

**Details of Grid Events during the Month of December 2023 in Northern Region**



Sl No.	Category of Grid Event	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration (HH:MM)	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load w.r.t. Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid*		Brief details of the event ( pre fault and post fault system conditions)	Elements Tripped
						Generation Loss(MW)	Load Loss (MW)	% Generation Loss (MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GI-2	Rajasthan	03-Dec-23 13:31	04-Dec-23 00:08	10:37	106	0	0.265	0.000	39981	46164	i) Total MW generation of Avada Sunce, Avada RHN and Avada Sustainable are pooled at 400kV Avada pooling and total generation is evacuated through 400 KV Avada Pooling SL_BKN_PG (AEPL)-Bikaner(PG) (AEPL) Ckt. During antecedent condition, 400/33 kV 150 MVA ICT 7 at Avada Pooling SL_BKN_PG (AEPL) was carrying approx. 106MW. ii) As reported, at 13:33hrs, 400/33 kV 150 MVA ICT 7 at Avada Pooling SL_BKN_PG (AEPL) tripped due to main LV Feeder-352 LA failure. iii) As per PMU at Avada(IP), Y-N phase to earth fault with fault clearance time of 80ms is observed in the system. iv) As per PMU, generation loss of approx. 106MW at Avada Pooling(IP) is observed.	1) 400/33 kV 150 MVA ICT 7 at Avada Pooling SL_BKN_PG (AEPL)
2	GD-1	J&K	10-Dec-23 15:57	10-Dec-23 23:00	07:03	127	0	0.347	0.000	36626	42183	i) During antecedent condition, only 130MW Unit-2 at Dulhasti HEP was running (generating approx. 127MW) and power was evacuating through 400kV Dulhasti-Kishenpur ckt-1 only. 400kV Dulhasti-Kishenpur ckt-2 was already under planned outage due to stringing work. ii) As reported, at 15:57hrs, 400kV Dulhasti-Kishenpur ckt-1 tripped on Y-N phase to earth fault. At the same time, 130MW Unit-2 at Dulhasti HEP also tripped due to loss of evacuation path. iii) As per PMU at Kishenpur (PG), Y-N phase to earth fault with unsuccessful A/R operation is observed. Fault was of permanent nature and fault current was ~4KA. iv) As per SCADA, generation loss of approx. 127MW is observed at Dulhasti HEP.	1) 400 kV Dulhasti(KHN)-Kishenpur(PG) (PG) Ckt-1 2) 130MW Unit-2 at Dulhasti HEP
3	GD-1	Rajasthan	13-Dec-23 13:03	13-Dec-23 13:35	00:32	0	550	0.000	1.023	44848	53773	i) During antecedent condition, MVA loadings of 400/220 kV 315 MVA ICT-1 & 2 at Hindaun(RS) were 227 and 243 MVA respectively. ii) At 13:03 hrs, 220kV Hindaun220-Sakra(Dausa)(RS) ckt (carrying ~78MW) tripped which further resulted into overloading of 220kV Hindaun400-Hindaun220(RS) ckt (carrying ~95MW) and 400/220kV 315MVA ICTs at Hindaun(RS). Subsequently, 400/220kV 315MVA ICT-1&2 at Hindaun tripped on overcurrent protection operation. iii) As per PMU, no fault is observed in the system. iv) As per SCADA, load loss of approx. 550 MW is observed in Rajasthan control area.	1) 400/220 kV 315 MVA ICT -1 at Hindaun(RS) 2) 400/220 kV 315 MVA ICT -2 at Hindaun(RS)
