrying 324MW & 86MW respectively.			GI-2	
14	NR	1) 315MVA ICT 2 at 400/220kV Mundka(DTL) 2) 220kV Mundka(DTL)-Najafgarh(DTL) 3) 220kV Mundka(DTL)-Khanjawa(DTL)	Delhi	Delhi	29-Sep-19	0:19	29-Sep-19	11:30	11:11	315MVA ICT 2 at 400/220kV Mundka(DTL) tripped due to Fire In Ict resulting in heavy sound and flame in the transformer. At the same time, 220kV Mundka(DTL)-Najafgarh(DTL) & 220kV Mundka(DTL)-Khanjawa(DTL) also tripped. As per PMU, B-N fault is observed in the system. In antecedent conditions, 315MVA ICT 2, 220kV Mundka(DTL)-Najafgarh(DTL) & 220kV Mundka(DTL)-Khanjawa(DTL) carrying 157MW, 105MW & 72MW respectively.	187		GD-1	0.03

**Western Region-Event Report for September 2019**

S.No	Region	Name of Elements	Owner/Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards	Energy Unserved (MU)
				Date	Time	Date	Time	Time					
1	WR	Tripping of 1.220/132 kV Bhanpura ICT 2.132 kV Bhanpura- Gandhisagar 1&2 3.132 kV Bhanpura- Garoth 4.132 kV Bhanpura- Suwasra	MPPTCL	01-09-2019	22:56	01-09-2019	23:38	00:42	At 220/132 kV Bhanpura s/s, 132 kV B phase Bus PT blasted and resulted in tripping of all the 132 kV lines on Zone 2 protection operation and tripping of ICT on Back up Earth fault protection.	Nil	5	GI-1	0.0035
2	WR	Tripping of 1.220 kV Bhopal Bus 1 2.220 kV Bhopal- Bairagarh 1 3.220 kV Bhopal-Bhopal 1 4.220 kV Bhopal- Ganj Basoda 5.400/220 kV 315 MVA Bhopal ICTs 1&3	MPPTCL	04-09-2019	16:06	04-09-2019	17:00	00:54	At 400/220 kV Bhopal s/s, 220 kV Bairagarh 1 CB did not open during R phase fault and resulted in tripping of all the elements connected to 220 kV Bhopal Bus 1 on LBB operation.	Nil	Nil	GI-1	Nil
3	WR	Tripping of 1.220 kV Kadana-Godhra s/c 2.220 kV Kadana-Modasa 1&2 3. Kadana Units 1,2,3& 4 (4x60MW)	GSECL	06-09-2019	14:44	06-09-2019	16:07	01:23	Prior to the event 220 kV Dhansura-Modasa 1&2 and 220 kV Kadana-Lunavada was under shutdown. At 14:44 Hrs Kadana-Godhra s/c tripped on B phase fault. With the above tripping, 220kV Kadana was connected to Modasa S/S only(radial load) and all 4 units at Kadana tripped. Units tripped as generation was 200MW and load was only 15MW .	200	15	GD-1	0.02075
4	WR	Tripping of 1.220 kV Sukha Bus 2 2.220 kV Sukha- Panagar 2 3.220 kV Sukha- Narsingpur 2 4.220 kV Sukha- Jabalpur 2 5.400/220 kV 315 MVA Jabalpur ICT 2	MPPTCL	07-09-2019	16:15	07-09-2019	16:45	00:30	At 220 kV Sukha s/s, due to the faulty control cable of 400/220 kV Jabalpur ICT 2, LBB initiated and all the elements connected to 220 kV Bus 2 tripped.	Nil	Nil	GI-1	Nil
5	WR	Tripping of 1.220 kV Urla-Siltara 2.220/132 kV 160 MVA Urla ICTs 1,2&3 3.132 kV feeders at Urla & Birgaon	CSPTCL	08-09-2019	01:54	08-09-2019	02:41	00:47	At 220 kV Urla s/s, 220 kV Urla-Siltara tripped on R phase fault and at the same time, due to the faulty cable spurious LBB signal initiated from 132 kV Birgaon bay and resulted in tripping of all the elements in the substation.	Nil	156	GD-1	0.1222
6	WR	Tripping of 1.400 kV Charanka- APL 2.400 kV Charanka- Kansari 2 3.400 kV Charanka- Veloda 2 4.400/220 kV Charanka ICT 2 5.400 kV 125Mvar Charanka Bus BR	GETCO	08-09-2019	11:02	08-09-2019	14:08	03:06	At 400/220 kV Charanka s/s, Main-1 LBB protection of 400kV Charanka-APL line mal-operated and resulted in tripping of all the elements connected to 400 kV Charanka Bus 2.	Nil	Nil	GI-2	Nil
7	WR	Tripping of 1.220 kV Padghe Jhambul 2 2.220 kV Padghe- Jinda 3.400 kV Boisar-Padghe 1 4.400/220 kV 500 MVA Padghe ICT 5 5.220/100 kV 200 MVA ICT 1&3	MSETCL	18-09-2019	11:50	18-09-2019	13:19	01:29	At 400/220 kV Padghe s/s, 220 kV side Y phase Jumper connecting 220 kV Bus 1 and isolator of 400/220 kV 500 MVA ICT 5 snapped and created fault which resulted in tripping of 'upper section' of 220 kV Padghe bus 1 along with the elements connected to it.	Nil	194.6	GI-1	0.288656667
