

Northern Region-Event Report for November 2018

| S.No. | Region | Name of Elements (Tripped/Manually opened) | Affected Area | Owner/ Agency | Outage | | Revival | | Duration | Event (As reported) | Generation Loss(MW) | Load Loss(MW) | Category as per CEA Grid Standards | Energy Unservd (in MU) |
|-------|--------|---|-----------------------------|--------------------------------|-----------|-------|-----------|-------|----------|--|------------------------|---------------|---------------------------------------|------------------------|
| | | | | | Date | Time | Date | Time | | | | | | |
| 1 | NR | 1) 220KV Chamera III(NHPC)-Chamera pool(PG) ckt-2 2) 220KV Budhi(Lanco)-Chamera III(NHPC) | Himachal Pradesh | NHPC/POWERGRID/Lanco | 2-Nov-18 | 16:10 | 2-Nov-18 | 19:35 | 03:25 | A problem occurred in UR1 GIS breaker compartment caused Bus bar protection operation at 220KV Chamera III(NHPC) leading to tripping of 220KV Chamera III(NHPC)-Chamera pool(PG) ckt-2& 220KV Budhi(Lanco)-Chamera III(NHPC) ckt-1. As per PMU, B-N fault is observed. SCADA data at 220KV Chamera III(NHPC) was suspected during the incident. | NIL | NIL | GI-2 | |
| 2 | NR | 1) 220KV Sala(NHPC)-Kishenpur(PG) ckt-3 2) 220KV Sala(NHPC)-Kishenpur(PG) ckt-4 3) 400KV Kishenpur(PG) -New Wanpoh(PG) ckt-4 | Jammu & Kashmir | POWERGRID & NHPC | 3-Nov-18 | 15:24 | 3-Nov-18 | 15:48 | 00:24 | 400KV Kishenpur(PG) -New Wanpoh(PG) ckt-4 tripped on Phase to earth fault(B-N fault), 111 kms from Kishenpur(PG) end. At the same time, 220KV Sala(NHPC)-Kishenpur(PG) ckt-3 & ckt-4 also tripped. As per PMU, B-N fault is observed. Another B-N fault observed after 1 sec with delayed clearance of 680ms. | NIL | NIL | GI-2 | |
| 3 | NR | 1) 400KV New Wanpoh(PG) -Kishenpur(PG)-ckt-1 2) 400KV New Wanpoh(PG) -Kishenpur(PG)-ckt-2 3) 400KV New Wanpoh(PG) -Wagooora(PG)-ckt-1 4) 400KV New Wanpoh(PG) -Wagooora(PG)-ckt-2 | Jammu & Kashmir | POWERGRID | 4-Nov-18 | 09:45 | 4-Nov-18 | 10:06 | 00:21 | 400KV New Wanpoh(PG) -Kishenpur(PG)-ckt-1 & 2, 400KV New Wanpoh(PG) -Wagooora(PG)-ckt-1 & 2 tripped on R-B Fault, 132km from Kishenpur(PG) end. As per PMU, multiple R-B fault observed in the system. In antecedent conditions, 400KV New Wanpoh(PG) -Wagooora(PG)-ckt-1 & 2 carrying 135MW each and 400KV Kishenpur(PG)-New Wanpoh(PG) ckt-1 & 2 carrying 135 MW each. | NIL | NIL | GI-2 | |
| 4 | NR | 1) 400KV Aligarh(UP)-Sikandrabad(UP)-1 2) 400KV Aligarh(UP)-Sikandrabad(UP)-2 3) 400KV Aligarh(UP)-Mainpuri(UP)-1 4) 400KV Aligarh(UP)-Mainpuri(UP)-2 5) 400KV Aligarh(UP)-Pankaj(UP) 6) 400KV Aligarh(UP)-Muradnagar(UP)-1 7) 400/220KV 500 MVA ICT #1 at Aligarh(UP) 8) 400/220KV 500 MVA ICT #2 at Aligarh(UP) 9) 400KV Sikandrabad(UP)-G.Noida(UP)-1 10) 400KV Sikandrabad(UP)-G.Noida(UP)-2 11) 400KV Muradnagar(UP)-Ataur(UP) 12) 765/400KV 1000 MVA ICT #1 at Mainpuri(UP) | Uttar Pradesh | UP | 6-Nov-18 | 18:13 | 6-Nov-18 | 19:04 | 00:51 | B-N fault occurred resulted in tripping of all 400KV ckt from Aligarh(UP) along with both 400/220KV ICTs. 400KV Muradnagar-Ataur, 765/400KV ICT #1 at Mainpuri(UP) and 400KV Sikandrabad-G.Noida also tripped. 400KV Sikandrabad-Aligarh hand tripped. | NIL | 200 | GD-1 | 0.16 |
| 5 | NR | 1) 400KV Ballabgarh(PG)-Tughlakabad(PG)-2 2) 400KV Ballabgarh(PG)-Nawada(HVPLN) | Haryana | Delhi/POWERGRID/Haryana | 7-Nov-18 | 04:01 | 7-Nov-18 | 05:45 | 01:44 | 400KV Ballabgarh(PG)-Tughlakabad(PG)-2 and Ballabgarh(PG)-Nawada(HVPLN) tripped on over voltage. As per PMU, no fault observed. | NIL | NIL | GI-2 | |
