

Details of Grid Events during the Month of August 2021 in Northern Region



Sl No.	Category of Grid Event (GI for 2/ GD-1 to GD-5)	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration (HH:MM)	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load w.r.t Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid*		Brief details of the event (pre fault and post fault system conditions)	Elements Tripped
						Generation Loss(MW)	Load Loss (MW)	% Generation Loss(MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GD-1	PUNJAB	02-Aug-2021 17:22	02-Aug-2021 19:32	2:10	0	480	0.000	0.980	36835	48975	Y-N & B-N phase to earth faults occurred in 220 KV Amritsar(PG)-Verpal(PS) (PSTCL) Ckt-1 due to burning of Y-ph jumper of wavetrap at Verpal end and snapping of B-ph conductor at Amritsar end respectively. During the event, 220kV Amritsar-Verpal Ckt-1 tripped from Amritsar(PG) end in Z-1 but didn't trip from Verpal(PS) end, following which 220kV Amritsar-Verpal Ckt-2 tripped from Verpal end only. 220kV feeders to 220 kV Wadala Granthia also tripped and feeders to 220 kV Patti & 220 kV Rashiana got de-energized. As per PMU, Y-B phase to phase fault is observed with delayed clearance in 440ms. As per SCADA, load loss of approx. 480MW is observed in Punjab Control area.	1) 220 KV Amritsar(PG)-Verpal(PS) (PSTCL) Ckt-2 2) 220 KV Amritsar(PG)-Verpal(PS) (PSTCL) Ckt-1
2	GD-1	HIMACHAL PRADESH	06-Aug-2021 13:52	06-Aug-2021 15:12	1:20	170	0	0.364	0.000	46746	60734	At 13:52 Hrs 220 KV Phozal(HP)-Nallagarh(PG) (ADHPL) Ckt-1 tripped on B-N phase to earth fault. Fault distance was 46.7km and fault current was 1.6kA from Phozal end. At the same time, 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) Ckt-1 also tripped as 220 KV AD hydro(AD)-Nallagarh(PG) (ADHPL) Ckt-1 was already out since 13:16 Hrs on B-N fault. 96MW AD Hydro Unit 1 & Unit 2 both tripped due to non availability of evacuation path. As per PMU, B-N phase to earth fault is observed. As per SCADA, generation loss of approx. 170MW is observed at AD Hydro(AD). In antecedent condition, 220KV AD Hydro-Phozal Ckt and 220KV Phozal-Nallagarh Ckt were carrying 170MW & 215MW respectively.	1) 220 KV AD hydro(AD)-Phozal(HP) (ADHPL) Ckt-1 2) 220 KV Phozal(HP)-Nallagarh(PG) (ADHPL) Ckt-1
3	GD-1	UTTAR PRADESH	07-Aug-2021 03:02	07-Aug-2021 05:50	2:48	870	0	2.048	0.000	42473	56479	400/220 kv 315 MVA ICT 3 at Muzaffarnagar(UP) tripped on differential protection operation on blast of R-ph CT of ICT 3, ICT 3 was connected to bus 2. At the same time, bus bar 1 protection operated which resulted into tripping of ICT 1, ICT 4, 400kV lines to Meerut, Ataur and Vishnuprayag which were connected to Bus 1. 400 KV Alaknanda-Muzaffarnagar Ckt-1 also tripped on B-N phase to earth fault on B-ph CT damaged at Muzaffarnagar S/s, fault distance was 116meter(Z-1) from Muzaffarnagar end. 400 KV Alaknanda GVK(UPC)-Srinagar(UK) (UK) Ckt-1 & Ckt-2 both tripped on DT received at Srinagar end. Due to tripping of all evacuating lines all the units of Alaknanda HEP, Vishnuprayag HEP and Simoli Bhatwari tripped. As per PMU, R-N & B-N fault followed by Y-N fault observed with delayed clearance in 760ms. As per SCADA, generation loss of approx. 870MW is observed in Alaknanda HEP, Vishnuprayag HEP & Singoli Bhatwari total. In antecedent condition, 400/220 kv 315 MVA ICT 1 & ICT 3 at Muzaffarnagar(UP) and 400/220 kv 500 MVA ICT 4 at Muzaffarnagar(UP) were carrying 108MW, 115MW & 174MW respectively.	1) 400/220 kv 500 MVA ICT 4 at Muzaffarnagar(UP) 2) 400 KV Muzaffarnagar-Ataur (UP) Ckt-1 3) 400 KV Roorkee(PG)-Muzaffarnagar(UP) (PTCUL) Ckt-1 4) 400 KV Muzaffarnagar(UP)-Vishnuprayag(UP) (UP) Ckt-1 5) 220 KV Singoli Bhatwari(Singoli(LTUHP))-Srinagar(UK) (PTCUL) Ckt-2 6) 400/220 kv 315 MVA ICT 3 at Muzaffarnagar(UP) 7) 400/220 kv 315 MVA ICT 1 at Muzaffarnagar(UP) 8) 400 KV Meerut(PG)-Muzaffarnagar(UP) (PG) Ckt-1 9) 82.5 MW Alakhanda HEP - UNIT 4 10) 82.5 MW Alakhanda HEP - UNIT 2 11) 82.5 MW Alakhanda HEP - UNIT 3 12) 82.5 MW Alakhanda HEP - UNIT 1 13) 110 MW Vishnuprayag HPS - UNIT 2 14) 110 MW Vishnuprayag HPS - UNIT 3 15) 110 MW Vishnuprayag HPS - UNIT 1 16) 110 MW Vishnuprayag HPS - UNIT 4 17) 220 KV Singoli Bhatwari(Singoli(LTUHP))-Srinagar(UK) (PTCUL) Ckt-1 18) 400 KV Alaknanda GVK(UPC)-Muzaffarnagar (UP) Ckt-1 19) 400 KV Alaknanda GVK(UPC)-Srinagar(UK) (UK) Ckt-1 20) 400 KV Alaknanda GVK(UPC)-Srinagar(UK) (UK) Ckt-2
4	GI-2	UTTAR PRADESH	07-Aug-2021 23:50	08-Aug-2021 02:32	2:42	0	0	0.000	0.000	46937	61868	At 23:50Hrs, 400/220 kv 315 MVA ICT 1 at Obra_B(UP) tripped on differential protection operation due to damage of R-Y-N phase bushing and Y-ph LA at 220kV side. At the same time, 400/220 kv 240 MVA ICT 3 at Obra_B(UP) tripped on directional E/F protection operation. Due to tripping of above elements, loading of 400/220 kv 315 MVA ICT 2 at Obra_B(UP) rose upto 371MW following which ICT 2 tripped on over current protection operation at 23:55 Hrs. As per PMU, Y-N phase to earth fault is observed. In antecedent condition, 400/220 kv 315 MVA ICT 1 & ICT 2 at Obra_B(UP) carrying 206MW & 200MW respectively.	1) 400/220 kv 240 MVA ICT 3 at Obra_B(UP) 2) 400/220 kv 315 MVA ICT 1 at Obra_B(UP) 3) 400/220 kv 315 MVA ICT 2 at Obra_B(UP)
