

Northern Region-Event Report for May 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) 400kV Tehri(THDC)-Koteshwar Pool(PG) ckt-1 2) 400kV Tehri(THDC)-Koteshwar Pool(PG) ckt-2	Uttarakhand	THDC & POWERGRID	2-May-19	10:53	2-May-19	13:13	02:20	400kV Tehri(THDC)-Koteshwar Pool(PG) ckt-1 & 2 tripped from Tehri end only, due to interruption in DC control supply at 400kV Tehri HEP(THDC). As per PMU, No fault is observed in the system. In antecedent conditions, 400kV Tehri(THDC)-Koteshwar Pool(PG) ckt-1 & 2 carrying 86 MW & 76 MW respectively and Unit#1 generating 166 MW.	165		GD-1
2	NR	1) 400kV Bahadurgarh(PG)-Sonepat(PG) ckt-2 2) 400kV Bahadurgarh(PG)-Bawana(GT)(DTL)	Haryana	POWERGRID & Delhi	2-May-19	17:52	2-May-19	18:40	00:48	400kV Bahadurgarh(PG)-Sonepat(PG) ckt-2 tripped on R-N fault. At the same time, 400kV Bahadurgarh(PG)-Bawana(GT)(DTL) also tripped due to malfunctioning of relay. As per PMU, R-N fault with unsuccessful auto-reclosing is observed. In antecedent conditions, 400kV Bahadurgarh(PG)-Sonepat(PG) ckt-2 & 400kV Bahadurgarh(PG)-Bawana(GT)(DTL) carrying 167 MW & 275 MW respectively.			GI-2
3	NR	1) 400kV Baghat(PG)-Kaithal(PG) ckt-1 2) 400kV Baghat(PG)-Kaithal(PG) ckt-2 3) 400kV Baghat(PG)-Dehradun(PG)	Uttar Pradesh	POWERGRID	2-May-19	18:43	2-May-19	20:07	01:24	400kV Baghat(PG)-Kaithal(PG) ckt-1 tripped on Y-N fault, 2.2 km from Baghat(PG) end, 400kV Baghat(PG)-Kaithal(PG) ckt-2 tripped on Y-N fault, 2.3 km from Baghat(PG) end and 400kV Baghat(PG)-Dehradun(PG) tripped on Y-N fault, 3.4 km from Baghat(PG) end. As per PMU, Multiple Y-N faults are observed in the system. In antecedent conditions, 400kV Baghat(PG)-Dehradun(PG), 400kV Baghat(PG)-Kaithal(PG) ckt-1 & 2 carrying 69MW, 172MW & 169MW respectively.			GI-2
4	NR	1) 400kV G.Noida 765(UP)-Noida sec-148(UP) ckt 1 2) 400kV G.Noida 765(UP)-Noida sec-148(UP) ckt 2	Uttar Pradesh	UP	3-May-19	19:24	3-May-19	22:09	02:45	400kV G.Noida 765(UP)-Noida sec-148(UP) ckt 1 tripped on B-N fault, 51.9km from 765/400kV G.Noida(UP) end. At the same time, 400kV G.Noida 765(UP)-Noida sec-148(UP) ckt 2 tripped on B-N fault, 54.4km from 765/400kV G.Noida(UP) end. As per PMU, B-N fault with no auto-reclosing is observed in the system. In antecedent conditions, 400kV G.Noida 765(UP)-Noida sec-148(UP) ckt 1 & 2 carrying 42 MW & 41 MW respectively.			GI-2
5	NR	1) 220kV Sarna(PSTCL) –wadla(PSTCL) ckt 1 & 2 2) 220kV Sarna(PSTCL)-Kishenpur(PG) ckt 1 & 2 3) 220kV Sarna(PSTCL)-dasya(PSTCL) ckt 1 & 2 4) 220kV Sarna(PSTCL)-RSDPH1, RSDPH2, RSDPH3 & RSDPH4	Punjab	Punjab & POWERGRID	4-May-19	10:41	4-May-19	11:02	00:21	220kV Sarna- Wadla ckt1 jumper snapped and caused bus fault. Since No availability of Bus bar protection at Sarna station, all the feeder tripped on Over current protection and 220kV Sarna-Kishenpur ckt 1 & 2 tripped from Kishenpur(PG) end on Zone 2. As per PMU, a voltage dip (10kV) observed in R phase with delayed clearance of around 800ms is observed. In antecedent conditions, 220kV Sarna(PSTCL)-Kishenpur(PG) ckt 1 & 2 carrying 40MW each.	300	100	GD-1
6	NR	1) 400kV Panki(UP)-Rewa Road(UP) 2) 400kV Panki(UP)-Unnao(UP) 3) 315 MVA ICT 2 at 400/220kV Panki(UP)	Uttar Pradesh	UP	6-May-19	12:58	6-May-19	13:44	00:46	400kV Panki(UP)-Unnao(UP) tripped on Y-N fault, 40km from Unnao end. At the same time, 400kV Panki(UP)-Rewa Road(UP) tripped only from Rewa Road end on R-N fault and 315 MVA ICT 2 tripped on 86A/86B relay flag. As per PMU, Y-N fault followed by R-N fault is observed. In antecedent conditions, 400kV Panki(UP)-Rewa Road(UP) & 400kV Panki(UP)-Unnao(UP) carrying 166 MW & 108 MW respectively.			GI-2
7	NR	1) 220kV Bus-2 at 400/220kV Samba(PG) 2) 315 MVA ICT 1 at 400/220kV Samba(PG) 3) 315 MVA ICT 2 at 400/220kV Samba(PG) 4) 315 MVA ICT 3 at 400/220kV Samba(PG) 5) 220kV Jammu(JK)-Samba(PG) 6) 220kV Hiranagar(JK)-Samba(PG) 7) 132kV Hiranagar(JK)-Sewa II(NHPC) ckt-1 & 2 8) 132kV Mahanpur (JK) - Sewa II(NHPC) 9) 132kV Kathua (JK) - Sewa II(NHPC) 10) 40 MW Unit#1, #2 & #3 at 132kV Sewa II(NHPC)	Jammu & Kashmir	POWERGRID, NHPC, Punjab & J&K	7-May-19	10:27	7-May-19	11:01	00:34	During Shutdown work of 220kV Bus-1 at 400/220kV Samba(PG) bird nest drooping from GI wire make a flash over and tripped 220kV Bus-2. 315 MVA ICT 1, 2 & 3 tripped from 220kV side only. At the same time, Complete outage of 132kV Sewa II(NHPC) occurs. As per PMU, R-N fault is observed in the system. In antecedent conditions, Unit#1, #2 & #3 at 132kV Sewa II(NHPC) carrying 39MW, 42MW & 40MW respectively.	119	90	GD-1
8	NR	1) 400kV Bikaner(RRVPNL)-Sikar(PG) ckt-1 2) 400kV Bikaner(RRVPNL)-Sikar(PG) ckt-2 3) 400kV Bhadla(RRVPNL)-Bikaner(RRVPNL) ckt-2	Rajasthan	Rajasthan & POWERGRID	7-May-19	11:34	7-May-19	14:44	03:10	400kV Bhadla(RRVPNL)-Bikaner(RRVPNL) ckt-2 tripped due to R-Y fault, 6.64km from Bikaner end. At the same time, 400kV Bikaner(RRVPNL)-Sikar(PG) ckt-1 & 2 tripped on 86 A & 86 B relay tripped at Sikar(PG). As per PMU, Y-B fault is observed in the system. In antecedent conditions, 400kV Bhadla(RRVPNL)-Bikaner(RRVPNL) ckt-2 carrying 533 MW.	800	300	GD-1
9	NR	1) 400kV Dhanonda(HVPNL)-Mohindergarh(Adani) ckt-1 2) 400kV Dhanonda(HVPNL)-Mohindergarh(Adani) ckt-2	Haryana	Haryana & Adani	7-May-19	18:37	7-May-19	19:43	01:06	400kV Dhanonda(HVPNL)-Mohindergarh(Adani) ckt-2 tripped due to isolator burnt at Dhanoda end and 400kV Dhanonda(HVPNL)-Mohindergarh(Adani) ckt-1 tripped due to overloading. As per PMU, No fault is observed in the system. In antecedent conditions, 400kV Dhanonda(HVPNL)-Mohindergarh(Adani) ckt-2 carrying 713 MW.			GI-2
