

Northern Region-Grid Event Report for January 2020

| S.No. | Region | Name of Elements<br>(Tripped/Manually opened)  | Affected Area    | Owner/ Agency     | Outage    |       | Revival   |       | Duration | Event<br>(As reported)   | Generation<br>Loss(MW) | Load<br>Loss(MW) | Category as per<br>CEA Grid Standards | Energy Unservd<br>(in MU) |
|-------|--------|--|------------------|-------------------|-----------|-------|-----------|-------|----------|--|------------------------|------------------|---------------------------------------|---------------------------|
|       |        |  |                  |                   | Date      | Time  | Date      | Time  |          |  |                        |                  |                                       |                           |
| 1     | NR     | 1) 220 KV Debari(RS)-RAPS_A(NP) (RS) Ckt-1<br>2) 220 KV RAPS_B(NP)-Debari(RS) (PG) Ckt-1   | RAJASTHAN        | POWERGRID, RRVPNL | 1-Jan-20  | 20:20 | 1-Jan-20  | 21:50 | 01:30    | All 220kV lines and ICTs at 220kV Debari(RS) tripped due to Y-Ph. CT blast of 220kV Debari-Madri line at Debari end. As per PMU, Y-N fault with delayed clearance is observed in the system. In antecedent conditions, 220kV Debari-Amberi, 220kV Debari-Chittorgarh, 220kV Debari-RAPP A carrying 14MW, 82MW & 45MW respectively.   | 0                      | 90               | GD-1                                  | 0.14                      |
| 2     | NR     | 1) 220 KV Mohana(HV)-Sonipat(PG) (HVPNL) Ckt-1<br>2) 220 KV Mohana(HV)-Sonipat(PG) (HVPNL) Ckt-2   | HARYANA          | HVPNL             | 2-Jan-20  | 09:55 | 2-Jan-20  | 11:32 | 0:07     | 220 KV Mohana(HV)-Sonipat(PG) (HVPNL) Ckt-1 & 2 tripped due R & Y- Phase CT of 220kV Mohana - Sampla ckt-2 damaged at Mohana end. As per PMU, R-N fault followed by R-Y fault with delayed clearance is observed in the system. In antecedent conditions, 220 KV Mohana(HV)-Sonipat(PG) (HVPNL) Ckt-1 & 2 carrying 137MW & 131MW respectively.   | 0                      | 150              | GD-1                                  | 0.23                      |
| 3     | NR     | 1) 220KV Samba(PG)-Hiranagar(PDD) (PG) Ckt-1<br>2) 220/132kV ICT 1 & ICT 2 at 220kV Hiranagar(JK)  | J & K            | POWERGRID         | 2-Jan-20  | 11:10 | 2-Jan-20  | 16:05 | 04:55    | R-phase jumper snapped resulted in bus fault at 220kV Hiranagar(JK) and subsequent bus bar protection operation. This resulted in tripping of 220/132kV ICT 1 & ICT 2 at 220kV Hiranagar(JK) and load loss of approx 200MW. As per PMU, R-B fault with delayed clearance is observed in the system. In antecedent conditions, 220KV Samba(PG)-Hiranagar(PDD) (PG) Ckt-1 carrying 193MW.  | 0                      | 200              | GD-1                                  | 0.23                      |
| 4     | NR     | 1) 400kV Bus 1 at Banda(UP)<br>2) 400 KV Banda-Orai (UP) Ckt-2<br>3) 400 KV Obra_B-Rewa Road (UP) Ckt-1<br>4) 400 KV Rewa Road-Masoli (UP) Ckt-1<br>5) 400 KV Rewa Road-Panki (UP) Ckt-1<br>6) 400 KV Banda-Rewa Road (UP) Ckt-1<br>7) 400/220 kv 315 MVA ICT 1 at Rewa Road(UP)<br>8) 400/220 kv 315 MVA ICT 2 at Rewa Road(UP)<br>9) 63 MVAR Bus Reactor No 1 at 400kV Banda(UP) | UTTAR PRADESH    | UPPTCL            | 11-Jan-20 | 02:38 | 11-Jan-20 | 04:24 | 01:46    | Due to 400kV Banda-Orai ckt 2 tie CB CT busted at Banda end, caused tripping of 400kV Bus 1 and 400kV Banda-Rewa road ckt 1 on Bus bar protection. Whereas at Rewa road, all the 400kV elements along with ICTs are connected on Bus 1 only, due to blast of CT at Banda, Bus 1 along with ICTs tripped on Bus bar protection at Rewa road. As per PMU, B-N followed by Y-N fault is observed in the system.                         | 0                      | 0                | GI-2                                  | 0.00                      |