5	GD-1	UTTAR PRADESH	08-Aug-2021 15:11	08-Aug-2021 16:38	1:27	280	0	0.633	0.000	44240	52248	220 KV Pantnagar(UK)-Bareilly(UP) (UP) Ckt-1 tripped on R-ph jumper of Pantnagar line snapped and R-ph LA of CB Ganj_2(UP) line damaged at Bareilly(UP) end. At the same time, 400/220 kv 315 MVA ICT 1 at Bareilly(UP) tripped on direction earth fault protection operation. All the units of 220kV Dhauilganga(NH) tripped on negative sequence stage 2 protection operation. As per PMU, B-N phase to earth fault followed by R-N phase to earth fault with delayed clearance in 2040ms is observed. As per SCADA, generation loss of approx. 280MW is observed at Dhauilganga(NH). In antecedent condition, 220 KV Pantnagar(UK)-Bareilly(UP) (UP) Ckt-1 and 400/220 kv 315 MVA ICT 1 at Bareilly(UP) were carrying 92MW & 103MW respectively.	1) 220 KV Pantnagar(UK)-Bareilly(UP) (UP) Ckt-1 2) 400/220 kv 315 MVA ICT 1 at Bareilly(UP) tripped on direction earth fault protection operation. 3) 70 MW Dhauilganga HPS - UNIT 1 4) 70 MW Dhauilganga HPS - UNIT 2 5) 70 MW Dhauilganga HPS - UNIT 3 6) 70 MW Dhauilganga HPS - UNIT 4
6	GD-1	J & K	09-Aug-2021 14:29	09-Aug-2021 15:57	1:28	0	130	0.000	0.229	48531	56672	220 KV Wagoora(PG)-Ziankote(JK) (PDD JK) Ckt-1 tripped on B-N phase to earth fault. Fault distance was 23.54km and fault current was 5.9kA from Wagoora(PG) end. At the same time, 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-1 & Ckt-2 both tripped from Ziankote end only. As per PMU, B-N phase fault cleared in 120ms is observed. As per SCADA, load loss of approx. 130MW is observed in J&K control area. In antecedent condition, 220 KV Wagoora(PG)-Ziankote(JK) (PDD JK) Ckt-1, 220kV Amargarh-Ziankote Ckt-1 & ckt-2 were carrying 40MW, 114MW & 114MW respectively.	1) 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-1 2) 220 KV Amargarh(NRSS XXIX)-Ziankote(JK) (PDD JK) Ckt-2 3) 220 KV Wagoora(PG)-Ziankote(JK) (PDD JK) Ckt-1
7	GD-1	UTTAR PRADESH	10-Aug-2021 20:28	11-Aug-2021 21:11	0:43	423	0	0.829	0.000	51034	64296	400 KV Alaknanda GVK(UPC)-Vishnuprayag (JP) (UP) Ckt-1 tripped on B-N phase to earth fault. Fault was in Z-1 from Alaknanda end. At the same time, all four 82.5MW units of Alaknanda HEP and all three 33MW units of Singoli Bhatwari tripped. As per PMU, R-N phase to earth fault with delayed clearance in 560ms is observed. As per SCADA, generation loss of approx. 315MW at Alaknanda HEP and 108MW at Singoli Bhatwari is observed.	1) 82.5 MW Alakhanda HEP - UNIT 4 2) 82.5 MW Alakhanda HEP - UNIT 2 3) 82.5 MW Alakhanda HEP - UNIT 3 4) 82.5 MW Alakhanda HEP - UNIT 1 5) 400 KV Alaknanda GVK(UPC)-Vishnuprayag(JP) (UP) Ckt-1 6) 33 MW Singoli Bhatwari HEP - UNIT 1 7) 33 MW Singoli Bhatwari HEP - UNIT 2 8) 33 MW Singoli Bhatwari HEP - UNIT 3
8	GD-1	UTTAR PRADESH	11-Aug-2021 13:26	11-Aug-2021 14:21	0:55	365	0	0.694	0.000	52613	61213	R-ph CVT of 220kV NAPP-Sambhal Ckt got burst at NAPP end which converted into R_Y phase to phase fault. 220kV lines to Smabhal, Khurja, Atrauli, Simbholi and Debai all tripped from remote end in Z-2 and from NAPP end in main protection operation. At the same time, NAPP Unit 1 tripped on Class A (Over fluxing stage-2) protection operation. After 20sec, NAPP Unit 2 tripped on over frequency protection operation as frequency rose up to 51.5Hz for 20sec. As per PMU, R-Y phase to phase fault is observed. As per SCADA, generation loss of approx. 365MW is observed at NAPP. In antecedent condition, 220kV lines to Smabhal, Simbholi, Atrauli, Khurja and Debai were carrying 67MW, 55MW, 59MW, 27MW and 139MW respectively.	1) 220 KV NAPP(NP)-Atrauli(UP) (UP) Ckt-1 2) 220 KV NAPP(NP)-Khurja(UP) (UP) Ckt-1 3) 220 KV NAPP(NP)-Sambhal(UP) (UP) Ckt-1 4) 220 KV NAPP(NP)-Debai(UP) (UP) Ckt-1 5) 220 KV NAPP(NP)-Simbholi(UP) (UP) Ckt-1 6) 220 MW NAPP UNIT 1, 220 MW NAPP UNIT 2
9	GD-1	UTTAR PRADESH	12-Aug-2021 08:28	12-Aug-2021 23:21	14:53	260	0	0.541	0.000	48083	55096	100MVA, 220/132KV ICT-2T of Harduaganj TPS tripped & caught fire at 08:13Hrs, at 08:27 Hrs both 220KV Main Bus-1 & II of Harduaganj(UP) tripped. At the same time, 220KV side CB of 315MVA, 400/220KV ICT-1, 220kV feeders to Sikandararao, Etah, Boner & Jhangirabad and 110 MW Harduaganj-C TPS - UNIT 7, 250 MW Harduaganj-D TPS - UNIT 8 & UNIT 9 also tripped. As per PMU, B-N phase to earth fault cleared in 200ms is observed. As per SCADA, generation loss of approx. 260MW is observed at Harduaganj TPS.	1) 250 MW Harduaganj-D TPS - UNIT 8 2) 110 MW Harduaganj-C TPS - UNIT 7 3) 250 MW Harduaganj-D TPS - UNIT 9 4) 400/220 kv 315 MVA ICT 1 at Harduaganj (UP)

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						Generation Loss(MW)	Load Loss (MW)	% Generation Loss(MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GI-1	WR	01-Aug-21 01:46	01-Aug-21 02:25	0:39	-	125	-	0.32%	49742	39403	At 01:46 Hrs/01-08-2021, the heavy fire and fumes due to flash over of B-Phase CT of 220kV Jambua-Achhalia 3 created bus fault at 220 kV Bus 1 Jambua substation. Bus bar protection not operated due to Y & B phase CT saturation detection by Bus bar relay. The fault was detected in Zone 1 by Main 1 & Main-2 Achhalia line-3 distance relays. Auto reclose cycle has been initiated by relay but after 89ms, single phase fault was converted in to Phase to Phase Y-B fault and line tripped at Jambua end in A/R lock out. 220 kV Achhalia line 3 relay at Jambua end gave 3-phase LBB initiation to Bus bar relay after 200 ms. This resulted in tripping of all the elements connected to 220 kV Jambua Bus 1 on LBB protection operation. After 369ms of Bus 1 tripping, fire and flames of failed CT extended to Bus-2 dropper jumper (in Achhalia 3 bay), which resulted in tripping of 220 kV Bus 2 on Bus bar protection operation.	Tripping of 1. 220 kV Jambua- Asoj 1&2 2. 220 kV Jambua- Vadodara 1&2 3. 220 kV Jambua- Karamsada 1&2 4. 220 kV Jambua- Achhalia 3&4 5. 220 kV Jambua- Haldarwa 6. 220 kV Jambua- Jhagadia 7. 220 kV Jambua- Gotri 1&2 8. 220/132 kV Jambua ICTs 1,2&3