10	NR	1) 400kV G.Noida(765kV)(UP)-Sikanderabad(UP) ckt-1 2) 400kV G.Noida(765kV)(UP)-Sikanderabad(UP) ckt-2	Uttar Pradesh	UP	10-May-19	19:09	10-May-19	20:24	01:15	400kV G.Noida(765kV)(UP)-Sikanderabad(UP) ckt-1 & 2 tripped due to malfunctioning of Relay. As per PMU, No fault is observed in the system. In antecedent conditions, 400kV G.Noida(765kV)(UP)-Sikanderabad(UP) ckt-1 & 2 carrying 265 MW & 269 MW respectively.			GI-2
11	NR	1) 400 kV Bus 1 at 400/220kV Barmer(Raj) 2) 400kV Akal(Raj)-Barmer(Raj) 3) 400kV Bhainsra(Raj)-Barmer(Raj) Ckt-1	Rajasthan	Rajasthan	10-May-19	23:08	11-May-19	00:56	01:48	Bus Bar protection of 400 kV Bus 1 at 400/220kV Barmer(Raj) operated leading to tripping of 400kV Akal(Raj)-Barmer(Raj) & 400kV Bhainsra(Raj)-Barmer(Raj) Ckt-1. As per PMU, R-N fault is observed in the system. In antecedent conditions, 400kV Akal(Raj)-Barmer(Raj) carrying 76 MW.			GI-2
12	NR	1) 220kV Bhiwadi(PG)-Bhiwadi(RVPL) ckt-1 2) 220kV Bhiwadi(PG)-Bhiwadi(RVPL) ckt-2 3) 220kV Bhiwadi (PG)-Mau(HVPL) 4) 220kV Bhiwadi(PG)-Bawal(HVPL) 5) 220kV Bhiwadi(PG)-Rewari(HVPL) ckt-1 6) 220kV Bhiwadi(PG)-Rewari(HVPL) ckt-2	Rajasthan	POWERGRID, Rajasthan & Haryana	11-May-19	10:24	11-May-19	10:57	00:33	06 Nos. of 220kV lines from 400/220kV Bhiwadi(PG) tripped due to maloperation of 220 kV bus protection during retrofitting work and scheme checking at Bhiwadi(PG). Load loss of around 300 MW reported by Rajasthan. No load loss reported by Haryana. As per PMU, Voltage rise in all three phases is observed. In antecedent conditions, 220kV Bhiwadi(PG)-Bhiwadi(RVPL) ckt-1 & 2 carrying 159 MW & 146 MW respectively.	300		GD-1
13	NR	1) 400 kV Bus 1 at 400/220kV Barmer(Raj) 2) 400kV Bhainsra(Raj)-Barmer(Raj) ckt-1	Rajasthan	Rajasthan	11-May-19	21:34	11-May-19	23:34	02:00	400kV Bhainsra(Raj)-Barmer(Raj) ckt-1 tripped on R-N fault, 0.3km from Barmer end. At the same time, 400kV Bus 1 at 400/220kV Barmer(Raj) tripped due to operation of Bus Bar protection. As per PMU, R-N fault is observed in the system.			GI-2
14	NR	1) 400kV Kota(PG)-Merta(RRVPNL) 2) 400kV Shree Cement(CSL)-Merta(RRVPNL) 3) 400kV Merta(RRVPNL)-Ratangarh(RRVPNL) 4) 315 MVA ICT 2 at 400/220kV Merta(RRVPNL)	Rajasthan	Rajasthan & POEWGRID	12-May-19	5:07	12-May-19	06:30	01:23	400kV Kota(PG)-Merta(RRVPNL) tripped on Overvoltage(Over voltage indication at Merta end, DT received at Kota (PG) end). At the same time, 400kV Shree Cement(CSL)-Merta(RRVPNL) & 400kV Merta(RRVPNL)-Ratangarh(RRVPNL) also tripped on overvoltage. 315 MVA ICT 2 tripped along with 400kV Ratangarh-Merta (Main bay of ICT was out already). As per PMU, B-N fault is observed. In antecedent conditions, 400kV Kota(PG)-Merta(RRVPNL) & 400kV Shree Cement(CSL)-Merta(RRVPNL) carrying 167 MW & 283 MW respectively.			GI-2
15	NR	1) 400 kV Barmer(Raj)-Rajwest(Raj) 2) 315 MVA ICT 1 at 400/220kV Barmer(Raj) 3) 220 kV Barmer(Raj)-Rajwest(Raj) ckt-1 4) 220 kV Barmer(Raj)-Rajwest(Raj) ckt-2 5) 220kV Balotra(Raj)-Barmer(Raj)	Rajasthan	Rajasthan	12-May-19	8:08	12-May-19	09:20	01:12	400 kV Barmer(Raj)-Rajwest(Raj) tripped from Rajwest end only. At the same time, 315 MVA ICT 1 at 400/220kV Barmer(Raj) also tripped. As per PMU, R-B fault with delayed clearance is observed in the system. In antecedent conditions, 400 kV Barmer(Raj)-Rajwest(Raj) carrying 74 MW and 315 MVA ICT 1 carrying 85 MW.		100	GD-1

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					Date	Time	Date	Time					
16	NR	1) 400kV Bikaner(RRVPNL)-Deedwana(RRVPNL) 2) 400kV Bikaner(RRVPNL)-Merta(RRVPNL) 3) 400kV Bikaner(RRVPNL)-SSCTPS(Raj) ckt-1 & 2 4) 400kV Bikaner(RRVPNL)-Suratgarh(Raj) 5) 400kV Bikaner(RRVPNL)-Sikar(PG) ckt-1 & 2 6) 400kV Bikaner(RRVPNL)-Bhadla(RRVPNL) ckt-1 & 2 7) 315MVA ICT 1 400/220kV Bikaner(Raj) 8) 315MVA ICT 2 400/220kV Bikaner(Raj) 9) 400kV Bus 1 & Bus 2 at 400/220kV Bikaner(Raj) 10) 50MVAR Bus Reactor 1 at 400/220kV Bikaner(Raj) 11) 125MVAR Bus Reactor 2 at 400/220kV Bikaner(Raj)	Rajasthan	Rajasthan & POWERGRID	12-May-19	17:45	12-May-19	19:01	01:16	400kV Bus-bar protection operated at Bikaner(Raj), due to blasting of Y-phase CB pole of main CB (of 400kV Bikaner-Deedwana line) connected to 400kV Bus-2 (at Bikaner). The incident occurred during opening of 400 kV Bikaner-Deedwana line on high voltage. As per PMU, R-N fault followed by B-N fault is observed. In antecedent conditions, 315MVA ICT 1 & 315MVA ICT 2 carrying 103 MW & 105 MW respectively.			GI-2
17	NR	1) 220kV Delina(JK)-Kishanganga(NHPC) ckt-1 2) 220kV Delina(JK)-Kishanganga(NHPC) ckt-2 3) 110MW Unit#1 at 220kV Kishanganga(NHPC) 4) 220kV Bus 2 at 220kV Kishanganga(NHPC) 5) 220kV Bus 1 at 220kV Kishanganga(NHPC)	Jammu & Kashmir	NHPC, J&K & POWERGRID	13-May-19	17:56	13-May-19	19:09	01:13	220kV Delina(JK)-Kishanganga(NHPC) ckt-2 tripped on R-Y fault, 15.60km from Kishanganga end. At the same time, 220kV Delina(JK)-Kishanganga(NHPC) ckt-1 tripped from Delina end only and 110MW Unit#1 tripped due to loss of evacuation path. As per PMU, R-Y fault is observed. In antecedent conditions, Unit#1 at 220kV Kishanganga(NHPC) generating around 104 MW.	104		GD-1
18	NR	1) 220kV Bus 1 at Chamera III HEP(NHPC) 2) 220kV Bus 2 at Chamera III HEP(NHPC) 3) 220kV Chamera III(NHPC)-Chamera pool(PG) ckt-1 4) 220kV Chamera III(NHPC)-Chamera pool(PG) ckt-2 5) 220kV Budhli(Lanco)-Chamera III(NHPC) 6) 77MW Unit#2 at 220kV Chamera III HEP(NHPC) 7) 77MW Unit#3 at 220kV Chamera III HEP(NHPC)	Himachal Pradesh	NHPC, Lanco & POWERGRID	14-May-19	11:56	14-May-19	12:45	00:49	All elements at 220kV Chamera III HEP(NHPC) tripped during shifting of 220kV elements from Bus-2 to BUS-1 due to operation of Bus bar protection. As per PMU, R-N fault is observed in the system. In antecedent conditions, Unit#2 & #3 generating 76MW & 77MW respectively.	150		GD-1
