

**Northern Region-Grid Event Report for August 2020**

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	Energy Unsaved (in MU)
					Date	Time	Date	Time						
1	NR	1) 400/220 kv 500 MVA ICT 2 at Muradnagar_1(UP) 2) 400KV Bus 2 at Muradnagar_1(UP)	UTTAR PRADESH	UPPTCL	4-Aug-20	19:12	4-Aug-20	22:33	3:21	Bus bar protection operated at 400/220kv Muradnagar_1(UP) during sync of 400 KV Aligarh-Muradnagar_1 (UP) Ckt-1 resulting into tripping of 400KV Bus 2 & 400/220 kv 500 MVA ICT 2 at Muradnagar_1(UP). As per PMU, No fault is observed in the system. In antecedent conditions, 400/220 kv 500 MVA ICT 2 at Muradnagar_1(UP) carrying 139MW.	0	150	GD-1	0.5
2	NR	1) 400/220 kv 315 MVA ICT 3 at Akal(RS) 2) 400 KV Akal-Barmer (RS) Ckt-1 3) 400/220 kv 500 MVA ICT 4 at Akal(RS)	RAJASTHAN	RRVPLN	5-Aug-20	9:35	5-Aug-20	10:58	1:23	400/220 kv 315 MVA ICT 3 at Akal(RS) tripped on 220KV Side CT damage of B-Ph, due to Internal Fault. At the same time, 400 KV Akal-Barmer (RS) Ckt-1 & 400/220 kv 500 MVA ICT 4 at Akal(RS) also tripped. As per PMU, B-N fault with delayed clearance is observed in the system. In antecedent conditions, 400 KV Akal-Barmer (RS) carrying 75MW, 315 MVA ICT 3 & 500 MVA ICT 4 at Akal(RS) carrying 28MW & 46MW respectively.	150	0	GD-1	0
3	NR	1) 400 KV Akal-Jodhpur (RS) Ckt-1 2) 400/220 kv 315 MVA ICT 2 at Barmer(RS) 3) 400/220 kv 315 MVA ICT 1 at Barmer(RS)	RAJASTHAN	RRVPLN	6-Aug-20	13:50	6-Aug-20	14:30	0:40	400 KV Akal-Jodhpur (RS) Ckt-1 tripped due to DT received at Jodhpur end. At the same time, 400/220 kv 315 MVA ICT 1 & 315 MVA ICT 2 at Barmer(RS) also tripped. As per PMU, R-Y fault with delayed clearance is observed in the system. In antecedent conditions, 400 KV Akal-Jodhpur (RS) Ckt-1 carrying 229MW. Wind generation loss of around 1250MW is observed as per SCADA data.	1250	0	GD-1	0
4	NR	1) 400/220 kv 315 MVA ICT 2 at Amritsar(PG) 2) 400KV Bus 2 at Amritsar(PG)	PUNJAB	POWERGRID	6-Aug-20	22:50	7-Aug-20	1:31	2:41	A flashover on B-PH CT of main bay of ICT occur resulting in tripping of 400/220 kv 315 MVA ICT 2 & 400KV Bus 2 at Amritsar(PG). As per PMU, multiple faults are observed in the system.	0	250	GD-1	0.66
5	NR	1) 220 KV Hissar(PG)-Sagwan(HV) (HVPNL) Ckt-2 2) 220 KV Hissar(PG)-Sagwan(HV) (HVPNL) Ckt-1 3) 500 KV HVDC Mahindergarh(APL)-Adani Mundra(APL) (ATIL) Ckt-2 4) 500 KV HVDC Mahindergarh(APL)-Adani Mundra(APL) (ATIL) Ckt-1	HARYANA	APL, HVPNL	8-Aug-20	0:16	8-Aug-20	3:27	3:11	Both pole of 500 kv HVDC Mundra - Mahindergarh tripped at 00:16 hrs due to DC line fault. During this time 200 MW rejection of load occur in Haryana by operation of SPS through tripping of 220 kv Bhiwani - Bapora double ckt and 220 kv Hissar Sagwan double ckt. As per PMU, Fluctuations observed in the phase voltages. In antecedent conditions, 500 kv HVDC Mundra - Mahindergarh Ckt-1 & 2 carrying 1000MW each.	0	200	GD-1	0.63
6	NR	1) 800 KV HVDC Kurukshetra(PG) Pole-4 2) 800 KV HVDC Kurukshetra(PG) Pole-2	HARYANA	POWERGRID	9-Aug-20	10:27	9-Aug-20	12:23	1:56	800 KV HVDC Champa(PG)-Kurukshetra(PG) Pole-2 & 4 tripped due to system fail in Pole-4 lane -2, rebooting done in Pole-4 LANE-2 panel in maintenance mode, during rebooting cat B generated in Pole-2, which caused blocking of both pole 2 & 4. As per PMU, Fluctuations observed in the phase voltages. In antecedent conditions, 800 KV HVDC Champa(PG)-Kurukshetra(PG) ckt-1 & 2 carrying 2500MW.	0	0	GI-2	0
7	NR	1) 68.67 MW Rampur HEP - UNIT 4 2) 250 MW Nathpa-Jhakri HPS - UNIT 3 3) 400 KV Nathpa Jhakri(SJ)-Panchkula(PG) (PG) Ckt-2 4) 250 MW Nathpa-Jhakri HPS - UNIT 5 5) 68.67 MW Rampur HEP - UNIT 3 6) 400 KV Nathpa Jhakri(SJ)-Panchkula(PG) (PG) Ckt-1 7) 250 MW Karcham Wangtoo HPS - UNIT 4 8) 250 MW Karcham Wangtoo HPS - UNIT 2	HIMACHAL PRADESH	JSW, POWERGRID, SIVNL	13-Aug-20	7:03	13-Aug-20	7:41	0:38	400KV Jhakri-Panchkula ckt-1 and 2 tripped due to sparking of Y-Ph Isolator for ckt1 at Panchkula end and the second ckt tripped at Jhakri end. In this connection, SPS operated at Jhakri, Karcham and Rampur. Consequently, 02 Nos Units of Karcham (Unit-2 &4), 02 Nos units of Jhakri (Unit-3 & 5) and 02 Nos Units of Rampur (Unit - 3 & 4) tripped. Around 1210MW(approx.) generation loss occurred at Jhakri (540MW), Karcham (520MW) and Rampur (150MW) complex. The Units were revived progressively at Karcham, Jhakri and Rampur after restoration of 400KV Jhakri-Panchkula ckt2. As per PMU, No fault is observed in the system. In antecedent conditions, 400 KV Nathpa Jhakri(SJ)-Panchkula(PG) (PG) Ckt-1 & 2 carrying 516MW & 525MW respectively.	1240	0	GD-1	0
8	NR	1) 400 KV Anta-Chhabra SCTPS (RS) Ckt-1 2) 400 KV Anta-Chhabra (RS) Ckt-1	RAJASTHAN	RRVPLN	16-Aug-20	14:30	16-Aug-20	16:26	1:56	400 KV Anta-Chhabra (RS) Ckt-1 tripped on B-N fault. At the same time, 400 KV Anta-Chhabra SCTPS (RS) Ckt-1 also tripped. As per PMU, B-N fault with no auto reclosing is observed in the system.	0	350	GD-1	0.67
9	NR	1) 800 KV HVDC Kurukshetra(PG) Pole-4 2) 800 KV HVDC Kurukshetra(PG) Pole-3 3) 800 KV HVDC Kurukshetra(PG) Pole-2	HARYANA	POWERGRID	17-Aug-20	19:59	17-Aug-20	21:07	1:08	800 KV HVDC Kurukshetra(PG) Pole-4 blocked due to Lane changeover fail, which was initiated due to software issue. 800 KV HVDC Kurukshetra(PG) Pole-2 blocked due to CAT-B in Pole-4. At the same time, 800 KV HVDC Kurukshetra(PG) Pole-03 blocked due to filter control blocking due to filter power limit. As per PMU, fluctuations observed in the phase voltages.	0	0	GI-2	0