2	GD-1	WR	03-Aug-21 08:25	03-Aug-21 09:30	1:05	-	55	-	0.01%	52239	465511	At 08:07 Hrs/ 03-08-2021, 220/132 KV 160 MVA Mehalgaon ICT 1 caught fire and tripped on differential protection operation. Due to fire & flame, R Phase overhead bus conductor string failed & fell on 220 KV Mehalgaon Main Bus at 08:25 Hrs and resulted in Bus bar protection operation. As reported by MSETCL, 132 kV feeders at Mehalgaon were H/T at 08:46 Hrs for system safety & to avoid AC/DC fault due to burning of cables.	Tripping of 1. 220 kV Mehalgaon- Gwalior 1&2 2. 220 kV Mehalgaon- Bina 3. 220 kV Mehalgaon- Datia 4. 220/132 kV Mehalgaon ICTs 1,2&3
3	GI-1	WR	05-Aug-21 10:13	05-Aug-21 12:19	2:06	78.9	-	0.14%	-	58258	50856	At 10:13 Hrs/ 05-08-2021, 220/33 KV Dayapar ICT 3 tripped on Oil Surge relay operation, resulting generation loss of 78.9 MW at Dayar (INOX) Wind power plant connected to bhuj substation	Tripping of 1. 220/33 kV Dayapar ICT 3
4	GI-1	WR	09-Aug-21 00:25	09-Aug-21 02:11	1:46	-	300	-	0.61%	55075	49422	At 00:25 Hrs/09-08-2021, 220 kV Kurud- Gurur 1 tripped on R-E fault. After this tripping, 220 kV Kurud Gurur 2 tripped on Overcurrent protection operation. 132 KV Dhamtari, Balod and Dalli Rajhara loads got affected due to the event. There was a load loss around 300 MW.	Tripping of 1.220 kV Kurud- Gurur 1 2.220 kV Kurud- Gurur 2
5	GI-2	WR	13-Aug-21 10:05	13-Aug-21 11:28	1:23	500	-	0.82%	-	61341	55096	At 10:05 Hrs/ 11-08-2021, 660 MW JP Nigrie Unit 1 tripped along with 400 kV Bus 2 and 400 kV JP Nigrie- Satna 1. As intimated by JP Nigrie, the earth rod was placed on 400 kV Bus 2 due to human error and resulted into bus-bar protection operation. The unit tripped on reverse power protection at the same time. The tie bay of 400 kV JP Nigrie Satna -1 was already out and line tripped only from JP Nigrie end. The unit was generating about 500 MW at the time of tripping.	Tripping of 1. 400 kV Jp Nigrie- Satna 1 2. 400 kV JP Nigrie Bus 2 3. 660 MW JP Nigrie Unit 1
6	GI-1	WR	13-Aug-21 08:36	13-Aug-21 18:01	9:25	212	-	0.35%	-	60879	56841	At 08:36 Hrs/ 11-08-2021, 220 kV Kakrapar 1&2 Bus 2 and all the connected elements tripped on differential protection operation due to R-E fault. There was a generation loss of 212 MW due to the event.	Tripping of 1. 220 kV Kakrapar 1&2 Bus 2 2. 220 kV Kakrapar 1&2 - Haldarwa 2 3. 220 kV Kakrapar 1&2 - Vapi 2 4. 220 kV Kakrapar 1&2 - Vav 2 5. 220 MW Kakrapar 1&2 Unit 2
7	GD-1	WR	16-Aug-21 03:10	16-Aug-21 04:23	1:13	240	-	0.44%	-	54359	47317	At 03:10 Hrs/16-08-2021, B phase LR of 400 kV Dhariwal(CTU)- Parli caught fire and resulted in tripping of the line on Zone 1 distance protection operation. At the same time, 400 kV Dhariwal(CTU) Bhadravathi line tripped at Dhariwal end on DT receipt. With these tripping, 300 MW Dhariwal CTU Unit 2 tripped due to loss of evacuation path. There was a generation loss of around 240 MW due to the event.	Tripping of 1. 400 kV Dhariwal(CTU)- Parli 2. 400 kV Dhariwal(CTU)- Bhadravathi 3. 300 MW Dhariwal CTU Unit 2
8	GD-1	WR	16-Aug-21 05:01	16-Aug-21 05:45	0:44	-	326	-	0.68%	55117	48057	At 05:01 Hrs/16-08-2021, 220 kV Suhela-Bemetara 1 tripped due to the opening of R-phase wave trap dropper jumper and at the same time 220 kV Suhela-Bemetara 2 tripped due to overloading . With these tripping, total interruption occurred at 220 kV Bematar, Mungeli , Gendpur & 132 kV Mungeli,Lormi, Thakhatpur, Pandariya, Kawardha substations .	Tripping of 1. 220 kV Suhela-Bemetara 1 2. 220 kV Suhela-Bemetara 2
9	GI-2	WR	18-Aug-21 11:30	18-Aug-21 11:43	0:13	336	-	0.56%	-	60017	52578	At 11:30 Hrs/18-08-2021, 220/33 kV Radhanesda Gujarat ICTs 3, 4& 5 tripped from LV side at 220/33 kV on over current protection operation. There was a solar generation loss of around 336 MW due to this event.. As reported by GETCO, O/C trip settings of the ICTs were kept 95% of Full load current during the tripping and it was revised to 112% after the event.	Tripping of 1.220/33 kV 125 MVA Radhanesda Gujarat ICTs 1,2&3

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						Generation Loss(MW)	Load Loss (MW)	% Generation Loss(MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
10	GI-1	WR	23-Aug-21 11:19	23-Aug-21 11:40	0:21	-	144.4	-	0.28%	55782	51740	At 11:19 Hrs/23-08-2021, 220 kV Boisar(MH) Bus 1 and all connected elements tripped on LBB protection operation of 220kV Ghodbandar line. During the B-Phase to E/F fault on 220kV Boisar2-Ghodbandar line B-phase CB at Boisar end did not trip, hence LBB protection operated to clear the fault. Due to the overloading of 220/132 kV 200MVA Boisar(MH) ICT2, load trimming scheme operated and resulted in tripping of 132kV MIDC & 132kV Palghar end load (93.4MW load relief obtained). 51 MW load loss occurred at 33 kV side due to the tripping of 220/33 kV Boisar(MH) ICT 2.	Tripping of 1. 220 kV Boisar(MH) - Ghodbandhar 2. 220 kV Boisar(MH) - Viraj 3. 220 kV Boisar(MH) - Boisar(PG) 1 4. 220/132 kV Boisar(MH) ICTs 1&2 5. 220/33 kV Boisar(MH) ICT 2
11	GI-2	WR	23-Aug-21 18:28	23-Aug-21 20:08	1:40	-	-	-	-	56746	50834	At 18:28 Hrs/ 23-08-2021, four 400kV lines at Charanka substation connected with PLCC BCU-1 tripped on DT receipt during fluctuation in DC supply source-1(Problem in DC Charger-1). As reported by GETCO, during auto change over of DC source, PLCC BCU has given false DT received command to all four Lines. As the PLCC BCU was mal operating during transition from Faulty DC source to Healthy DC source, the matter was taken up with OEM for resolution.	Tripping of 1. 400 kV Charanka- APL Mundra 1 2. 400 kV Charanka- Kansari 1&2 3. 400 kV Charanka- Varsana 1