19	NR	1) 220kV Salal(NHPC)-Kishenpur(PG) ckt-3 2) 220kV Salal(NHPC)-Kishenpur(PG) ckt-4	Jammu & Kashmir	POWERGRID & NHPC	14-May-19	22:55	14-May-19	23:00	00:05	220kV Salal(NHPC)-Kishenpur(PG) ckt-3 tripped on R-Y fault, 67.5km from Kishenpur end. At the same time, 220kV Salal(NHPC)-Kishenpur(PG) ckt-4 tripped on R-Y fault, 53km from Kishenpur end. As per PMU, R-Y fault is observed. In antecedent conditions, 220kV Salal(NHPC)-Kishenpur(PG) ckt-3 & 4 carrying 104MW each.			GI-2
20	NR	1) 105MW Unit#7 at 220kV Harduaganj(UP) 2) 250MW Unit#8 at 220kV Harduaganj(UP) 3) 250MW Unit#9 at 220kV Harduaganj(UP)	Uttar Pradesh	UP	15-May-19	1:16	15-May-19	04:21	03:05	Fire incident occurred in Unit#7 (105MW) at Harduaganj(UP). Unit#7(105MW), Unit#8 (205MW) & Unit#9(250MW) tripped at Harduaganj (UP). At 1317hrs, On attempt of synchronizing Unit#9 (250 MW), Bus bar protection operated resulting in the tripping of all associated lines, no load loss/Generation loss reported at this event. As per PMU, B-N fault is observed in the system. In antecedent conditions, Unit#8 & Unit#9 generating 228 MW each.	500	300	GD-1
21	NR	1) 400kV Abdullapur(PG)-Bawana(DTL) ckt-1 2) 400kV Bawana(DTL)-Mandola(PG) ckt-2 3) 315 MVA ICT 2 at 400/220kV Bawana(DTL) 4) 315 MVA ICT 3 at 400/220kV Bawana(DTL) 5) 315 MVA ICT 4 at 400/220kV Bawana(DTL)	Delhi	Delhi & POWERGRID	15-May-19	7:44	15-May-19	10:22	02:38	Bus II jumper snapped at 400/220kV Bawana(DTL) resulting in tripping of 400kV Abdullapur(PG)-Bawana(DTL) ckt-1 due to Y-N fault, 116km from Abdullapur end, 400kV Bawana(DTL)-Mandola(PG) ckt-2 on RYB-phase, E/F and 315 MVA ICT 2, ICT 3 & ICT 4 tripped on differential protection. As per PMU, Multiple faults are observed in the system. In antecedent conditions, 400kV Abdullapur(PG)-Bawana(DTL) ckt-1 & 400kV Bawana(DTL)-Mandola(PG) ckt-2 carrying 132 MW & 138 MW respectively.			GI-2
22	NR	1) 400kV Bhadla(RRVPNL)-Jodhpur(RRVPNL) 2) 400kV Jodhpur(RRVPNL)-Rajwest(RRVPNL) ckt-1	Rajasthan	Rajasthan	17-May-19	14:31	17-May-19	16:35	02:04	400kV Bhadla(RRVPNL)-Jodhpur(RRVPNL) tripped on R-Y fault, 3.86km from Jodhpur end. At the same time, 400kV Jodhpur(RRVPNL)-Rajwest(RRVPNL) ckt-1 also tripped. As per PMU, R-Y fault is observed in the system. In antecedent conditions, 400kV Bhadla(RRVPNL)-Jodhpur(RRVPNL) & 400kV Jodhpur(RRVPNL)-Rajwest(RRVPNL) ckt-1 carrying 90MW & 113MW respectively.			GI-2
23	NR	1) 400kV RAPS C(NPC)-Jaipur South(PG) 2) 400kV Kota(PG)-Jaipur South(PG)	Rajasthan	POWERGRID & NPCL	17-May-19	16:31	17-May-19	16:40	00:09	400kV RAPS C(NPC)-Jaipur South(PG) tripped on B-N fault, 4.66km from Jaipur end. At the same time, 400kV Kota(PG)-Jaipur South(PG) tripped on R-Y fault, 5.5km from Jaipur end. As per PMU, multiple faults observed in the system. In antecedent conditions, 400kV RAPS C(NPC)-Jaipur South(PG) & 400kV Kota(PG)-Jaipur South(PG) carrying 201MW & 264MW respectively.			GI-2
24	NR	1) 220kV Bareilly(UP)-Pithoragarh(PG) 2) 220kV Bareilly(UP)-Dhauliganga(NHPC)	Uttar Pradesh	UP, NHPC & POWERGRID	19-May-19	12:25	19-May-19	13:29	01:04	220kV Bareilly(UP)-Pithoragarh(PG) and 220kV Bareilly(UP)-Dhauliganga(NHPC) tripped at 1233Hrs from Bareilly(UP) end only. As per PMU, Y-B fault with delayed clearance is observed. In antecedent conditions, 220kV Bareilly(UP)-Pithoragarh(PG) and 220kV Bareilly(UP)-Dhauliganga(NHPC) carrying 10MW & 21MW respectively.			GI-2
25	NR	1) 500kV HVDC Vindhyachal(PG) BtB Block 1 2) 500kV HVDC Vindhyachal(PG) BtB Block 2	Western region	POWERGRID	22-May-19	15:34	22-May-19	17:40	02:06	500kV HVDC Vindhyachal(PG) BtB Block 1 tripped on DC overcurrent. At the same time, 500kV HVDC Vindhyachal(PG) BtB Block 2 tripped on loss of 400kV NTPC-VSTPP Feeder2. As per PMU, fluctuations observed in the phase voltages. In antecedent conditions, 500kV HVDC Vindhyachal(PG) BtB Block 1 & 2 carrying 500MW (North to west).			GI-2
26	NR	1) 765kV Anta(Raj)-Phagi(Raj) ckt-2 2) 660MW Unit#5 at 400/220kV Chhabra TPS 3) 660MW Unit#6 at 400/220kV Chhabra TPS	Rajasthan	Rajasthan	22-May-19	20:57	23-May-19	00:18	03:21	765kV Anta(Raj)-Phagi(Raj) ckt-2 tripped on B-N fault, 107km from Phagi end. At the same time, 660MW Unit#5 & #6 at 400/220kV Chhabra TPS also tripped on electrical fault. As per PMU, Multiple R-Y faults are observed. In antecedent conditions, 765kV Anta(Raj)-Phagi(Raj) ckt-2 carrying 503MW.	1050		GD-1
27	NR	1) 400kV Bhiwani(PG)-Jind(PG) ckt-1 2) 400kV Bhiwani(PG)-Jind(PG) ckt-2	Haryana	POWERGRID	23-May-19	17:15	23-May-19	19:51	02:36	400kV Bhiwani(PG)-Jind(PG) ckt-1 tripped on B-N fault, 42km from Jind end. At the same time, 400kV Bhiwani(PG)-Jind(PG) ckt-2 tripped on B-N fault, 46km from Jind end. As per PMU, multiple R-Y faults are observed in the system. In antecedent conditions, 400kV Bhiwani(PG)-Jind(PG) ckt-1 & 2 carrying 20MW & 19MW respectively.			GI-2
28	NR	1) 220kV Amargarh(NR529)-Delina(JK) 2) 220kV Delina(JK)-Zainkote(JK) 3) 220kV Kishenganga(NHPC)-Delina(JK) ckt-1 4) 220kV Kishenganga(NHPC)-Delina(JK) ckt-2 5) 110MW Unit#1 at Kishenganga(NHPC) 6) 110MW Unit#3 at Kishenganga(NHPC)	Jammu & Kashmir	J&K, NHPC and NR529	26-May-19	17:50	26-May-19	18:32	00:42	220kV Ziankote-Delina line tripped due to inclement weather condition (Details Awaited from SLD J&K) followed by tripping of all other 3 nos. line from Delina including 220kV Bus. This resulted outage of 2 nos. 110MW Units & generation loss of 134 MW at Kishenganga HEP. As per PMU, R-Y fault is observed in the system. In antecedent conditions, 220kV Amargarh(NR529)-Delina(JK) & 220kV Delina(JK)-Zainkote(JK) carrying 11MW & 70MW respectively.	130	100	GD-1