8	WR	Tripping of 1.400 kV Dehgam Bus 1 2.400/220 kV 315 MVA Dehgam ICT 1 3.400 kV Dehgam-Sami 1	PGCIL	19-09-2019	17:03	19-09-2019	17:29	00:26	At 400/220 kV Dehgam s/s, while testing A/R of the relay of 400 kV Wanakbori-2 line, by mistake command of bus bar tripping was extended by GETCO personnel. This resulted in tripping of all the elements connected to 400 kV Dehgam Bus 1.	Nil	Nil	GI-2	Nil
9	WR	Tripping of 1. 220 kV Ponda-Xeldem 2 2. 220 kV Mahalakshmi-Amona 3.220/132 kV Ponda ICT 1	Goa	19-09-2019	19:34	19-09-2019	19:36	00:02	At 220 kV Ponda s/s, due to B phase Insulator flashover on location 263, Xeldem 2 line tripped and at the same time 220 kV Mahalakshmi-Amona and Ponda ICT 1 tripped.	Nil	120	GI-1	0.02
10	WR	Tripping of 1.220 kV Ashta-Bhopal 2.220 kV Ashta-Mugaliyachap 3.220 kV Ashta-Jetpura 1&2 4.220 kV Ashta-Shajapur 1&2 5.220 kV Ashta-Dewas 1&2 6.220/132 kV 160 MVA Astha ICT 2	MPPTCL	21-09-2019	14:58	21-09-2019	15:54	00:56	At 400/220 kV Astha s/s, 220 kV R phase Bus PT blasted and resulted in tripping of all the elements connected to 220 kV Astha Bus 1&2	Nil	Nil	GI-1	Nil

S.No	Region	Name of Elements	Owner/Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards	Energy Unserved (MU)
				Date	Time	Date	Time	Time					
11	WR	Tripping of 1. 400 kV Koyna Stage IV- New Koyna 1&2 2. 400 kV New Koyna-Dabhol 1&2 3. 400 kV Koyna Stage IV- Lonikhand 4. 400 kV Koyna Stage IV- Jejuri 5. 400/220kV 315 MVA New Koyna ICT 1&2 6. Koyna Stage IV Units 2,3&4	MSEGCL	21-09-2019	18:29	21-09-2019	18:53	00:24	At 400 kV Koyna Stage IV power station, on 21.09.19 at 01:35 hrs 400 KV Stage IV -Lonikand line was hand tripped from Lonikand on voltage regulation.While charging from Lonikand end at 06.:38 hrs, line tripped on distance protection.After carrying out line patrolling charging trial was taken from Lonikand end at 14.34 hrs, but line tripped again on distance protection. After this, 400KV MSETCL opened Y phase jumper at location no -203 (cutpoint) to find out exact faulty section. At 18.29 hrs 400 KV Stage IV- Lonikand line was charged from Lonikand end with Y phase Jumper open at location No. 203. The line stood ok from Lonikand end. After 2 sec line was charged from Stage IV end and at that time VT fuse alarm operated and both Main 1 & Main 2 distance protection relays got blocked. The Y phase fault in the line was cleared by Over Current protection after 1.0 sec. All lines mentioned, tripped from remote end on zone 3 protection and ICTs at 400 KV New Koyna tripped on OC/EF Protection	600	Nil	GD-1	Nil
12	WR	Tripping of 1.220 kV Julwania Bus 1 2.220 kV Julwania-Julwania I/C 1 3.220 kV Julwania-Nirman 4.220 kV Julwania-Sendhwa 1&2 5.400/220 kV 315 MVA Julwania ICT 1 6.220/132 kV 160 MVA Julwania ICT 1	MPPTCL	22-09-2019	18:28	22-09-2019	19:55	01:27	At 400/220 kV Julwania s/s, B-phase CT of 220 kV Julwania-Julwania I/C 1 blasted and resulted in tripping of all the elements connected to 220 kV Bus 1 on bus bar protection operation.	Nil	Nil	GI-1	Nil
13	WR	Tripping of 1.220KV Omkareshwar-Julwania 2.220KV Omkareshwar-Chhegaon 3.220KV Omkareshwar-Khandwa 4. 8X 65 MW Omkareshwar Units 1 to 8	MPPGCL	27-09-2019	12:36	27-09-2019	12:51	00:15	At 220 kV Omkareshwar power station, due to Y&B phase fault, 220 kV Julwania, Chhegaon and Khandwa feeders tripped. All the eight units at Omkareshwar tripped at the same time and there was a generation loss of 433 MW.	433	Nil	GI-1	Nil
14	WR	Tripping of 1.±800 kV HVDC Champa-Kurukshetra Pole 1 2.±800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	29-09-2019	10:54	29-09-2019	11:33	00:39	800 kV HVDC Champa-Kurukshetra Pole 1&2 blocked due to the Type B filter tripping at Kurukshetra end during Pole 3 testing activities.	Nil	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-Grid Event Report for September 2019

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 (Hrs)	Date	Time (Hrs)	Time					