12	GI-2	WR	24-Aug-21 09:42	24-Aug-21 11:16	1:34	-	-	-	-	56745	53359	At 09:42 Hrs/ 24-08-2021, four 400kV lines at Charanka substation connected with PLCC BCU-1 tripped on DT receipt during Manual DC supply Change over on Charger. As reported by GETCO, during auto change over of DC source, PLCC BCU has given false DT received command to all four Lines. As the PLCC BCU was mal operating during transition from Faulty DC source to Healthy DC source, the matter was taken up with OEM for resolution. Similar incident occurred on 24-08-2021 at 18:28 Hrs.	Tripping of 1. 400 kV Charanka- APL Mundra 1 2. 400 kV Charanka- Kansari 1&2 3. 400 kV Charanka- Varsana 1
13	GD-1	WR	24-Aug-21 16:29	24-Aug-21 17:25	0:56	75	-	-	-	56745	52818	At 16:29 Hrs/24-08-2021, 220 kV SSP(CHPH)- SSP(RBPH) 1&2 tripped on Y-E fault and Y-B phase fault respectively. SSP CHPH Units 2,3&4 tripped due to the loss of evacuation path. There was a generation loss of 75 MW due to the event.	Tripping of 1.220 kV SSP(CHPH)- SSP(RBPH) 1&2 2. 50 MW SSP CHPH Units 2,3&4
14	GI-2	WR	24-Aug-21 16:49	24-Aug-21 17:11	0:22	478	-	0.84%	-	56745	52706	At 16:49 Hrs/ 24-08-2021, during change over of Vindhyachal Unit 8 from TBC 2 to Main Bay, 400 kV Vindhyachal Bus 4 and all the connected elements tripped on LBB operation of Unit 8 due to abnormality in change over circuit.	Tripping of 1. 400 kV Vindhyachal Bus 4 2. 400 kV Vindhyachal- Satna 2 3. 400 kV Vindhyachal- Jabalpur 2 4. 400 kV Vindhyachal- Korba 5. 500 MW Vindhyachal Unit 8
15	GI-2	WR	26-Aug-21 06:50	26-Aug-21 08:02	1:12	-	-	-	-	60011	54195	At 06:50 Hrs/26-08-2021, during Hand tripping of 125 MVAR Kolhapur(MH) Bus Reactor on voltage regulation, B phase CB pole of 125 MVAR reactor blasted and 400kV Kolhapur(MH) Bus 2 and all connected elements tripped on Busbar protection operation.	Tripping of 1. 400 kV Kolhapur(MH) Bus 2 2. 400 kV Kolhapur(MH)- Kolhapur(PG) 2 3. 400 kV Kolhapur(MH)- Karad 2 4. Kolhapur(MH)- Solapur 5. 400/220 kV Kolhapur(MH) ICTs 1&2 6. 400 kV 125 MVAR Kolhapur(MH) BR
16	GD-1	WR	27-Aug-21 09:10	27-Aug-21 09:25	0:15	-	149	-	0.27%	63021	56190	At 09:10 Hrs/ 27-08-2021, 220 kV Viramgam Bus 2 and all connected elements tripped. As reported by GETCO, the tripping was due to zero potential (No Volt) in B phase (R-phase fuse of 220 kV Bus-2 PT found open). Prior to the event all the elements connected to 220 kV Bus 1 was shifted to 220 kV Bus 2 for attending hot spot in isolator of 220 kV Viramgam- Charal 1. With the tripping of 220 kV Bus 2, 220/66 kV Viramgam substation went dark. There was a load loss of 149 MW.	Tripping of 1.220 kV Viramgam- Vadavi 2. 220 kV Viramgam- Chorania 3. 220 kV Viramgam- Dhanki 4. 220 kV Viramgam- GWIL 5. 220 kV Viramgam- Nano 1&2 6. 220 kV Viramgam- Charal 2 7. 220/66 kV 100 MVA Viramgam ICTs 1,2&3
17	GI-2	WR	28-Aug-21 10:53	28-Aug-21 13:24	2:31	240	-	0.39%	-	61661	56210	At 10:53 Hrs/28-08-2021, 400/33 kV ICT at Gaya Solar tripped due to Winding Temperature Indicator (WTI) alarm . As reported by site, the tripping was due to burnt WTI LV side wiring. Due to this tripping, there was a generation loss of 240 MW.	Tripping of 1. 400/33 kV Gaya Solar ICT
18	GI-1	WR	28-Aug-21 17:50	28-Aug-21 18:35	0:45	-	20.52	-	0.04%	58672	52578	At 17:50 Hrs/ 28-08-2021, 220/22kV Nagothane-ICT-1 tripped due to R-phase CT blast at 22kV side. At the same time 220 kV Nagothane Bus 1 tripped and all the elements connected to it also tripped on Bus bar protection operation. There was a load loss of 20.52 MW due to the event.	Tripping of 1.400/220 kV Nagothane ICTs 1&2 2. 220 kV Nagothane- Vadhkal 3. 220 kV Nagothane- MSL 4. 220 kV Nagothane- POSCO 1 5. 220 kV Nagothane- IPCL 1

Details of Grid Events during the Month of August 2021 in Western Region



Sl No.	Category of Grid Event	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration (HH:MM)	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load w.r.t Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid*		Brief details of the event (pre fault and post fault system conditions)	Elements Tripped
	(GI 1or 2/ GD-1 to GD-5)					Generation Loss(MW)	Load Loss (MW)	% Generation Loss(MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
19	GD-1	WR	29-Aug-21 14:49	29-Aug-21 15:14	0:25	-	135	-	0.26%	54089	52860	At 06:50 Hrs/29-08-2021, 220 kV Satna(MP)- Chhattarpur and 220 kV Satna(PG)- Chhattarpur tripped on B-E fault and Y-B fault respectively. With these tripping, 220 kV Chhattarpur went dark and there was a load loss of 135 MW.	Tripping of 1. 220 kV Satna(PG)- Chhattarpur 2. 220 kV Satna(MP)-Chhattarpur

Details of Grid Events during the Month of August 2021 in Eastern Region



Sl No.	Category of Grid Event	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration (HH:MM)	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load v.r.t Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid		Brief details of the event (pre fault and post fault system conditions)	Elements Tripped
	(GI 1 or 2/ GD-1 to GD-5)					Generation Loss(MW)	Load Loss (MW)	% Generation Loss(MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GD-1	Sonenagar	06-Aug-21 15:28	06-Aug-21 15:37	00:19	0	150	0.00%	0.76%	26110	19720	220 kv Bus I at Sonenagar tripped on mal-operation of bus bar protection. 220 kv Bus II at Sonenagar is not available. 220 kv Chandauti-Sonenagar D/c tripped, leading to load loss of around 150 MW at Sonenagar, Aurangabad and Rafiganj. 220 KV Chandauti-Sonenagr I charged at 15:37 Hrs, 220 kv Chandauti-Sonenagar II charged at 15:55 Hrs	220 kv Bus I at Sonenagar 220 kv Chandauti-Sonenagar D/c
2	GD-1	TTPS	11-Aug-21 13:34	11-Aug-21 13:49	00:15	0	150	0.00%	0.74%	24857	20256	220 kv Bus I at TTPS tripped. 220 kv Bus II & 220 kv TTPS-Meeramundali II was under shutdown. All lines emanating from TTPS tripped. Around 150 MW load loss occurred at Chainpal, Duburi and Angul. Chainpal and Angul load shifted to Meeramundali and Duburi load shifted to old Duburi by 13:49 Hrs. Power supply restored at TTPS at 17:50 Hrs	220 kv Bus I at TTPS 220 kv TTPS-TSTPP 220 kv TTPS-Rengali PH 220 kv TTPS-Joda D/c 220 kv TTPS-Meeramundali I