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29	NR	1) 220KV Chamera III(NHPC)-Chamera pool(PG) ckt-1 2) 220KV Chamera III(NHPC)-Budhil(Lanco) 3) 77MW Unit#1, #2 & #3 at 220KV Chamera III(NHPC) 4) 35MW Unit#1 & #2 at 220KV Budhil(Lanco)	Himachal Pradesh	POWERGRID, NHPC & Lanco	29-May-19	13:42	30-May-19	22:25		220KV Chamera III(NHPC)- Chamera pool(PG) ckt-1 tripped due to conductor snapped during dismantling of tower near Span 24-25. 220 kv Chamera III (NHPC)- Chamera pool(PG) ckt. 2 is already under forced outage since 14.05.19, due to Circuit Breaker problem at Chamera III. Generation loss of around 228 MW of Chamera III and 69 MW of Budhil Hydro-station occurred due to non-availability of evacuation path. As per PMU, R-N fault with no auto-reclosing is observed in the system.	300		GD-1
30	NR	1) 220KV Bus-II at 220/132kV Khetri (Raj) 2) 220KV Khetri(Raj)-Behror(Raj) 3) 220KV Khetri(Raj)-Ratangarh(Raj) ckt-1 & 2 4) 220KV Khetri(Raj)-Jhunjhunu(Raj) 5) 220KV Khetri(Raj)-Babai(Raj) ckt-1 & 2 6) 220KV Khetri(Raj)-Dadri(BBMB) ckt-1 & 2 7) 100MVA ICT 4 at 220/132kV Khetri (Raj) 8) 100MVA ICT 5 at 220/132kV Khetri (Raj) 9) 100MVA ICT 6 at 220/132kV Khetri (Raj)	Rajasthan	Rajasthan & BBMB	30-May-19	23:59	31-May-19	01:36	01:37	220KV Khetri(Raj)-Behror(Raj) tripped due to Y-Ph CT blast at Khetri end. Due to this, 220KV Bus-II Bus bar protection operated leading to tripping of the lines and ICTs connected to 220 kV Bus-II (at Khetri). As per PMU, three phase fault is observed in the system. In antecedent conditions, 100MVA ICT 5 & 6 carrying 31MW & 36MW respectively.		80	GD-1
31	NR	1) 115MW Unit#5 at 220kV Salai HEP(NHPC) 2) 115MW Unit#1 at 220kV Salai HEP(NHPC) 3) 115MW Unit#2 at 220kV Salai HEP(NHPC) 4) 115MW Unit#3 at 220kV Salai HEP(NHPC) 5) 115MW Unit#4 at 220kV Salai HEP(NHPC) 6) 115MW Unit#6 at 220kV Salai HEP(NHPC)	Jammu & Kashmir	NHPC	31-May-19	18:40	31-May-19	18:52	00:12	Unit#5 at 220kV Salai HEP(NHPC) tripped on overcurrent and other 5 units tripped due to overloading after tripping of Unit#5. As per PMU, R-N fault with delayed clearance of 400ms is observed. In antecedent conditions, Unit#1,2,3,4,5 & 6 carrying 118MW,118MW,117MW,122MW,122MW & 121MW respectively.	715		GD-1

Western Region-Event Report for May 2019

S.No	Region	Name of Elements	Owner/Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA standards	Energy Unreserved (MU)
				Date	Time	Date	Time	Time					
1	WR	Tripping of 1.220 kv Chichli-Narsingpur 2.220 kv Chichli-Papariya 3.220/132 kv 160 MVA Chichli ICT.	MPPTCL	1-May-19	07:13	1-May-19	07:34	00:21	At 220/132 kv Chichli s/s, B phase CT of 220/132 kv 160 MVA ICT blasted and resulted in tripping of 220 kv Narsingpur and pipariya feeders.	Nil	Nil	GI-1	Nil
2	WR	Tripping of 1.400 kv Wanakbori-Asoj 2.210 MW Wanakbori Unit 5 3.210 MW Wanakbori Unit 7	GSECL	9-May-19	13:55	9-May-19	16:10	02:15	At 400 kv Wanakbori power station, 400 kv Bus 2 side Y phase CT blasted and resulted in 400 kv Bus 2 bus bar protection operation. Since the Tie bays were already in open condition, it resulted in tripping of Unit 5 and Unit 7.	410	Nil	GI-2	Nil
3	WR	Tripping of 1.220/132 kv 125 MVA Bhilai ICT 1,2,3 2.220/132 kv 160 MVA ICT 5 3.220 kv Bhilai-Khedamara 1&2 4.220 kv Bhilai-Raipur(PG) 5.220 kv Bhilai-Gurur 6.220 kv Raika-Gurur 7.220 kv Gurur-Barsoor	CSPTCL	10-May-19	22:19	10-May-19	23:04	00:45	At 220/132 kv Bhilai s/s, LV side Y phase CT of 220/132 kv 125 MVA ICT blasted and resulted in tripping of all the 220 kv elements on Bus bar protection operation.220 kv Bhilai, Gurur, Barsoor and the downstream 132 kv system got affected due to the event.	Nil	590	GD-1	0.4425
4		Tripping of 1.220kv Churri-Bishrampur-1 and 2.132kv down stream network of Churri and Bishrampur	CSPTCL	11-May-19	20:56	11-May-19	22:30	01:34	Due to stormy weather in the area, 220kv Churri-Bishrampur-1 tripped on Y phase fault (jumper opening at location 171). 132kv downstream network from Churri and Bishrampur also tripped .	Nil	284	GD-1	0.4449
5	WR	Tripping of 1.220 kv Lonand-Jejuri 2.220 kv Lonand-Sona alloys 3.220 kv Lonand-Phalthan 4.220 kv Lonand-Bothe 5.220/132kv 200 MVA ICT 1&2 6.220/132 kv 100 MVA ICT 3	MSETCL	16-May-19	17:20	16-May-19	18:10	00:50	At 220 kv Lonand s/s, 220 kv Bus tripped on Bus bar protection operation. Minor flashover was found in Y phase of pilot string insulator in main bus gantry near 100 MVA ICT 3.	Nil	152	GD-1	0.12667
6	WR	Tripping of 1.210 MW VSTPS Unit 1,2,3,4,6 2.500 MW VSTPS Unit 7,8,9,10 3.400 kv Vindhyachal- Satna 1,2,3&4 4.400 kv VSTPS-Jabalpur 1&2 5.400 kv VSTPS-Korba 6.400 kv VSTPS-Essar Mahan 7.400 kv VSTPS-REWA 8.400 kv VSTPS-SASAN-REWA 9.150 MVAR Satna Statcom 1&2 10. 500 kv HVDC Vindhyachal pole 2 11.400 kv Vindhyachal-Waidhan 1&2	NTPC/PGCIL	19-May-19	10:35	19-May-19	11:38	01:03	At 400 kv Vindhyachal power station, the Pipe carrying ash slurry from stage 2 got burst near stage 3 switchyard and caused water splashing over the Bus section 6 of Vindhyachal power station with high velocity. This resulted in flashover at stage 3 switchyard insulators and in between bus conductors. At the same time R phase bushing of Unit 7 (500 MW) GT failed and resulted in R phase fault. The fault was neither cleared by GT differential protection operation nor Bus bar protection operation, which led to the tripping of all the connected lines and generators of stage 1,2&3 on Zone 2 distance protection operation from the remote end and backup protection operation respectively.	2584	Nil	GD-1	Nil
7	WR	Tripping of 1. 220 kv Alkud-Mendhigiri 2 2.220 kv Alkud-Miraj 3.220 kv Alkud-Vita 4.400/220 kv Alkud ICT	MSETCL	21-May-19	07:36	21-May-19	08:00	00:24	At 400/220 kv Alkud s/s, B phase CT of 220 kv Mendhigiri-2 failed and resulted in tripping of 220 kv Bus 1 and Bus 2 on Bus bar protection operation. 220 kv Mendhigiri 2 was connected to 220 kv Alkud Bus 2 but Bus 1 was also tripped during the event. The 220 kv Bus 1 tripping was mal-operation, due to the intermittent status of the Isolator in spare peripheral Unit	Nil	Nil	GI-1	Nil
