

### Northern Region-Grid Event Report for July 2019

S.No.	Region	Name of Elements (Tripped/Manually opened)	Affected Area	Owner/ Agency	Outage		Revival		Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
					Date	Time	Date	Time					
1	NR	1) 220kV Bareilly(UP)-Pithoragarh(PG) 2) 220kV Bareilly(UP)-Dhauliganga(NHPC) 3) 70MW Unit#2 at 220kV Dhauliganga(NHPC) 4) 70MW Unit#4 at 220kV Dhauliganga(NHPC)	Uttar Pradesh	UP, NHPC & POWERGRID	2-Jul-19	13:19	2-Jul-19	14:19	01:00	220kV Bareilly(UP)-Pithoragarh(PG) & 220kV Bareilly(UP)-Dhauliganga(NHPC) tripped on B-N fault. SPS operated at 220kV Dhauliganga resulting in tripping unit#2 & #4 and generation reduced to 10MW each in remaining two units. As per PMU, B-N fault followed by Y-N fault is observed. In antecedent conditions, 220kV Bareilly(UP)-Pithoragarh(PG) & 220kV Bareilly(UP)-Dhauliganga(NHPC) carrying 115MW & 127MW respectively. After tripping of abovementioned 220kV lines & SPS operation at 220kV Dhauliganga(NHPC); island created and survived with two running units of 220kV Dhauliganga(NHPC) and 25-30MW radial load of Pithoragarh.	260	Nil	GD-1
2	NR	1) 400KV Bus I & II at 400/220kV Jodhpur(Raj) 2) 315MVA ICT-1 & II at 400/220kV Jodhpur(Raj) 3) 400KV Jodhpur(Raj)-Kankani(Raj) ckt-1 & II 4) 400KV Jodhpur(Raj)-Kankoli(Raj) 5) 400KV Jodhpur(Raj)-Bhadla(Raj) 6) 400KV Jodhpur(Raj)-Akal(Raj) 7) 400KV Jodhpur(Raj)-Rajwest(Raj)	Rajasthan	Rajasthan	3-Jul-19	16:13	3-Jul-19	19:40	03:27	Due to heavy storm and rain Bus Post Insulator of Bus-I broken and fall down on other live conductor. Bus bar protection of 400 kV Bus-I & II at 400/220kV Jodhpur(Raj) operated and all 400 kV lines and ICT tripped. As per PMU, Voltage dip in all three phases is observed. In antecedent conditions, 315MVA ICT-1 & II carrying 129MW & 125MW respectively.	Nil	Nil	GI-2
3	NR	1) 400KV Akal(Raj)-Kankani(Raj) ckt-I 2) 400KV Akal(Raj)-Ramgarh(Raj) ckt-II 3) 315MVA ICT-II & III at 400/220kV Akal(Raj) 4) 220KV Akal(Raj)-Bhu(Raj) ckt-II 5) 220KV Akal(Raj)-Dangri(Raj) ckt-I 6) 220KV Bus Coupler at 400/220kV Akal(Raj) 7) 400KV Akal(Raj)-Kankani(Raj) ckt-2 { Tripping at 0459Hrs} 8) 400KV Akal(Raj)-Jodhpur(Raj) { Tripping at 0459Hrs} 9) 400KV Akal(Raj)-Barmer(Raj) { Tripping at 0459Hrs}	Rajasthan	Rajasthan	5-Jul-19	3:56	5-Jul-19	06:11	02:15	220kV Bus-I Jumper of C Phase of 220kV Akal-Bhu Line-I snapped & grounded and tripping occurs in 220 kV system. At the Same time, over voltage occurs in 400kV system and after one minute 400 kV Akal-Kankani ckt-I & Akal-Ramgarh ckt-II tripped. At 0459Hrs, 400kV Akal(Raj)-Kankani(Raj) ckt-2, 400kV Akal(Raj)-Jodhpur(Raj) & 400kV Akal(Raj)-Barmer(Raj) also tripped. As per PMU, B-N fault (0356Hrs) & R-Y fault (0459Hrs) is observed. In antecedent conditions, 315MVA ICT-II & III carrying 206MW & 209MW respectively.	1500	Nil	GD-1
4	NR	1) 800KV HVDC Champa(PG)-Kurukshehra(PG) pole-1 2) 800KV HVDC Champa(PG)-Kurukshehra(PG) pole-2	Haryana	POWERGRID	5-Jul-19	17:20	5-Jul-19	17:49	00:29	800KV HVDC Champa(PG)-Kurukshehra(PG) pole-I & pole-II tripped due to false operation of DMR Protection. As per PMU, Fluctuations are observed in phase voltages. In antecedent conditions, 800KV HVDC Champa(PG)-Kurukshehra(PG) bipole carrying 2300MW.	Nil	Nil	GI-2
5	NR	1) 220kV Tanakpur(NHPC)-Sitarganj(PG) 2) 220kV Cbganj(UP)-Tanakpur(NHPC) 3) 40MW Unit#1, #2 & #3 at 220kV Tanakpur(NHPC) 4) 132kV Tanakpur(NHPC)-Mahendernagar	Uttarakhand	NHPC, POWERGRID & UP	6-Jul-19	9:18	6-Jul-19	10:30	01:12	20kV Tanakpur(NHPC)-Sitarganj(PG) & 220kV Cbganj(UP)-Tanakpur(NHPC) tripped on overvoltage. At the same time, 40MW Unit#1, #2 & #3 at 220kV Tanakpur(NHPC) & 132kV Tanakpur(NHPC)-Mahendernagar also tripped. As per PMU, No fault is observed in the system. In antecedent conditions, 220kV Tanakpur(NHPC)-Sitarganj(PG) & 220kV Cbganj(UP)-Tanakpur(NHPC) carrying 68MW & 9MW respectively.	72	Nil	GD-1
6	NR	1) 400kV Bikaner(Raj)-Suratgarh(Raj) 2) 400kV Bikaner(Raj)-Suratgarh SC(Raj) ckt-1 3) 400kV Bikaner(Raj)-Suratgarh SC(Raj) ckt-2 4) 400kV Bikaner(Raj)-Didwana(Raj)	Rajasthan	Rajasthan	7-Jul-19	13:42	7-Jul-19	16:22	02:40	Fault occurred on 400kV Bikaner(Raj)-Suratgarh SC(Raj) ckt-2, 400kV Bikaner(Raj)-Didwana(Raj) tripped as charged through Tie CB of SCTPS-II at Bikaner end. 400kV Bikaner(Raj)-Suratgarh SC(Raj) ckt-1 tripped on DT Received at Bikaner end as it was charged through Tie CB of SCTPS-II at SCTPS end. 400kV Bikaner(Raj)-Suratgarh(Raj) tripped at Bikaner end on LBB trip relay optd and 86A. As per PMU, R-N fault followed by R-Y fault is observed in the system. In antecedent conditions, 400kV Bikaner(Raj)-Suratgarh SC(Raj) ckt-1 & 2, 400kV Bikaner(Raj)-Suratgarh(Raj) & 400kV Bikaner(Raj)-Didwana(Raj) carrying 111MW, 109MW, 108MW & 80MW respectively.	Nil	Nil	GI-2