Details of Grid Events during the Month of August 2021 in Southern Region



Sl No.	Category of Grid Event (GI 1or 2/ GD-1 to GD-5)	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load w.r.t Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid		Brief details of the event (pre fault and post fault system conditions)	Name of Elements (Tripped/Manually opened)
						Generation Loss(MW)	Load Loss (MW)	% Generation Loss(MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GD-1	Karnataka	05-Aug-21 03:55	05-Aug-21 04:33	38mins	0	25	0.00	0.00	38661	39070	Complete Outage of 220kV/110kV/11kV Alipura Receiving Station of KPTCL and Multiple Tripping in 400kV/220kV BTPS of KPCL: As per the report submitted, triggering incident was Y-N fault in 220kV Regulpadu Alipura line. At Regulpadu end, fault was sensed in zone-1, A/R operated and line was holding. At Alipura end, zone-2 protection operated and line got tripped. At the same time, 220kV LBB operated at BTPS end and all the 220kV lines and ICTS connected to bus got tripped. Tripping of both lines connected to Alipura resulted in complete outage of 220kV/110kV/11kV Alipura Receiving station .	1. 220kV Regulpadu Alipura 2. 220kV BTPS Alipura 3. 400kV/220kV BTPS ICT-1 4. 400kV/220kV BTPS ICT-2 5. 220kV BTPS Lingapur line 6. Station transformer-2 at BTPS
2	GD-1	Andhra Pradesh	06-Aug-21 10:42	06-Aug-21 11:06	24mins	1230	0	0.02	0.00	52171	51917	Complete Outage of 400kVSEIP_P2 (Sembcorp Energy India Ltd., Plant-2) : During the antecedent conditions, 400kV SEIL_P2 NPS line-1 was under outage. As per the report submitted, triggering incident was RBN fault in 400kV SEIL_P2 NPS line-2 due to B phase conductor snapping at a distance of 6km from SEIL_P2 end. At SEIL_P2 end line tripped on operation of Zone-1 distance protection and at NPS end, line tripped on operation of Zone-2 carrier aided protection. Due to loss of both the connected lines, there was complete outage of 400kV SEIL_P2 resulting in loss of generation of 1320MW	1. 400kV SEIL_P2 NPS line-2 2. SEIL_P2 Unit 1&2
3	GD-1	Andhra Pradesh and Telangana	08-Aug-21 20:14	08-Aug-21 20:29	15mins	612	257	0.02	0.01	40075	40029	Complete outage of 220kV Talapalli SWS of APTRANSCO, 220kV Chalakurthy SWS, 220kV/132kV KM Pally SS, 220kV/11kV Puttamgandi LIS, 220kV/11kV Puliyatanda LIS of TSTRANSCO, 220kV/132kV N'Sagar MPH and Receiving Station of TSGENCO: During antecedent conditions, since 220kV Chalakurthy SWS to Miryalaguda line was under idle charged condition from 220kV Chalakurthy end, 220kV/132kV KM Pally SS, 220kV/11kV Puttamgandi LIS, 220kV/11kV Puliyatanda LIS were radially fed from 220kV Chalakurthy SWS. 220kV Chalakurthy SWS is fed from 220kV Talapalli SWS and 220kV N'Sagar MPH. Triggering incident was Y-phase fault at Bus-1 and Bus-2 of 220kV Talapalli SWS since Y-ph auxiliary bus conductor of 220kV Talapalli SWS to N'Sagar line-2 which was connected on Bus-2 fell on Bus-1 at 220kV Talapalli SWS. This resulted in the tripping of 220kV Bus-1, 2, 3 and 4 at Talapalli SWS since, Bus Section Isolators between 220kV Bus-2 and 4, 220kV Bus-1 and 3 were in closed condition . All the connected elements at 220kV Talapalli SWS got de-energised resulting in complete loss of supply at 220kV Talapalli SWS. After the tripping of 220kV Talapalli SWS to N'Sagar line-1, 2 and 3, 220kV N'Sagar Srisailam RB got overloaded and tripped on operation of overcurrent protection at N'Sagar end. Due to loss of evacuating lines, subsequently all running units at N'Sagar got tripped. Due to failure of supply at 220kV Talapalli SWS and 220kV N'Sagar MPH, there was complete loss of supply at 220kV Chalakurthy SWS, 220kV/132kV KM Pally SS, 220kV/11kV Puttamgandi LIS, 220kV/11kV Puliyatanda LIS.	1. 220kV-Talapalli -Nagarjungar_TS-1,2&3 2. 400/220 kV N'sagar ICT-1,2&3 3. 220kV Srisailam RB-220kV Nsagar TS-1
4	GD-1	Karnataka	20-Aug-21 15:51	20-Aug-21 16:16	25mins	0	275	0.00	0.01	42407	44453	Tripping of 400/220 kV ICT-1 at Somanahalli, complete outage of 220kV/66kV Horahalli SS, 220kV/66kV Kanakpura SS, 220kV/66kV Tataguni SS and 220kV/66kV Vishabhavathi SS of KPTCL: During antecedent conditions, 220kV Kanakpura TK Halli and 220kV Vishabhavathi NRS lines were under open condition and there was bus split operation at 220kV Somanahalli SS. As per the report submitted, triggering incident was SLG fault in 220kV Somanahalli-Horahalli line and the line got tripped. At the same time, HV side Backup over current protection of 400/220 kV Somanahalli ICT-1 operated and the ICT got tripped. Since 220kV Horahalli SS, 220kV Kanakpura SS, 220kV Tataguni SS and 220kV Vishabhavathi SS were radially fed from 400/220 kV Somanahalli ICT-1, tripping of ICT resulted in complete outage of these stations.	1. 220kV Somanahalli-Horahalli 2. 400/220 kV ICT-1
5	GD-1	Andhra Pradesh	29-Aug-21 17:06	01-Sep-21 08:13	63hrs 7min	0	0	0.00	0.00	36325	33981	Complete Outage of 400kV RYTPP Generating station of APGENCO: Triggering incident was tripping of 400kV Kalikiri RYTPP Line -1 & 2 on over voltage stage-1 protection at RYTPP end and DT was received at Kalikiri end. Since both the lines connected to RYTPP got tripped, this resulted in complete outage of 400kV RYTPP generating station. There was no generation in RYTPP during this event.	1. 400kV Kalikiri RYTPP -1 2. 400kV Kalikiri RYTPP -2