8	WR	Tripping of 1.210 MW VSTPS Unit 1 2.500 MW VSTPS Unit 8 3.500 kv HVDC Vindhyachal Pole 1&2 4.150 MVAR Satna STATCOM 1&2 5.400 kv VSTPS-Jabalpur 1&2 6.400 kv VSTPS-Satna 1 7.400 kv VSTPS-Essar Mahan 8.400/132 kv Vindhyachal ICT 1	NTPC/PGCIL	22-May-19	15:33	22-May-19	17:33	02:00	While availing emergency outage of VSTPS-Jabalpur-1, to disconnect the L/R of 400kv VSTPS-Jabalpur-1 at Jabalpur end for attending oil leakages, the line was opened at Jabalpur end, and direct trip received at VSTPS. While opening, R-ph of the breaker at VSTPS, blasted resulting in bus fault on 400kv Bus section-3. Bus bar protection operated at Vindhyachal power station.	700	Nil	GI-2	Nil
9	WR	Tripping of 1.220 kv Halvad- Mansar 2 2.220 kv Halvad- Sartanpar 2 3.220 kv Halvad- Dhranghandra 1&2 4.220/66 kv 160 MVA Halvad ICT 1&2	GETCO	22-May-19	19:33	22-May-19	21:20	01:47	At 220 kv Halvad s/s, 220kv Bus-2 side B phase Isolator dropper jumper of 220kv Halvad Mansar-2, opened and created fault in Bus 2. All the 220 kv elements connected to Bus-2 tripped on Bus bar protection operation. While charging ICT 1 through 220 kv Bus 1, 220 kv Halvad-Dhranghandra 1 tripped on Back up protection from remote end and the 220 kv Halvad station went blackout	Nil	82	GD-1	0.1462
10	WR	Tripping of 1.400/220 kv 500 MVA Asoj ICT 1 2.400 kv Asoj-Chorania 2	GETCO	24-May-19	09:06	24-May-19	10:32	01:26	At 400/220 kv Asoj s/s, Y phase Unit of 400/220 kv 500 MVA ICT 1 blasted and resulted in tripping of the ICT along with the chorania 2 line. To control the fire and isolate the faulty unit of ICT remaining 400 kv elements in the Asoj s/s were H/T at 09:45 Hrs.	Nil	Nil	GI-2	Nil
11	WR	1.400 kv VSTPS-Jabalpur 1&2 2.400 kv Vindhyachal- Satna 1&2 3.210 MW VSTPS Unit 1 4.500 MW VSTPS Unit 8 5.500 kv HVDC Vindhyachal Pole 2 7.400 kv VSTPS-Korba 8.400 kv VSTPS-Essar Mahan 9.400/132 kv Vindhyachal ICT 1	NTPC/PGCIL	28-May-19	12:09	28-May-19	13:11	01:02	At Vindhyachal power station, 400 kv bus 4 was under shutdown and all other elements were shifted to 400 kv Bus 3. Only 400 kv Vindhyachal- Jabalpur 1 was connected through TBC. R phase Isolator of TBC opened in onload condition and resulted in tripping of 400 kv Bus 3 on busbar protection operation. It was found that the Isolator limit switch control wiring was loose and was earthed due to which the bus bar protection operated.	710	Nil	GI-2	Nil

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

Eastern Region-Event Report for May 2019

Sl. No.	Region	Name of major elements tripped	Owner / Agency	Outage		Revival		Outage Duration	Event	Generation Loss (MW)	Load Loss (MW)	Category as per CEA Grid Standards	Loss of Energy(in MU)
				Date	Time	Date	Time						
1	ERLDC	765 kV Angul - Jharsuguda - III 765 kV bus I at Angul	ISTS	2-May-19	01:08	2-May-19	01:49	00:41	At 01:08 Hrs, 765 kV Angul-Jharsuguda III tripped due to R_ph CT failure of its tie bay at Angul end. 765 kV Bus I at Angul also tripped along with the line.	0	0	GI-II	0.0000
2	ERLDC	400 KV Meramundali-Mendhasal 400 KV Mendhasal-Pandiabli D/c 400/220 kV ICT II at Mendhasal 220 KV Mendhasal-Nayagarh 220 KV Mendhasal-Atri D/c 220 KV Pandiabli Atri D/C	OPTCL	8-May-19	13:05	8-May-19	13:24	00:19	220 kV Mendasal - Bhanjanagar S/C was under breakdown. While taking charging attempt 400/220 kV ICT - II at Mendasal, B phase LA of its HV side burst and subsequently all 400 kV and 220 kV lines at Mendasal tripped. Pandiabli which was being supplied through Mendasal end only also became dead	0	0	GD-I	0.0000
3	ERLDC	400 kV SEZ - Smelter T/C	OPTCL	16-May-19	19:10	16-May-19	19:34	00:24	One flying metal sheet was in induction zone of two smelter SEZ transmission line due to heavy localized windy storm which created line fault. Hence SEZ lines (2nos) got tripped on earth fault protection and third line tripped on over current protection. Unit -1 came to home load operation and HP/LP bypassed of other units (unit-3&4) immediately by CILMS (Internal SPS) action	540	1332	*GI-II	0.5328
4	ERLDC	220 KV Bakreswar-Satgachia I 220 KV Bakreswar Sadaipur I 220 KV Bakreswar Durgapur II 315 MVA ICT II at Bakreswar U#3 and U#5 at Bakreswar	WBPCL	18-May-19	22:34	18-May-19	22:47	00:13	At 22:34 hrs 220 kV main bus I at Bakreswar (BkTPP) tripped on bus differential protection leading to the tripping of 220 KV Bakreswar-Satgachia I, 220 KV Bakreswar Sadaipur I, 220 KV Bakreswar Durgapur II & 315 MVA ICT II at Bakreswar. U#3 and U#5 of Bakreswar switched to house-load mode, resulting into generation loss of around 350 MW (House load catered: 15 MW apex.) Load at Satgachia was interrupted due to an inter-tripping scheme which trips Satgachia's load during peak hours if any one of the 220 KV Bakreswar-Satgachia D/c trips.	350	18	*GI-I	0.0039
5	ERLDC	400 kV OPGC - Jharsuguda D/C	OPTCL	22-May-19	19:57	22-May-19	21:08	01:11	At 19:57 hrs 400 kV Jharsuguda - OPGC - II tripped at 19:57 hrs from OPGC end only. At 19:59 hrs 400 kV Jharsuguda OPGC - I tripped at 19:59 hrs on R-N fault resulting tripping of GT#4 & interruption of auxiliary supply to plant followed by tripping of all station compressors. At 20:15 hrs U#3 at OPGC was hand tripped.	650	0	GI-II	0.0000
6	ERLDC	400 kV Kishangunj - Darbhanga D/C 400 kV bus II at Darbhanga	ISTS	29-May-19	21:44	Yet to be restored		--	400 kV Darbhanga - Kishangunj D/C along with 400 kV bus II at Darbhanga tripped at 21:44 hrs due to collapse of Tower No 385(Loc. 96/0) suspension type collapsed due to high speed cyclone at Supaul Area (Bihar)-Near Koshi River.	0	0	GI-I	0.0000

(*) marked category is liable to change after the receipt of further information asked from concerned constituents.