10	NR	1) 400/220 kv 500 MVA ICT 2 at Moradabad(UP) 2) 400/220 kv 240 MVA ICT 3 at Moradabad(UP) 3) 400/220 kv 500 MVA ICT 1 at Moradabad(UP)	UTTAR PRADESH	UPPTCL	19-Aug-20	12:19	19-Aug-20	13:21	1:02	400/220 kv 500 MVA ICT 1, 500 MVA ICT 2 & 240 MVA ICT 3 at Moradabad(UP) tripped due to operation of 220 KV Bus bar at 220kv Moradabad substation. As per PMU, No fault is observed in the system. In antecedent conditions, 400/220 kv 500 MVA ICT 1, 500 MVA ICT 2 & 240 MVA ICT 3 at Moradabad(UP) carrying 84MW, 90MW & 39MW respectively.	0	150	GD-1	0.16
11	NR	1) 220 KV Phozal(HP)-Nallagarh(PG) (ADHPL) Ckt-1 2) 220 KV AD hydro(AD)-Nallagarh(PG) (ADHPL) Ckt-1 3) 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) Ckt-1 4) 96 MW AD hydro - UNIT 1 5) 96 MW AD hydro - UNIT 2	HIMACHAL PRADESH	ADHPL/POWERGRID	19-Aug-20	16:15	19-Aug-20	17:28	1:13	220 KV Phozal(HP)-Nallagarh(PG) (ADHPL) tripped on R-B fault. At the same time, 220 KV AD hydro(AD)-Nallagarh(PG) (ADHPL) & 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) also tripped. DT received at AD Hydro end for tripping of 220 KV AD hydro(AD)-Nallagarh(PG) (ADHPL). As per PMU, R-B fault with delayed clearance of 560ms is observed in the system. In antecedent conditions, 220 KV AD hydro(AD)-Nallagarh(PG) & 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) carrying 101MW & 80MW respectively.	180	0	GD-1	0
12	NR	1) 400 KV Jind(PG)-Kirori(HV) (HVPNL) Ckt-1 2) 400 KV Jind(PG)-Kirori(HV) (HVPNL) Ckt-2	HARYANA	HVPNL/POWERGRID	21-Aug-20	11:35	21-Aug-20	13:53	2:18	400 KV Jind(PG)-Kirori(HV) (HVPNL) Ckt-1 & 2 tripped on Master Relay 86 A& B only from Kirori end, happened due to low DC voltage at Kirori end. As per PMU, No fault is observed in the system.	0	0	GI-2	0
13	NR	1) 220 KV AD hydro(AD)-Nallagarh(PG) (ADHPL) Ckt-1 2) 220 KV Phozal(HP)-Nallagarh(PG) (ADHPL) Ckt-1 3) 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) Ckt-1 4) 96 MW AD hydro - UNIT 1 5) 96 MW AD hydro - UNIT 2	HIMACHAL PRADESH	ADHPL/POWERGRID	21-Aug-20	19:30	22-Aug-20	12:10	16:40	220 KV AD hydro(AD)-Nallagarh(PG) (ADHPL) Ckt-1 tripped on B-N fault. At the same time, 220 KV Phozal(HP)-Nallagarh(PG) (ADHPL) Ckt tripped on R-Y fault and 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) tripped due to under voltage. As per PMU, R-Y fault is observed in the system. In antecedent conditions, 220 KV AD hydro(AD)-Nallagarh(PG) & 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) carrying 131MW & 97MW respectively.	230	0	GD-1	0
14	NR	1) 400 KV Amritsar(PG)-Makhu(PS) (PSTCL) Ckt-1 2) 400 KV Nakodar(PSG)-Makhu(PS) (PS) Ckt-1	PUNJAB	PSTCL/POWERGRID	22-Aug-20	11:42	22-Aug-20	12:59	1:17	400 KV Nakodar(PSG)-Makhu(PS) (PS) Ckt-1 tripped on B-N fault, when Auto re close operated for 400 KV Nakodar(PSG)-Makhu(PS) (PS) Ckt-1, this led to reflect Voltage dip and fault current in 400 KV Makhu - Amritsar ckt-1. Due to this, line tripped on SOTF. As per PMU, B-N fault with unsuccessful autorecloser is observed in the system. In antecedent conditions, 400 KV Nakodar(PSG)-Makhu(PS) (PS) Ckt-1 carrying 129MW.	0	0	GI-2	0

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					Date	Time	Date	Time						
15	NR	1) 400/220 KV 240 MVA ICT 3 at Obra_B(UP) 2) 400/220 KV 315 MVA ICT 2 at Obra_B(UP) 3) 400/220 KV 315 MVA ICT 1 at Obra_B(UP)	UTTAR PRADESH	UPPTCL	23-Aug-20	22:26	23-Aug-20	23:14	0:48	400/220 kv 315 MVA ICT 1, 315 MVA ICT 2 & 240 MVA ICT 3 at Obra_B(UP) tripped due to earth fault. As per PMU, Y-N fault is observed in the system. In antecedent conditions, 315 MVA ICT 1 & 315 MVA ICT 2 at Obra_B(UP) carrying 175MW each.	0	0	GI-2	0
16	NR	1) 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) Ckt-1 2) 220 KV AD hydro(AD)-Nallagarh(PG) (ADHPL) Ckt-1 3) 96 MW AD hydro - UNIT 1 4) 96 MW AD hydro - UNIT 2	HIMACHAL PRADESH	ADHPL	25-Aug-20	5:24	25-Aug-20	6:12	0:48	220 KV AD HYDRO(AD)-NALAGARH(PG) (ADHPL) CKT-1 tripped at 05:24hrs on Phase to phase fault Y-B fault, Fault Current = 1.6kA and Fault Location= 68.6kms from AD Hydro. Along with this 220 KV AD HYDRO(AD)-PHOZAL(HP) (ADHPL) CKT-1 and all two units of AD Hydro were also tripped. Generation loss of approx~150MW at AD Hydro was reported. As per PMU, Y-B fault is observed in the system. In antecedent conditions, 220 KV AD hydro(AD)-Nallagarh(PG) & 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) carrying 175MW & 24MW respectively.	150	0	GD-1	0
17	NR	1) 400 KV Tanda(NT)-Sultanpur(UP) (UP) Ckt-1 2) 400/220 KV 315 MVA ICT 1 at Sultanpur(UP) 3) 80 MVAR Bus Reactor No 1 at 400KV Sultanpur(UP) 4) 400 KV Sultanpur(UP)-Lucknow_1(PG) (PG) Ckt-1 5) 400/220 KV 315 MVA ICT 3 at Sultanpur(UP) 6) 400/220 KV 240 MVA ICT 2 at Sultanpur(UP) 7) 400KV Bus 1 at Sultanpur(UP) 8) 400KV Obra_B-Sultanpur (UP) Ckt-1	UTTAR PRADESH	UPPTCL	26-Aug-20	20:50	26-Aug-20	21:45	0:55	400KV Transfer Bus B phase CT got damaged ,leading to operation of Bus Bar Protection relay and tripping of 400KV Bus Coupler & all elements connected to 400kv Bus 1. All ICTs were connected to Bus-1. Bus-2 charged through the 400KV Obra line. Load at Sultanpur after tripping meeting through the 220KV Ckt-2, Tanda new, Tanda-2 and Pratagarh(as per SCADA). As per PMU, B-N fault is observed in the system. In antecedent conditions, 400/220 KV 315 MVA ICT 1, 240 MVA ICT 2 & 315 MVA ICT 3 at Sultanpur(UP) carrying 158MW, 111MW & 159MW respectively.	0	0	GI-2	0
18	NR	1) 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-2 2) 220 KV Wagoora(PG)-Ziankote(JK) (PDD JK) Ckt-2 3) 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-1	J & K	PDD JK	28-Aug-20	18:16	28-Aug-20	19:27	1:11	220 KV Wagoora(PG)-Ziankote(JK) (PDD JK) Ckt-2 tripped on Y-B fault. At the same time, 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-1 & 2 also tripped. As per PMU, multiple Y-B faults are observed in the system. In antecedent conditions, 220 KV Wagoora(PG)-Ziankote(JK) (PDD JK) Ckt-2, 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-1 & 2 carrying 36MW, 115MW & 115MW respectively.	0	120	GD-1	0.14