7	NR	1) 400kV Bareilly(UP)-Unnao(UP) ckt-1 2) 400kV Bareilly(UP)-Unnao(UP) ckt-2	Uttar Pradesh	UP	8-Jul-19	14:06	9-Jul-19	12:09	22:03	400kV Bareilly(UP)-Unnao(UP) ckt-1 tripped on Y-N fault, 258.7km from Unnao end. At the same time, 400kV Bareilly(UP)-Unnao(UP) ckt-2 tripped due to Y-B-N fault, 263km from Unnao end. As per PMU, multiple faults are observed in the system. In antecedent conditions, 400kV Bareilly(UP)-Unnao(UP) ckt-1 & 2 carrying 245MW & 243MW respectively.	Nil	Nil	GI-2
8	NR	1) 220kV Panipat(Th)- Panipat(BBMB) ckt-1,2,3&4 2) 220kV Panipat(Th)-Sonapat ckt-1 3) 220kV Panipat(BBMB)-Chazpur ckt-2 4) 450MVA ICT 1& 2 at Panipat(BBMB) 5) 400kV Panipat(BBMB)-Dadri ckt-1(tripped from Panipat end)	Haryana	BBMB & Haryana	8-Jul-19	14:21	8-Jul-19	15:04	00:43	100MVA transformer CT busted at 220/132kV Panipat(TH) and caused tripping of multiple elements at 220kV panipat(TH) and Panipat(BBMB). It seems, none of the protection operated at Panipat(TH) except bus-coupler O.C, the fault cleared after tripping of ICT 1& 2 at 400/220kV Panipat(BBMB) by directional earth fault. As per PMU, B-N fault followed by R-N fault is observed. In antecedent conditions, 450MVA ICT 1& 2 at Panipat(BBMB) carrying 280MW each.	Nil	300	GD-1
9	NR	1) 500 MVA ICT 1 at 400/220kV Moradabad(UP) 2) 500 MVA ICT 2 at 400/220kV Moradabad(UP) 3) 240 MVA ICT 3 at 400/220kV Moradabad(UP)	Uttar Pradesh	UP	9-Jul-19	2:51	9-Jul-19	04:20	01:29	500 MVA ICT 1, 500 MVA ICT 2 & 240 MVA ICT 3 at 400/220kV Moradabad(UP) tripped due to mal operation of Bus bar protection relay. As per PMU, No fault is observed in the system. In antecedent conditions, 500 MVA ICT 1, 500 MVA ICT 2 & 240 MVA ICT 3 at 400/220kV Moradabad(UP) carrying 207MW, 211MW & 96MW respectively.	Nil	Nil	GI-2
10	NR	1) 400kV Balia(PG)-Mau(UP) ckt-1 2) 400kV Balia(PG)-Mau(UP) ckt-2 3) 400kV Azamgarh(UP)-Mau(UP)	Uttar Pradesh	UP & POWERGRID	10-Jul-19	9:48	10-Jul-19	11:38	01:50	400kV Balia(PG)-Mau(UP) ckt-1 & 2 tripped on B-N fault. At the same time, 400kV Azamgarh(UP)-Mau(UP) also tripped on B-N fault. As per PMU, B-N fault is observed in the system. In antecedent conditions, 400kV Balia(PG)-Mau(UP) ckt-1, 2 & 400kV Azamgarh(UP)-Mau(UP) carrying 55MW, 61MW & 19MW respectively.	Nil	Nil	GI-2
11	NR	1) 500kV Vindhyachal HVDC BtB Block 1 2) 500kV Vindhyachal HVDC BtB Block 2	Uttar Pradesh	Powergrid	21-Jul-19	12:43	21-Jul-19	14:36	01:53	500kV Vindhyachal HVDC BtB Block 2 tripped due to tripping of 400kV VSTPS HVDC FEEDER#2 from VSTPS end. At the same time, 500kV Vindhyachal HVDC BtB Block 1 also tripped on DC Overcurrent protection. As per PMU, Fluctuations observed in the phase voltages. In antecedent conditions, 500kV Vindhyachal HVDC BtB Block 1 & 2 carrying 250MW each.	Nil	Nil	GI-2
12	NR	1) 220kV Delina(JK)-Kishanganga(NHPC) ckt-1 2) 220kV Delina(JK)-Kishanganga(NHPC) ckt-2 3) 220kV Delina(JK)-Amargarh(NRSS29) 4) 220kV Delina(JK)-Ziankote(JK) 5) 110MW Unit#2 at 220kV Kishanganga(NHPC)	Jammu & Kashmir	NHPC, J&K & POWERGRID	23-Jul-19	12:26	23-Jul-19	13:06	00:40	220kV Delina(JK)-Amargarh(NRSS29) tripped on B-N fault from Delina(JK) end. Unit#2 at 220kV Kishanganga(NHPC) tripped due to loss of evacuation path. As per PMU, B-N fault is observed in the system. In antecedent conditions, 220kV Delina(JK)-Kishanganga(NHPC) ckt-1 & 2 carrying 50MW each.	100	80	GD-1
13	NR	1) 500 MVA ICT 1 at 400/220kV Moga(PG) 2) 315 MVA ICT 4 at 400/220kV Moga(PG) 3) 220kV Moga(PG)-Moga(PSTCL) ckt-2 4) 220kV Moga(PG)-Ajitwal(PSTCL)	Punjab	POWERGRID & Punjab	23-Jul-19	19:36	23-Jul-19	20:33	00:57	500 MVA ICT 1 & 315 MVA ICT 4 at 400/220kV Moga(PG) tripped due to 96A relay having fault & got short circuit. At the same time, 220kV Moga(PG)-Moga(PSTCL) ckt-2 & 220kV Moga(PG)-Ajitwal(PSTCL) also tripped. As per PMU, No fault is observed in the system. In antecedent conditions, 500 MVA ICT 1 & 315 MVA ICT 4 carrying 260MW & 170MW respectively.	Nil	Nil	GI-2
14	NR	1) 315 MVA ICT 1 at 400/220 kV Bawana(DTL) 2) 315 MVA ICT 4 at 400/220 kV Bawana(DTL) 3) 315 MVA ICT 5 at 400/220 kV Bawana(DTL) 4) 220kV Bawana(DTL)-Rohini(DTL) ckt-1 5) 220kV Bawana(DTL)-Rohini(DTL) ckt-2 6) 220kV Bawana(DTL)-Shalimar bagh(DTL) ckt-1 7) 220kV Bawana(DTL)-Shalimar bagh(DTL) ckt-2	Delhi	Delhi	25-Jul-19	10:58	25-Jul-19	11:48	00:50	315 MVA ICT 1, 4 & 5 at 400/220 kV Bawana(DTL) connected with 220kV Bus 1 and feeding the load of 220kV Rohini(DTL) & 220kV Shalimar bagh(DTL). 315 MVA ICT 2, 3 & 6 at 400/220 kV Bawana(DTL) connected with Bus 2. 220kV Bawana(DTL)-Shalimar bagh(DTL) ckt-2 tripped on R-N fault. 315 MVA ICT 1, 4 & 5 tripped on operation of back up directional Earth fault protection. 220kV Bawana(DTL)-Rohini(DTL) ckt-1 & 2 were out due to loss of supply from Bawana. As per PMU, Y-N fault followed by R-N fault with delayed clearance is observed. In antecedent conditions, 315 MVA ICT 1, 4 & 5 at 400/220 kV Bawana(DTL) carrying 156MW, 158MW & 122MW respectively.	Nil	470	GD-1