| 5     | NR     | 1) 400 KV Chamera_2(NH)-Chamera_1(NH) (PG) Ckt-1<br>2) 400 KV Chamera_2(NH)-Kishenpur(PG) (PG) Ckt-1<br>3) 220 KV Wagoora(PG)-Pampore(PDD) (PDD JK) Ckt-2<br>4) 220 KV Wagoora(PG)-Pampore(PDD) (PDD JK) Ckt-1   | J & K            | PDD JK, POWERGRID | 13-Jan-20 | 13:21 | 13-Jan-20 | 14:14 | 00:53    | 220 KV Wagoora(PG)-Pampore(PDD) (PDD JK) Ckt-1 & 2 tripped on B-N fault and 400 KV Chamera_2(NH)-Chamera_1(NH) (PG) Ckt-1, 400 KV Chamera_2(NH)-Kishenpur(PG) (PG) Ckt-1 tripped on overvoltage. As per PMU, B-N fault with delayed clearance of 560ms is observed in the system. In antecedent conditions, 220 KV Wagoora(PG)-Pampore(PDD) (PDD JK) Ckt-1 & 2 carrying 121MW & 125MW respectively.                                  | 0                      | 300              | GD-1                                  | 0.00                      |
| 6     | NR     | 1) 220 KV Kishenganga(NH)-Wagoora(PG) (PG) Ckt-1<br>2) 220 KV Kishenganga(NH)-Wagoora(PG) (PG) Ckt-2   | J & K            | POWERGRID         | 16-Jan-20 | 09:18 | 16-Jan-20 | 10:37 | 01:19    | 220 KV Kishenganga(NH)-Wagoora(PG) (PG) Ckt-2 tripped on R-N fault and 220 KV Kishenganga(NH)-Wagoora(PG) (PG) Ckt-1 tripped on B-N fault. As per PMU, R-B fault is observed in the system. In antecedent conditions, 220 KV Kishenganga(NH)-Wagoora(PG) (PG) Ckt-1 & 2 carrying 9MW & 8MW respectively.   | 0                      | 0                | GI-2                                  | 0.00                      |
| 7     | NR     | 1) 400 KV Moga-Hissar (PG) Ckt-2<br>2) 765/400 kv 1500 MVA ICT 1 at Moga(PG)   | PUNJAB           | POWERGRID         | 20-Jan-20 | 20:12 | 20-Jan-20 | 20:46 | 00:34    | 400 KV Moga-Hissar (PG) Ckt-2 & 765/400 kv 1500 MVA ICT 1 at Moga(PG) tripped due to relay maloperation. As per PMU, fluctuations observed in the phase voltages. In antecedent conditions, 765/400 kv 1500 MVA ICT 1 at Moga(PG) carrying 292MW.  | 0                      | 0                | GI-2                                  | 0.00                      |
| 8     | NR     | 1) 400 KV Anpara-Sarnath (UP) Ckt-1<br>2) 400/220 kv 315 MVA ICT 1 at Sarnath(UP)  | UTTAR PRADESH    | UPPTCL            | 26-Jan-20 | 12:32 | 26-Jan-20 | 14:09 | 01:37    | 400 KV Anpara-Sarnath (UP) Ckt-1 tripped due to R-B fault. At the same time, 400/220 kv 315 MVA ICT 1 at Sarnath(UP) also tripped. As per PMU, R-B fault with delayed clearance of 440ms is observed. In antecedent conditions, 400 KV Anpara-Sarnath (UP) Ckt-1 & 400/220 kv 315 MVA ICT 1 at Sarnath(UP) carrying 405MW & 123MW respectively.  | 0                      | 0                | GI-2                                  | 0.00                      |
| 9     | NR     | 1) 400/220 kv 315 MVA ICT 2 at Malerkotla(PG)<br>2) 400/220 kv 500 MVA ICT 3 at Malerkotla(PG)   | PUNJAB           | POWERGRID         | 27-Jan-20 | 14:44 | 27-Jan-20 | 18:11 | 03:27    | 220 KV BUS BAR protection operated at Malerkotla PSTCL Sub station resulting in tripping of 400/220 kv 315 MVA ICT 2 & 500MVA ICT 3 at Malerkotla(PG). As per PMU, R-N fault is observed in the system. In antecedent conditions, 400/220 kv 315 MVA ICT 2 & 500MVA ICT 3 at Malerkotla(PG) carrying 80MW & 123MW respectively.  | 0                      | 300              | GD-1                                  | 1.03                      |
| 10    | NR     | 1) 400/220 kv 315 MVA ICT 2 at Malerkotla(PG)<br>2) 400/220 kv 500 MVA ICT 3 at Malerkotla(PG)<br>3) 400/220 kv 315 MVA ICT 1 at Malerkotla(PG)<br>4) 400 KV Ludhiana-Malerkotla (PG) Ckt-1<br>KV Malerkotla-Patiala (PG) Ckt-1  | 5) 400<br>PUNJAB | POWERGRID         | 28-Jan-20 | 19:27 | 28-Jan-20 | 21:17 | 01:50    | At 220kV Substation Malerkotla all 220kV elements tripped from Remote end due to damage of 220kV Dhuri 2 upper Bus Bar insulator string of R phase at 1927Hrs during heavy rain and lightning. As per PMU, R-N fault with delayed clearance of around 2320ms is observed in the system. In antecedent conditions, 315 MVA ICT 1, 315 MVA ICT 2 & 500 MVA ICT 3 at 400/220kV Malerkotla(PG) carrying 75MW, 70MW & 114MW respectively. | 0                      | 250              | GD-1                                  | 0.46                      |