Southern Region-Event Report for May 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 NCTPS - Tondiarpet line-2 2. 230kV NCTPS - Almathy 3. 230kV NCTPS - NCTPS St-2 4. 230kV NCTPS - Kilpauk 5. Uni # 1,2 & 3 at NCTPS	TANGEDCO	18-May-19	04:39	18-May-19	05:30	51 mins	Complete outage of 230kV NCTPS Generating Station of TANGEDCO: Triggering incident was Y phase to Earth fault in 220kV NCTPS Tondiarpet line-2. Due to mal-operation of LBB protection (of Tondiarpet line-2) at NCTPS end, all the connected elements of bus zone-3 got tripped. This resulted in the tripping of 230kV NCTPS Almathy line, 230kV NCTPS NCTPS St-2 line, bus section breaker-2, unit#3 and station transformer#3. Due to loss of evacuating lines, running units at NCTPS ,unit#1 and 2 got tripped. 230kV NCTPS Kilpauk line is radially connected and was hand tripped later. This resulted in complete loss of supply at 230kV NCTPS Generating Station.	440	-----	GD-1
2	SR	1. 230kV NCTPS - Tondiarpet ckt-1 &2 2. 230kV NCTPS - Sriperumpudur 3. 230kV NCTPS - Alamathy 4. 230kV NCTPS - Kilpauk 5. Unit # 1, 2 and 3 at NCTPS	TANGEDCO	19-May-19	22:44	19-May-19	23:15	31 mins	Complete outage of 230kV NCTPS Generating Station of TANGEDCO at 22:44 hrs on 19-05-2019: During antecedent condition many connected lines at 230kV NCTPS were under outage due to line faults. From 22:44:02hrs onwards, subsequent faults occurred and other in service lines at 230kV NCTPS namely 230kV NCTPS Tondiarpet line-1 &2, 230kV NCTPS Sriperumpudur line and 230kV NCTPS Alamathy line also got tripped one after the other due to jumper cut in B-ph and Y-ph. Due to loss of evacuating lines, running units#1,2 and 3 at 230kV NCTPS also got tripped during this event. 230kV NCTPS Kilpauk was hand tripped at NCTPS end. This resulted in complete loss of supply at 230kV NCTPS Generating Station.	480	132	GD-1
3	SR	1. 220kV Edamon - Edappon 2. 220kv Edamon - Sabarigiri ckt-1, 2 & 3 3. 220kV Edamon - Pothencode ckt-1 &2 4. 220kv Edamon - Kundara 5. 220kV Edamon - Tirunelveli ckt-1&2 6. 100MVA transformer 1 &2	KSEB	27-May-19	12:30	27-May-19	12:42	12 mins	Complete outage of 220kV Edamon SS of KSEB: Triggering incident was three phase to earth fault in 220kV Edamon Bus 1 and 2. Bus 1 and 2 Bus bar protection operated resulting in the tripping of all connected elements. This resulted in complete loss of supply at 220kV Edamon SS.	-----	600	GD-1
4	SR	1. 220kV Kodalalli - Kaiga 2. 220kV Kodalalli - Kadra 3. 220kV Kodalalli - Nagjheri ckt-1&2 4. Unit # 3 at Kodalalli	KPCL	30-May-19	13:34	30-May-19	14:12	38 mins	Complete outage of 220kV Kodalalli HEP of KPCL: As per report of KPCL, Bus isolator of Unit-3 opened online due to DC earth fault which in turn led to occurrence of fault. Delayed clearance of fault (200msec) observed from PMU data. It is mentioned in the report of KPCL that there was operation of LBB protection of Unit #3 CB. The reason for non-operation of busbar protection needs further investigation and details are awaited from KPCL. All connected elements got tripped at 220kV Kodalalli Hydro station	27	-----	GD-1
5	SR	1. 230kV MAPS - Acharapakkam 2. 230kV MAPS - Arani 3. 230kV MAPS - SP Koil ckt-1&2 4. Unit#2 at MAPS	NPCIL	15-May-19	02:45	15-May-19	03:36*	51 mins	Multiple tripping at 230kV MAPS station of NPCIL: Triggering incident was failure of Y ph insulator at 230kV intermediate tower at MAPS. Bus bar protection operated resulting in tripping of all elements connected to that bus. Running Unit # 2 also tripped.	220	----	GI-1
6	SR	1. 400/220kV ICT-1 &2 at Talarichevu 2. 220kV Talarichevu - Talarichevu PS2	APTRANSCO	25-May-19	07:33	25-May-19	08:37	1 hr 4 mins	Tripping of 220kV Bus-2 at 400/220kV Talarichevu: As reported, bus bar protection of 220kV Bus-2 at 400/220kV Talarichevu station operated due to through fault. This resulted in tripping of all elements connected to Bus-2.	---	---	GI-1
7	SR	1. 400/220kV ICT-1,2,3 & 4 at Ghanapur 2. All elements connected to 220kV Bus-2 at Ghanapur.	TSTRANSCO	27-May-19	02:04	27-May-19	03:14	1 hr 10 mins	Multiple tripping at 220kV Ghanapur station of TSTRANSCO: Triggering incident was failure of B-phase CT of bus coupler of Bus-2. Bus bar protection of 220kV Bus-2 operated resulting in tripping of all elements connected to Bus-2.	----	----	GI-1

*Note: Revival time taken from SCADA data since not furnished by MAPS-NPCIL

North Eastern Region Grid Disturbances for Month May 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 Ranganadi - Itanagar line 132 kV Itanagar - Pare line	POWERGRID, NEEPCO, ARUNACHAL PRADESH	10-May-19 14:36	10-May-19 15:16	40 mins	Itanagar (Chimpu) area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Itanagar line, 132 kV Itanagar - Pare line and 132 kV Itanagar - Lekhi line. At 14:36 Hrs on 10.05.2019, 132 kV Ranganadi - Itanagar and 132 kV Itanagar - Pare lines tripped. 132 kV Itanagar - Lekhi line was idle charged from Lekhi end at that time. Due to tripping of the elements, Itanagar (Chimpu) area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	15	0	0.01	GD 1
2	NER	132 kV Doyang- Sanis line	DoP, Nagaland	13-May-19 18:00	13-May-19 18:35	35 mins	Capital area of Nagaland Power System was connected with rest of NER Grid through 132 kV Doyang - Sanis line. (132 kV Dimapur-Kohima line tripped due to conductor snapping at 17:18 Hrs of 13.05.19, 132 kV Karong - Kohima line is idle charged from Kohima end as this line is quite old and due to weak jumper arrangement, 66 kV Tuensang - Likhimro line is kept open due to construction activities.) At 18:00 Hrs on 13.05.19, 132 kV Doyang - Sanis line tripped. Due to tripping of this element, Capital area of Nagaland Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area	0	40	0	0.023	GD 1