1	SR	1. 220kV Kamar - Varahi line-1 2. 220kV Kamar - Varahi line-2 3. 220kV Kamar - Varahi line-3	KPTCL	29-Sep-19	11:31	29-Sep-19	12:13	42 mins	<b>Complete Outage of 220kV Kamar, MSEZ, Puttur &amp; Kavoov stations of KPTCL:</b> Renovation and Upgradation works were going on at 220kV Kamar station during the time of the incident and all elements were connected to single bus. Single line to ground fault occurred in 220kV Kamar – Varahi line-2 due to R-phase insulator flashover and the line tripped on Zone-1 distance protection. Simultaneously, 220kV Kamar – Varahi line-1 tripped at Kamar end only. 220kV Kamar –Varahi line-3 also tripped due to overloading. This resulted in complete loss of supply at 220kV Kamar since all the three source feeders tripped. In addition there was complete loss of supply at 220kV MSEZ, 220kV Kavoov and 220kV Puttur stations since these stations were radially fed from 220kV Kamar station.	NIL	300	GD-1	0.21
2	SR	i. 230kV Checkanurani - Pasumalai ii. 230kV Checkanurani - Theni iii. 230kV Checkanurani - Kinnimangalam iv. 230kV Checkanurani - Nallamanayakkanpatti v. 230kV Checkanurani - Renganathapuram vi. 400kV/230kV Madurai ICT#1 and ICT#2	TANTRANSCO	10-Sep-19	13:24	10-Sep-19	14:31	1 hr 7 mins	<b>Multiple Tripping at 230kV Checkanurani SS of TANTRANSCO:</b> Triggering incident was B phase to Earth fault in 230kV Checkanurani - Renganathapuram line. As per the verbal information received from TANTRANSCO, there was contamination of SF6 gas in B-ph limb of CB. Persistent fault current resulted in the operation of LBB protection and all the elements connected at Bus-1 got tripped since 230kV Checkanurani Renganathapuram line was connected at Bus-1 during antecedent conditions.	----	----	GI-1	----
3	SR	i. 400kV Guttur-Kaiga-1 ii. 400kV Guttur-Hiriyur-1 & 2 iii. 400kV Guttur - JSW iv. 400kV Guttur - Dhoni v. 400kV Guttur - Narendra-1 vi. 400/220kV ICT-1 at Guttur	KPTCL	26-Sep-19	16:10	26-Sep-19	16:54	44 mins	<b>Multiple tripping at 400kV Guttur station of KPTCL:</b> During antecedent conditions, all elements were connected to Bus-1 due to renovation and upgradation works. As per the report submitted, during testing of ICT-2 HV side Back-up P14 relay, LBB trip got extended resulting in the operation of Bus-1 Bus Bar Protection at 400kV Guttur SS and all the elements connected to 400kV Bus-1 got tripped. Since Bus-2 was already under outage, this resulted in the de-energization of 400kV bus voltage at 400kV/220kV Guttur SS. 220kV side was not affected.	----	----	GI-2	----
4	SR	i. 400kV Guttur-Kaiga-2 ii. 400kV Guttur-Hiriyur-1 & 2 iii. 400kV Guttur - D iv. 400kV Guttur - Nare v. 400/220kV ICT-1 at Guttur	KPTCL	26-Sep-19	18:20	26-Sep-19	20:25	2 Hrs 5 mins	<b>Multiple trippings at 400kV Guttur station of KPTCL:</b> After the first event at 16:10 Hrs, supply to 400kV Guttur station restored at 16:54 Hrs. However, due to shorting of R-ph initiation wire, there was continuous LBB initiation which resulted in operation of LBB once again at 18:20 Hrs. This resulted in de-energization of 400kV Bus voltage at 400/220kV Guttur SS. 220kV side not affected.	----	----	GI-2	----

**Eastern Region-Grid Event Report for September 2019**

Sl. No.	Region	Name of major elements tripped	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	400 K Barh Motihari D/C	BSPTCL	4-Sep-19	04:36		Still out	-	400 kV Motihari – Gorakhpur D/C was not in service. Motihari was radially connected to Barh via a 400 kV D/C line. At 4:36 Hrs., 400kV Barh-Motihari D/C tripped leading to a load loss of 240 MW in Bettia (traction), Ramnagar, Raxaul, Motihari. Nepal load at Parwanipur got interrupted due to this disturbance. Fault location is 10 km from Motihari. Normal load of Bettia, Ramnagar, Narkatiyaganj and Traction of Bettia were shifted to Gopalganj and Motihari local load were shifted on Motipur after disturbance. Tower collapse of 26/0 location reported.	0	240	GD-I	-