| 11    | NR     | 1) 400/220 kv 315 MVA ICT 1 at Chittorgarh(RS)<br>2) 400/220 kv 315 MVA ICT 2 at Chittorgarh(RS)   | RAJASTHAN        | RRVPNL            | 29-Jan-20 | 09:01 | 29-Jan-20 | 10:17 | 01:16    | 315 MVA ICT 1 & 315 MVA ICT 2 at 400/220kV Chittorgarh(RS) tripped on overloading. As per PMU, no fault is observed in the system. In antecedent conditions, 315 MVA ICT 1 & 315 MVA ICT 2 at 400/220kV Chittorgarh(RS) carrying 305MW & 300MW respectively.   | 0                      | 400              | GD-1                                  | 0.51                      |
| 12    | NR     | 1) 400 KV Bareilly-Unnao (UP) Ckt-2<br>2) 400/220 kv 315 MVA ICT 2 at Bareilly(UP)   | UTTAR PRADESH    | UPPTCL            | 30-Jan-20 | 15:14 | 30-Jan-20 | 18:15 | 03:01    | 400 KV Bareilly-Unnao (UP) Ckt-2 tripped on R-B fault. At the same time, 315 MVA ICT 2 at 400/220kV Bareilly(UP) tripped due to operation of Backup Overcurrent Protection on HV side. As per PMU, R-B fault is observed in the system. In antecedent conditions, 400 KV Bareilly-Unnao (UP) Ckt-2 & 315 MVA ICT 2 at 400/220kV Bareilly(UP) carrying 254MW & 65MW respectively.   | 0                      | 0                | GI-2                                  | 0                         |

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

| S.No | Region | Name of Elements  | Owner/Agency | Outage    |       | Revival   |       | Outage Duration | Event   | Generation Loss (MW) | Load Loss (MW) | Category as per CEA standards | Energy Unserved (MU) |
|------|--------|---|--------------|-----------|-------|-----------|-------|-----------------|---|----------------------|----------------|-------------------------------|----------------------|
|      |        |   |              | Date      | Time  | Date      | Time  | Time            |   |                      |                |                               |                      |
| 1    | WR     | Tripping of<br>1.400kV Bus-4 at VSTPS<br>2.400kV VSTPS-Sasan<br>3.400kV VSTPS-KSTPS<br>4.400kV VSTPS-Jabalpur-1<br>5.400kV VSTPS-Satna line-2<br>6.400kV Sasan-Rewa<br>7.VSTPS Unit-8<br>8.500 kV HVDC Vindhychal Pole 1  | NTPC         | 3-Jan-20  | 05:12 | 3-Jan-20  | 06:00 | 00:48           | At 400 kV VSTPS Power station, due to heavy lightening, tracking of B-phase CT of Bus Section 2 taken place and resulted in tripping of all the elements connected to 400 kV Bus 4 on busbar differential protection operation.   | 300                  | Nil            | GI-2                          | Nil                  |
| 2    | WR     | Tripping of<br>1. 400 kV Indira Sagar(ISP)-Indore 2<br>2.ISP Units 5,6,7&8  | NHDC         | 7-Jan-20  | 14:09 | 7-Jan-20  | 14:49 | 00:40           | At 400 kV ISP Hydro power station, during the R-E fault on 400 kV Isp-Indore 2, ISP generating units (Unit 5,6,7&8) tripped on generator Over current protection operation. As intimated by NHDC, after the event, the Generators over current (Definite Time) relay setting is modified as 1.21n, 500msec.                                 | 495                  | Nil            | GI-2                          | Nil                  |
| 3    | WR     | Tripping of<br>1.400 kV Amreli Bus 2<br>2.400 kV Amreli-Chorania 1<br>3.400/220 kV Amreli ICT 1&4<br>4.400 kV Amreli-Jetpur 2<br>5.400 kV 50 MVAR Kasor 1 reactor   | GETCO        | 8-Jan-20  | 11:24 | 8-Jan-20  | 12:22 | 00:58           | At 400 kV Amreli s/s, 400 kV Bus 2 and all the elements connected to it tripped on B phase fault indication but there was no actual fault in the system. The same event recurred at 14:16 Hrs.As reported by GETCO the Central Unit of the BB relay maloperated and gave trip command even though there was no actual differential current. | Nil                  | Nil            | GI-2                          | Nil                  |