3	NER	132 kV Silchar- P.K.Bari D/C 132 kV Dharmanagar- Dullavchera 132 kV P.K.Bari- Kumarghat 132 kV Kamalpur- Dhalabil 132 kV Baramura- Gamaitila lines	POWERGRID, TSECL & AEGCL	13-May-19 18:06	13-May-19 18:33	27 mins	Northern part of Tripura Power system consisting of Dharmanagar, Kailashahar, PKBari, Ambasa, Gamaitila and Kamalpur area was connected with the rest of NER Grid with 132 kV Silchar- P.K.Bari D/C, 132 kV Dharmanagar- Dullavchera, 132 kV P.K.Bari- Kumarghat, 132 kV Kamalpur- Dhalabil & 132 kV Baramura- Gamaitila lines. At 18:06 Hrs on 13.05.19, 132 kV Silchar- P.K.Bari D/C, 132 kV Dharmanagar- Dullavchera, 132 kV P.K.Bari- Kumarghat, 132 kV Kamalpur- Dhalabil & 132 kV Baramura- Gamaitila lines tripped. Due to tripping of these elements, Northern part of Tripura Power system was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	63	0	0.028	GD 1
4	NER	132 kV Aizawl (PG)- Luangmual line	P&E Dept., Mizoram	13-May-19 20:16	13-May-19 20:42	26 mins	Luangmual area of Mizoram Power System as connected with rest of NER Grid through 132 kV Aizawl (PG)- Luangmual line. At 20:16 Hrs on 13.05.19, 132 kV Aizawl (PG)- Luangmual line tripped. Due to tripping of this element, Luangmual area of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	22	0	0.009	GD 1
5	NER	132 kV Aizawl (PG)- Luangmual line	P&E Dept., Mizoram	16-May-19 00:40	16-May-19 01:18	38 mins	Luangmual area of Mizoram Power System as connected with rest of NER Grid through 132 kV Aizawl (PG)- Luangmual line. At 00:40 Hrs on 16.05.19, 132 kV Aizawl (PG)- Luangmual line tripped. Due to tripping of this element, Luangmual area of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	20	0	0.012	GD 1
6	NER	132 kV Aizawl (PG)- Luangmual line.	P&E Dept., Mizoram	17-May-19 10:16	17-May-19 10:50	34 mins	Luangmual area of Mizoram Power System as connected with rest of NER Grid through 132 kV Aizawl (PG)- Luangmual line. At 10:16 Hrs on 17.05.19, 132 kV Aizawl (PG)- Luangmual line tripped. Due to tripping of this element, Luangmual area of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	19	0	0.011	GD 1
7	NER	132 kV Melriat (PG)- Zuangtui line	POWERGRID	17-May-19 10:29	17-May-19 13:06	2 hrs 37 mins	Zuangtui area of Mizoram Power System as connected with rest of NER Grid through 132 kV Melriat (PG)- Zuangtui line. At 10:29 Hrs on 17.05.19, 132 kV Melriat (PG)- 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.	0	49	0	0.128	GD 1
8	NER	132 kV Aizawl (PG)- Luangmual line.	P&E Dept., Mizoram	17-May-19 11:26	17-May-19 11:39	13 mins	Luangmual area of Mizoram Power System as connected with rest of NER Grid through 132 kV Aizawl (PG)- Luangmual line. At 11:26 Hrs on 17.05.19, 132 kV Aizawl (PG)- Luangmual line tripped. Due to tripping of this element, Luangmual area of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	15	0	0.003	GD 1
9	NER	132 kV Melriat (PG)- Zuangtui line	POWERGRID	17-May-19 13:27	17-May-19 13:51	24 mins	Zuangtui area of Mizoram Power System as connected with rest of NER Grid through 132 kV Melriat (PG)- Zuangtui line. At 13:27 Hrs on 17.05.19, 132 kV Melriat (PG)- 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.	0	19	0	0.008	GD 1
10	NER	132 kV Aizawl (PG)- Luangmual line.	P&E Dept., Mizoram	19-May-19 03:41	19-May-19 04:11	30 mins	Luangmual area of Mizoram Power System as connected with rest of NER Grid through 132 kV Aizawl (PG)- Luangmual line. At 03:41 Hrs on 19.05.19, 132 kV Aizawl (PG)- Luangmual line tripped. Due to tripping of this element, Luangmual area of Mizoram Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	13	0	0.0065	GD 1
11	NER	132 kV Melriat (PG)- Zuangtui line	PGCIL	19-May-19 04:04	19-May-19 04:25	21 mins	Zuangtui area of Mizoram Power System as connected with rest of NER Grid through 132 kV Aizawl (PG)- Luangmual line. At 04:04 Hrs on 19.05.19, 132 kV Melriat (PG)- 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.	0	12	0	0.0042	GD 1
12	NER	132 kV Balipara - Bhalupong- Khupi line	NEEPCO & DoP, Arunachal Pradesh	19-May-19 19:34	19-May-19 19:54	20 mins	Khupi area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Balipara - Bhalupong - Khupi line. At 19:34 Hrs on 19.05.2019, 132 kV Balipara - Bhalupong- Khupi line tripped. Due to tripping of these elements, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	18	0	0.0057	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
13	NER	132 kV Nangalbibra- Nongstoin TL	MePTCL	21-May-19 14:13	21-May-19 14:21	8 mins	Nongstoin, Mawngap, Mawlai and Cherrapunji areas of Meghalaya Power system was connected with rest of NER Grid through 132 kV Nangalbibra- Nongstoin line (132 kV Mawlai-Umiam Stg I, 132 kV Mawlai- NEHU and 132 kV Mawngap- Umiam Stg I D/C lines were kept open for system requirement). At 14:13 Hrs on 21.05.19, 132 kV Nangalbibra- Nongstoin line tripped. Due to tripping of this element, Nongstoin, Mawngap, Mawlai and Cherrapunji areas of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	42.7	0	0.0056	GD 1
14	NER	132 kV Monarchak - Udaipur Line 132 kV Monarchak - Rokhia Line Monarchak Unit GTG Monarchak Unit STG	TSECL & NEEPCO	24-May-19 15:53	24-May-19 16:05	12 mins	Monarchak GBPP & Rabindranagar area of Tripura Power System were connected with rest of NER Grid through 132 kV Monarchak - Udaipur Line & 132 kV Monarchak - Rokhia Line. At 15:53 Hrs on 24.05.2019, 132 kV Monarchak - Udaipur Line & 132 kV Monarchak - Rokhia Line tripped. Due to tripping of these elements, Monarchak GBPP & Rabindranagar area were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch.	65	5	0.013	0.001	GD 1
15	NER	132 kV Ranganadi - Itanagar 132 kV Pare - Itanagar Lines	NEEPCO & DoP, Arunachal Pradesh	26-May-19 13:14	26-May-19 13:29	15 mins	Itanagar (Chimpu) area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Itanagar (Chimpu) Line & 132 kV Pare - Itanagar (Chimpu) Line. 132 kV Lekhi - Itanagar (Chimpu) Line was kept open due to system requirement. At 13:14 Hrs on 26.05.2019, 132 kV Ranganadi - Itanagar (Chimpu) Line & 132 kV Pare - Itanagar (Chimpu) Line tripped. Due to tripping of these elements, Itanagar (Chimpu) area was 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 Ranganadi - Ziro Line	POWERGRID	28-May-19 05:30	28-May-19 06:03	33 mins	Ziro area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Ziro Line. At 05:30 Hrs on 28.05.2019, 132 kV Ranganadi -Ziro Line tripped. Due to tripping of this element, Ziro area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	19	0	0.01	GD 1