S.No.	Region	Name of Elements (Tripped/Manually opened)	Affected Area	Owner/ Agency	Outage		Revival		Duration	Event (As reported)	Generation Loss(MW)	Load Loss(MW)	Category as per CEA Grid Standards
					Date	Time	Date	Time					
15	NR	1) 220kV BUS-1 at 400/220kV Wagoora(PG) 2) 220kV Wagoora(PG)-Pampore(JK) ckt-I & II 3) 220kV Wagoora(PG)-Zainkote(JK) ckt-I & II 4) 315MVA ICT-I, II, III & IV at 400/220kV Wagoora(PG) 5) 220kV Amargarh(NRSS29)-Zainkote(JK) 6) 220kV Zainkote(JK)-Delina(JK) 7) Unit-IV of 400kV URI-I(NHPC) & Unit-I,II, & III of 400kV URI-I(NHPC) 8) Unit-I,II,III&IV of 220kV Kishenganga(NHPC) 9) SVC (-200/+300 MVAR) at New Wanpoh(PG) 10) 400kV Amargarh(NRSS29)-URI-I(NHPC) ckt-2 11) 220kV Rampur(JK)-Mirbazar(JK) & 220kV Kishnepur(PG)-Mirbazar(JK)	Jammu & Kashmir	POWERGRID, J&K, NRSS29 & NHPC	26-Jul-19	17:43	26-Jul-19	18:35	00:52	First time anti-theft charging of 220kV Wagoora -Kishenganga line from Wagoora end was carried out. In antecedent conditions, 315MVA ICT-I, II, III & IV at 400/220kV Wagoora(PG) carrying 95MW, 96MW, 96MW & 89MW respectively. Isolator dropper of 220kV BUS -1 at Wagoora was snapped during shifting of isolators from 220kV BUS-1 to 220kV BUS-2 of Wagoora-kishanganga line. The fault is continuously feeded at wagoora so that all ICT, 220kV Bus-I and all 220 KV line are tripped.  As the 220kV Zainkote-Delina & Kishanganga-Delina lines tripped due to fault at wagoora end, 280 MW generation loss at Kishanganga occurred due to loss of power evacuation path. Generation of 160 MW at URI-I & URI-II was out due to over fluxing. As per PMU, Y-N followed by R-N followed by B-N fault with delayed clearance is observed.	525	1000	GD-1