| 6 | NR | 1) 220KV Sakatpura(RVPLN)-Dyra(RVPLN) 2) 220KV Sakatpura(RVPLN)-Arta(KTFC) 3) 220KV Sakatpura(RVPLN)-RAP5-1 4) 220KV Sakatpura(RVPLN)-RAP5-2 5) 220KV Sakatpura(RVPLN)-RAP5-3 6) 220KV Sakatpura(RVPLN)-Bhanpura(MPPTCL) 7) 220KV Sakatpura(RVPLN)-KTPS(RRVUNL)-1 8) 220KV Sakatpura(RVPLN)-KTPS(RRVUNL)-3 9) 220KV Sakatpura(RVPLN)-KTPS(RRVUNL)-4 10) 220KV KTPS(RRVUNL)-KOTAPG-1 11) 220KV KTPS(RRVUNL)-Modak 12) 220KV KTPS(RRVUNL)-Heerapura(RVPLN) 13) 220KV Sakatpura(RRVPLN)-Mandalgarh(RRVPLN) 14) Unit #2 at KTPS 15) Unit #3 at KTPS 16) Unit #4 at KTPS 17) Unit #5 at KTPS 18) Unit #6 at KTPS 19) Unit #7 at KTPS | Rajasthan | Rajasthan/NTPC | 13-Nov-18 | 14:26 | 13-Nov-18 | 14:40 | 00:14 | Due to fault and subsequent bus bar protection operation at 220KV Sakatpura, cascade tripping occurred at 220KV KTPS and 220KV Dyra and Rana Pratap Sagar. All running units viz. Unit #2, #3, #4, #5, #6 & #7 also tripped at KTPS. | 700 | 250 | GD-1 | 0.06 |
| 7 | NR | 1) 315 MVA ICT 1 at 400/220KV Nalagarh(PG). 2) 220KV Mohali(Pun)-Nalagarh(PG) ckt-2 3) 220KV Nalagarh(PG)-Upanangala(HP) ckt-2 4) 220KV Kish_cha(CHD)-Nalagarh(PG) ckt-1 | Punjab | POWERGRID, Punjab & HP | 19-Nov-18 | 13:44 | 19-Nov-18 | 14:26 | 00:42 | 315 MVA ICT 1 at 400/220KV Nalagarh(PG) tripped due to LBB protection operation of 220KV Mohali(Pun)-Nalagarh(PG) ckt-2. As per PMU, R-N fault is observed. In antecedent condition, 315 MVA ICT 1 & 220KV Mohali(Pun)-Nalagarh(PG) carrying 119 MW & 45 MW respectively. | NIL | NIL | GI-2 | |
| 8 | NR | 1) 220KV Sarsawa(UPPTCL) -Khodri (UPCL) 2) 220KV Khodri(UTT)-Saharanpur(UP) ckt-2 3) 220KV Khodri(UTT)-Chibra(UTT) ckt-1 4) 220KV Khodri(UTT)-Chibra(UTT) ckt-2 | Uttarakhand & Uttar Pradesh | Uttarakhand & UP | 21-Nov-18 | 08:43 | 21-Nov-18 | 09:48 | 01:05 | Bus bar protection operated at 220KV Khodri(UTT) due to snake climbed on 220KV R-Ph CT resulting in tripping of 220KV Sarsawa(UPPTCL)-Khodri (UPCL) & 220KV Khodri(UTT)-Saharanpur(UP) ckt-2. As per PMU, R-N fault with delayed clearance is observed. In antecedent conditions, 220KV Khodri(UTT)-Saharanpur(UP) ckt-2 carrying 135 MW. | 162 | NIL | GD-1 | |
| 9 | NR | 1) 220KV Bhiwadi(PG)-Kushkhera(RVPLN) ckt-2 2) 220KV Bhiwadi(PG)-Bhiwadi(RVPLN) ckt-2 3) 220KV Bhiwadi(PG)-Mau(HVPLN) 4) 315 MVA ICT 1 at 400/220KV Bhiwadi(PG) 5) 315 MVA ICT 3 at 400/220KV Bhiwadi(PG) 6) 220KV Bhiwadi(PG)-Rewari(HVPLN) ckt-1 7) 220KV Bhiwadi(PG)-Rewari(HVPLN) ckt-2 8) 220KV Bus 2 at 400/220KV Bhiwadi(PG) | Rajasthan | POWERGRID, Haryana & Rajasthan | 24-Nov-18 | 08:14 | 24-Nov-18 | 09:18 | 01:04 | 220KV Bhiwadi(PG)-Kushkhera(RVPLN) ckt-2 tripped due to broken jumper at Tower No. 20. At the same time, 220KV Bhiwadi(PG)-Bhiwadi(RVPLN) ckt-2, 220KV Bhiwadi(PG)-Mau(HVPLN) and 315 MVA ICT 1 & ICT 3 also tripped. As per PMU, B-N fault is observed. Voltage drop also observed in R & Y phase. In antecedent conditions, 315 MVA ICT 1 & ICT 3 carrying 150 MW & 140 MW respectively. | NIL | NIL | GI-2 | |
| 10 | NR | 1) 220KV Napp(NPC)-Simbholi(UP) 2) 220KV Meerut(PG)-Simbholi(UP) | Uttar Pradesh | UP, NPC & POWERGRID | 25-Nov-18 | 11:23 | 25-Nov-18 | 13:40 | 02:17 | 220KV Napp(NPC)-Simbholi(UP) and 220KV Meerut(PG)-Simbholi(UP) tripped at 11:23Hrs. As per PMU, B-N fault with delayed clearance is observed. In antecedent conditions, 220KV Napp(NPC)-Simbholi(UP) carrying 101 MW. | NIL | NIL | GI-2 | |