17	NER	132 kV Balipara - Khupi Line	NEEPCO & DoP, Arunachal Pradesh	29-May-19 13:58	29-May-19 14:20	22 mins	Khupi area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Balipara - Khupi Line. At 13:58 Hrs on 29.05.2019, 132 kV Balipara - Khupi Line tripped. Due to tripping of this element, Khupi area was separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	13	0	0.005	GD 1
18	NER	132 kV Lekhi - Pare Line	POWERGRID & DoP, Arunachal Pradesh	30-May-19 10:26	30-May-19 10:49	23 mins	Lekhi & Nirjuli areas of Arunachal Pradesh Power System were connected with rest of NER Grid through 132 kV Lekhi - Pare Line. 132 kV Lekhi - Itanagar Line kept open for restriction of loading of the Line due to Low CT ratio (150/1 A) and 132 kV Nirjuli - Gohpur Line kept open for over-loading of 132 kV Lekhi - Nirjuli Line. At 10:26 Hrs on 30.05.2019, 132 kV Lekhi - Pare Line tripped. Due to tripping of this element, Lekhi & Nirjuli areas were separated from rest of NER Grid and subsequently collapsed due to no source in this area.	0	33	0	0.013	GD 1
19	NER	132 kV Melriat (PG)- Zuangtui line	POWERGRID	31-May-19 16:51	31-May-19 17:45	54 mins	Zuangtui area of Mizoram Power System was connected with the rest of NER Grid through 132 kV Melriat (PG)- Zuangtui line. At 16:51 Hrs on 31.05.19, 132 kV Melriat (PG)- Zuangtui line tripped. Due to tripping of this element, Zuangtui area of Mizoram Power System was separated from the rest of NER Grid and subsequently collapsed due to no source in this area	0	46	0	0.0414	GD 1
20	NER	132 kV Balipara - Khupi line.	POWERGRID & DoP, Arunachal Pradesh	31-May-19 18:51	31-May-19 19:17	26 mins	Khupi area of Arunachal Pradesh Power System was connected with the rest of NER Grid through 132 kV Balipara - Khupi line. At 18:51 Hrs on 31.05.2019, 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	21	0	0.009	GD 1

North Eastern Region Grid Incidents for Month May 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	AGTCCPP Unit 1	NEEPCO	01-May-19 08:28	01-May-19 09:15	47 mins	AGTCCPP Unit 1 tripped at 08:28 Hrs on 01.05.19 due to IGB Control Trouble Trip. (Revision of schedule from Block No.38 on 01.05.19).	17	0	0.01	0	GI 1
2	NER	AGTCCPP Unit 1	NEEPCO	02-May-19 16:12	02-May-19 16:45	33 mins	AGTCCPP Unit 1 tripped at 16:12 Hrs on 02.05.19 due to IGB Control Trouble Trip. (Revision of schedule from Block No.68 on 02.05.19).	19	0	0.01	0	GI 1
3	NER	AGTCCPP Unit 1	NEEPCO	03-May-19 12:45	03-May-19 13:30	45 mins	AGTCCPP Unit 1 tripped at 12:45 Hrs on 03.05.19 due to Generator Electrical Fault. (Revision of schedule from Block No.55 on 03.05.19).	13	0	0.01	0	GI 1
4	NER	AGTCCPP Unit 4	NEEPCO	04-May-19 07:03	04-May-19 08:00	57 mins	AGTCCPP Unit 4 tripped at 07:03 Hrs on 04.05.19 due to Voltage jerk. (Revision of schedule from Block No.33 on 04.05.19).	18	0	0.02	0	GI 1
5	NER	AGTCCPP Unit 6	NEEPCO	06-May-19 03:07	06-May-19 04:15	1 hrs 8 mins	AGTCCPP Unit 6 tripped at 03:07 Hrs on 06.05.19 due to STG console trip. (Revision of schedule from Block No.17 on 06.05.19).	11	0	0.01	0	GI 1
6	NER	BgTPP Unit 1	NTPC	08-May-19 06:59	08-May-19 07:45	46 mins	BGTPP Unit-1 tripped at 06:59 Hrs on 08.05.19 due to boiler flame failure. (Revision of schedule from Block No 32 on 08.05.19).	138	0	0.11	0	GI 2
7	NER	Khandong Unit 2	NEEPCO	09-May-19 19:42	09-May-19 20:30	48 mins	Khandong Unit 2 tripped at 19:42 Hrs on 09.05.19 due to high thrust bearing temperature. (Revision of schedule from Block No 83 on 09.05.19).	25	0	0.02	0	GI 1
8	NER	AGBPP Unit 4	NEEPCO	12-May-19 09:50	12-May-19 10:45	55 mins	AGBPP Unit 4 tripped at 09:50 Hrs on 12.05.19 due to tripping of Gas Compressor 1. (Revision of schedule from Block No 44 on 12.05.19).	13	0	0.01	0	GI 2
9	NER	Kopili Unit 1	NEEPCO	12-May-19 11:44	12-May-19 13:00	1 hrs 16 mins	Kopili Unit 1 tripped at 11:44 Hrs on 12.05.19 due to Stator Earth Fault. (Revision of schedule from Block No 53 on 12.05.19).	40	0	0.05	0	GI 2
10	NER	AGBPP Unit 6 and 9	NEEPCO	12-May-19 18:09	12-May-19 19:30	1 hrs 21 mins	AGBPP Unit 6 tripped at 18:09 Hrs of 12.05.2019 due to high vibration and Unit 9 tripped at 18:09 Hrs of 12.05.2019 due to non availability of Unit 5 & 6. (Revision done from block number 79 on 12.05.2019)	66	0	0.09	0	GI 2
11	NER	Pare Unit 2	NEEPCO	16-May-19 16:19	16-May-19 17:15	56 mins	Pare Unit 2 tripped at 16:19 Hrs of 16.05.2019 due to failure of governor primary signal. (Revision done from block number 70 on 16.05.2019)	48	0	0.04	0	GI 1
12	NER	BgTPP Unit 2	NTPC	23-May-19 03:37	23-May-19 04:30	53 mins	BGTPP Unit-2 tripped at 03:37 Hrs on 23.05.19 due to low vacuum level. (Revision of schedule from Block No 19 on 23.05.19).	194	0	0.17	0	GI 2
13	NER	Khandong Unit 1	NEEPCO	25-May-19 15:57	25-May-19 16:45	48 mins	Khandong Unit 1 tripped at 15:57 Hrs on 25.05.19 due to high thrust bearing temperature. (Revision of schedule from Block No 68 on 23.05.19).	24	0	0.02	0	GI 1
14	NER	AGTCCPP Unit 3	NEEPCO	27-May-19 13:48	27-May-19 14:30	42 mins	AGTCCPP Unit 3 tripped at 13:48 Hrs on 27.05.19 due to under voltage & over-current. (Revision of schedule from Block No.59 on 27.05.19).	18	0	0.01	0	GI 1
15	NER	AGBPP Unit 2	NEEPCO	27-May-19 23:54	28-May-19 00:45	51 mins	AGBPP Unit 2 tripped at 23:54 Hrs of 27.05.2019 due to tripping of Gas compressor 1. (Revision done from block number 4 on 28.05.2019)	29	0	0.02	0	GI 2
16	NER	AGBPP Unit 3, 4 & 8	NEEPCO	28-May-19 00:33	28-May-19 01:30	57 mins	AGBPP Unit 3, 4 & 8 tripped at 00:33 Hrs of 28.05.2019 due tripping of Gas Compressor 3 & 4. (Revision done from block number 7 on 28.05.2019)	58	0	0.06	0	GI 2
17	NER	AGBPP Unit 1, 5, 7 & 9	NEEPCO	28-May-19 03:03	28-May-19 04:00	57 mins	AGBPP Unit 1, 5, 7 & 9 tripped at 03:03 Hrs of 28.05.2019 due tripping of Gas Compressor 2. (Revision done from block number 17 on 28.05.2019)	71	0	0.07	0	GI 2
18	NER	Kopili Unit 2	NEEPCO	28-May-19 14:50	28-May-19 16:00	1 hrs 10 mins	Kopili Unit 2 tripped at 14:50 Hrs on 28.05.19 due to high thrust bearing temperature. (Revision of schedule from Block No 65 on 28.05.19).	36	0	0.04	0	GI 2
19	NER	AGTCCPP Unit 1	NEEPCO	29-May-19 21:43	29-May-19 22:30	47 mins	AGTCCPP Unit 1 tripped at 21:42 Hrs on 29.05.19 due to flash-over in bus duct of Unit-1. (Revision of schedule from Block No.91 on 29.05.19).	16	0	0.01	0	GI 1