6	GD-1	Karnataka	30-Aug-21 17:08	30-Aug-21 17:35	27min	0	98	0.00	0.00	40557	37699	Complete Outage of 220kV/ 110kV Shimoga SS of KPTCL: As per the report submitted, triggering incident was failure of R-phase CT of 220kV Davangere Shimoga line at Shimoga end resulting in 220kV Bus-1 fault. Bus-1 BBP operated and all the elements connected to Bus-1 got tripped at 220kV Shimoga SS. Since all elements were connected to Bus-1 during antecedent conditions, this resulted in complete outage of 220kV/110kV Shimoga SS.	1. 220kV Shimoga Varahi line-1,2 and 3 2. 220kV Shimoga Kadur 3. 220kV Shimoga KB Cross 4. 220kV Shimoga Hassan line-1 and 2 5. 220kV Shimoga A'halli 6. 220kV Shimoga Chikamangalur 7. 220kV Shimoga Arasikere 8. 220kV Shimoga Sharavathy PH-1, 2, and 3 9. 220kV/110kV Transformer-1,2 and 3 at Shimoga
7	GI-1	Karnataka	11-Aug-21 01:18	11-Aug-21 02:34	1hr 16mins	0	98	0.00	0.00	40794	39959	Tripping of 220kV Bus-2 of 400kV/220kV BTPS of KPCL: Triggering incident was snapping of y-ph conductor of 220kV Alipur BTPS line at Bus-2 bay of BTPS end resulting in bus fault. BBP of bus-2 operated resulting in the tripping of all the connected elements. Since all elements were connected to Bus-2 during antecedent, there was de-energisation of 220kV bus of 400kV/220kV BTPS during this event.	1. 400kV/220kV BTPS ICT-1 2. 400kV/220kV BTPS ICT-2 3. 220kV BTPS Alipura 4. 220kV BTPS Lingapur line 5. Station transformer-2
8	GI-1	Andhra Pradesh	18-Aug-21 11:50	18-Aug-21 12:49	59mins	90	0	0.00	0.00	49021	45589	Tripping of 220kV Bus-2 of 220kV Lower Sileru PH of APGENCO: As per the report submitted, while synchronising Unit-1 to Bus-2, LBB of Unit-1 operated and all the 220kV lines and generating units connected to bus-2 got tripped. This resulted in deenergisation of 220kV Bus-2 at Lower Sileru PH.	1. 220kV Asupaka Lower Sileru 2. 220kV KTPS V Lower Sileru 3. Unit-1& 4 at Lower Sileru PH
9	GI-2	Karnataka	21-Aug-21 18:12	21-Aug-21 20:19	1 hr 7mins	0	0	0.00	0.00	36812	39173	Tripping of 400kV Bus-1 of 400kV/220kV Kaiga Atomic Station of NPCIL: As per the report submitted, triggering incident was failure of HV side R-phase CT of 400kV/220kV ICT-1 at Kaiga . Immediately, 400kV BUS-1 Bus-bar Differential protection operated and all the Main breakers of bus-1 got opened. At the same time, 400kV/220kV ICT-1 got tripped on operation of TEED protection.	1. 400kV/220kV ICT-1 kaiga

Details of Grid Events during the Month of August 2021 in North Eastern Region



Sl No.	Category of Grid Event (GI Ior 2/ GD-1 to GD-5)	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration (HH:MM:SS)	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load w.r.t Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid		Brief details of the event (pre fault and post fault system conditions)	Elements Tripped
						Generation Loss(MW)	Load Loss (MW)	% Generation Loss(MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GD-I	Zuangtui area of Mizoram Power System	02-Aug-21 20:42	02/Aug/21 21:34	0:52:00	0	27	0.0	0.0	2863	2792	Zuangtui area of Mizoram Power System was connected with the rest of NER Grid through 132 kV Melriat - Zuangtui line. 132 kV Serchip - Lunglei (Khawiva) line is kept in opened condition to avoid overloading of 132 kV Aizawl - Luangmual line. At 20:42 Hrs dtd 02.08.2021, 132 kV Melriat - Zuangtui line tripped. Due to tripping of this element, Zuangtui area of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	132 kV Melriat - Zuangtui line
2	GD-I	Zuangtui area of Mizoram Power System	02/Aug/21 21:49	02/Aug/21 22:21	0:32:00	0	14	0.0	0.0	2960	2687	Zuangtui area of Mizoram Power System was connected with the rest of NER Grid through 132 kV Melriat - Zuangtui line. 132 kV Serchip - Lunglei (Khawiva) line is kept in opened condition to avoid overloading of 132 kV Aizawl - Luangmual line. At 21:49 Hrs dtd 02.08.2021, 132 kV Melriat - Zuangtui line tripped. Due to tripping of this element, Zuangtui area of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	132 kV Melriat - Zuangtui line
3	GD-I	Kohima and Wokha areas of Nagaland Power System	02/Aug/21 14:42	02/Aug/21 15:07	0:25:00	0	20	0.0	0.0	2738	2262	Kohima and Wokha areas of Nagaland Power System was connected with the rest of NER Grid through 132 kV Karong-Kohima, 132 kV Wokha-Kohima and 132 kV Sanis-Wokha Lines. 132 kV Dimapur(PG) - Kohima Line was already tripped at 10:48 Hrs on 02.08.21 and 132 kV Kohima - Meluri Line was hand tripped due to tower on verge on collapse. At 14:42 Hrs on 02.08.2021, 132 kV Karong-Kohima , 132 kV Sanis-Wokha & 132 kV Kohima-Wokha Lines tripped. Due to tripping of these elements, Kohima and Wokha areas of Nagaland Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	132 kV Karong-Kohima, 132 kV Wokha-Kohima and 132 kV Sanis-Wokha Lines
4	GD-I	Kahelipara and Kamalpur areas of Assam Power System	02/Aug/21 18:20	02/Aug/21 18:53	0:33:00	0	100	0.0	0.0	2872	2645	Kahelipara and Kamalpur areas of Assam Power System was connected with the rest of NER Grid through 132 kV Sarusajai-Kahelipara I, 132 kV Sarusajai-Kahelipara II, 132 kV Sarusajai-Kahelipara III, 132 kV Kamalpur-Kahelipara, 132 kV Kahelipara-Narangi & 132 kV Kahelipara-Dispur lines. At 18:20 Hrs on 02.08.2021, Bus bar protection operated in 132 kV Kahelipara S/S and 132 kV Sarusajai-Kahelipara I, 132 kV Sarusajai-Kahelipara II, 132 kV Sarusajai-Kahelipara III, 132 kV Kamalpur-Kahelipara, 132 kV Kahelipara-Narangi & 132 kV Kahelipara-Dispur lines tripped. Due to tripping of these elements, Kahelipara and Kamalpur areas of Assam Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	132 kV Sarusajai-Kahelipara I, 132 kV Sarusajai-Kahelipara II, 132 kV Sarusajai-Kahelipara III, 132 kV Kamalpur-Kahelipara, 132 kV Kahelipara-Narangi & 132 kV Kahelipara-Dispur lines