19	NR	1) 400 KV Sultanpur(UP)-Lucknow_1(PG) (PG) Ckt-1 2) 400/220 kv 315 MVA ICT 3 at Sultanpur(UP) 3) 400 KV Tanda(NT)-Sultanpur(UP) (UP) Ckt-1 4) 400/220 kv 315 MVA ICT 1 at Sultanpur(UP) 5) 80 MVAR Bus Reactor No 1 at 400KV Sultanpur(UP) 6) 400/220 kv 240 MVA ICT 2 at Sultanpur(UP)	UTTAR PRADESH	UPPTCL	30-Aug-20	17:34	30-Aug-20	18:08	0:34	220kv B phase LA blasted of 315MVA ICT-1 and ICT tripped on differential protection. But LBB of 400kv mal operated and tripped all elements on Bus A. As per PMU, B-N fault is observed in the system. In antecedent conditions, 400/220 kv 315 MVA ICT 1, 240 MVA ICT 2 & 315 MVA ICT 3 at Sultanpur(UP) carrying 128MW, 91MW & 128MW respectively. As reported by UP SLDC, 105MMW load loss occur in the event.	0	105	GD-1	0.06

**Western Region-Event Report for August 2020**

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 Unserviced (MU)
				Date	Time	Date	Time						
1	WR	Tripping of 1.220 kV Chhatarpur-Satna(PG) 2.132 kV Damoh-Hatta	MPPTCL	14-Aug-20	11:11	14-Aug-20	11:33	0:22	At 220 kV Chhatarpur substation, 220 kV Chhatarpur-Satna(PG) tripped at 10:47 Hrs on Y-B phase fault. 220 kV Chhatarpur-Satna(MP) was under planned shutdown from 10:44 Hrs. With the tripping of 132 kV Damoh-Hatta(further connected to 132 kV Chhatarpur-Bijawar) on Y-E fault at 11:11 Hrs, 220/132 kV Chhatarpur station went blackout. 132kV Tikamgarh-Bada Malhera (further connected to 132 kV Chhatarpur-Bijawar) was under planned outage from 10:20 Hrs.	Nil	110	GD-1	0.0403
2	WR	Tripping of 1.220 kV Vita- Karad 1&2 2.220 kV Vita- Khanapur 3.220 kV Vita- Alkud 4.220 kV Vita-Mhaisal 5.220 kV Vita- Waiphale 6.220 kV Vita- Ghatnandre 7.220 kV Vita- Hiwarawadi	MSETCL	14-Aug-20	12:16	14-Aug-20	12:42	0:26	At 220 kV Vita substation, heavy sparking was observed due to Jumper snapping of R phase Main Bus Isolator of 220kV Vita -Karad 1 and resulted in tripping of all the elements connected to 220 kV Main Bus on bus bar protection operation.	225.47	19.2	GD-1	0.0083
3	WR	Tripping of 1.400 kV Kosamba Bus 1 2.400 kV Kosamba- Chorania 2 3.400 kV Kosamba- Vav 4.400 kV Kosamba- Charal 5.400/220 kV Kosamba ICT 4 6.400 kV 80 MVAR Kosamba BR	GETCO	14-Aug-20	21:28	14-Aug-20	22:49	1:21	At 400/220 kV Kosamba substation, while opening 400 kV Chorania on High Voltage, R phase pole of tie breaker 429 bay failed to open and during the opening of tie breaker isolator, heavy sparking was observed. This created R phase fault and resulted in tripping of 400kV Kosamba Bus 1 alongwith all the connected elements on LBB operation of 429 bay.	Nil	Nil	GI-2	Nil
4	WR	Tripping of 1. 400 kV Varsana Bus 1 2.400 kV Varsana-Hadala 3.400 kV Varsana-Bhachau 2 4.400 kV Varsana- APL 2 5.400/220 kV Varsana ICT 2 6.400 kV 125 MVAR Varsana BR 2	GETCO	15-Aug-20	3:29	15-Aug-20	5:19	1:50	At 400/220 kV Varsana substation, 400 kV BR 2 tripped on differential protection operation due to B-E fault. During the BR tripping, 400 kV Varsana Bus 1 and all connected elements tripped on Bus bar protection mal-operation for through fault.	Nil	Nil	GI-2	Nil
5	WR	Tripping of ± 800 kV HVDC Champa-Kurukshetra Poles 2,3&4	PGCIL	17-Aug-20	19:59	17-Aug-20	21:07	1:08	At ± 800 kV Champa HVDC station, Pole 2 blocked on Cat B alarm at Kurukshetra end. Pole 3 blocked on "Filter Control block due to filter power limit". Pole 4 blocked on ' lane changeover fail' at Kurukshetra end due to software issue.	Nil	Nil	GI-2	Nil
6	WR	Tripping of 1.220 kV Datia- Bina(MP) 2.220 kV Datia- Mahalgaon	MPPTCL	18-Aug-20	5:22	18-Aug-20	5:45	0:23	At 220 kV Datia substation, 220kV Datia- Bina(MP) & 220 kV Datia- Mahalgaon tripped on R-E fault at 05:08 Hrs. Due to the tripping of the 220 kV lines, 132 kV Dabra-Gwalior 2, 132 kV Dabra-Chinnore, 132 kV Datia-Pichhore and 132 kV Karera-Pichhore tripped on Overloading at 05:22 Hrs. After the tripping of the above lines 220/132 kV Datia substation went blackout.	Nil	281	GD-1	0.1076
7	WR	Tripping of 1.220 kV Sayali- Vaghchhipa 2.220 kV Sayali- Khadoli	DNH	23-Aug-20	10:54	23-Aug-20	13:48	2:54	At 220 kV Sayali substation, 220 kV Sayali-Vaghchhipa and 220 kV Sayali-Khadoli tripped on B-E fault at 10:54 Hrs. This resulted in blackout of Sayali substation.	Nil	70	GD-1	0.2030
8	WR	Tripping of 1.400kV RPL(Nandgaonpeth)- Akola(Adani) 1&2 2.400kV RPL(Nandgaonpeth)-Akola(MH) 3.400kV RPL(Nandgaonpeth)- Koradi 4.400 kV Akola(Adani)-Akola(MH) 1&2	Indian Bulls	27-Aug-20	10:01	27-Aug-20	11:06	1:05	After availing planned shutdown of 765/400 kV Akola(Adani) ICT 1, 400kV RPL(Nandgaonpeth)- Akola(Adani) 1&2, 400kV RPL(Nandgaonpeth)-Akola(MH),400 kV RPL(Nandgaonpeth)- Koradi and 400 kV Akola(Adani)-Akola(MH) 1&2 tripped on Over Voltage protection operation.	Nil	Nil	GI-2	Nil
9	WR	Tripping of 1.765/400 kV Champa ICTs 1,2&3 2.400 kV Champa-KSK 3 3.400 kV Champa-KSK 4 4.KSK Units 2,3&4(600MW each)	PGCIL/KSK	28-Aug-20	2:49	29-Aug-20	15:37	12:48	At 765/400 kV Champa substation, heavy thunder storm and rains resulted in collapse of boundary wall and due to sudden ingress of water inside the switchyard, 765/400 kV Champa ICTs 1,2&3 tripped at 02:49 Hrs, 400 kV Champa-KSK 4 tripped at 03:19 Hrs and 400 kV Champa-KSK 3 tripped at 03:22 Hrs. All the ICTs and lines mentioned above tripped on DC Earth fault due to moisture ingress inside the marshalling box. With the tripping of 400 kV Champa-KSK 3&4, all the running units 2,3&4 at KSK with total generation of 800MW tripped due to loss of evacuation path.	800	Nil	GD-1	Nil