| S.No. | Region | Name of Elements (Tripped/Manually opened) | Affected Area | Owner/ Agency | Outage | | Revival | | Duration | Event (As reported) | Generation Loss(MW) | Load Loss(MW) | Category as per CEA Grid Standards | Energy Unerved (in MU) |
|-------|--------|--|---------------|----------------------|-----------|-------|-----------|-------|----------|---|------------------------|---------------|---------------------------------------|------------------------|
| | | | | | Date | Time | Date | Time | | | | | | |
| 11 | NR | 1) 400KV Dadri(NTPC)-G.Noida(UP) 2) 400KV G.Noida(765)-G.Noida(400) ckt-2 3) 400KV Dadri(NTPC)-Panipat(BBMB) ckt-2 4) 500MVA 400/220kV ICT 5 at 400KV Greater Noida(UP) 5) 315MVA 400/220kV ICT 1 at 400KV Greater Noida(UP) 6) 315MVA 400/220kV ICT 2 at 400KV Greater Noida(UP) | Uttar Pradesh | UP, POWERGRID & NTPC | 26-Nov-18 | 01:56 | 26-Nov-18 | 02:31 | 00:35 | Due to Y-phase CT blast of Dadri (NTPC) line at 400 kV Greater Noida (UP), 400KV Dadri(NTPC)-400KV Greater Noida(UP) & 400KV Greater Noida(UP)-765kV Greater Noida(UP) ckt-2 tripped along with 500 MVA ICT-5, 315 MVA ICT-1 & 2. At the same time, 400 kV Dadri(NTPC)-Panipat(BBMB) ckt-2 also tripped from Dadri(NTPC) end. As per PMU, R-N fault is observed. In antecedent conditions, 500MVA ICT5, 315 MVA ICT1 & 315 MVA ICT2 carrying 101MW, 62MW & 67MW respectively. | NIL | NIL | GI-2 | |
| 12 | NR | 1) 500MVA 400/220kV ICT1 at 400KV Ataur(UP) 2) 500MVA 400/220kV ICT2 at 400KV Ataur(UP) 3) 220KV Ataur(UP)-Mort(UP) ckt-2 4) 220KV Ataur(UP)-Mandola(UP) ckt-1 | Uttar Pradesh | UP | 26-Nov-18 | 15:32 | 26-Nov-18 | 16:34 | 01:02 | 500MVA 400/220kV ICT 1 & ICT 2 at 400KV Ataur(UP) tripped due to Bus bar protection maloperation. As per PMU, No fault is observed in the system. In antecedent conditions, 500MVA ICT 2 carrying 72 MW. | NIL | NIL | GI-2 | |
| 13 | NR | 1) 400KV Rajpura(Pun)-Rajpura(TH)(Pun) ckt-2 2) 400KV Rajpura(Pun)-Dhuri(Pun) ckt-1 | Punjab | Punjab | 26-Nov-18 | 15:49 | 26-Nov-18 | 16:57 | 01:08 | 400KV Rajpura(Pun)-Rajpura(TH)(Pun) ckt-2 and 400KV Rajpura(Pun)-Dhuri(Pun) ckt-1 tripped while doing testing work. As per PMU, No fault observed in the system. In antecedent condition, 400KV Rajpura(Pun)-Rajpura(TH)(Pun) ckt-2 & 400KV Rajpura(Pun)-Dhuri(Pun) ckt-2 carrying 274 MW & 86 MW respectively. | NIL | NIL | GI-2 | |
| 14 | NR | 1) 400KV Banda(UP)-Oral(UP) ckt-1 2) 315 MVA 400/220kV ICT 1 at Oral(UP) 3) 400 kV Bus 2 at 400/220kV Oral(UP) | Uttar Pradesh | UP | 29-Nov-18 | 02:25 | 29-Nov-18 | 04:26 | 02:01 | 400KV Banda(UP)-Oral(UP) ckt-1 tripped on R-N fault. At the same time, 400 kV Bus 2 and 315 MVA ICT 1 at 400/220kV Oral(UP) also tripped. As per PMU, Y-N fault is observed. In antecedent condition, 315 MVA ICT 1 carrying 123 MW and 400KV Banda(UP)-Oral(UP) ckt-1 carrying 75 MW. | NIL | NIL | GI-2 | |