2	ERLDC	HVDC Talcher Kolar pole II	ISTS	4-Sep-19	16:59	4-Sep-19	17:41	00:42	Due to SPS operation for tripping of HVDC Talcher Kolar pole II at 16:59 hrs. because of interruption of 24V Pole control system 1 and delayed changeover from system 1 to system 2 control system, 130 MW generation reduction occurred at JITPL (500 to 370 MW) and 80 MW generation reduction occurred at GMR (480 MW to 400 MW).	210	0	GI-II	0.0000
3	ERLDC	220 Maithon Kalyaneshwari D/C 220kV Maithon-Dhanbad D/C 220kV Maithon-Dumka D/C 400/220 kV ICTs at Maithon	JUSNL	7-Sep-19	17:32	7-Sep-19	17:53	00:21	220 kV Dumka – Govindpur - II was idle charged from Dumka end. Due to improper protection setting, Dumka end failed to clear the fault in idle charged portion of 220 kV Dumka – Govindpur – II. As per voltage dip observed in PMU data, fault seems to be in high resistive nature due to rocky terrain around Dumka. To clear the fault, 400/220 kV ICTs at Maithon, 220 kV Maithon – Kalyaneshwari D/C, 220 kV Maithon – Dhanbad D/C, 220 kV Maithon – Dumka D/C also tripped resulting total power failure at Dumka and 220 kV side of Maithon S/S.	0	180	GD-I	0.0630
4	ERLDC	400 kV Teesta V - Rangpo D/C 400/220 kV ICTs at Rangpo	ISTS	13-Sep-19	21:42	13-Sep-19	23:13	01:31	Rangpo is having double main bus scheme. All elements except 400 kV Binaguri - Rangpo - II and 400 kV Dikchu Rangpo S/C were connected to bus I. At 21:42 hrs, due to suspected LBB operation associated with 315 MVA 400/220 kV ICT III at Rangpo, bus I became dead resulting tripping of 400 kV Teesta V - Rangpo D/C, 400/220 kV ICTs at Rangpo, units at Chujachen, Tashiding and Jorethang.	830	30	GD-I	0.0455
5	ERLDC	HVDC BNC- Alipurduar-Agra pole I, II, III & IV	ISTS	16-Sep-19	13:01	16-Sep-19	13:26	00:25	At 13:01 hrs. All poles associated with HVDC BNC - Agra (POLE 1&2) and ALIPURDUAR-AGRA(POLE 3&4) tripped due to line fault . Prior to tripping, flow from HVDC pole at Alipurduar was 1400 MW and from BNC pole was 500 MW. To reduce the loading of AC lines after tripping of HVDC poles, generation reduction was done manually at Teesta III, Teesta V, Tashiding, Jorethang and Dikchu by 200 MW, 200 MW, 50 MW, 50 MW and 50 MW respectively.	550 (Manually)	0	GI-II	0.0000
6	ERLDC	400 kV HEL – Subhasgram – II	WBSETCL	21-Sep-19	12:43	21-Sep-19	13:07	00:24	400 kV HEL – Subhasgram – I was taken shutdown in the morning on same day at 07:02:09 hrs. due to maintenance related work. HEL was radially connected through 400 kV HEL – Subhasgram – II to Subhasgram S/S. At 12:43 Hrs. 400 kV HEL - Subhasgram II tripped due to R – Y – N fault. Consequently, both running units (2*300 MW) at HEL tripped due to loss of evacuation path.	571	0	GD-I	0.0000
7	ERLDC	220 KV Ranchi-Hatia D/C 220 KV Patratu-Hatia D/C	JUSNL	24-Sep-19	17:13	24-Sep-19	17:35	00:22	At 17:13 hrs., 220 KV Ranchi-Hatia D/C and 220 KV Patratu-Hatia D/C tripped leading to total power failure in 220 K Hatia s/s.	0	169	GD-I	0.0620
8	ERLDC	HVDC Talcher Kolar pole II	ISTS	29-Sep-19	21:02	30-Sep-19	00:06	03:04	Due to blockage of HVDC Talcher Kolar pole 2, power order of HVDC Talcher Kolar reduced from 1500 MW to 1000 MW. Generation reduction occurred at JITPL by 40 MW (from 380 MW to 340 MW). There was no unit in service at GMR. Valve based electronics fault is suspected.	40	0	GI-II	0.0000

**North Eastern Region-Grid Disturbances Report for September 2019**

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	132 kV Badarpur - Panchgram line and 132 kV Hailakandi - Panchgram line	POWERGRID & AEGCL	01-Sep-19 11:32	01-Sep-19 11:48	16 mins	Panchgram area of Assam Power System was connected with the rest of NER Grid through 132 kV Badarpur - Panchgram line and 132 kV Hailakandi - Panchgram line. ( 132 kV Lumshong-Panchgram and 132 kV Srikona-Panchgram were under shutdown). At 11:32 Hrs on 01.09.2019,132 kV Badarpur - Panchgram line and 132 kV Hailakandi - Panchgram line tripped. Due to tripping of these elements, Panchgram area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	35	0.000	0.009	GD 1