### Western Region-Event Grid Report for July 2019

S.No	Region	Name of Elements	Owner/Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards
				Date	Time	Date	Time	Time				
1	WR	Tripping of 1.800 kV HVDC Champa-Kurukshetra Pole 1 2.800 kV HVDC Champa-Kurukshetra Pole 2	PGCIL	05-07-2019	17:20	05-07-2019	17:49	00:29	800 kV HVDC Champa-Kurukshetra Pole 1&2 tripped on Metallic Return Line Differential(MRLD) protection and Earth overcurrent protection respectively due to Direct Metallic Return(DMR) line 1 shortcircuit fault	Nil	Nil	GI-2
2	WR	Tripping of 1.220 kV Kalwa-Apta 2.220 kV Kalwa-AKP 3.220 kV Klawar-Colorchem 4.220 kV Apta-Taloja	MSETCL	10-07-2019	09:04	10-07-2019	09:20	00:16	220 kV Padghe Bus 2 and 220 kV Padghe-Temghar 1&2 were under outage prior to the event. 220 kV Kalwa-Kalwa interconnector 1&2 were in open condition to reduce the fault level. 220 kV Apta-Taloja and 220 kV Kalwa-Apta tripped due to conductor snapping and resulted in overloading and tripping of 220 kV Kalwa-Colorchem and 220 kV Kalwa-AKP. 220 kV Kalwa 1, colorchem, Themghar and Taloja got blackout due to the event.	Nil	610	GD-1
3	WR	Tripping of 1.400/21.75 kV 600 MVA Deepnagar GT-5 2.400/21.75 kV 600 MVA Deepnagar GT-4 3.400/11/6.6 kV Deepnagar ST 4 4.500MW Deepnagar Unit 4&5 5.400 kV Deepnagar Bus1	MSEGCL	12-07-2019	10:19	12-07-2019	12:04	01:45	At 400/220 kV Deepnagar station, LBB of ST 4 & GT 5 operated which resulted in tripping of 400 kV Deepnagar Bus 1	350	Nil	GI-2
4	WR	Tripping of 1.220/132 kV 160 MVA Bemetara ICT 1 2.220/132 kV 160 MVA Bemetara ICT 2 3.220/132 kV 160 MVA Gendpur ICT 2	CSPTCL	13-07-2019	22:20	13-07-2019	22:34	00:14	220/132 kV 160 MVA Bemetara ICTs 1&2 and 220/132 kV 160 MVA Gendpur ICT 2 tripped on overload and led ton the blackout of 220 kV Gendpur s/s and 132 kV Kawardha, Pandariya and Saja s/s	Nil	346	GD-1
5	WR	Tripping of 1.400 kV Amreli-Hadala 2.400 kV Amreli-Chorania 3.400 kV Amreli-Jetpur 2 4.400/220 kV 315 MVA Amreli ICTs 1&4 5. 400 kV Kasor 1 LR charged as BR at Amreli 6.400 kV 50 MVAR Amreli Bus reactor	GETCO	16-07-2019	11:14	16-07-2019	11:46	00:32	R-B phase fault occurred on 400 kV Amreli-Hadala line and the fault was not cleared by Amreli end CB which led to LBB protection operation and tripping of all the elements connected to 400 kV Amreli Bus 2	Nil	Nil	GI-2
6	WR	Tripping of 1.220 kV Kalwa-Taloja 2.100 kV Pal-Mumbra	MSETCL	19-07-2019	19:28	19-07-2019	19:37	00:09	220 kV Taloja-Apta and 220 kV Jambhul-Anandnagar were under outage prior to the event. 220 kV ICTs at Pal s/s were handtripped from 100 kV side to shift the load of 100 kV Dombivalli s/s to 100 kV Pal-Mumbra and 100 kV Pal-Taloja. At 19:28 Hrs, 220 kV Kalwa-Taloja tripped due to the snapping of B phase conductor and no source was available at Taloja s/s. 100 kV Pal-Mumbra tripped on overload and led to the total failure of supply at 220kV Taloja, 100 kV Dombivalli, Taloja, DFPCL, FGIL, BOC, Hindalco and Mumbra s/s.	Nil	144	GD-1
7	WR	Tripping of 1.220 kV Kukma-Panandhro 1 2.220 kV Kukma-Panandhro 2 3.220 kV Akrimota Bus 1 4.220 kV Akrimota-Nakharatna 1 5. KLTPS Unit 1&4	GSECL	21-07-2019	15:50	21-07-2019	18:45	02:55	At 220kV Akrimota, Bus 2 and Akrimota-Nakhrana 2 were under shutdown. 220kV Bus 1 and Akrimota - Nakhrana ckt 1 tripped due to heavy chattering in PI of Bus. Since, both the buses tripped, ALTPS units 1 & 2 and 220kV ALTPS-KLTPS ckt 1&2 tripped and ALTPS station became dead. At the same time 220kV KLTPS - Kukma ckt 1&2 tripped on reflection fault. As 220kV KLTPS-Nakhrana ckt 1&2 were under outage due to tower collapse, units 1&4 at KLTPS tripped on loss of evacuation.	217	Nil	GD-1
8	WR	Tripping of 1.220 kV Khargar Bus 1 2.400/220 kV Khargar ICTs 1&3 3.220 kV Khargar-Nerul 4.220 kV Khargar-Uran 1 5.220 kV Khargar-Panvel 6.220 kV Khargar-Borivalli 7.220/33 kV Khargar ICTs 1&3	MSETCL	25-07-2019	03:48	25-07-2019	04:45	00:57	At 400/220 kV Khargar s/s, 220 kV Bus 1 and all connected elements tripped due to the B phase bus CVT blast on Bus bar protection operation.	Nil	33	GI-1

S.No	Region	Name of Elements	Owner/Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards
				Date	Time	Date	Time	Time				
9	WR	Tripping of 1.220 kV Ponda Bus 2 2.220 kV Ponda-Xeldem 1&2 3.220 kV Mahalakshmi-Amona 4.220/110 kV Ponda ICTs 2&3 5.220 kV Amona-Ponda 1&2	Goa	29-07-2019	17:38	29-07-2019	18:05	00:27	At 220kV Ponda, Bus 2 bus fault occurred due to the decapping of bus insulator and resulted in tripping of all the elements connected to it.220 kV Mahalakshmi-Amona also tripped during the event.Tripping of 220 kV Ponda-Xeldem 1&2, led to black out at 220kV Xeldem S/S.	Nil	200	GD-1
10	WR	Tripping of 1.220 kV Boisar-Boisar(PG) 1,2&3 2.220 kV Boisar-Nallasopara 3.220 kV Boisar-TAPS 4.220 kV TAPS-Borivalli	MSETCL	29-07-2019	17:48	29-07-2019	18:45	00:57	Due to the snapping of earthwire of multicircuit tower, 220 kV Boisar-Boisar(PG) T/C and 220 kV Boisar-Nallasopara tripped. 220 kV Boisar-TAPS also tripped at the same time on Directional earth fault and 220 kV TAPS-Borivalli tripped later on overcurrent protection operation.	Nil	Nil	GI-1
11	WR	Tripping of 1.400 kV Boisar-Padghe 1 2.400 kV Tarapur-Padghe 2 3.400 kV Nagothane-Padghe 1 4. ±500 kV HVDC Chandrapur-Padghe Pole 2 5.400/220 kV 315 MVA ICT2 6.400/220 kV 500 MVA ICT 3 7.400 kV Bableshtar-Padghe 1	MSETCL	31-07-2019	12:54	31-07-2019	14:59	02:05	At 400/220 kV Padghe s/s, R phase CVT of 400 kV Bus 1 blasted and resulted in tripping of all the elements connected to 400 kV Bus 1.	Nil	Nil	GI-2