| 4    | WR     | Tripping of<br>1.400kV Chandrapur Bus-1&2<br>2.400kV Chandrapur-Bhadravati -1,2,3&4<br>3.400kV Chandrapur-Parli (Girwall)<br>4.400kV Chandrapur-Chandrapur -1&2<br>5.400kV Chandrapur-Khaparkheda -2<br>6. ± 500kV HVDC Chandrapur-Padghe Pole-1&2<br>7.400/220kV Chandrapur ICTs-1&2<br>8.Chandrapur 210 MW Units 3&4<br>9.Chandrapur 500 MW Units 5&6 | MSETCL       | 18-Jan-20 | 12:36 | 18-Jan-20 | 13:40 | 01:04           | At 400 kV Chandrapur, 400kV Main Bus I & Bus II tripped simultaneously on operation of 96 trip relay (of ABB RADSS scheme) without any actual fault in the system.  | 1067                 | Nil            | GD-1                          | Nil                  |
| 5    | WR     | Tripping of<br>1. ± 800 kV HVDC Champa-Kurukshetra Poles 1&3  | PGCIL        | 10-Jan-20 | 09:24 | 10-Jan-20 | 09:59 | 00:35           | At 09:24 Hrs, 'Instability Detected' Alarm appeared in pole-3 at Kurukshetra end and pole-3 tripped on CatA2 protection. Due to improper isolation of parallel pole(pole-1), pole-1 blocked on Cat B protection. After resetting pole protection, pole-1 deblocked on 10.01.2020 at 09:59 Hrs.  | Nil                  | Nil            | GI-2                          | Nil                  |
| 6    | WR     | Tripping of<br>1.400 kV Chakan Bus 2<br>2.400 kV Chakan- Pune<br>3.400/220 kV Chakan ICT 2  | MSETCL       | 19-Jan-20 | 15:21 | 19-Jan-20 | 16:58 | 01:37           | At 400 kV Chakan s/s,commissioning of 400/220 kV ICT-3 was in progress. For this work 400 kV spare line bay was being made ready for shifting of 400 kV Talegaon line.Trip positive extended erroneously to LBB protection scheme and resulted in tripping of 400 kV Chakan Bus 2 and all the connected elements.                           | Nil                  | Nil            | GI-2                          | Nil                  |
| 7    | WR     | Tripping of<br>1. ± 800 kV HVDC Champa-Kurukshetra Poles 1&3  | PGCIL        | 19-Jan-20 | 20:45 | 19-Jan-20 | 22:25 | 01:40           | 800 kV HVDC Champa-Kurukshetra Poles 1&3 blocked on Filter power limit  | Nil                  | Nil            | GI-2                          | Nil                  |
| 8    | WR     | Tripping of<br>1.220 kV Raigarh(PG)-Raigarh 1,2&3<br>2.220 kV Raigarh(PG)- Budhipadhar  | PGCIL        | 26-Jan-19 | 01:58 | 26-Jan-19 | 03:31 | 01:33           | At 400/220 kV Raigarh(PG), all 220 kV lines tripped on Over Voltage protection operation. The O/V trip for 220 kV lines were enabled on 25-01-2020 as per third party audit recommendation by CPRI. As reported by PGCIL, the same was disabled after the event.  | Nil                  | 250            | GI-1                          | 0.3875               |
| 9    | WR     | Tripping of<br>1.220 kV Ranasan Bus 1<br>2.220 kV Ranasan- Dehgam 1<br>3.220 kV Ranasan- Gandhinagar 1<br>4.220 kV Ranasan- Karamsad 1<br>5.220 kV Ranasan- Kapadvanj 1<br>6.220/132 kV Ranasan ICTs 1&2  | GETCO        | 26-Jan-20 | 14:52 | 26-Jan-20 | 15:26 | 00:34           | At 220 kV Ranasan s/s, during erection of new lighting doom by contract Labour, supply cable came in induction zone of 220kV Kapadvanj line-1 between BUS-A isolator B phase jumper and post insulator. This resulted in tripping of 220 kV Ranasan Bus 1 and all connected elements on Bus bar protection operation.                       | Nil                  | Nil            | GI-1                          | Nil                  |
| 10   | WR     | Tripping of<br>1.220 kV Kolhapur(MH)- Five star 1<br>2.220 kV Kolhapur(MH)- Ichalkaranji 1<br>3.220 kV Kolhapur(MH)- Bidri<br>4.220 kV Kolhapur(MH)- Hamidwada<br>5.400/220 kV Kolhapur(MH) ICTs 1&2  | MSETCL       | 27-Jan-20 | 13:45 | 27-Jan-20 | 14:10 | 00:25           | At 400/220 kV Kolhapur(MH) s/s, Yph insulator string of 220 kV Bus1 blasted and resulted in tripping of all the elements connected to 220 kV Bus 1. As the 400/220 kV 500 MVA ICT 3 was already under outage, the downstream load of 180 MW got affected.   | Nil                  | 180            | GI-1                          | 0.0750               |