2	NER	132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.	P&ED, Mizoram	01-Sep-19 12:28	01-Sep-19 13:07	39 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line. At 12:28 hrs on 01.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	61	2	0.040	0.001	GD 1
3	NER	132 kV Monarchak - Rokhia line	TSECL	01-Sep-19 14:18	01-Sep-19 14:28	10 mins	Monarchak area of Tripura Power System was connected with the rest of NER Grid through 132 kV Monarchak - Rokhia line (132 kV Monarchak - Udaipur line was under shutdown). At 14:18 Hrs on 01.09.2019, 132 kV Monarchak - Rokhia line tripped. Due to tripping of this element, Monarchak area was separated from the rest of NER Grid and subsequently collapsed due to load-generation mismatch in this area.	77	5	0.400	0.001	GD 1
4	NER	132 kV Daporijo - Along line	DoP, AP	02-Sep-19 10:56	02-Sep-19 12:40	1 hrs 44 mins	Along area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Daporijo - Along line. At 10:56 Hrs on 02.09.2019, 132 kV Daporijo - Along line tripped. Due to tripping of this element Along area with Pasighat, Roing, Tezu & Namsai area were separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	17	0.000	0.029	GD 1
5	NER	132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line	P&ED, Mizoram	02-Sep-19 11:45	02-Sep-19 12:22	37 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line. At 11:45 hrs on 02.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	60	2	0.040	0.001	GD 1
6	NER	132 kV Aizawl - Kolasib line	P&ED, Mizoram	02-Sep-19 14:55	02-Sep-19 15:22	27 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Aizawl - Kolasib line. (132 kV Badarpur - Kolasib line was under shutdown). At 14:55 hrs on 02.09.2019, 132 kV Aizawl - Kolasib line tripped. Due to tripping of this element, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	62	5	0.030	0.001	GD 1

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
7	NER	132 kV Rangia (New) - Rangia (old) D/C and 132 kV Motanga(Bhutan) - Rangia (old) line	AEGCL	03-Sep-19 02:50	03-Sep-19 02:58	8 mins	Rangia (old), Kamalpur and Sipajhar Area of Assam Power System were connected with the rest of NER Grid through 132 kV Rangia (New) - Rangia (old) D/C and connected with Bhutan through 132 kV Motanga (Bhutan) - Rangia (old) line. 132 kV Rangia - Rowta line, 132 kV Sipajhar - Rowta line, 132 kV Kamalpur - Sisugram line and 132 kV Kamalpur - Kahilipara line were kept opened for system requirement.  At 02:50 Hrs on 03.09.2019, 132 kV Rangia (New) - Rangia (old) D/C and 132 kV Motanga(Bhutan) - Rangia (old) line tripped. Due to tripping of these elements, Rangia (old), Kamalpur and Sipajhar Area of Assam Power System were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	25	0.000	0.003	GD 1
8	NER	132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line	P&ED, Mizoram	03-Sep-19 06:49	03-Sep-19 07:23	34 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.  At 06:49 hrs on 03.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	61	2	0.030	0.001	GD 1
9	NER	132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.	P&ED, Mizoram	03-Sep-19 10:30	03-Sep-19 11:04	34 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.  At 10:30 hrs on 03.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	61	4	0.030	0.001	GD 1
10	NER	132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.	P&ED, Mizoram	03-Sep-19 12:00	03-Sep-19 13:47	1 hrs 47 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.  At 12:00 hrs on 03.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	62	2	0.110	0.001	GD 1
11	NER	132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.	P&ED, Mizoram	03-Sep-19 20:19	03-Sep-19 20:44	25 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.  At 20:19 hrs on 03.09.19, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	62	2	0.030	0.001	GD 1