Western Region-Event Report for November 2018

| S.No | Region | Name of Elements | Owner/Agency | Outage | | Revival | | Outage Duration | Event | Generation Loss (MW) | Load Loss (MW) | Category as per CEA standards | Energy Unserved (MU) |
|------|--------|--|--------------|------------|-------|------------|-------|-----------------|--|----------------------|----------------|-------------------------------|----------------------|
| | | | | Date | Time | Date | Time | | | | | | |
| 1 | WR | Tripping of 1. 220 kv Bhugaon-Wardha (PG) 2. 220 kv Bhugaon-Purti 3. 220 kv Bhugaon-IPL 4. 220 kv Bhugaon-Warora D/C 5. 220 kv Bhugaon-Wardha (MH) 6. 220 kv Bhugaon-Hinganghat 7. 220 kv Bhugaon-LLOYDS 8. 220 kv Bhugaon-UGML 9. 220/132 kv 100 MVA Bhugaon ICTs 1&2 10. 220/33 kv 50 MVA ICTs 1&2 | MSETCL | 04-11-2018 | 12:21 | 04-11-2018 | 12:45 | 00:24 | At Bhugaon(MH), Y-ph wave trap of 220KV Wardha-Bhugaon ckt 1 decapped but the Y phase pole CB of 220KV Wardha-Bhugaon ckt 1 failed to open and resulted in tripping of 220KV Bus 1 on LBB operation. Due to the Non availability of PT supply Bus 2 also tripped during the event. | 9 | 103 | GD-1 | 0.0910 |
| 2 | WR | Tripping of 1. 400/220 kv Aurangabad(MH) ICT 1&2 2. 400 kv Aurangabad(MH)-Aurangabad(PG) ckt 2 3. 400 kv Aurangabad(MH)-Babhleshwar 4. 400 kv Aurangabad(MH)-Pune(GIS) 2 | MSETCL | 06-11-2018 | 13:28 | 06-11-2018 | 14:54 | 01:26 | At Aurangabad(MH), all the elements connected to the 400 kv Bus 1 tripped due to 400 kv Bus 1 bus bar protection operation. | Nil | Nil | GI-2 | Nil |
| 3 | WR | Tripping of 1. 400 kv Kala-Kudus 2 2. 400 kv Kala-Vapi 1 3. 400/220 kv 315 MVA Kala ICTs 1&2 4. 400 kv 80 MVAR Kala BR | PGCL | 06-11-2018 | 12:18 | 06-11-2018 | 12:58 | 00:40 | 400 kv Kala bus-2 tripped along with the connected elements on bus bar protection operation during testing of 400 kv bus-1 which was under planned shutdown. | Nil | Nil | GI-2 | Nil |
| 4 | WR | Tripping of 765 kv Ektuni Bus 1 | MSETCL | 08-11-2018 | 07:11 | 08-11-2018 | 15:58 | 08:47 | Due to Mal-operation of 765 kv Bus bar protection operation, 765 kv Bus 1 at Ektuni tripped. | Nil | Nil | GI-2 | Nil |
| 5 | WR | Tripping of 1. 400/220 kv Pithampur ICT 2 2. 400 kv Pithampur-Indore D/C 3. 400 kv Pithampur-Singhaji D/C 4. 400 kv Pithampur BR | MPPTCL | 09-11-2018 | 04:37 | 09-11-2018 | 05:16 | 00:39 | 400/220 kv Pithampur ICT 2, HV side Y phase CT blasted resulting in tripping of all the 400 kv lines connected to Pithampur s/s along with 400/220 kv ICT 2 and 400 kv BR. | Nil | Nil | GI-2 | Nil |
| 6 | WR | Tripping of 1. 220 kv Kosamba-Kim D/C 2. 220 kv Kosamba-Jagadia D/C 3. 220 kv Kosamba-Mota 4. 220 kv Kosamba-Suva 5. 220 kv Kosamba-Vav 6. 220 kv Kosamba-Gavaad 7. 220 kv Kosamba-GSEG 2 8. 220 kv Kosamba-Ichhapur 9. 400/220 kv 315 MVA ICTs 1,2,3&4 10. 220/66 kv 100 MVA ICTs 1&2 | GETCO | 18-11-2018 | 07:35 | 18-11-2018 | 08:00 | 00:25 | Due to Bus fault at 220 kv Kosamba substation, 220 kv Bus 1 and 2 tripped along with the connected elements on Bus bar protection operation. | Nil | Nil | GI-1 | Nil |
| 7 | WR | Tripping of 1. 220 kv Mansar-Halvad D/C 2. 220 kv Mansar-Charadva D/C 3. 400/220 kv 315 MVA Mansar ICTs 1&2 4. 220/66 kv 100 MVA Mansar ICTs 1&2 | GETCO | 18-11-2018 | 06:12 | 18-11-2018 | 16:20 | 10:08 | At 220kv Mansar all the lines and ICTs including 400/220kv ICTs tripped on flashover of insulators due to dense fog. | Nil | Nil | GI-1 | Nil |
| 8 | WR | Tripping of 1. 220/132 kv 160 MVA Tikamgarh ICT 1 2. 220/132 kv 160 MVA Tikamgarh ICT 2 3. 132 kv Tikamgarh I/C 1&2 4. 132 kv Tikamgarh-Budera D/C 5. 132 kv Tikamgarh-Jatara 6. 132 kv Tikamgarh-Digoda 7. 132 kv Tikamgarh-Pirithipur 8. 132 kv Tikamgarh-Bijawer | MPPTCL | 20-11-2018 | 12:03 | 20-11-2018 | 12:43 | 00:40 | At 220/132kv Tikamgarh s/s, 132 kv side Y phase PT blasted and resulted in tripping of all the elements connected to 132 kv Bus. 132 kv Tikamgarh, Digoda, Pirithipur, Jatara and Bhudera substations affected due to the event. | Nil | 150 | GD-1 | 0.1425 |