| 11   | WR     | Tripping of<br>1. 220 kV Sayli-Khadoli  | DNH          | 29-Jan-20 | 12:12 | 29-Jan-20 | 12:55 | 00:43           | 220 kV Vapi- Sayali line was under planned outage from 09:24 Hrs of 24-01-2020 for LILO works of 220kV Vapi-Sayali line at Vaghachipa SS of DNH. Due to tripping of 220 kV Sayali- Khadoli on R-Y fault,around 75 MW load loss at Sayali in DNH.  | Nil                  | 75             | GD-1                          | 0.0538               |

*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 January 2020**

| Sl. No. | Region | Name of Elements<br>(Tripped/Manually opened)   | Owner / Agency | Outage   |            | Revival  |            | Outage Duration | Event<br>(As reported)   | Generation Loss (MW) | Load Loss (MW) | Category as per CEA Grid Standards | Energy Unserved (MU) |
|---------|--------|---|----------------|----------|------------|----------|------------|-----------------|--|----------------------|----------------|------------------------------------|----------------------|
|         |        |   |                | Date     | Time (Hrs) | Date     | Time (Hrs) | Time            |  |                      |                |                                    |                      |
| 1       | SR     | All connected elements tripped.   | APTRANSCO      | 1-Jan-20 | 11:40      | 1-Jan-20 | 13:30      | 1 hr 50 mins    | Complete outage of 220kV Bommuru SS of APTRANSCO: Bus bar protection operated resulting in complete outage of 220kV Bommuru SS. Details are awaited.   | ---                  | ---            | GD-1                               | ---                  |
| 2       | SR     | i. 400kV Julurpadu - Manuguru (BTPS) ckt-2<br>ii. Station Transformer-1<br>iii. 125 MVA Bus reactor | TGENCO         | 3-Jan-20 | 17:15      | 3-Jan-20 | 18:04      | 49 mins         | Complete loss of supply at 400kV Manuguru (BTPS) GS of TSGENCO: 400kV Julurpadu – Manuguru line-2 tripped on relay maloperation. BBP of Bus-1 and Bus-2 operated resulting in complete loss of supply at 400kV Manuguru station. | ---                  | ---            | GD-1                               | ---                  |

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

| 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  | Time            |   |                      |                |                                    |                       |
| 1       | ERLDC  | 400 kV Rangpo – Teesta V D/C  | ISTS           | 5-Jan-20  | 20:04 | 5-Jan-20  | 22:13 | 02:09           | Both 400 kV Teesta V – Rangpo D/C tripped from Rangpo end at 20:04 HRS on Y-N fault. Unit-III was stopped at 20:03 Hrs before the incident. No generation loss occurred at no generation at Teesta V was scheduled. However, it was observed that SF6 gas failure of Unit-III GIS circuit breaker alarm was appeared in SOE of Scada at 20:04. On preliminary investigation on the checking of purity of SF6 gas of Y-Phase detected the presence of SO2 . Both circuits were restored at 22:13hrs & 22:51hrs respectively.   | 0                    | 0              | GD-I                               | 0.0000                |
| 2       | ERLDC  | All five 315 MVA 400/220 KV ICTs at Rangpo<br>220 KV Rangpo-New Melli S/C<br>220 KV Rangpo-Tashiding S/C<br>All 3 100 MVA 220/132 KV ICTs at Rangpo | ISTS           | 11-Jan-20 | 11:45 | 11-Jan-20 | 12:19 | 00:34           | 220 KV Bus II at Rangpo undershutdown. At 11:45 Hrs, 220 KV Bus I at Rangpo became dead due to operation of bus bar protection resulting tripping of all five 315 MVA 400/220 KV ICTs at Rangpo, 220 KV Rangpo-New Melli S/C, 220 KV Rangpo-Tashiding S/C and all 3 100 MVA 220/132 KV ICTs at Rangpo. Total power failure occurred at 220 kv S/S at Tashiding, New Melli and Jorethang S/S. 400 kv bus at Rangpo was in service. Power supply to Gangtok interrupted as it was being fed through 132 KV Rangpo-Gangtok D/c. No generation occurred loss at Jorethang, Tashiding and Chuzachen as no machine was running. | 0                    | 79             | GD-I                               | 0.0448                |