10	WR	Tripping of 1.220 kV Parli(MH)-Parli old GCR 2 2.220 kV Parli(MH)-Murud 3.400/220kV Parli ICTs 2&3 4.220/132 kV Parli(MH) ICTs 2&3	MSETCL	28-Aug-20	9:10	28-Aug-20	9:55	0:45	At 400/220 kV Parli(MH) substation, B phase CT of 220 kV Parli old GCR 2 blasted and resulted in tripping of all the elements connected to 220 kV Bus 2. The fault was cleared on Backup protection operation as the faulty Bus bar relay was out of service prior to the event.	Nil	Nil	GI-1	Nil

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Sl. No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration Time	Event (As reported)	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards	Energy Unserviced (MU)
				Date	Time (Hrs)	Date	Time (Hrs)						
1	SR	i. 220kV Chittoor - Chittoor4 line-1 ii. 220kV Chittoor - Chittoor4 line-2 iii. 220kV Chittoor - Kalikiri iv. 220kV Chittoor - Tiruvalum v. 220/132kV ICT#1, 2 & 3	APTRANSCO	2-Aug-20	3:46	2-Aug-20	4:26	40 mins	Complete outage of 220/132kV Chittoor station of APTRANSCO: Triggering incident was current spike detected in 220kV Kalikiri feeder due to suspected problem in CB interruption circuit. It is reported that current detected was in the range of 14.5KA. This led to the operation of bus bar protection of 220kV Chittoor bus and all connected elements at 220kV Chittoor tripped. 220 KV Chittoor station has single bus configuration. 132kV Chittoor was also affected since it is radially connected.	----	21 MW	GD-1	----
2	SR	i. 220kV Chittoor - Chittoor4 line-1 ii. 220kV Chittoor - Chittoor4 line-2 iii. 220kV Chittoor - Kalikiri iv. 220kV Chittoor - Tiruvalum v. 220/132kV ICT#1, 2 & 3	APTRANSCO	9-Aug-20	9:02	9-Aug-20	9:53	51 mins	Complete outage of 220/132kV Chittoor station of APTRANSCO: Triggering incident was current spike detected in 220kV Kalikiri feeder due to suspected problem in relay internal circuit. It is reported that current detected was in the range of 22KA. This led to the operation of bus bar protection of 220kV Chittoor bus and all connected elements at 220kV Chittoor tripped. 220 KV Chittoor station has single bus configuration. 132kV Chittoor was also affected since it is radially connected.	----	84 MW	GD-1	----
3	SR	i. 220kV Chittoor - Chittoor4 line-1 ii. 220kV Chittoor - Chittoor4 line-2 iii. 220kV Chittoor - Kalikiri iv. 220kV Chittoor - Tiruvalum v. 220/132kV ICT#1, 2 & 3	APTRANSCO	9-Aug-20	10:46	9-Aug-20	19:52	9 Hrs 6 mins	Complete outage of 220/132kV Chittoor station of APTRANSCO: Triggering incident was current spike detected in 220kV Kalikiri feeder due to suspected problem in relay internal circuit. This led to the operation of bus bar protection of 220kV Chittoor bus and all connected elements at 220kV Chittoor tripped. 220 KV Chittoor station has single bus configuration. 132kV Chittoor was also affected since it is radially connected.	----	30 MW	GD-1	----
4	SR	i. 400kV Srisaillam - Dindi -1 ii. 400kV Srisaillam - Dindi -2 iii. 400kV Srisaillam - Sattenapalli -1 iv. 400kV Srisaillam - Sattenapalli-2 v. 400kV Srisaillam - Narnoor vi. Unit#1,2,3,4,5,6 at Srisaillam Left Bank	TSGENCO	20-Aug-20	22:25	Not restored		--	Complete outage of 400kV Srisaillam station of TSGENCO : As reported, fire broke out at 400kV Srisaillam LB station of TSGENCO. All running units at Srisaillam LB tripped one after another. All connected lines at Srisaillam LB station tripped at remote end on Zone-2, distance protection and DT also received. Oscillations were also observed from 22:24hrs to 22:46 hrs in Southern Region during the event. Oscillations died out after tripping of all the running units at Srisaillam LB. Details are awaited.	852 MW	----	GD-1	----
5	SR	i. 220kV Bidnal - Soundhatti ii. 220kV Bidnal - Haveri iii. 220kV Srisaillam - Ponda-1 & 2 iv. Nagheri - Hubli Line-1,2 & 3 v. Nagheri U#1,2,5 and 6	KPTCL	31-Aug-20	17:12	31-Aug-20	17:43	31 mins	Complete outage of 220 KV NAGJHARI GS,220KV AMBEWADI-220 KV BIDNAL&220 KV HUBLI: In the antecedent condition 220kV Narendra Bus-1 and Bus-2 were under planned shutdown for maintenancee works.220kV Nagheri - Kodalalli D/C and 220kV Hubli - Sirsi lines were kept open in the antecedent for operational purpose. 220kV Bidnal - Harti line-2 was in idle charged condition from Bidnal end. Initially three units were in service at Nagheri with 400MW generation. As reported, under these conditions, Unit#4 at Nagheri was brought in which resulted in overloading of the connected 220kV lines and the lines tripped on overcurrent protection. Running units at Nagheri also tripped. These resulted in complete outage of 220kV Nagheri, 220kV Hubli, 220kV Bidnal and 220kV Ambewadi stations. Details are awaited.	500MW	350 MW	GD-1	----
6	SR	i. 400kV Yelahanka - Neelamangala ii. 400kV Yelahanka - Tumkur Line-3 iii. 63MVAr Bus Reactor-2 at Yelahanka	PGCIL	3-Aug-20	17:32	3-Aug-20	18:10	38 mins	Tripping of 400kV Bus-2 at 400kV Yelahanka SS of PGCIL : During antecedent conditions, ICT#2 at Yelahanka was under outage since 09:09hrs due to AMP works. As per the information received, while charging ICT#2 at 17:36hrs, Bus-2 BBP operated due to failure of R-phase bus isolator of ICT#2. This resulted in the tripping of all the elements connected to Bus-2 along with bus coupler.	----	----	GI-2	----
7	SR	i. 400kV/230kV Neyveli TS-2 ICT - 1 ii. 400kV Neyveli TS-2 - Neyveli TS-1 (Exp) iii. 400kV Neyveli TS-2 - Salem Line-2 iv. 400kV Neyveli TS-2 - Pugalur Line	Neyveli Lignite Corporation	30-Aug-20	12:50	30-Aug-20	14:48	1 hr 58 mins	Tripping of 400kV Bus-2 at 400kV Neyveli TS-2 generating station: Triggering incident was failure of Y-ph tension insulator of 400kV NEYVELI_TS_II Bus-2 near bus reactor-1 gantry tower. Bus-2 Bus bar Protection operated resulting in the tripping of all elements connected to Bus-2. There was no generation at Neyveli TS-2 during the event.	----	----	GI-2	----