| S.No | Region | Name of Elements | Owner/Agency | Outage | | Revival | | Outage Duration Time | Event | Generation Loss (MW) | Load Loss (MW) | Category as per CEA standards | Energy Unserved (MU) |
|------|--------|--|--------------|-------------|-------|-------------|-------|-------------------------|--|----------------------|----------------|-------------------------------|----------------------|
| | | | | Date | Time | Date | Time | | | | | | |
| 9 | WR | Tripping of 1.220/66 kV Bhilosa ICT 1 2.220/66 kV Bhilosa ICT 2 | DNH | 22-11-2018 | 11:56 | 22-11-2018 | 12:08 | 00:12 | 220/66 kV Bhilosa ICTs 1&2 tripped on differential protection operation. | Nil | 45 | GI-1 | 0.009 |
| 10 | WR | Tripping of 1.220 kV Mapusa-Ponda 1 2.220 kV Amona-Ponda 2 3.220 kV Mahalakshmi-Amona | Goa | 25-11-2018 | 06:01 | 25-11-2018 | 07:17 | 01:16 | At 220kV Ponda s/fs , 220 kV Mapusa-Ponda 1 and Amona-Ponda 1 tripped due to CT failure of 220 kV Amona-Ponda 2 at Ponda end. | Nil | Nil | GI-1 | Nil |
| 11 | WR | Tripping of 400 kV 50 MVAR Bhusawal BR | MSETCL | 10-11-20108 | 13:38 | 13-11-20108 | 00:27 | 58:49 | 400 kV Bhusawal 50 MVAR BR caught fire and the fire got spread to the nearby control cables followed by the hand tripping of 400 kV Koradi, Akola, Aurangabad, Bhabheshwar dts at Bhusawal substation. | Nil | Nil | GI-2 | Nil |

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

Eastern Region-Event Report for November 2018

| Sl. No. | Region | Name of major elements | 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 | Time | | | | | |
| 1 | ERLDC | 400 KV Dikchu-Teesta III 400/132 KV ICT @ Dikchu | ISTS | 14-11-2018 | 16:31 | 14-11-2018 | 17:00 | 00:29 | At 16:30 hrs, 400 KV Teesta III – Dikchu S/C tripped from Teesta III end along with 400/132 KV ICT at Dikchu resulting tripping of all running units at Dikchu due to loss of evacuation path. As per DR received, ICT tripped in E/F (132 KV side current: IA = 387 A, IB = 316 A, IC = 525 A, IN = 171 A). At the same time, 400 KV Teesta III – Dikchu S/C tripped from Teesta III end due to operation of cable directional O/C protection (IB = 1.695 kA, IN = 1.6 kA). | 90 | 0 | GD-I | 0.0000 |
| 2 | ERLDC | 400 KV bus I unit I & VII | ISTS | 24-11-2018 | 02:05 | 24-11-2018 | 03:02 | 00:57 | At 02:05 Hrs, 400 KV Bus#1 tripped due to operation of Breaker Failure Relay (BFR) of Main Bay of GT#1, leading to outage of Unit#1 (210 MW). At the same time, U#7 also tripped as it was synchronized through bus#1 only. | 700 | 0 | GI-II | 0 |
| 3 | ERLDC | 400/132 KV ICT - I at BRBCL 400 KV Sasaram - BRBCL - I Unit I at BRBCL | ISTS | 25-11-2018 | 16:31 | 25-11-2018 | 18:02 | 01:31 | At 16:31 hrs bus II at BRBCL tripped on bus bar protection due to mal-operation of bus bar differential relay. At the same time tie CB between ICT I & GT I tripped on operation of master trip signal due to logic error from Bus bar relay of Bus II, which again led to erroneous LBB retrip signal to main CB no. 401 connected to GT I leading to tripping of unit 1 generating 230 MW and ICT I. At same time, main bay 400 KV Sasaram BRBCL - I at BRBCL tripped on logic error and DT was sent to Sasaram end. | 230 | 0 | GD-I | 0 |
| 4 | ERLDC | 2*110 MW U#5,U#6 160 MVA 220/132 KV ICT I, ICT II 220 KV TTPS-TSTPP 220 KV TTPS-Joda D/c 220 KV TTPS-Rengali 220 KV TTPS-Meramundali II | OPTCL | 29-11-2018 | 07:23 | 29-11-2018 | 08:15 | 00:52 | At 07:23 Hrs, 220 KV Bus II tripped alongwith 2*110 MW U#5,U#6, 160 MVA 220/132 KV ICT I, ICT II, 220 KV TTPS-TSTPP S/C, 220 KV TTPS-Joda D/C, 220 KV TTPS-Rengali S/C, 220 KV TTPS-Meramundali II. | 200 | 0 | GD-I | 0 |