| 3       | ERLDC  | 220 KV Gaya-Sonenagar D/C   | BSPTCL         | 13-Jan-20 | 00:40 | 13-Jan-20 | 01:00 | 00:20           | At 00:40 Hrs, 220 KV Gaya-Sonenagar D/C tripped due to B-N Fault, leading to load loss of 130 MW in Aurangabad, Sonenagar, Rafiganj, Japla.   | 0                    | 130            | GD-I                               | 0.0433                |
| 4       | ERLDC  | 400 KV DSTPS-RTPS D/C<br>400 KV DSTPS-Jamshedpur D/C  | DVC            | 14-Jan-20 | 13:16 | 14-Jan-20 | 13:39 | 00:23           | 400 kv bus II at DSTPS was under shutdown. At 13:16 Hrs, 400 KV Bus-I of DSTPS (ANDAL) DVC tripped leading to tripping of 2 running units U1&2 ( 500MW each) and 400 KV DSTPS-RTPS D/C & 400 KV DSTPS-Jamshedpur D/C.   | 700                  | 0              | GD-I                               | 0.0000                |
| 5       | ERLDC  | 220KV-NEW MELLI-TASHIDING-S/C<br>220KV-TASHIDING-RANGPO-S/C<br>220KV-NEW MELLI-JORETHANG-I  | ISTS           | 16-Jan-20 | 15:48 | 16-Jan-20 | 15:58 | 00:10           | At 15:48 hrs 220KV-NEW MELLI-TASHIDING-S/C, 220KV-TASHIDING-RANGPO-S/C, 220KV-NEW MELLI-JORETHANG-I tripped on B-N fault resulting total power failure at Tashiding S/S. There was no generation at Tashiding   | 0                    | 0              | GD-I                               | 0.0000                |
| 6       | ERLDC  | 220KV Maithon-Kalyaneswari-D/C<br>400/220kv ICT-I&II at Maithon<br>220KV Maithon-Dumka D/C<br>220KV Maithon-Dhanbad D/C                             | JUSNL          | 25-Jan-20 | 15:14 | 25-Jan-20 | 15:47 | 00:33           | At 15:14 Hrs, LBB operated at 220KV Bus Coupler bay at Maithon(PG) leading to tripping of 220kv Bus-1&2, 500MVA 400/220kv ICT-1&2, 220kv Maithon-Dhanbad Ckt-1&2, 220KV Maithon-Kalyaneswari Ckt-1&2, 220kv Maithon-Dumka Ckt-1&2. Load loss of around 119MW in JSEB at Dumka, Pakur and Deoghar area.  | 0                    | 119            | GD-I                               | 0.0655                |

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

| Sl. No. | Region | Name of Element  | Owner / Agency                 | Date and Time of Tripping | Date and Time of Revival | Outage Duration | Event   | Generation Loss (MW) | Load Loss (MW) | Generati on Loss in MU | Load Loss in MU | Category as per CEA Grid Standards |
|---------|--------|--|--------------------------------|---------------------------|--------------------------|-----------------|---|----------------------|----------------|------------------------|-----------------|------------------------------------|
| 1       | NER    | 132 kV Balipara - Tenga line   | NEEPCO & DoP Arunachal Pradesh | 02-Jan-20 09:34           | 02-Jan-20 09:59          | 0:25:00         | Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were connected with rest of NER Grid through 132 kV Balipara - Tenga line. At 09:34 Hrs on 02.01.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.   | 4                    | 17             | 0.002                  | 0.007           | GD 1                               |
| 2       | NER    | 132 kV Badarpur - Kolasib line<br>132 kV Aizawl - Kolasib line   | POWERGRID                      | 03-Jan-20 19:06           | 03-Jan-20 19:36          | 0:30:00         | Kolasib area of Mizoram Power System and Turali Power Station were connected with rest of NER Grid through 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line. At 19:06 hrs on 03.01.2020, 132 kV Badarpur - Kolasib line and 132 kV Aizawl - Kolasib line tripped. Due to tripping of these elements, Kolasib area of Mizoram Power System and Turali Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.   | 24                   | 9              | 0.012                  | 0.005           | GD 1                               |