12	NER	Itanagar Area of Arunachal Pradesh Power System	AP & NEEPCO	04-Sep-19 01:57	04-Sep-19 02:17	20 mins	Itanagar Area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Ranganadi- Itanagar line and 132 kV Pare- Itanagar line.(132 kV Itanagar - Lekhi line kept opened).  At 01:57 Hrs on 04.09.2019, 132 kV Ranganadi- Itanagar line and 132 kV Pare- Itanagar line tripped. Due to tripping of these elements, Itanagar area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	14	0.000	0.005	GD 1

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
13	NER	Itanagar Area of Arunachal Pradesh Power System	AP & NEEPCO	04-Sep-19 03:03	04-Sep-19 03:18	15 mins	Itanagar Area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Ranganadi- Itanagar line and 132 kV Pare- Itanagar line.( 132 kV Itanagar - Lekhi line kept opened). At 03:03 Hrs on 04.09.2019, 132 kV Ranganadi- Itanagar line and 132 kV Pare- Itanagar line tripped. Due to tripping of these elements, Itanagar area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	12	0.000	0.003	GD 1
14	NER	Kolasib Area of Mizoram Power System	POWERGRID	04-Sep-19 21:36	05-Sep-19 00:01	2 hrs 25 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line. At 21:36 hrs on 04.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	62	3	0.150	0.007	GD 1
15	NER	132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line	P& ED Mizoram POWERGRID	07-Sep-19 18:36	07-Sep-19 18:55	19 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line. At 18:36 hrs on 07.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	59	1	0.018	0.001	GD 1
16	NER	Khupi area of Arunachal Pradesh Power System	ARUNACHAL PRADESH, NEEPCO	08-Oct-19 12:18	08-Oct-19 12:54	36 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara - Khupi line (Owner- NEEPCO & DoP, Arunachal Pradesh). At 12:18 Hrs on 08.09.2019, 132 kV Balipara - Khupi line tripped. Due to tripping of these elements, Khupi area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	22	0.000	0.013	GD 1
17	NER	Kohima area of Nagaland Power System	DOP, NAGALAND, MSPCL	08-Sep-19 01:59	08-Sep-19 02:36	37 mins	Kohima area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Doyang-Sanis-Wokha -Kohima ,132 Imphal-Kohima and 132 Kohima-Karong Line (132 KV Kohima-Dimapur was under emergency S/D). At 01:59 Hrs on 08.09.2019, 132 kV Doyang-Sanis, 132 kV Karong-Kohima and 132 kV Imphal-Kohima line Tripped . Due to tripping of this element, Kohima area was separated from the rest of NER Grid and subsequently collapsed due to load generation mis-match in this area.	16	13	0.010	0.008	GD 1
18	NER	Khupi area of Arunachal Pradesh Power System	NEEPCO and DoP, Arunachal Pradesh	09-Sep-19 12:02	09-Sep-19 12:43	41 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara -Tenga -Khupi line (Owner- NEEPCO & DoP, Arunachal Pradesh). At 12:02 Hrs on 09.09.2019, 132 kV Balipara - Tenga line tripped. Due to tripping of these elements, Khupi area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	18	0.000	0.012	GD 1
19	NER	Along area of Arunachal Pradesh Power System	DoP, Arunachal Pradesh	09-Sep-19 22:24	09-Sep-19 23:24	1 hrs 0 mins	Along area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Daporijo- Along line (Owner- DoP, Arunachal Pradesh). At 22:24 Hrs on 09.09.19, 132 kV Daporijo- Along line tripped. Due to tripping of these elements, Along area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	13	0.000	0.013	GD 1



Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
20	NER	Itanagar area of Arunachal Pradesh Power System	ARUNACHAL PRADESH, NEEPCO	11-Sep-19 00:22	11-Sep-19 00:57	35 mins	Itanagar area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Itanagar Line and 132 kV Pare - Itanagar Line. 132 kV Lekhi -Itanagar Line was kept open due to low CT ratio at Lekhi end.  At 00:22 Hrs on 11.09.2019, 132 kV Ranganadi - Itanagar Line and 132 kV Pare - Itanagar Line tripped. Due to tripping of these elements, Itanagar area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	14	0.000	0.008	GD 1