5	GD-I	Kohima and Karong areas of Nagaland and Manipur Power System	03-Aug-21 07:21	03-Aug-21 07:40	0:19:00	0	24	0.0	0.0	2636	2417	Kohima and Karong areas of Nagaland and Manipur Power System was connected with the rest of NER Grid through 132 kV Yurembum-Karong & Karong Kohima line. 132 kV Dimapur-Kohima line was under faulty condition since 10:48 Hrs dtd 02.08.2021, 132 kV Kohima-Meluri line out of service since 12:47 Hrs of 13.07.2021 on the verge of tower collapse and 132 kV Kohima-Wokha line was declared faulty since 14:42 Hrs of 02.08.2021. At 07:21 Hrs dtd 03.08.2021, 132 kV Yurembum - Karong and 132 kV Karong-Kohima line tripped. Due to tripping of these elements, Kohima and Karong areas of Nagaland and Manipur Power System were separated from rest of NER Grid and subsequently collapsed due to no source in these areas.	132 kV Yurembum - Karong line and 132 kV Karong-Kohima line
6	GD-I	Myndtu Leshka HEP of Meghalaya Power System	04-Aug-21 12:34	04-Aug-21 12:45	0:11:00	84	0	0.0	0.0	2075	2385	Myndtu Leshka HEP of Meghalaya Power System was connected to the rest of NER Grid through 132 kV Leshka - Khliehriat D/C lines. At 12:34 Hrs on 04.08.2021, 132 kV Leshka - Khliehriat D/C tripped. Due to tripping of these elements, Myndtu Leshka HEP of Meghalaya Power System consisting of 2 units (Myndtu Leshka - UNIT 1 & Myndtu Leshka - UNIT 2) was separated from the rest of NER Grid and subsequently collapsed due to loss of evacuation path.	132 kV Leshka - Khliehriat D/C, Myndtu Leshka - UNIT 1 & Myndtu Leshka - UNIT 2
7	GD-I	Rangia, Nalbari, Sipajhar, Kamalpur, Sishugram and part of the load of Bornagar Areas of Assam Power System	05/Aug/21 11:36	05/Aug/21 11:43	0:07:00	0	110	0.0	0.0	2430	2670	Rangia, Nalbari, Sipajhar, Kamalpur, Sishugram and part of the load of Bornagar Areas of Assam Power System were connected with the rest of NER Grid through 220 kV BTPS - Rangia 1 Line, 220 kV BTPS - Rangia 2 Line and 132 kV Motonga (Bhutan) - Rangia Line. 132 kV Nalbari-Dhaligaon line was kept under shutdown due to low loading capacity of 132 kV Nalbari-Dhaligaon line. 132 kV Rowta-Rangia Line and 132 kV Sipajhar-Rowta Line were kept under shutdown to avoid overloading of 132 kV Sonabil-Depota Line. At 11:36 Hrs on 05.08.2021, 220 kV BTPS - Rangia 1 Line, 220 kV BTPS - Rangia 2 Line and 132 kV Motonga (Bhutan) - Rangia Line tripped. Due to tripping of these elements, Rangia, Nalbari, Sipajhar, Kamalpur, Sishugram and part of the load of Bornagar Areas of Assam Power System were separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	220 kV BTPS - Rangia 1 Line, 220 kV BTPS - Rangia 2 Line and 132 kV Motonga (Bhutan) - Rangia Line
8	GD-I	Golaghat and Bokajan Areas of Assam Power System	07-Aug-21 13:07	07-Aug-21 13:30	0:23:00	0	26	0.0	0.0	2336	2278	Golaghat and Bokajan Areas of Assam Power System were connected with the rest of NER Grid through 132 kV Mariani (AS) - Golaghat Line. 132 kV Dimapur - Bokajan line was under emergency shutdown w.e.f 10:54 Hrs on 07.08.21. At 13:07 Hrs on 07.08.2021, 132 kV Mariani (AS) - Golaghat Line tripped. Due to tripping of this element, Golaghat and Bokajan Areas of Assam Power System were separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	132 kV Mariani (AS) - Golaghat Line
9	GD-I	Pasighat, Roing, Tezu and Namsai Area of Arunachal Pradesh Power System	09-Aug-21 22:17	09-Aug-21 22:40	0:23:00	0	13	0.0	0.0	3168	2901	Pasighat, Roing, Tezu and Namsai Area of Arunachal Pradesh Power System were connected to the rest of NER Grid through 132 kV Along - Pasighat Line. At 22:17 Hrs on 09.08.2021, 132 kV Along - Pasighat Line tripped. Due to tripping of these elements, Pasighat, Roing, Tezu and Namsai Area of Arunachal Pradesh Power System were separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	132 kV Along - Pasighat Line
10	GD-I	Rokhia, Monarchak, Rabindra Nagar and Udaipur areas of Tripura Power System	10-Aug-21 10:35	10-Aug-21 11:35	1:00:00	103	38	0.0	0.0	2714	2251	Rokhia, Monarchak, Rabindra Nagar and Udaipur Area of Tripura Power System were connected to the rest of NER Grid through 132 kV Rokhia - Agartala II Line. 132 kV Rokhia - Agartala I & 132 kV Palatana-Udaipur line were under planned shutdown. At 10:35 Hrs on 10.08.2021, 132 kV Rokhia - Agartala II Line tripped. Due to tripping of this elements, Rokhia, Monarchak, Rabindra Nagar and Udaipur Area of Tripura Power System were separated from the rest of NER Grid and subsequently collapsed due to load generation mismatch in these areas.	132 kV Rokhia - Agartala II Line

Details of Grid Events during the Month of August 2021 in North Eastern Region



Sl No.	Category of Grid Event (GI Ior 2/ GD-1 to GD-5)	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration (HH:MM:SS)	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load w.r.t Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid		Brief details of the event (pre fault and post fault system conditions)	Elements Tripped
						Generation Loss(MW)	Load Loss (MW)	% Generation Loss(MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
11	GD-I	Dhaligaon, Gossaigaon, Barnagar, BRPL and Jogighopa areas of Assam Power System	10-Aug-21 21:34	10-Aug-21 21:45	0:11:00	0	101	0.0	0.0	3112	2651	Dhaligaon, Gossaigaon, Barnagar, BRPL and Jogighopa areas of Assam Power System were connected to the rest of NER Grid through 132 kV BTPS - Dhaligaon D/C. 132 kV Gossaigaon - Gouripur line was kept opened to control overloading of 132 kV BTPS - Kokrajhar line. 132 kV Dhaligaon - Nalbari line was kept opened by Assam SLDC due to low loading capability of the line. 132 kV Barnagar Bus was segregated and loads fed radially via 132 kV Dhaligaon - Barnagar line and 132 kV Rangia - Barnagar line. At 21:34 Hrs on 10.08.2021, 132 kV BTPS - Dhaligaon D/C tripped. Due to tripping of these elements, Dhaligaon, Gossaigaon, Barnagar, BRPL and Jogighopa areas of Assam Power System were separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	132 kV BTPS-Dhaligaon D/C lines