8	SR	i. 230kV Kudankulam - TTPS ii. 230kV Kayathar - TTPS iii. Unit#2 at TTPS	TANGEDCO	31-Aug-20	5:56	31-Aug-20	7:24	1 hr 28 mins	Tripping of 230kV Bus-2 at TTPS station of TANGEDCO: As reported, 230kV TTPS -Kayathar line tripped on Y-phase to ground fault. At the time of tripping, SF6 gas escaped through the vent at the top of the breaker. This led to operation of LBB protection and all elements connected to 230kV Bus-2 at TTPS tripped. Unit#2 at TTPS also tripped.	200 MW	----	GI-1	----

**Eastern Region-Grid Event Report for August 2020**

Sl. No.	Region	Name of major elements tripped	Owner / Agency	Outage		Reival		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	ER	400 KV Teesta III – Dikchu S/C 400 KV Rangpo-Dikchu S/C	ISTS	1-Aug-20	11:47	1-Aug-20	12:33	0:46	400/132 kv Dikchu Hydroelectric Plant is connected to the rest of the grid through 400 kv Teesta III – Dikchu S/C and 400 kv Dikchu – Rangpo S/C. Tie bay of 400/132 kv ICT and 400 kv bus 2 at Dikchu was out of service. Both the running units at Dikchu HEP were connected to bus 1 only at Dikchu via 400/132 kv ICT. Tripping of 400 kv Rangpo – Dikchu S/C (only outgoing feeder connected to 400 kv bus 1 at Dikchu), would result in tripping of any running unit at Dikchu HEP due to opening of both main and tie CB of this line at Dikchu, resulting in complete isolation of Bus-1. At 11:47 hrs, 400 kv Dikchu Rangpo S/C tripped from both ends due to B phase to earth fault resulting in tripping of both the running units at Dikchu. At same time Dikchu end breaker of 400 kv Teesta III – Dikchu S/C tripped after receiving SOTF trip signal from Main-2 relay (ABB REL 670). Consequently 400kv Bus-2 of Dikchu also became dead	100	0	GD-1	0.0000
2	ER	220 kv New Purnea-Begusarai 220 kv Khagaria-Begusarai 220 kv Khagaria-New Purnea 220 kv Biharsharif-Barauni D/C 220 kv Begusari-Barauni D/C	BSPTCL	3-Aug-20	11:05	3-Aug-20	12:04	0:59	On 03-08-20 at 10:15 Hrs 220 kv New Purnea-Begusarai-1 tripped on B phase to earth fault. Consequently 220 KV MTPS-Samastipur D/C kept open to reduce overloading of 220 kv Muzaffarpur(PG)-MTPS D/C. Also 220n kv Samatipur-DMTCL Darbhanga line was out due to flood. At 11:01 hrs 220 kv Biharsharif-Barauni D/C tripped from Biharsharif end on B-Phase to earth fault with delayed fault clearance observed in PMU. At the same time 220 kv Barauni-Begusari-1 tripped in zone-2 from Barauni end. At 11:05hrs, 220 kv Begusari-Khagaria and New Purnea–Khagaria ckt 2 tripped on B phase to earth fault. For 220 kv Begusari-Khagaria line fault distance was 48.26 km from Begusarai. At 11:05 hrs. Running unit of Barauni (unit no. 8) generating 180 MW get islanded with Begusarai load and Samastipur load. Due to LGBR unbalance unit-8 of Barauni tripped on under frequency and complete blackout in 220 kv Barauni, 220 kv Begusarai & 220 kv Khagaria took place. Load loss of 232 MW in Rosra, Kuchesar, Dalsinghara, Manjhaul, Samastipur, Khagaria areas took place.	180	232	GD-1	0.2281
3	ER	220 kv Rengali Switchyard (OPTCL) - Rengali (PG) D/C 220 kv TSTPP – Rengali PH S/C 220 kv Rengali Switchyard (OPTCL) - Barkote S/C and 220 kv Rengali Tarkera S/C	OPTCL	3-Aug-20	17:35	3-Aug-20	18:08	0:33	220 kv Rengali Power house (PH) – TTPS S/C was under outage since 19:17 hrs on 02nd August 2020. At 16:17 hrs, 220 kv RengaliSwitchyard (OPTCL)- Tarkera S/C tripped due to B phase to earth fault. At 16:58 hrs 220 kv Rengali Switchyard (OPTCL) - Barkote S/C tripped due to R and Y phase fault. At 17:17 hrs 220 kv Rengali Switchyard (OPTCL) - Rengali (PG) - 2 tripped due to Y and B phase fault. At 17:35 hrs 220 kv Rengali Switchyard (OPTCL) - Rengali (PG) - 1 tripped due to B phase fault. At same time, 220 kv TSTPP – Rengali PH S/C tripped from TSTPP end resulting in complete power failure at 220kv Rengali Switchyard (OPTCL) and at 220kv Rengali PH. All running units at Rengali PH tripped due to loss of evacuation path.	150	0	GD-1	0.0000
4	ER	220 KV Muzaffarpur-Hajipur D/C	BSPTCL	4-Aug-20	19:33	4-Aug-20	20:05	0:32	220 kv Barauni-Hajipur-1 was under breakdown and ckt-2 was not in service prior to the event. At 19:33 hrs, while taking charging attempt of 220 kv Barauni-Hajipur 2, 220 kv Muzaffarpur-Hajipur D/C tripped leading to a load loss of 313 MW in Hajipur, Chhapra, Amnour.	0	313	GD-1	0.1669
5	ER	220 kv New Purnea-Begusarai 220 kv Khagaria-Begusarai 220 kv Begusari-Samastipur D/C 220 kv Begusari-Barauni D/C 220/132 kv ICT at Begusarai 220 kv BTPS-Hajipur Unit 8 of Barauni (BTPS)	BSPTCL	9-Aug-20	7:41	9-Aug-20	8:55	1:14	At 7:41 hrs R ph CT blast at Begusarai end of 220 kv BTPS Begusarai ckt 2. Subsequently, all connected 220 kv ckts and 220/132 kv ICTs at Begusarai tripped either on busbar/LBB protection or from remote ends on zone 2. At the same time, running unit 8 at 220 kv Barauni TPS with 220 MW generation tripped on overcurrent. 220 kv BTPS –Hajipur 1 was under breakdown due to tower collapse and 220 kv BTPS Hajipur ckt 2 also tripped at the same time on possibly overreach. As a result, there was total voltage loss at 220 kv Begusarai s/s and load loss 175 MW took place in Dalsinghara, BTPS(132kv),Manjhaul, Ballia, Khagaria and Begusarai area. 220 kv BTPS remained connected with 220 kv Biharsharif via 220 kv double ckts.	220	175	GD-1	0.2158
6	ER	220 kv Tenughat Bihar Sharif S/C 400/220 kv ICT 2 and 3 at Bihar Sharif 220/132 kv ICT 1, 2 and 3 at Bihar Sharif 132 kv Bihar sharif –Sheikhupura D/C	BSPTCL	14-Aug-20	20:23	14-Aug-20	21:08	0:45	At 20:23 hrs 220 kv Tenughat Bihar Sharif S/C tripped due to Y phase to earth fault. At same time, 400/220 kv ICT 2 and 3 at Bihar Sharif, 220/132 kv ICT 1, 2 and 3 at Bihar Sharif, 132 kv Bihar sharif –Sheikhupura S/C also tripped. During line patrolling, it was found that Y phase Conductor of 220 kv Bihar sharif – TTPS S/C snapped at location No. 496-497 and fell on 132 kv Bihar sharif – Sheikhupura D/C at tower loc no. 10 from Bihar Sharif.	0	332	GI-1	0.2490