21	NER	Kolasib Area of Mizoram Power System	PGCIL	13-Sep-19 02:52	13-Sep-19 03:07	15 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.  At 02:52 hrs on 13.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	59	4	0.015	0.001	GD 1
22	NER	Monarchak area of Tripura Power System	TSECL	15-Sep-19 11:49	15-Sep-19 12:58	1 hrs 9 mins	Monarchak area of Tripura Power System was connected with the rest of NER Grid through 132 kV Monarchak-Rokhia line. (132 kV Monarchak -Udaipur line was under Shutdown).  At 11:49 Hrs on 15.09.2019, 132 kV Monarchak-Rokhia line tripped. Due to tripping of these elements, Monarchak area was separated from the rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	48	6	0.055	0.007	GD 1
23	NER	Khupi area of Arunachal Pradesh Power System	NEEPCO & DoP, Arunachal Pradesh	15-Sep-19 18:02	15-Sep-19 18:21	19 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara -Tenga -Khupi line (Owner- NEEPCO & DoP, Arunachal Pradesh).  At 18:02 Hrs on 15.09.2019, 132 kV Balipara - Tenga line tripped. Due to tripping of these elements, Khupi area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	17	0.000	0.005	GD 1
24	NER	Kolasib Area of Mizoram Power System	POWERGRID	16-Sep-19 10:44	16-Sep-19 12:35	1 hrs 51 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line.  At 10:44 hrs on 16.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	57	6	0.105	0.011	GD 1
25	NER	Pasighat area of Arunachal Pradesh Power System	DoP, Arunachal Pradesh	16-Sep-19 13:25	16-Sep-19 14:25	1 hrs 0 mins	Pasighat area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Along-Pasighat line (Owner- DoP, Arunachal Pradesh).  At 13:25 Hrs on 16.09.2019, 132 kV Along-Pasighat line tripped. Due to tripping of these elements, Pasighat area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	10	0.000	0.010	GD 1
26	NER	Monarchak area of Tripura Power System	TSECL	17-Sep-19 10:52	17-Sep-19 11:11	19 mins	Monarchak area of Tripura Power System was connected with the rest of NER Grid through 132 kV Monarchak-Udaipur line. (132 kV Monarchak -Rokhia line was under tripped condition from 10:46 Hrs of 17.09.2019).  At 10:52 Hrs on 17.09.2019, 132 kV Monarchak-Udaipur line tripped. Due to tripping of these elements, Monarchak area was separated from the rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	68	6	0.022	0.002	GD 1

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
27	NER	132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line	POWERGRID, P&ED, Mizoram	20-Sep-19 04:02	20-Sep-19 04:28	26 mins	Kolasib area of Mizoram Power System and Tural Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line. At 04:02 hrs on 20.09.2019, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Tural Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	30	4	0.010	0.002	GD 1
28	NER	Panchgram Area of Assam Power System	POWERGRID & AEGCL	23-Sep-19 16:29	23-Sep-19 16:45	16 mins	Panchgram area of Assam Power System was connected with the rest of NER Grid through 132 kV Badarpur - Panchgram line and 132 kV Hailakandi - Panchgram line. (132 kV Srikona-Panchgram line was under long outage and 132 kV Lumshong-Panchgram line was ideal charged for system requirement) At 16:29 Hrs on 23.09.2019, 132 kV Badarpur - Panchgram line and 132 kV Hailakandi - Panchgram line tripped. Due to tripping of these elements, Panchgram area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	37	0.000	0.010	GD 1
29	NER	132 kV Palatana- Surajmaninagar, 132 kV R.C.Nagar- Agartala D/C, 132 kV Agartala-Rokhia D/C, 132 kV Agartala-S.M. Nagar D/C	TSECL, POWERGRID	27-Sep-19 11:36	27-Sep-19 12:00	24 mins	Agartala area of Tripura Power System was connected with the rest of NER Grid through 132 kV R.C. Nagar- Agartala D/C, 132 kV Agartala-Rokhia D/C and 132 kV Palatana- Surajmaninagar D/C line. (132 kV Rokhia-Monarchak line was under shutdown) At 11:36 hrs of 27.09.2019, 132 kV Palatana- Surajmaninagar, 132 kV R.C. Nagar- Agartala D/C, 132 kV Agartala-Rokhia D/C, 132 kV Agartala-S.M. Nagar D/C tripped leading to bus dead of 132 kV Agartala, S.M. Nagar & Rokhia S/S. Further, 132 kV S.M Nagar - Comilla D/C were hand tripped due to loss of power at 132 kV S.M. Nagar Bus. Due to tripping of these elements, Agartala area was separated from the rest of NER Grid and subsequently collapsed due to load generation mismatch in this area	44	192	0.020	0.077	GD 2