12	GD-I	Along,Pasighat,Roing,Tezu & Namsai Areas of Arunachal Power System	14-Aug-21 16:54	14-Aug-21 17:10	0:16:00	0	16	0.0	0.0	2219	2454	Along,Pasighat,Roing,Tezu & Namsai Areas of Arunachal Power System was connected with the rest of NER Grid through 132 kV Daporijo-Along line. At 16:54 Hrs on 14.08.2021, 132 kV Daporijo-Along line tripped. Due to tripping of this element, Along and the radially connected Pasighat, Roing, Tezu & Namsai areas of Arunachal Power System were separated from the rest of NER Grid and subsequently collapsed due to no source available in these areas.	132 kV Daporijo - Along line
13	GD-I	Yiangangpokpi area of Manipur Power System	15-Aug-21 06:45	15-Aug-21 06:50	0:05:00	0	38	0.0	0.0	1958	2482	Yiangangpokpi area of Manipur Power System was connected with the rest of NER Grid through 132 kV Imphal(MN) - Yiangangpokpi D/C lines. At 06:45 Hrs on 15.08.2021, Imphal(MSPCL) - Yiangangpokpi D/C lines tripped . Due to tripping of these elements,Yiangangpokpi area of Manipur Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	132 kV Imphal(MSPCL) - Yiangangpokpi D/C lines
14	GD-I	Udaipur area of Tripura Power System	18-Aug-21 13:00	18-Aug-21 13:28	0:28:00	0	12	0.0	0.0	2112	2204	Udaipur area of Tripura Power System was connected with the rest of NER Grid through 132 kV Palatana-Udaipur Line & 132 kV Monarchak - Udaipur Line. At 13:00 Hrs on 18.08.2021,132 kV Palatana-Udaipur Line & 132 kV Monarchak - Udaipur Line tripped. Due to tripping of these elements, Udaipur area of Tripura Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	132 kV Palatana-Udaipur Line & 132 kV Monarchak - Udaipur Line.
15	GD-I	Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP	19-Aug-21 18:07	19-Aug-21 18:34	0:27:00	0	24	0.0	0.0	2315	2831	Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP was connected with the rest of NER Grid through 132 kV Balipara-Tenga Line. At 18:07 Hrs on 19.08.2021,132 kV Balipara-Tenga Line tripped. Due to tripping of these elements, Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP were separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	132 kV Balipara - Tenga line
16	GD-I	Tinsukia area of Assam Power System	20-Aug-21 21:12	20-Aug-21 21:30	0:18:00	0	146	0.0	0.1	2832	2732	Tinsukia area of Assam Power System was connected with the rest of NER Grid through 220 kV AGBPP-Tinsukhia DC, 220 kV NTPS-Tinsukhia line I, 132 kV Lakwa-Moran line & 132 kV NTPS- Bordubi Line. 220 kV NTPS-Tinsukhia II line were under forced outage since 14:55 Hrs dated 20.08.2021. At 21:12 Hrs on 20.08.2021,220 kV AGBPP-Tinsukhia DC, 220 kV NTPS-Tinsukhia line I ,132 kV Lakwa-Moran line & 132 kV NTPS- Bordubi Line tripped. Due to tripping of these elements, Tinsukia area of Assam Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	220 kV AGBPP-Tinsukhia DC, 220 kV NTPS-Tinsukhia line ,132 kV Lakwa-Moran line & 132 kV NTPS- Bordubi Line
17	GD-I	Myndtu Leshka HEP of Meghalaya Power System	22-Aug-21 09:32	22-Aug-21 09:49	0:17:00	125	0	0.1	0.0	1949	2179	Myndtu Leshka HEP of Meghalaya Power System was connected to the rest of NER Grid through 132 kV Leshka - Khliehriat D/C lines. At 09:32 Hrs on 22.08.2021,132 kV Leshka - Khliehriat D/C tripped. Due to tripping of these elements,Myndtu Leshka HEP of Meghalaya Power System was separated from the rest of NER Grid and subsequently collapsed due to loss of evacuation path.	132 kV Leshka - Khliehriat D/C, Myndtu Leshka UNIT 1, 2 & 3
18	GD-I	Along,Pasighat,Roing,Tezu & Namsai Areas of Arunachal Power System	29-Aug-21 02:39	30-Aug-21 23:05	20:26:00	0	14	0.0	0.0	2658	2196	Along,Pasighat,Roing,Tezu & Namsai Areas of Arunachal Power System was connected with the rest of NER Grid through 132 kV Daporijo-Along line. At 02:39 Hrs on 29.08.2021, 132 kV Daporijo-Along line tripped. Due to tripping of this element, Along and the radially connected Pasighat, Roing, Tezu & Namsai areas of Arunachal Power System were separated from the rest of NER Grid and subsequently collapsed due to no source available in these areas.	132 kV Daporijo - Along line
19	GD-I	Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP	29-Aug-21 20:33	29-Aug-21 20:49	0:16:00	0	23	0.0	0.0	2758	2845	Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP was connected with the rest of NER Grid through 132 kV Balipara-Tenga Line. At 20:33 Hrs on 29.08.2021,132 kV Balipara-Tenga Line tripped. Due to tripping of this elements, Tenga and Khupi areas of Arunachal Pradesh Power System and Dikshi HEP were separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	132 kV Balipara - Tenga line
20	GI-II	Arunachal Pradesh	11-Aug-21 02:01	11-Aug-21 03:30	1:29:00	150	0	0.1	0.0	2165	2472	Kameng unit 2 tripped at 02:01 hours on 11-08-21 due to master trip relay malfunction. Revision done from Block No. 15 on 11-08-21.	Kameng Unit 2
21	GI-II	Assam	20-Aug-21 14:53	20-Aug-21 16:12	1:19:00	23	0	0.0	0.0	1837	2312	AGBPP unit 8 tripped at 14:53 hours on 20-08-21 due to voltage oscillation. Revision done from Block No. 67 on 20-08-21.	AGBPP unit 8
22	GI-II	Tripura	24-Aug-21 15:53	24-Aug-21 17:30	1:37:00	312	0	0.1	0.0	2163	2404	Palatana GTG 1 & STG 1 tripped at 15:53 hours on 24-08-21 due to tripping of lube oil pump of GTG-I. Revision done from Block No. 71 on 24-08-21.	Palatana GTG 1 & Palatana STG 1
23	GI-II	Tripura	24-Aug-21 22:17	25-Aug-21 00:00	1:43:00	83	0	0.0	0.0	2247	2762	Palatana STG 1 tripped at 22:17 hours on 24-08-21 due to Cashing Temperature Difference. Revision done from Block No. 1 on 25-08-21.	Palatana STG 1