7	ER	315 MVA 400/220 kv ICT 1 & 2 at Bokaro A 500 MW unit 1 at Bokaro A 220 kv Bokaro B-Ramgarh D/C 220 kv Bokaro B-Jamshedpur (DVC) D/C 220 kv Bokaro B-CTPS B D/C 150 MVA 220/132 kv ICT 1 & 2 at Bokaro B	DVC	16-Aug-20	1:52	16-Aug-20	2:05	0:13	At 01:52 Hrs, 220/132 kv Bokaro B S/S became dead after tripping of all connected 220 kv lines and 400/220 kv ICTs. Y phase CT burst was reported of 220 kv Bokaro B-Jamshedpur 2 at Jamshedpur end.	0	297	GD-1	0.0644
8	ER	400 kv GMR – Meramundali S/C GMR unit #2 and 3	OPTCL	19-Aug-20	22:04	19-Aug-20	23:55	1:51	GMR unit # 3 was connected to 400/220 kv Meramundali S/S of OPTCL STU network through 400 kv GMR – Meramundali S/C. GMR unit#1 and 2 were connected to ISTS network through 400 kv Angul-GMR D/C . The ISTS and STU buses at GMR are electrically isolated from each other, as per the regulatory requirements. At 21:51 hrs, 400 kv GMR Meramundali S/C tripped only from GMR end after receipt of direct trip signal (DT) from remote end. GMR unit # 3 got islanded and remained in house load operation before tripping at 22:04 hrs. 6.6 kv switchgear of unit # 2 and unit # 3 was in coupled condition. This resulted in high circulating current in the unit auxiliary transformer of unit # 2 and tripped tripping of transformer followed by tripping of unit # 2.	611	0	GD-1	0.0000
9	ER	400 kv Barh – Motihari – 2	ISTS	22-Aug-20	16:46	23-Aug-20	3:43	10:57	At 16:46 hrs 400 kv Barh – Motihari – 2 tripped due to Y to B phase short circuit fault. Other 400kv lines connected to Motihari(DMTCL) are under breakdown since August 2019. The tripping led to loss of supply to 400kv Motihari (DMTCL), Betiah/Raxaul/Motihari (Bihar), being the only source of supply causing Grid Disturbance 1 (GD-1) category event.	0	117	GD-1	1.2812
10	ER	400 kv Alipurduar-Jigmeling D/C	ISTS	31-Aug-20	22:33	31-Aug-20	23:10	0:37	At 22:27 Hrs 400 kv Jigmeling-Mangdechu-2 tripped on B phase to earth fault. At 22:33 hrs while taking charging attempt of 400 kv Jigmeling-Mangdechu-2, 400 kv Alipurduar-Jigmeling D/C tripped on zone-2 in Y to B phase short circuit fault. At the same time all the running units of Mangdechu and 400 kv Mangdechu-Jigmeling-1 tripped.	520MW	0	GI-1	0.0000
11	ER	400 kv Alipurduar - Jigmelling D/C	ISTS	22-Jul-20	1:32	22-Jul-20	4:10	2:38	At 01:32 hrs 400 kv Alipurduar Jigmelling D/C tripped due to R & B phase fault. Prior to the tripping, schedule to Mangdechu generating units were 762 MW. There was no load or generation loss reported in Indian grid at the time of the event.	0	0	GI-2	0.0000
12	ER	220 kv Darbhanga (DMTCL)-Darbhanga (Bihar) D/C 220 kv Dharbanga-Mushahari-1	BSPTCL	22-Jul-20	12:15	22-Jul-20	12:50	0:35	220 kv Darbhanga (BSPTCL) to Mushahari – 2 was idle charged from Mushahari end. At 12:15 hrs 220 kv Darbhanga (DMTCL) – Darbhanga (BSPTCL) D/C tripped from DMTCL end only. At same time 220 kv Darbhanga (BSPTCL) to Mushahari – 1 also tripped. Later it was reported that Y – Phase Bushing to Gantry tower conductor of 220 kv Darbhanga (DMTCL) – Darbhanga (BSPTCL) – 2 melted and fault occurred.	0	250	GD-1	0.1458

**North Eastern Region-Grid Disturbances Report for August 2020**

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)	Generati on Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	132 kV Loktak -Ningthoukhong line 132 kV Imphal -Ningthoukhong line	MSPCL	01-Aug-20 09:36	01-Aug-20 09:45	0:09:00	Ningthoukhong area of Manipur Power System was connected with the rest of NER Grid through 132 kV Loktak - Ningthoukhong line & 132 kV Imphal - Ningthoukhong line. 132 kV Kakching - Kongba line kept open for system requirement. At 09:36 Hrs on 01.08.2020, 132 kV Loktak - Ningthoukhong line & 132 kV Imphal - Ningthoukhong line tripped. Due to tripping of these elements, Ningthoukhong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	34	0	0.005	GD 1
2	NER	132 kV Along - Pasighat line	DoP, Arunachal Pradesh	02-Aug-20 18:50	02-Aug-20 19:30	0:40:00	Pasighat area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Along - Pasighat line. At 18:50 Hrs on 02.08.2020, 132 kV Along - Pasighat line tripped. Due to tripping of this element, Pasighat area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	20	0	0.0133	GD 1
3	NER	132 kV Ningthoukhong-Churachandpur II	MSPCL	04-Aug-20 11:36	04-Aug-20 11:56	0:20:00	Churachandpur area of Manipur Power System was connected with the rest of NER Grid through 132 kV Ningthoukhong-Churachandpur II line(132 kV Ningthoukhong - Churachandpur line- I was under shutdown from 07:55 hrs of 04-08-2020 ) At 11:36 Hrs on 04.08.2020, 132 kV Ningthoukhong-Churachandpur II line tripped.Due to tripping of this element, Churachandpur area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area	0	13	0	0.0043	GD 1
4	NER	132 kV Along - Pasighat line	DoP, AP	06-Aug-20 14:39	06-Aug-20 15:39	1:00:00	Pasighat area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Along - Pasighat line. At 14:39 Hrs on 06.08.2020, 132 kV Along - Pasighat line tripped. Due to tripping of this element, Pasighat 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	0.0120	GD 1
5	NER	220 kV Mariani (PG) - Misa line 220 kV Mariani (PG) - AGBPP	POWERGRID & DoP Nagaland	06-Aug-20 20:07	06-Aug-20 20:44	0:37:00	Mokokchung area of Nagaland Power System, 220 kV Mariani(PG) and 220/132 kV Mokokchung(PG) substations were connected with the rest of NER Grid through 220 kV Mariani (PG) - Misa line & 220 kV Mariani (PG) - AGBPP line. 132 kV Doyang - Mokokchung (DoP, Nagaland) Line was under forced outage from 19:30 hrs of 06.08.2020. At 20:07 Hrs on 06.08.2020, 220 kV Mariani (PG) - Misa line & 220 kV Mariani (PG) - AGBPP line tripped.Due to tripping of these elements, Mokokchung area of Nagaland Power System, 220 kV Mariani(PG) and 220/132 kV Mokokchung(PG) substations were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	16	0	0.0099	GD 1