Southern Region-Event Report for November 2018

| Sl. No. | Region | Name of Elements (Tripped/Manually opened) | Owner / Agency | Outage | | Revival | | Outage Duration | Event (As reported) | Generation Loss (MW) | Load Loss (MW) | Category as per CEA Grid Standards | Energy Unserved (MU) |
|---------|--------|--|----------------|-----------|-------|-----------|-------|-----------------|--|----------------------|----------------|------------------------------------|----------------------|
| | | | | Date | Time | Date | Time | Time | | | | | |
| 1 | SR | All elements connected to 220kV Kadra, 220kV Kodalalli Power House of KPCL and 220kV Karwar SS of KPTCL | KPCL and KPTCL | 13-Nov-18 | 16:56 | 13-Nov-18 | 18:05 | 1 hr 09 mins | Complete Outage of 220kV Kadra, 220kV Kodalalli Power House of KPCL and 220kV Karwar SS of KPTCL : De-energization of 220kV bus occurred at Kadra and Kodalalli hydro power station and 220kV Karwar substation (radial) due to tripping of connected 220kV lines. 220kV Karwar was radially fed from 220kV Kadra power house, resulting in complete loss of supply at 220kV Karwar station. 220kV Kaiga-Kodalalli and 220kV Kaiga-Kadra tripped at Kaiga end on operation of SPS provided for overloading of ICT at Kaiga. | 240 | 70 | GD-1 | 0.093 |
| 2 | SR | 1. 400/230kV ICT-2,3 and 5 2. 230 KV Annaikadavu- Myvadi 3. 230 KV Annaikadavu- Othakkalmandapam 4. 230 KV Annaikadavu- Periyappatty 5. 230 KV Annaikadavu- Vestas | TANTRANSCO | 6-Nov-18 | 21:35 | 7-Nov-18 | 19:03 | 21 hrs 28 mins | Multiple tripping at 400/230kV Annaikadavu station: Triggering incident was failure of R-ph PT of 230kV Annaikadavu Bus-1 . 230kV Bus bar protection of bus-1 operated resulting in tripping of all the connected elements. 230kV Annaikadavu was on single bus operation due to failure of Bus-2 PT during antecedent conditions. | --- | --- | GI-1 | --- |
| 3 | SR | 1. 400/220kV ICT-1 400/220kV ICT-2 220kV Lines at Guttur SS 2. All | KPTCL | 13-Nov-18 | 16:00 | 13-Nov-18 | 16:29 | 29 mins | Multiple tripping at 400/220kV Guttur station: Triggering incident was R-ph to ground fault in 220kV Jogihally feeder. 220kV Guttur Bus bar protection operated resulting in tripping of all the connected elements. 220kV Guttur was on single bus operation since 220kV Neelagunda line was connected through bus coupler breaker for line CVT replacement works. | --- | --- | GI-1 | --- |
| 4 | SR | 1. 400/230kV ICT-1 GT-1&3, ST-1 230kV Lines connected to Bus-1 at 230kV NLC TS-2 and bus coupler breaker 2. All 3. All | NLCIL | 20-Nov-18 | 17:08 | 20-Nov-18 | 18:25 | 1 hr 17 mins | Multiple tripping at 400/230kV NLC TS-II: Triggering incident was conductor snapping of 230kV NLC TS2 tie- NNTPP line #1 . 230kV Bus bar protection of bus-1 operated resulting in tripping of all the connected elements. This resulted in tripping of running units 1 and 3 at 230kV NLC TS2. | 420 | --- | GI-1 | --- |