4	GD-1	Rajasthan	17-Dec-23 13:01	17-Dec-23 23:22	10:21	1600	0	3.285	0.000	48712	55964	i) During antecedent condition, 220/33kV 100MVA ICT-1, 2 & 3 at Rising Sun(RSDCL4) were carrying 57MW, 57MW and 53MW respectively. ii) As reported, at 13:01hrs, 400 KV Bikaner-Bhadla (RS) Ckt-1 tripped on Y-B phase to phase fault with fault distance of 70.52km from Bhadla(RS) end, conductor found broken between tower no. 243-244. As per DR at Bikaner(RS) end, fault was in zone -1, fault current was 4.53kA and 5.46kA on Y & B phase respectively and fault clearing time was 50ms. iii) At the same time, 220/33kV 100MVA ICT-1 & 3 at Rising Sun(RSDCL4) tripped due to relay mal-operation (exact reason yet to be shared). Due to this tripping, 220/33kV 100MVA ICT-2 at Rising Sun(RSDCL4) also tripped due to over-loading. iv) Again, at 13:14hrs, 400 KV Bikaner-Bhadla (RS) Ckt-2 tripped on Y-B phase to phase fault with fault distance of 30.61km from Bhadla(RS) end, conductor found broken between tower location no. 107-108. As per DR at Bikaner(RS) end, fault was in zone -1, fault current was 3.14kA and 4.36kA on Y & B phase respectively and fault clearing time was 40ms. v) As per PMU at Bhadla(RS), Y-B phase to phase fault is observed with fault clearing time of 80ms. vi) As per SCADA, generation loss of approx. 1600 MW is observed in total NR Solar generation which was recovered within 3 minutes.	1) 400 KV Bikaner-Bhadla (RS) Ckt-1 2) 220/33kV 100MVA ICT-1 at Rising Sun(RSDCL4) 3) 220/33kV 100MVA ICT-2 at Rising Sun(RSDCL4) 4) 220/33kV 100MVA ICT-3 at Rising Sun(RSDCL4) 5) 400 KV Bikaner-Bhadla (RS) Ckt-2
5	GI-2	Uttar Pradesh	24-Dec-23 05:36	24-Dec-23 14:06	08:30	0	0	0.000	0.000	33070	42165	i) During antecedent condition, 765/400 kV 1500 MVA ICT 1 & 2 at Meerut, PMSTL (UP) were carrying approx. 120MW each. ii) As reported, at 05:36hrs, 765 kV Hapur-Meerut, PMSTL (UP) Ckt tripped on R-N phase to earth fault with fault location of 9.104km from Hapur end due to OPGW conductor broken at fault location. iii) As per DR at Hapur end, zone-1 distance protection operated and fault current was 6.194kA from Hapur end. As per DR at Meerut end, zone-1 distance protection operated (unsuccessful A/R), LBB operated and fault current was 6.632kA from Meerut end. iv) Due to issue in opening of R-phase CB at Meerut end of 765 kV Hapur-Meerut, PMSTL (UP) Ckt, LBB operated at Meerut end which led to tripping of 765/400 kV 1500 MVA ICT 2 at Meerut, PMSTL (UP) also and 765 kV Meerut, PMSTL (UP) - Bus 1 became dead. v) As per PMU at Meerut(PG), multiple R-N phase to earth fault with fault clearance time of 80ms and 280ms are observed. vi) As per SCADA, no change in demand is observed in UP control area.	1) 765 kV Hapur-Meerut, PMSTL (UP) Ckt 2) 765/400 kV 1500 MVA ICT 2 at Meerut, PMSTL (UP) 3) 765 kV Meerut, PMSTL (UP) - Bus 1
6	GI-2	Delhi	24-Dec-23 11:42	24-Dec-23 15:46	04:04	400	0	0.823	0.000	48608	57489	i) As reported, at 11:42 hrs, 400 KV Jhatikari(PG) Mundka(DV) (DTL) Ckt-1 tripped on Y-B-N double phase to ground fault with fault current of 19.062kA and fault location of 4.202km from Jhatikari end. ii) As per DR at Mundka end, zone-1 distance protection operated, fault current was 13.14kA and 14.28kA in Y and B phase respectively and fault clearing time was approx. 40ms. iii) During the same time, 400 KV Bawana-Mundka (DV) Ckt-1 & 2 also tripped from Mundka end only. iv) As per SCADA, sudden dip in solar generation of approx. 400MW is observed which revived within 2 minutes. v) As per PMU, sudden dip in generation is observed in some RE plants, e.g., AHEJL (~70MW), NTPC Devkott (~110MW), RSWP (~140MW) and RSUP (~70MW). vi) As per PMU, Y-B-N double phase to ground fault with fault clearing time of 120ms is observed. vii) As per SCADA, no change in demand is observed in Delhi control area.	1) 400 KV Jhatikari(PG)-Mundka(DV) (DTL) Ckt-2 2) 400 KV Bawana-Mundka (DV) Ckt-1 3) 400 KV Bawana-Mundka (DV) Ckt-2