6	NER	132 kV BTPS Dhaligaon D/C,132 kV Bornagar-Rangia line	AEGCL	06-Aug-20 20:24	06-Aug-20 20:44	0:20:00	Dhaligaon area of Assam Power System was connected with the rest of NER Grid through 132 kV BTPS Dhaligaon D/C,132 kV Bornagar- Rangia line. 132 kV BTPS Kokraghar line was under planned shutdown & 132 kV Nalbari- Dhaligaon was kept open to control the loading of 132 kV BTPS - Dhaligaon D/C. At 20:24 Hrs on 06.08.2020,132 kV BTPS Dhaligaon D/C,132 kV Bornagar- Rangia line tripped. Due to tripping of these elements, Dhaligaon area of Assam Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	137	0	0.0457	GD 1
7	NER	132 kV Badarpur-Kolasib line &132 kV Aizawl - Kolasib line.	POWERGRID , & DoP, Mizoram	07-Aug-20 13:52	07-Aug-20 14:26	0:34:00	Kolasib area of Mizoram Power System were connected with the rest of NER Grid through 132 kV Badarpur-Kolasib line &132 kV Aizawl - Kolasib line. At 13:52 Hrs on 07.08.2020, 132 kV Badarpur-Kolasib line &132 kV Aizawl - Kolasib lines tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System was separated from rest of NER Grid and subsequently subsequently collapsed due to load generation mismatch.	22	5	0.012	0.0028	GD 1
8	NER	132 kV Melriat(PG)-Zuangtui line.	POWERGRID	10-Aug-20 13:17	10-Aug-20 13:52	0:35:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Melriat(PG)-Zuangtui line. At 13:17 Hrs on 10.08.20, 132 kV Melriat(PG)-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	0.0200	GD 1
9	NER	132 kV Ranganadi - Ziro line	POWERGRID	12-Aug-20 19:40	12-Aug-20 20:00	0:20:00	Ziro area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Ziro line. At 19:40 Hrs on 12.08.2020, 132 kV Ranganadi - Ziro line tripped. Due to tripping of this element, Ziro area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	43	0	0.0140	GD 1
10	NER	132 kV Melriat(PG)-Zuangtui line	POWERGRID	13-Aug-20 08:50	13-Aug-20 09:14	0:24:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Melriat(PG)-Zuangtui line. At 08:50 Hrs on 13.08.20, 132 kV Melriat(PG)-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	39	0	0.0160	GD 1
11	NER	132 kV Lekhi - Pare Line	POWERGRID & DoP AP	14-Aug-20 05:23	14-Aug-20 05:57	0:34:00	Capital area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Lekhi - Pare Line(132 kV Pare - Itanagar line & 132 kV Ranganadi - itanagar line were under outage due to tower collapse since 12.07.20 & 132 kV Nirjuli - Gohpur line was kept open to control loading of 132 kV Lekhi - Pare Line). At 05:23 Hrs on 14.08.20, 132 kV Lekhi - Pare Line tripped. Due to tripping of this element, Capital area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	41	0	0.0230	GD 1
12	NER	132 kV Aizawl - Luangmual Line	P&ED Mizoram	14-Aug-20 15:05	14-Aug-20 19:40	4:35:00	Luangmual area of Mizoram Power System was connected with rest of NER Grid through 132 kV Aizawl - Luangmual Line. At 15:05 Hrs on 14.08.20,132 kV Aizawl - Luangmual Line tripped. Due to tripping of this element, Luangmual area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	24	0	0.1100	GD 1
13	NER	132 kV AGTCCPP - Kumarghat Line 132 kV Agartala - Rokhia D/C 132 kV Agartala - Dhalabil Line 132 kV Bodhjannagar - Jirania Line 132 kV Palatana - Surjamaninagar 1 Line	TSECL, POWERGRID & NEEPCO	14-Aug-20 18:58	14-Aug-20 19:21	0:23:00	Capital area of Tripura Power System, AGTCCPP Power Station & South Comilla load of Bangladesh Power System were connected with rest of NER Grid through 132 kV AGTCCPP - Kumarghat Line, 132 kV Agartala - Rokhia D/C, 132 kV Agartala - Dhalabil Line, 132 kV Bodhjannagar - Jirania Line and 132 kV Palatana - Surjamaninagar 1 Line. At 18:58 Hrs on 14.08.20, 132 kV AGTCCPP - Kumarghat Line, 132 kV Agartala - Rokhia D/C, 132 kV Agartala - Dhalabil Line, 132 kV Bodhjannagar - Jirania Line and 132 kV Palatana - Surjamaninagar 1 & 2 Line tripped. Due to tripping of these elements, Capital area of Tripura Power System, AGTCCPP Power Station & South Comilla load of Bangladesh Power System were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	141	228	0.054	0.0870	GD 1
14	NER	132 kV Ziro-Daporijo line	DoP, Arunachal Pradesh	17-Aug-20 09:11	17-Aug-20 09:49	0:38:00	Daporijo area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Ziro-Daporijo line. At 09:11 Hrs on 17.08.2020, 132 kV Ziro-Daporijo line tripped. Due to tripping of this element, Daporijo area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	15	0	0.0100	GD 1
15	NER	132 kV Daporijo- Along line	DoP, Arunachal Pradesh	19-Aug-20 14:09	19-Aug-20 16:51	2:42:00	Along area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Daporijo- Along line. At 14:09 Hrs on 19.08.2020, 132 kV Daporijo- Along line tripped. Due to tripping of this element, Along area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	19	0	0.0513	GD 1

**North Eastern Region-Grid Disturbances Report for August 2020**

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
16	NER	132 kV Ranganadi - Ziro line	POWERGRID	20-Aug-20 13:27	20-Aug-20 16:30	3:03:00	Ziro area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Ziro line. At 13:27 Hrs on 20.08.2020, 132 kV Ranganadi - Ziro line tripped. Due to tripping of this element, Ziro area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	27	0	0.0823	GD 1