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

## Southern Region-Grid Event Report for July 2019

Sl. No.	Region	Name of Elements (Tripped/Manually opened)	Owner / Agency	Outage		Revival		Outage Duration	Event (As reported)	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards
				Date	Time (Hrs)	Date	Time (Hrs)	Time				
1	SR	1. 220kV Palakkad – Palakkad PG line-1, 2 and 3 2. 220kV Palakkad – Madakathara line 3. 220kV/ 110kV 160MVA Transformers- 1, 2 and 3	KSEB	4-Jun-19	14:02	4-Jun-19	14:10	8 mins	Complete outage of 220kV Palakkad SS of KSEB: During antecedent conditions, all elements were connected to Bus-2 and Bus coupler was in open condition. During testing of Bus Coupler CT, due to secondary current injection without isolation of trip inputs to LBB, LBB trip got initiated and Bus-2 Bus Bar Protection (BBP) operated. This resulted in the tripping all the connected elements at 220kV Palakkad Bus-2. Due to this, there was complete loss of supply at 220kV/110kV Palakkad SS.	----	268	GD-1
2	SR	1. 400kV NLC1EXP- NLC St-2 . 2. 400kV NLC1EXP- Nagapattinam 3. NLC1EXP U#1	NLC	5-Jun-19	18:51	5-Jun-19	20:13	1 hr 22 mins	Complete outage of 400kV NLC1 Expansion(NLC1EXP): Triggering incident was failure of Y-phase CT of GT-1 (Generator Transformer) at 400kV NLC1EXP. Bus-1 Bus bar protection operated resulting in the tripping of NLC1EXP U#1 and 400kV NLC1EXP- Nagapattinam line. At the same time, 400kV NLC1EXP- NLC St-2 also got tripped at NLC TS-2 end due operation of Main 2 micromho relay and remote signal was sent to NLC1EXP end. This resulted in complete outage of 400kV NLC1 Expansion station.	190	----	GD-1
3	SR	1. 220kV Sedam RTPS line-1 and 2 . 2. 220kV Sedam Humnabad line-1 and 2 3. 220kV Sedam Tandur 4. 220kV/ 132kV Transformers- 1, 2	KPTCL	14-Jun-19	01:59	14-Jun-19	02:57	58 mins	Complete outage of 220kV Sedam SS of KPTCL: Triggering incident was R phase to Earth fault in 220kV Sedam RTPS line-2. A/r is not in service. At RTPS end, line got tripped on Zone-1 distance protection and at Sedam end, fault was sensed in Zone-1 but breaker didn't open due to mechanical problem. Due to absence of LBB protection at 220kV Sedam SS, fault was cleared by tripping of remote end feeders. This resulted in complete loss of supply at 220kV Sedam SS	63	----	GD-1
4	SR	1. HVDC Talcher-Kolar Pole-1 2. HVDC Talcher - Kolar Pole-2	PGCIL	5-Jun-19		5-Jun-19	22:08	3 hrs 15 mins	Tripping of HVDC Talcher-Kolar bipole:HVDC Talcher-Kolar Pole-1 tripped on receipt of ESOF (Emergency Switch On to Fault) signal at Kolar from Talcher end. As reported, the 400kV converter transformer isolator (B-ph) had opened under load at Talcher end and ESOF signal sent to Kolar. Pole-2 went to metallic return mode with a power flow of 900MW at Kolar end. Subsequently at 19:02 Hrs, HVDC Talcher-Kolar Pole -2 also tripped due to operation of undervoltage protection at Kolar end.	----	700 MW Load Relief due to SPS operation.	GI-2
5	SR	1. 400kV Guttur - Dhoni-1 2. 400kV Guttur - Hiriyur 1&2 3. 400kV Guttur - JSW 4. 400kV Guttur - Kaiga-1 5. 400/220kV ICT-1 & 2 at Guttur	KPTCL	11-Jun-19	17:24	11-Jun-19	18:01	37 mins	Multiple trippings at 400/220kV Guttur station: As reported, during ground fault testing in bus bar panel at 400kV Guttur, trip command got extended to bus bar protection. All elements connected to 400kV Bus-1 and 2 tripped. 400kV Guttur - Dhoni ckt-1 , 400/220kV ICT-1 & 2 tripped on overvoltage.	---	---	GI-2
6	SR	1. 220kV Nunna - KTPS 2. 220kV Nunna - Gunadala 1&2 3. 220kV Nunna - Bhimadole 4. 220kV Nunna - Gudivada 1&2 5. 400/220kV, 315 MVA ICT-1, 2 &3 at Vijaywada (Nunna)	APTRANSCO	16-Jun-19	06:16	16-Jun-19	07:14	58 mins	Multiple trippings at 400/220kV Vijaywada (Nunna) station: Triggering incident: Failure of HV side B-Phase CT pertaining to 220/132KV 100MVA PTR-1 at 220kV Nunna SS. Bus bar protection operated leading to bus dead at 220kV Nunna.	----	157	GI-1