7	GD-1	Rajasthan	31-Dec-23 09:29	31-Dec-23 13:15	03:46	315	310	0.734	0.546	42911	56822	i) During antecedent condition, MVA loadings of 400/220 kV 500 MVA ICT- 2 & 3 at Ramgarh(RS) were 188 and 191 MVA respectively. 400/220 kV 500 MVA ICT- 1 at Ramgarh(RS) was not under working condition. ii) As reported by SIDC-Rajasthan (Bhadla(RS) end), at 09:29 hrs, 400kV Ramgarh(RS)-Bhadla(RS) Ckt-1 tripped on R-Y phase to phase fault with fault clearing time of 332ms, fault distance of 152.15km and fault current of ~3.25kA and ~3.13kA in R and Y phase respectively from Bhadla(RS) end (phase sequence issue at Bhadla(RS) end); fault was observed in zone-2 at Bhadla(RS) end. 400kV Ramgarh(RS)-Bhadla(RS) Ckt-2 tripped from Ramgarh(RS) end only, no tripping occurred at Bhadla(RS) end. iii) As per DR at Ramgarh(RS) end, bus bar protection operated at Ramgarh(RS) end during the same time (exact reason yet to be shared). iv) As per DR, 400 KV Akal-Ramgarh(End) (RS) Ckt-1 tripped on Y-B phase to phase fault with fault clearing time of 520ms and fault current of ~3.63kA and ~3.46kA in Y and B phase respectively from Ramgarh(RS) end; fault was observed in zone-4 at Ramgarh(RS) end. v) As per DR, 400 KV Akal-Ramgarh(End) (RS) Ckt-2 tripped on Y-B phase to phase fault with fault clearing time of 220ms and fault current of ~3.72kA and ~3.52kA in Y and B phase respectively from Ramgarh(RS) end; fault was observed in zone-4 at Ramgarh(RS) end. vi) Due to tripping of all the elements, 400/220kV Ramgarh(RS) S3 became dead. vii) As per PMU, Y-B phase to phase fault with delayed fault clearance time of 520ms is observed. viii) As per SCADA, change in demand of approx. 310 MW is observed in Rajasthan control area. ix) As per SCADA, loss of wind generation of approx. 315 MW is observed in Rajasthan control area.	1) 400kV Ramgarh(RS)-Bhadla(RS) Ckt-1 2) 400kV Ramgarh(RS)-Bhadla(RS) Ckt-2 3) 400kV Ramgarh(RS)-Akal(RS) Ckt-1 4) 400kV Ramgarh(RS)-Akal(RS) Ckt-2
8	GD-1	Rajasthan	31-Dec-23 12:35	31-Dec-23 13:38	01:03	0	1560	0.000	2.612	49584	59724	i) As reported, at 12:35 hrs, B-phase conductor of main bus isolator of 220kV Bhawad(RS)-Bhopalgarh(RS) Ckt-1 snapped which led to bus bar protection operation at 220kV Bhawad(RS). All the elements connected to 220kV Bus-1 & 2 at Bhawad(RS) tripped and 220/132kV Bhawad(RS) S3 became dead. ii) Due to tripping of total load of Bhopalgarh on 400/220kV Merta(RS), 400/220kV 315MVA ICT-1 & 2 at Merta(RS) tripped at the same time due to over-loading. iii) As 400/220kV Kankani(RS) and Jodhpur(RS) started to cater the nearby load of Bhopalgarh area, 400/220kV 315MVA ICT-1 & 500MVA ICT-2 at Kankani(RS) and 220/132kV 100MVA ICT at Jodhpur(RS) also tripped during the same time due to over-loading. iv) As per DR at Kankani(RS), current in 400/220kV 315MVA ICT-1 at Kankani(RS) were Ia=578.72A, Ib=577.98A, and Ic=585.23kA and current in 400/220kV 500MVA ICT-2 at Kankani(RS) were Ia=1348.41A, Ib=1352.59kA and Ic=1381.58kA respectively. Over-current protection operated in both the ICTs. v) As per SCADA SDE, 220kV Nagaur(RS)-Barsingar(RS) Ckt, 220kV Merta(RS)-Jethana(RS) Ckt and 400kV Merta(RS)-Kankani(RS) Ckt also tripped during the same time (Exact reason of the same yet to be shared). vi) As per PMU, no fault is observed in the system. vii) As per SCADA, load loss of approx. 1560 MW is observed in Rajasthan control area.	1) 220kV Bhawad(RS)-Bhopalgarh(RS) Ckt-1 2) 220kV Bhawad(RS)-Bhopalgarh(RS) Ckt-2 3) 220kV Bhawad(RS)-Jodhpur(RS) Ckt-1 4) 220kV Bhawad(RS)-Jodhpur(RS) Ckt-2 5) 220kV Bhawad(RS)-Bhatwas(RS) Ckt-1 6) 220kV Bhawad(RS)-Bhatwas(RS) Ckt-2 7) 220/132kV 100MVA ICT-1 at Bhawad(RS) 8) 220/132kV 100MVA ICT-2 at Bhawad(RS) 9) 400/220kV 315MVA ICT-2 at Merta(RS) 10) 400/220kV 315MVA ICT-2 at Merta(RS) 11) 220/132kV 100MVA ICT at Jodhpur(RS) 12) 400/220kV 315MVA ICT-1 at Kankani(RS) 13) 400/220kV 500MVA ICT-2 at Kankani(RS)