Grid Disturbances in NER Grid for November 2018

| Sl. No. | Region | Name of Element | Owner / Agency | Outage | | Revival | | Outage Duration | Event | Generation Loss (MW) | Load Loss (MW) | Generation Loss in MU | Load Loss in MU | Category as per CEA Grid Standards |
|---------|--------|--|---------------------------|-------------|----------|-------------|----------|-----------------|--|----------------------|----------------|-----------------------|-----------------|------------------------------------|
| | | | | Date | Time | Date | Time | | | | | | | |
| 1 | NER | 132 kV Loktak - Ningthoukhong Line | MSPCL | 04-Nov-2018 | 14:11:00 | 04-Nov-2018 | 14:20:00 | 00:09 | Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line. 132 kV Imphal(PG)-Ningthoukhong line and 132 kV Kakching-Kongba line kept open for overloading of 132 kV Loktak-Ningthoukhong line. At 14:11 Hrs on 04.11.2018, 132 kV Loktak-Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. | 0 | 25 | 0.000 | 0.008 | GD-I |
| 2 | NER | 132 kV Loktak - Ningthoukhong Line | MSPCL | 06-Nov-2018 | 18:14:00 | 06-Nov-2018 | 18:24:00 | 00:10 | Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line. 132 kV Imphal(PG)-Ningthoukhong line kept open for overloading of 132 kV Loktak-Ningthoukhong line, 132 kV Kakching-Kongba line kept open due to system constraint. At 18:14 Hrs on 06.11.2018, 132 kV Loktak-Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. | 0 | 46 | 0.000 | 0.013 | GD-I |
| 3 | NER | 132 kV Loktak - Ningthoukhong 1 Line | MSPCL | 06-Nov-2018 | 18:50:00 | 06-Nov-2018 | 19:00:00 | 00:10 | Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kV Loktak-Ningthoukhong line. 132 kV Imphal(PG)-Ningthoukhong line kept open for overloading of 132 kV Loktak-Ningthoukhong line, 132 kV Kakching-Kongba line kept open due to system constraint. At 18:50 Hrs on 06.11.2018, 132 kV Loktak-Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. | 0 | 42 | 0.000 | 0.008 | GD-I |
| 4 | NER | 132 kV Ranganadi - Pare 2 Line | NEEPCO & DoP, AP | 09-Nov-2018 | 17:56:00 | 09-Nov-2018 | 18:43:00 | 00:47 | Ziro area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Bus I at Ranganadi. 132 kV Bus Coupler, 400/132/33 kV, 360 MVA ICT 1, 132 Ranagandi - Pare II line and 132 kV Ranganadi - Ziro line were connected with 132 kV Bus I at Ranganadi. At 17:54 Hrs, spark observed in Y-Phase connector of 132 kV side of 400/132/33 kV, 360 MVA ICT 1 at Ranganadi with 132 kV Bus I. At 17:56 Hrs, 132 kV Bus Coupler was hand tripped and 132 kV 132 kV Ranganadi - Pare II line tripped. At 18:04 Hrs, 400/132/33 kV, 360 MVA ICT 1 was hand tripped. Due to tripping of these elements, Ziro area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. | 0 | 22 | 0.000 | 0.017 | GD-I |
| 5 | NER | 132 kV Badarpur - Panchgram Line, 132 kV Lumshnong - Panchgram Line and 132 kV Hailakandi - Panchgram Line | POWERGRID, AEGCL & MePTCL | 16-Nov-2018 | 11:13:00 | 16-Nov-2018 | 11:20:00 | 00:07 | Panchgram area of Assam Power System was connected with rest of NER Grid through 132 kV Badarpur - Panchgram Line, 132 kV Lumshnong - Panchgram Line and 132 kV Hailakandi - Panchgram Line. 132 kV Panchgram - Srikona Line was kept idle charged due to tower collapse. At 11:13 Hrs on 16.11.18, 132 kV Badarpur - Panchgram Line, 132 kV Lumshnong - Panchgram Line and 132 kV Hailakandi - Panchgram Line tripped. Due to tripping of these elements, Panchgram area was separated from rest of NER Grid and subsequently collapsed due to no source in this area. | 0 | 25 | 0.000 | 0.003 | GD-I |
| 6 | NER | 132 kV Ranganadi - Ziro Line | POWERGRID | 21-Nov-2018 | 07:20:00 | 21-Nov-2018 | 08:05:00 | 00:45 | Ziro area of Arunachal Pradesh Power System was connected with rest of NER Grid through 132 kV Ranganadi - Ziro line. At 07:20 Hrs on 21.11.2018, 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 | 20 | 0.000 | 0.015 | GD-I |
| 7 | NER | 132 kV Udaipur - Monarchak Line and 132 kV Udaipur - Palatana Line | TSECL | 27-Nov-18 | 09:48:00 | 27-Nov-18 | 15:15:00 | 05:27 | Udaipur area of Tripura Power System was connected with rest of NER Grid through 132 kV Udaipur -Monarchak Line and 132 kV Udaipur-Palatana Line. 66 kV Udaipur - Gokulnagar Line, 66 kV Amarpur - Gumti Line and 66 kV Bagafa - Belonia Line kept open for system requirement. At 09:48 Hrs on 27.11.2018, 132 kV Udaipur - Monarchak Line and 132 kV Palatana-Udaipur tripped. Due to tripping of this element, Udaipur area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area. | 110 | 18 | 0.057 | 0.022 | GD-I |