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

Sl. No.	Region	Name of major elements tripped	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards
				Date	Time	Date	Time					
1	ER	220 kv Jorethang – New Melli D/C (from Jorethang end only) 220 kv Rangpo - Tashiding S/C(from Tashiding end only) 220 kv Tashiding – New Melli S/C 220 kV Melli (New) – Rangpo – S/C	ISTS	14-Jul-19	10:35	14-Jul-19	10:50	00:15	At 10:35:11 hrs, 220 kv Jorethang – New Melli D/C, 220 kv Rangpo - Tashiding S/C, 220 kv Tashiding – New Melli S/C and 220 kV Melli (New) – Rangpo – S/C tripped due to R-Y fault (Fault location is yet to be received) resulting total power failure at Jorethang, Tashiding and Melli (New) S/S. Sequence of events and relay indication are given in table I & II respectively. All the running units at Jorethang and Tashiding tripped due to loss of evacuation path.	200	0	GD-I
2	ER	220kV Siliguri-Binaguri - II 220/132 kV ICT-II at Siliguri 220 kV bus II at Siliguri	ISTS	22-Jul-19	03:57	22-Jul-19	06:38	02:41	At 03:57 Hrs, 220kV Siliguri-Dalkhola - I tripped along with tripping of 220kV Siliguri-Binaguri - II,220/132 kV ICT-II at Siliguri and 220 kV Bus-II at Siliguri; At same time,220 kV Siliguri-Dalkhola - I successfully auto-reclosed at both ends.	0	0	GI-I
3	ER	400 KV KhSTPP - Lakhisarai - II 400 kV KhSTPP BUS II	ISTS	26-Jul-19	10:30	26-Jul-19	11:06	00:36	At 10:30 hrs KhSTPP unit 3 tripped along with Khargaon bus II. 400 KVKhSTPP - Lakhisarai - II also tripped at the same time due to DT receipt at Lakhisarai end. Unit 3 tripped due to loss of auxiliary supply. Bus tripped due to operation of LBB of main bay of U#3. 400 KV KhSTPP Lakhisarai II tripped due to DT receipt at Lakhisarai end.	184	0	GI-II

### North Eastern Region-Grid Disturbances Report for July 2019

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Restoration	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	132 kV Monarchak - Rokhia Line	NEEPCO	01-Jul-19 02:45	01-Jul-19 03:11	26 mins	Udaipur area of Tripura Power System and Monarchak Power Station were connected with rest of NER Grid through 132 kV Monarchak - Rokhia line.132 kV Udaipur- Palatana Line was idle charged to restrict loading of 125 MVA ICT 2 at Palatana. At 02:45 Hrs on 01.07.19, 132 kV Monarchak - Rokhia line tripped. Due to tripping of this element, Udaipur area of Tripura Power System and Monarchak Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.	39	37	0.0169	0.016	GD 1
2	NER	132 kV Lekhi -Nirjuli Line and 132 kV Lekhi-Pare Line	DoP Arunachal Pradesh, POWERGRID	01-Jul-19 23:50	02-Jul-19 00:05	15 mins	Lekhi area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Lekhi -Nirjuli Line and 132 kV Lekhi-Pare Line. 132 kV Lekhi -Itanagar Line was kept open due to CT problem at Lekhi end and 132 kV Nirjuli- Gohpur Line was kept open for system requirement. At 23:50 Hrs on 01.07.19, 132 kV Lekhi -Nirjuli Line and 132 kV Lekhi-Pare Line tripped. Due to tripping of these elements,Lekhi area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	35	0	0.008	GD 1
3	NER	132 kV Ranganadi - Itanagar Line and 132 kV Pare- Itanagar Line	POWERGRID, NEEPCO	02-Jul-19 00:07	02-Jul-19 00:28	21 mins	Itanagar area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Itanagar Line and 132 kV Pare- Itanagar Line. 132 kV Lekhi -Itanagar Line was kept open due to CT problem at Lekhi end. At 00:07 Hrs on 02.07.19,132 kV Ranganadi - Itanagar Line and 132 kV Pare- Itanagar Line tripped. Due to tripping of these elements, Itanagar area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	55	47	0.019	0.016	GD 1
4	NER	132 kV Melriat(PG)-Zuantui Line	POWERGRID	02-Jul-19 18:15	02-Jul-19 18:38	23 mins	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Melriat(PG)-Zuangtui line. At 18:15 Hrs on 02.07.19,132 kV Melriat(PG)-Zuantui line tripped resulting in power loss in Zuangtui area of Mizoram Power System.Due to tripping of these elements, Zuangtui area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	50	0	0.019	GD 1
5	NER	132 kV Ranganadi - Itanagar Line and 132 kV Pare - Itanagar Line	DoP Arunachal Pradesh, POWERGRID	05-Jul-19 05:11	05-Jul-19 05:30	19 mins	Itanagar area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Itanagar Line and 132 kV Pare - Itanagar Line. 132 kV Lekhi -Itanagar Line was kept open due to low CT ratio at Lekhi end. At 05:11 Hrs on 05.07.19,132 kV Ranganadi - Itanagar Line and 132 kV Pare- Itanagar Line tripped. Due to tripping of these elements, Itanagar area of Arunachal Pradesh Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	30	0	0.010	GD 1
6	NER	132 kV Ranganadi - Ziro Line	POWERGRID	06-Jul-19 21:02	06-Jul-19 21:39	37 mins	Ziro area of Arunachal Pradesh Power System was connected radially with the rest of NER Grid through 132 kV Ranganadi - Ziro line. At 21:02 Hrs on 06.07.2019, 132 kV Ranganadi - Ziro line tripped. Due to tripping of this element, Ziro area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	35	0	0.022	GD 1
7	NER	132 kV Jiribam-Pailapool Line	AEGCL and MSPCL	08-Jul-19 16:00	08-Jul-19 16:19	19 mins	Pailapool area of Manipur Power System was connected with the rest of NER Grid through 132 kV Jiribam-Pailapool line.132 kV Pailapool-Srikona was under outage since 12:58 hrs of 06.07.19. At 16:00 Hrs on 08.07.2019, 132 kV Jiribam-Pailapool line tripped. Due to tripping of this element, Pailapool area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area	0	12	0	0.004	GD 1