| 3       | NER    | 132 kV Loktak- Ningthoukhong line  | MSPCL                          | 03-Jan-20 22:45           | 03-Jan-20 22:49          | 0:04:00         | Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kV Loktak- Ningthoukhong line. 132 kV Imphal - Ningthoukhong line and 132 kV Kakching - Kongba line kept open for over-loading of 132 kV Loktak- Ningthoukhong line. At 22:45 Hrs on 03.01.20, 132 kV Loktak- Ningthoukhong line tripped. Due to tripping of this element, Ningthoukhong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.  | 0                    | 23             | 0                      | 0.0015          | GD 1                               |
| 4       | NER    | 132 kV Balipara - Tenga line   | NEEPCO & DoP Arunachal Pradesh | 05-Jan-20 12:51           | 05-Jan-20 13:21          | 0:30:00         | Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were connected with rest of NER Grid through 132 kV Balipara - Tenga line. At 12:51 Hrs on 05.01.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.   | 6                    | 20             | 0.003                  | 0.01            | GD 1                               |
| 5       | NER    | 132 kV Balipara - Tenga line   | NEEPCO & DoP Arunachal Pradesh | 08-Jan-20 09:26           | 08-Jan-20 09:56          | 0:30:00         | Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were connected with rest of NER Grid through 132 kV Balipara - Tenga line. At 09:26 Hrs on 08.01.20, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were separated from rest of NER Grid and subsequently collapsed due to no source in this area.  | 0                    | 19             | 0                      | 0.01            | GD 1                               |
| 6       | NER    | 132 kV Ningthoukhong- Churachandpur 1 & 2 lines  | MSPCL                          | 08-Jan-20 12:11           | 08-Jan-20 12:23          | 0:12:00         | Churachandpur area of Manipur Power System was connected with rest of NER Grid through 132 kV Ningthoukhong- Churachandpur 1 & 2 lines .132 kV Kakching - Kongba line kept open for over-loading of 132 kV Loktak- Ningthoukhong line At 12:11 Hrs on 08.01.20, 132 kV Ningthoukhong- Churachandpur 1 & 2 lines tripped. Due to tripping of these elements, Churachandpur area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.  | 0                    | 35             | 0                      | 0.007           | GD 1                               |
| 7       | NER    | 132 kV Doyang-Sanis line<br>132 kV Imphal-Kohima line  | POWERGRID & DoP Nagaland       | 09-Jan-20 12:14           | 09-Jan-20 12:29          | 0:15:00         | Kohima area of Nagaland Power System was connected with the rest of NER Grid through 132 kV Doyang-Sanis line and 132 kV Imphal - Kohima line. 132 Kohima-Karong Line was under Planned Shutdown . At 12:14 Hrs on 09.01.2020, 132 kV Doyang-Sanis line and 132 kV Imphal-Kohima line tripped. Due to tripping of these elements, Kohima area was separated from the rest of NER Grid and subsequently collapsed due to no source in this area.   | 0                    | 30             | 0                      | 0.008           | GD 1                               |
| 8       | NER    | 132 kV Loktak- Ningthoukhong line  | MSPCL                          | 13-Jan-20 17:28           | 13-Jan-20 17:41          | 0:13:00         | Ningthoukhong area of Manipur Power System was connected with rest of NER Grid through 132 kV Loktak- Ningthoukhong line. 132 kV Imphal - Ningthoukhong line & 132 kV Kakching-Kongba line kept open to avoid over-loading of 132 kV Loktak- Ningthoukhong line. At 17:28 Hrs on 13.01.20, 132 kV Loktak- Ningthoukhong line . Due to tripping of this element, Ningthoukhong area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.  | 0                    | 60             | 0                      | 0.013           | GD 1                               |
| 9       | NER    | 132 kV Balipara - Tenga line   | DoP AP , NEEPCO                | 15-Jan-20 21:48           | 15-Jan-20 21:53          | 0:05:00         | Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were connected with rest of NER Grid through 132 kV Balipara - Tenga line. At 21:48 Hrs on 15.01.2020, 132 kV Balipara - Tenga line tripped. Due to tripping of this element, Khupi area of Arunachal Pradesh Power System and Dikshi Power Station were separated from rest of NER Grid and subsequently collapsed due to load generation mismatch in this area.   | 6                    | 22             | 0.001                  | 0.002           | GD 1                               |