| Sl. No. | Region | Name of Element | Owner / Agency | Outage | | Revival | | Outage Duration | Event | Generation Loss (MW) | Load Loss (MW) | Generation Loss in MU | Load Loss in MU | Category as per CEA Grid Standards |
|---------|--------|---|---------------------------|-----------|----------|-----------|----------|-----------------|---|----------------------|----------------|-----------------------|-----------------|------------------------------------|
| | | | | Date | Time | Date | Time | | | | | | | |
| 8 | NER | 132 kV Dimapur (PG)-Kohima (DoP, Nagaland) line | POWERGRID & DoP, Nagaland | 29-Nov-18 | 10:37:00 | 29-Nov-18 | 10:49:00 | 00:12 | Capital area of Nagaland Power System was connected with rest of NER Grid through 132 kV Dimapur (PG)-Kohima (DoP, Nagaland) line. 132 kV Kohima-Karong line & 66 kV Tuensang-Likimro line kept open for system requirement. 132 kV Kohima - Wokha line kept open due to protection co-ordination issue. At 10:37 Hrs on 29.11.2018, 132 kV Dimapur (PG)-Kohima line tripped. Due to tripping of this element, Capital area was separated from rest of NER Grid and subsequently collapsed due to load generation mismatch. | 6 | 18 | 0.001 | 0.004 | GD-I |

Grid Incidents in NER Grid for November 2018

| S.No | Region | State(s) Involved | Name of Elements | Owner / Agency | Outage | | Revival | | Outage Duration | Event (Brief Details) | Generation Loss (MW) | Load Loss MW | Energy Unreserved (MU) | Category as per CEA Grid Standards |
|------|--------|-------------------|---------------------------------|----------------|-------------|----------|-------------|----------|-----------------|--|----------------------|--------------|------------------------|------------------------------------|
| | | | | | Date | Time | Date | Time | | | | | | |
| 1 | NER | AGTCCPP | AGTCCPP Unit 2 | NEEPCO | 02-Nov-2018 | 15:45:00 | 02-Nov-2018 | 16:30:00 | 00:45:00 | AGTCCPP Unit 2 tripped at 15:45 Hrs on 02.11.18 due to cooling water pump failure. (Revision of schedule from Block No. 67 on 02.11.18). | 16 | 0 | 0.012 | GI-I |
| 2 | NER | Pare | Pare Unit 1 & 2 | NEEPCO | 03-Nov-18 | 17:58:00 | 03-Nov-18 | 18:15:00 | 00:17:00 | Pare Unit 1 & 2 tripped at 17:58 Hrs on 03.11.18 due to Stator Earth Fault. (Revision of schedule from Block No.74 on 03.11.18). | 90 | 0 | 0.026 | GI-I |
| 3 | NER | Khandong | Khandong Unit 2 | NEEPCO | 04-Nov-2018 | 17:26:00 | 04-Nov-2018 | 18:15:00 | 00:49:00 | Khandong Unit 2 tripped at 17:26 Hrs on 04.11.18 due to Stator Earth Fault. (Revision of schedule from Block No. 74 on 04.11.18). | 24 | 0 | 0.020 | GI-I |
| 4 | NER | Ranganadi | Ranganadi Unit 3 | NEEPCO | 09-Nov-2018 | 18:04:00 | 09-Nov-2018 | 19:30:00 | 01:26:00 | Ranganadi Unit 3 tripped at 18:04 Hrs on 09.11.18 due to NGR negative phase sequence. (Revision of schedule from Block No.79 on 09.11.18). | 130 | 0 | 0.186 | GI-II |
| 5 | NER | Loktak | Loktak Unit 1 | NHPC | 14-Nov-2018 | 18:38:00 | 14-Nov-2018 | 19:45:00 | 01:07:00 | Loktak Unit 1 tripped at 18:38 Hrs on 14.10.2018 due to Bucholz relay operated in auxiliary transformer. (Revision of schedule from Block No.80 on 14.11.2018). | 32 | 0 | 0.036 | GI-I |
| 6 | NER | AGTCCPP | AGTCCPP Unit 1, 2 & STG 1 | NEEPCO | 20-Nov-2018 | 13:25:00 | 20-Nov-2018 | 14:00:00 | 00:35:00 | AGTCCPP Unit 1, 2 & STG 1 tripped at 13:25 Hrs on 20.11.2018 due to High lubricating oil header temp high. (Revision of schedule from Block No.57 on | 65 | 0 | 0.038 | GI-I |
| 7 | NER | AGBPP | AGBPP Unit 1, 2, 3, 4, 7, 8 & 9 | NEEPCO | 29-Nov-18 | 19:18:00 | 29-Nov-18 | 20:00:00 | 00:42:00 | AGBPP Unit 1, 2, 3, 4, 7, 8 & 9 tripped at 19:18 Hrs on 29.11.2018 due to tripping of gas boost compressor. (Revision of schedule from Block No.81 on 29.11.2018). | 203 | 0 | 0.142 | GI-II |