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Restoration	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
8	NER	132 kV Balipara - Khupi Line	NEEPCO & DoP, Arunachal Pradesh	13-Jul-19 14:58	13-Jul-19 15:40	42 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara - Khupi line. At 14:58 Hrs on 13.07.2019, 132 kV Balipara - Khupi line tripped. Due to tripping of these elements, Khupi area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	23	0	0.016	GD 1
9	NER	132 kV Lumshong-Khliehriat(ME) Line	MePTCL	17-Jul-19 08:46	17-Jul-19 09:01	15 mins	Lumshong area of Meghalaya Power System was connected with the rest of NER Grid through 132 kV Lumshong-Khliehriat(ME) line .132 KV Lumshong-Panchgram line (Ideal charged from Panchgram due to system requirement). At 08:46 Hrs on 17.07.2019, 132 kV Lumshong-Khliehriat(ME) line tripped. Due to tripping of this element, Lumshong area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	23	0	0.005	GD 1
10	NER	132 kV Jiribam-Pailapool Line & Pailapool-Srikona Line .	MSPCL & AEGCL	17-Jul-19 10:07	17-Jul-19 10:14	7 mins	Pailapool area of Assam Power System was connected with the rest of NER Grid through 132 kV Jiribam-Pailapool line &132 kV Pailapool-Srikona Line. At 10:14 Hrs on 17.07.2019, 132 kV Jiribam-Pailapool line & Pailapool-Srikona Line tripped. Due to tripping of these elements, Pailapool area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	22	0	0.003	GD 1
11	NER	132 kV Kohima-Wokha Line	DoP, Nagaland	17-Jul-19 17:42	17-Jul-19 17:53	11 mins	Capital area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Kohima-Wokha line, 132 kV Kohima - Karong Line(under Planned S/D) and 132 kV Dimapur - Kohima (Under emergency S/D). At 17:42 Hrs on 17.07.2019, 132 kV Kohima-Wokha line tripped . Due to tripping of this element, Capital area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	41	0	0.008	GD 1
12	NER	132 kV Kohima-Wokha Line	DoP, Nagaland	17-Jul-19 18:19	17-Jul-19 18:28	9 mins	Capital area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Kohima - Wokha line. 132 kV Kohima - Karong Line (under Planned S/D), 132 kV Dimapur - Kohima (Under emergency S/D). At 18:19 Hrs on 17.07.2019, 132 kV Kohima-Wokha line tripped . Due to tripping of this element, Capital area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	42	0	0.006	GD 1
13	NER	132 kV Monarchak - Rokhia Line, 132 kV Rokhia - Agartala 1 & 2 Lines along with Monarchak STG & GTG Units	TSECL	18-Jul-19 07:11	18-Jul-19 07:25	14 mins	Part of Tripura Power System excluding Bangladesh (South Comilla) load was connected with rest of NER Grid through 132 kV Rokhia-Agartala 1 & 2 lines .132 kV Palatana -Udaipur line was ideal charged condition from Palatana due to system requirement. At 07:11 Hrs of 18/07/2019, 132 kV Monarchak - Rokhia line, 132 kV Rokhia - Agartala 1 & 2 lines along with Monarchak STG & GTG Units tripped .Due to tripping of these elements Monarchak , Udaipur , Rabindarnagar , and Rokhia areas were separated from the rest of NER Grid and subsequently collapsed due to no source in these areas.	133	24	0.03	0.005	GD 1
14	NER	132 kV Aizawl-Melriat and 132 kV Melriat-Zuangtui Lines	POWERGRID	19-Jul-19 12:15	19-Jul-19 12:40	25 mins	Zuangtui area of Mizoram Power System was connected with rest of NER Grid through 132 kV Melriat(PG)-Zuangtui line and 132 kV Aizawl-Melriat line At 12:15 Hrs on 19.07.19,132 kV Melriat(PG)-Zuantui line and 132 kV Aizawl-Melriat line tripped due to operation of Local Breaker Back-up protection in Melriat substation during the testing of 132 kV Silchar-Melriat 1 line resulting in power loss in Zuangtui area of Mizoram Power System.Due to tripping of these elements, Zuangtui area of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	28	0	0.012	GD 1



Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Restoration	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
15	NER	132 kV Kohima -Wokha and 132 kV Karong-Imphal	DoP,Nagaland, MSPCL	19-Jul-19 13:00	19-Jul-19 13:14	14 mins	Capital area of Nagaland Power System and Karong area of Manipur Power System were connected with rest of NER Grid through 132 kV Kohima -Wokha line and 132 kV Karong-Imphal line. 132 kV Dimapur-Kohima was under Emergency Shutdown ,66 kV Tuensang - Likhimro line is kept open due to construction activities. At 13:00 Hrs on 19.07.19, 132 kV Kohima-Wokha and 132 kV Karong-Imphal line tripped. Due to tripping of this element, Capital area of Nagaland Power System and Karong area of Manipur Power System were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	14	0	0.003	GD 1
16	NER	132 kV Kohima-Wokha Line and 132 kV Kohima-Imphal Line	DOP,Nagaland, MSPCL	24-Jul-19 13:10	24-Jul-19 13:23	13 mins	Capital area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Kohima-Wokha line and 132 kV Kohima-Imphal Line. 132 kV Dimapur-Kohima was under Emergency Shutdown, 66 kV Tuensang - Likhimro line is kept open due to construction activities. 132 kV Kohima-Karong line was under outage since 12:32 Hrs on 24.07.19. At 13:10 Hrs on 24.07.19, 132 kV Kohima-Wokha line and 132 kV Kohima-Imphal line tripped Due to tripping of these elements, Capital area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	16.9	0	0.003	GD 1
17	NER	132 KV Imphal(MSPCL)-Imphal(PG)-1 & 2 Lines	MSPCL , POWERGRID	25-Jul-19 16:18	25-Jul-19 16:24	6 mins	Imphal area of Manipur Power System is connected with the rest of the NER grid through 132 kV Imphal (PG)-Imphal (MSPCL) 1 & 2 lines, 132 kV Imphal-Karong line (idle charged) and 132 kV Kongba-Kakching line was kept opened due to system requirement . At 16:18 Hrs on 25.06.2019, while charging 132 kV Imphal - Karong line ,132 kV Imphal (PG)-Imphal (MA) 1 & 2 lines tripped. Due to tripping of this element, Imphal area of Manipur Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	50	0	0.010	GD 1
18	NER	132 kV Dimapur (PG)-Dimapur (DoP, Nagaland) 1 & 2 lines.	DoP, Nagaland	28-Jul-19 14:09	28-Jul-19 14:26	17 mins	Dimapur area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Dimapur (PG)-Dimapur (DoP,Nagaland) 1 & 2 lines. At 14:09 Hrs on 28.07.2019, 132 kV Dimapur (PG)-Dimapur (DoP, Nagaland) 1 & 2 lines tripped. Due to tripping of these elements, Dimapur area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	60	0	0.017	GD 1
19	NER	132 kV Imphal (PG)-Imphal (MSPCL) 1 & 2 Lines	POWERGRID & MSPCL	31-Jul-19 15:56	31-Jul-19 16:02	6 mins	Imphal area of Manipur Power System is connected with the rest of the NER grid through 132 kV Imphal (PG)-Imphal (MSPCL) 1 & 2 lines and 132 kV Yiangangpokpi-Kongba line. 132 kV Imphal (MSPCL)-Karong line is under outage due to construction work. 132 kV Kongba-Kakching line was kept opened due to system requirement. At 15:56 Hrs on 31.07.2019, 132 kV Imphal (PG)-Imphal (MSPCL) 1 & 2 lines tripped. Due to tripping of this element, Imphal area of Manipur Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.	0	48	0	0.005	GD 1

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Restoration	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
20	NER	132 kV Hailakandi - Panchgram line and 132 kV Badarpur - Panchgram line	POWERGRID & AEGCL	31-Jul-19 16:45	31-Jul-19 17:01	16 mins	<p>Panchgram area of Assam Power System was connected with the rest of NER Grid through 132 kV Hailakandi - Panchgram line and 132 kV Badarpur - Panchgram line. (132 kV Srikona - Panchgram Line is under long outage, 132 kV Panchgram - Lumshnong line was idle charged for system requirement)</p> <p>At 16:45 Hrs on 31.07.19, 132 kV Hailakandi - Panchgram line and 132 kV Badarpur - Panchgram line tripped. Due to tripping of these elements, Panchgram area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.</p>	0	40	0	0.011	GD 1

## North Eastern Region-Grid Incidences Report for July 2019

Sl. No.	Region	Name of Element	Owner / Agency	Date and Time of Tripping	Date and Time of Revival	Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Generation Loss in MU	Load Loss in MU	Category as per CEA Grid Standards
1	NER	BGTPP - Unit 1	NTPC	02-Jul-19 10:07	02-Jul-19 10:45	38 mins	BGTPP - Unit 1 tripped at 10:07 Hrs on 02.07.19 due to flame failure. (Revision of schedule from block no 44 on 02.07.19)	133	0	0.080	0	GI 2
2	NER	AGTCCPP- Unit 1	NEEPCO	02-Jul-19 20:05	02-Jul-19 20:45	40 mins	AGTCCPP- Unit 1 tripped at 20:05 Hrs on 02.07.19 due to tripping of boiler due to problem in damper. (Revision of schedule from block no 84 on 02.07.19)	20	0	0.010	0	GI 1
3	NER	Khandong - Unit 2	NEEPCO	09-Jul-19 13:20	09-Jul-19 14:15	55 mins	Khandong Unit 2 tripped at 13:20 Hrs on 09.07.2019 due to Rotor E/F. (Revision of schedule from block no 58 on 09.07.19)	25	0	0.022	0	GI 1
4	NER	Palatana Module 1 & 2	OTPC	12-Jul-19 14:51	12-Jul-19 15:30	39 mins	Palatana Module 1(GT & ST) & 2 (GT & ST) tripped at 14:51 Hrs on 12.07.19 due to Auxiliary Power Supply Failure and tripping of station transformer T1.(Revision of Schedule from Block No. 63 on 12.07.19)	566	0	0.367	0	GI 2
5	NER	AGBPP Unit 4	NEEPCO	20-Jul-19 15:25	20-Jul-19 16:15	50 mins	AGBPP Unit 4 tripped at 15:25 Hrs on 20.07.19 due to GT cooling air trouble trip (Revision of schedule from Block No.66 on 20.07.19).	28.9	0	0.024	0	GI 2
6	NER	Khandong Unit 1	NEEPCO	23-Jul-19 09:34	23-Jul-19 10:15	41 mins	Khandong Unit 1 tripped at 09:34 Hrs on 23.07.19 due to high thrust bearing temperature (Revision of schedule from Block No.42 on 23.07.19).	23	0	0.015	0	GI 1
7	NER	AGBPP Unit-4	NEEPCO	28-Jul-19 20:53	28-Jul-19 21:45	52 mins	AGBPP Unit 4 tripped at 20:53 Hrs of 28.07.2019 due to tripping of Gas Compressor-1. (Revision of schedule from Block No. 88 on 28.07.2019)	30	0	0.030	0	GI 2
8	NER	Kopili Unit-3	NEEPCO	29-Jul-19 12:16	29-Jul-19 13:15	59 mins	Kopili Unit 3 tripped at 12:16 Hrs on 29.07.19 due to GT overall differential operation. (Revision of schedule from Block No. 54 on 29.07.19).	50	0	0.050	0	GI 2
9	NER	Khandong Unit-1	NEEPCO	29-Jul-19 12:54	29-Jul-19 14:00	1 hrs 6 mins	Khandong Unit-1 tripped at 12:54 Hrs on 29.07.19 due to High Thrust Bearing temperature.( Revision of schedule from Block No. 57 on 29.07.19).	23	0	0.030	0	GI 1