17	NER	132 kV Silchar- Srikona D/C 132 kV Srikona-Pailapool line	POWERGRID & AEGCL	22-Aug-20 00:23	22-Aug-20 00:48	0:25:00	Srikona area of Assam Power System was connected with rest of NER Grid through 132 kV Silchar- Srikona D/C & 132 kV Srikona-Pailapool line. 132 kV Srikona - Panchgram line is under forced outage since 14.01.19 due to tower collapse. At 00:23 Hrs on 22.08.2020, 132 kV Silchar- Srikona D/C & 132 kV Srikona-Pailapool line tripped. Due to tripping of these elements, Srikona area of Assam Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	30	0	0.0125	GD 1
18	NER	132 kV Ranganadi - Ziro line	POWERGRID	22-Aug-20 18:35	22-Aug-20 18:56	0:21:00	Ziro area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Ziro line. At 18:35 Hrs on 22.08.2020, 132 kV Ranganadi - Ziro line tripped. Due to tripping of this element, Ziro area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	46	0	0.0160	GD 1
19	NER	132 kV Melriat(PG)-Zuangtui line	POWERGRID	25-Aug-20 12:58	25-Aug-20 13:42	0:44:00	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Melriat(PG)-Zuangtui line. At 12:58 Hrs on 25.08.20, 132 kV Melriat(PG)-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	0.0260	GD 1
20	NER	132 kV Along - Pasighat line.	DoP, Arunachal Pradesh	28-Aug-20 12:53	28-Aug-20 13:05	0:12:00	Pasighat area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Along - Pasighat line. At 12:53 Hrs on 28.08.2020, 132 kV Along - Pasighat line tripped. Due to tripping of this element, Pasighat area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	13	0	0.0020	GD 1
21	NER	132 kV Agartala - Rokhia D/C line 132 kV Agartala - Dhalabil line 132 kV Agartala - AGTCCPP D/C line 132 kV AGTCCPP - Kumarghat line 132 kV AGTCCPP - Surajmaninagar D/C line 132 kV Bodhjunnagar - Jirania line 132 kV Palatana - surajmaninagar line	TSECL, POWERGRID & NEEPCO	31-Aug-20 07:26	31-Aug-20 07:45	0:19:00	Capital area of Tripura Power System, AGTCCPP Power Station & South Comilla load of Bangladesh Power System were connected with rest of NER Grid through 132 kV AGTCCPP - Kumarghat Line, 132 kV Agartala - Rokhia D/C, 132 kV Agartala - Dhalabil Line, 132 kV Bodhjannagar - Jirania Line and 132 kV Palatana - Surjamaninagar 1 Line. At 07:26 Hrs on 31.08.20, 132 kV AGTCCPP - Kumarghat Line, 132 kV Agartala - Rokhia D/C, 132 kV Agartala - Dhalabil Line, 132 kV Bodhjannagar - Jirania Line and 132 kV Palatana - Surjamaninagar 1 Line tripped. Due to tripping of these elements, Capital area of Tripura Power System, AGTCCPP Power Station & South Comilla load of Bangladesh Power System were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	116	190	0.03673	0.0602	GD 1

**North Eastern Region-Grid Incidences Report for August 2020**

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	Kameng HEP - Unit 2	NEEPCO	01-Aug-20 23:19	02-Aug-20 01:00	1:41:00	Kameng HEP - Unit 2 tripped at 23:19 Hrs on 01-08-2020 on mal-operation of pressure relief device. Revision done from Block No.5 on 02-08-2020	155	0	0.380	0	GI 2
2	NER	Kameng HEP - Unit 1	NEEPCO	04-Aug-20 10:16	44047.5	1:44:00	Kameng HEP - Unit 1 tripped due to high temperature of turbine guide bearing alarm at 10:16 Hrs on 04-08-2020. Revision done from Block No.49 on 04-08-2020	63	0	0.080	0	GI 2
3	NER	Palatana GTG-1 & STG-1	OTPC	05-Aug-20 09:08	05-Aug-20 11:00	1:52:00	Palatana GTG-1 & STG-1 tripped due to Exhaust over Temperature at 09:08 Hrs on 05-08-2020. Revision done from Block No.45 on 05-08-2020	206.9	0	0.390	0	GI 2
4	NER	Doyang Unit-2	NEEPCO	05-Aug-20 12:50	05-Aug-20 15:00	2:10:00	Doyang Unit-2 tripped due to Tripped due to Aux. failure at 12:50 Hrs on 05-08-2020. Revision done from Block No.61 on 05-08-2020	23.2	0	0.050	0	GI 1
5	NER	Kameng HEP - Unit2	NEEPCO	06-Aug-20 07:26	44049.375	1:34:00	Kameng HEP - Unit 2 tripped due to high temperature of Guide bearing at 07:26 Hrs on 06-08-2020. Revision done from Block No.37 on 06-08-2020	150	0	0.250	0	GI 2
6	NER	AGBPP Unit-5 & 9	NEEPCO	09-Aug-20 04:14	09-Aug-20 06:00	1:46:00	AGBPP Unit-5 & 9 tripped at 04:14 Hrs on 09-08-20 due to GT differential protection operated. Revision done from Block No. 25 on 09-08-20	40	0	0.070	0	GI 2
7	NER	BgTTP Unit 2	NTPC	11-Aug-20 00:12	44054.10417	2:18:00	BgTTP Unit-2 tripped at 00:12 Hrs on 11-08-20 due to low vacuum. Revision done from Block No. 11 on 11-08-20	125	0	0.320	0	GI 2
8	NER	AGBPP Unit 8	NEEPCO	11-Aug-20 13:47	44054.64583	1:43:00	AGBPP Unit-8 tripped at 03:47 Hrs on 11-08-20 due to high thrust bearing temperature alarm. Revision done from Block No. 63 on 11-08-20	25	0	0.050	0	GI 2
9	NER	Kameng HEP - Unit 2	NEEPCO	18-Aug-20 23:16	44062.04167	1:44:00	Kameng HEP - Unit 2 tripped at 23:16 Hrs on 18-08-2020 due to low governor pressure . Revision done from Block No.5 on 19-08-2020	152	0	0.270	0	GI 2
10	NER	Kameng HEP Unit-1 & 2	NEEPCO	19-Aug-20 08:02	19-Aug-20 09:30	1:28:00	Kameng HEP Unit-1 & 2 tripped at 08:02 Hrs on 19-08-20 due to tripping of generator transformer for fault in 400 kV Kameng - Balipara 1 line. Revision done from Block No.39 on 19-08-20	305	0	0.450	0	GI 2
11	NER	AGBPP Unit-5 & 9	NEEPCO	23-Aug-20 14:12	23-Aug-20 16:00	1:48:00	AGBPP Unit-5 & 9 tripped at 14:12 Hrs on 23-08-20 due to operation of Generator differential protection. Revision done from Block No. 65 on 23-08-20	55	0	0.100	0	GI 2
12	NER	AGBPP Unit-1, 2 & 7	NEEPCO	29-Aug-20 11:34	29-Aug-20 13:00	1:26:00	AGBPP Unit-1, 2 & 7 tripped at 11:34 Hrs on 29-08-20 due to Tripped due to tripping of station Transformer 2 and loss of auxiliary power(Rotor cooling fan tripped). Revision done from Block No. 53 on 29-08-20.	64	0	0.090	0	GI 2
13	NER	AGBPP Unit-1, 7 & 8	NEEPCO	29-Aug-20 13:41	29-Aug-20 15:30	1:49:00	AGBPP Unit-1, 7 & 8 tripped at 13:41 Hrs on 29-08-20 due to Tripped due to non-availability of GTG-1 & GTG-2. Revision done from Block No. 63 on 29-08-20.	45	0	0.080	0	GI 2