| 10      | NER    | 132 kV Ningthoukhong- Churachandpur 1 & 2 lines  | MSPCL                          | 16-Jan-20 08:22           | 16-Jan-20 08:25          | 0:03:00         | Churachandpur area of Manipur Power System was connected with rest of NER Grid through 132 kV Ningthoukhong- Churachandpur 1 & 2 lines.132 kV Kakching - Kongba line was kept open to avoid overloading of 132 kV Loktak-Ningthoukhong line At 08:22 Hrs on 16.01.20, 132 kV Ningthoukhong- Churachandpur I & II lines tripped. Due to tripping of these elements, Churachandpur area of Manipur Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area.   | 0                    | 42             | 0                      | 0.002           | GD 1                               |
| 11      | NER    | 132 kV Mawlyndep-NEHU line<br>132 kV Khleihriat(MePTCL) - Khleihriat (PG) D/C lines<br>132 kV Panchgram- Lumshnong line ,<br>132 kV NEHU - NEIGRIHMS line<br>132 kV NEHU - Mustem line | POWERGRID & MePTCL             | 16-Jan-20 09:11           | 16-Jan-20 09:27          | 0:16:00         | Khleihriat area of Meghalaya Power System was connected with rest of NER Grid through 132 kV Mawlyndep-NEHU line , 132 kV Khleihriat - Khleihriat (PG) D/C lines ,132 kV Panchgram- Lumshnong line , 132 kV NEHU - NEIGRIHMS line & 132 kV NEHU - Mustem line . At 09:11 Hrs on 16.01.20, 132 kV Mawlyndep-NeHU line , 132 kV Khleihriat(MePTCL) - Khleihriat (PG) D/C lines ,132 kV Mawlyndep-NEHU line , 132 kV Khleihriat - Khleihriat (PG) D/C lines ,132 kV Panchgram- Lumshnong line , 132 kV NEHU - NEIGRIHMS line & 132 kV NEHU - Mustem line tripped. Due to tripping of these elements, Khleihriat area of Meghalaya Power System was separated from rest of NER Grid and subsequently collapsed due to no source in this area. | 0                    | 75             | 0                      | 0.02            | GD 1                               |
| 12      | NER    | 132 kV Ranganadi - Itanagar Line<br>132 kV Pare - Itanagar Line  | DoP AP & NEEPCO                | 23-Jan-20 20:00           | 23-Jan-20 20:36          | 0:36:00         | 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 to avoid overloading of 132 kV Pare-Lekhi Line. At 20:00 Hrs on 23.01.20, 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                    | 13             | 0                      | 0.008           | GD 1                               |

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

| Sl. No. | Region | Name of Element | Owner / Agency | Date and Time of Tripping | Date and Time of Revival | Outage Duration | Event  | Generation Loss (MW) | Load Loss (MW) | Generation Loss in MU | Load Loss in MU | Category as per CEA Grid Standards |
|---------|--------|-----------------|----------------|---------------------------|--------------------------|-----------------|--|----------------------|----------------|-----------------------|-----------------|------------------------------------|
| 1       | NER    | AGBPP Unit 6    | NEEPCO         | 18-Jan-20 12:09           | 18-Jan-20 12:45          | 0:36:00         | AGBPP Unit 6 tripped at 12:09 Hrs on 18.01.20 due to high vibration. Revision of schedule from Block No 52 on 18.01.20.              | 28                   | 0              | 0.020                 | 0               | GI 2                               |
| 2       | NER    | AGBPP Unit -2   | NEEPCO         | 21-Jan-20 16:11           | 21-Jan-20 17:00          | 0:49:00         | AGBPP Unit-2 tripped at 16:11 Hrs on 21-01-20 due to pressure problem of Gas compressor . Revision done from Block No.69 on 21-01-20 | 28.7                 | 0              | 0.020                 | 0               | GI 2                               |