30	NER	Panchgram Area of Assam Power System	POWERGRID & AEGCL	28-Sep-19 03:51	28-Sep-19 03:59	8 mins	Panchgram area of Assam Power System was connected with the rest of NER Grid through 132 kV Badarpur - Panchgram line and 132 kV Hailakandi - Panchgram line. (132 kV Srikona-Panchgram line was under long outage and 132 kV Lumshong-Panchgram line was ideal charged for system requirement). At 03:51 Hrs on 28.09.2019, 132 kV Badarpur - Panchgram line and 132 kV Hailakandi - Panchgram line tripped. Due to tripping of these elements, Panchgram area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	25	0.000	0.003	GD 1
31	NER	Dimapur area of Nagaland Power System, Bokajan area of Assam Power System and 220 kV Dimapur(PG) substation	POWERGRID	30-Sep-19 14:38	30-Sep-19 15:32	54 mins	Dimapur area of Nagaland Power System, Bokajan area of Assam Power System and 220 kV Dimapur(PG) substation were connected with rest of NER Grid through 220 kV Dimapur(PG)-Misa 1&2 Lines, 132 kV Dimapur(PG)-Doyang 1&2 lines and 132 kV Golaghat- Bokajan Line. At 14:38 hrs on 30.09.2019, 220 kV Dimapur(PG)- Misa 1&2 Lines, 132 kV Dimapur(PG)-Doyang 1&2 lines and 132 kV Golaghat- Bokajan Line tripped. Due to tripping of these elements, Dimapur area of Nagaland Power System, Bokajan area of Assam Power System and 220 kV Dimapur(PG) substation were separated from rest of NER Grid and subsequently collapsed due to load-generation mismatch in these areas.	42	61	0.038	0.055	GD 1

**North Eastern Region-Grid Incidences Report for September 2019**

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	AGBPP Unit-3	NEEPCO	01-Sep-19 04:20	01-Sep-19 05:30	1 hrs 10 mins	AGBPP Unit-3 tripped at 04:20 Hrs on 01.09.2019 due to tripping of Gas Compressor-1.(Revision of schedule from Block No. 23 on 01.09.2019)	38	0	0.04	0	GI 2
2	NER	AGBPP Unit-3	NEEPCO	01-Sep-19 12:57	01-Sep-19 13:45	48 mins	AGBPP Unit-3 tripped at 12:57 Hrs on 01.09.2019 due to tripping of Gas Compressor-1.(Revision of schedule from Block No. 56 on 01.09.2019)	57	0	0.05	0	GI 2
3	NER	AGBPP Unit-7	NEEPCO	06-Sep-19 07:15	06-Sep-19 08:15	1 hrs 0 mins	AGBPP Unit-7 tripped at 07:15 Hrs on 06.09.2019 due to Generator Negative Sequence(Revision of schedule from Block No.34 on 06.09.2019).	25	0	0.03	0	GI 2
4	NER	Palatana GTG-2 and STG-2	OTPCL	06-Sep-19 11:49	06-Sep-19 12:30	41 mins	Palatana GTG 2 and STG 2 tripped at 11:49 Hrs on 06.09.2019 due to Compressor Air Pressure Low (Revision of schedule from Block No.51 on 06.09.2019).	330	0	0.23	0	GI 2
5	NER	Khandong Unit-2	NEEPCO	11-Sep-19 13:49	11-Sep-19 15:00	1 hrs 11 mins	Khandong Unit 2 tripped at 13.49 hrs on 11.09.2019 due to problem in Main Inlet Valve( Revision from Block No.61 on 11.09.2019)	17.5	0	0.02	0	GI 1
6	NER	Palatana GTG-1 and STG-1	OTPCL	14-Sep-19 05:48	14-Sep-19 06:45	57 mins	Palatana GTG 1 and STG 1 tripped at 05:48 Hrs on 14.09.2019 due to tripping of Gas Booster (due to tripping of Station Transformer) (Revision of schedule from block no 28 on 14.09.2019)	288	0	0.27	0	GI 2
7	NER	AGTCCPP Unit-1,3 & 6	NEEPCO	22-Sep-19 06:29	22-Sep-19 07:30	1 hrs 1 mins	AGTCCPP Unit 1,3 & 6 tripped at 06:29 Hrs on 22.09.2019 due to O/C and UV. (Revision of schedule from block no 31 on 22.09.2019)	46	0	0.05	0	GI 1
8	NER	AGBPP Unit-1,3,4 ,5,7,8 & 9	NEEPCO	27-Sep-19 12:15	27-Sep-19 12:45	30 mins	AGBPP Unit 1,3,4,5,7,8 & 9 tripped at 12:15 Hrs on 27.09.2019 due to loss of Auxillary supply due to tripping of Station Transformer 1 in EF (Revision of schedule from block no 52 on 27.09.2019)	104	0	0.05	0	GI 2