**Details of Grid Events during the Month of December 2023 in Western Region**



Sl No.	Category of Grid Event	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration (HH:MM)	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load w.r.t Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid*		Brief details of the event ( pre fault and post fault system conditions)	Elements Tripped
	( GI for GI2/ GD-1 to GD-5)					Generation Loss(MW)	Load Loss (MW)	% Generation Loss (MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GD-1	WR	20:43 / 02-12-2023	22:32 / 02-12-2023	01:49	273	-	0.53%	-	51643	50209	At 20:43 Hrs/ 02-12-2023, 220/33 kV Pritamagar-ICT-1&2 tripped on Over current protection operation. During inspection no abnormalities were found. 220/33 kV Pritamagar ICT 3 was under planned shutdown w.o.f. 10:56 Hrs/ 20-11-2023. 273 MW generation loss occurred at 220 kV Pritamagar s/s due to the event.	Tripping of following elements- 1. 220/33 kV Pritamagar-ICT-1&2
2	GD-1	WR	03:50 / 09-12-2023	04:00 / 09-12-2023	00:10	-	35	-	0.08%	53385	45279	At 03:50 Hrs/ 09-12-2023, 220 kV Sabalgarh-Shivpur-2 tripped on R-E fault from Shivpur end only. The breaker didn't open at Sabalgarh end and all lines connected to 220 kV Sabalgarh tripped on Z-3 protection operation from remote ends and handtripped by site at Sabalgarh end.Total supply failed at 220 kV Sabalgarh, 220 kV Sheopurkala and adjoining 132 kV Substations (132 kV Vijaypura,132 kV Kailarash, 132 kV Baroda). 35 MW load loss occurred at the mentioned area due to the event.	Tripping of following elements- 1. 220 kV Sabalgarh-Shivpur-1&2 2. 220 kV Sabalgarh-Sheopurkala-1&2 3. 220 kV Sabalgarh-Morena(MPP)-1 4. 220 kV Sabalgarh-Morena(Karnal)-1 5. 220/132 kV Sabalgarh-ICT-1&2 (160 MVA) 6. 220 kV Sabalgarh-Bus-1&2
3	GD-1	WR	06:43 / 14-12-2023	08:03 / 14-12-2023	01:20	-	240	-	0.41%	66358	58234	At 06:43 Hrs/14.12.2023, 220 kV bus 2 at Raipur PG station tripped due to bus bar protection operation which led to tripping of 220 kV Raipur-Doma-1, 220 kV Raipur-Borjara, 220 kV Raipur-Bhilai, 220 kV Raipur-Sheriha, 400/220 kV ICT-2 and 400/220 kV ICT-3 at Raipur PG. Around 240 MW load loss occurred during the event.	Tripping of following elements- 1. 220 kV Raipur PG Bus-2 2. 220 kV Raipur-Doma-1 3. 220 kV Raipur-Borjara 4. 220 kV Raipur-Bhilai 5. 400/220 kV ICT-2 6. 400/220 kV ICT-3 7. 220 kV Raipur-Sheriha
4	GD-1	WR	14:08 / 20-12-2023	17:30 / 20-12-2023	03:22	-	79	-	0.12%	71313	65600	At 14:08 Hrs/20.12.2023, 220 kV Bhuj- Gadhsisa Ckt tripped on Bph-E fault resulting in loss of generation due to loss of evacuation path. 79 MW generation loss reported.	Tripping of following elements- 1.220 kV Bhuj- Gadhsisa Ckt
5	GD-1	WR	22:05 / 23-12-2023	23:00 / 23-12-2023	00:55	-	373	-	0.70%	64371	53512	At 22:05 Hrs/23.12.2023, Y-phase CT of 220kV Bus Coupler blasted at Kharadpada SS. Due to which all Ckts at 220kV Kharadpada SS tripped, 220kV Vapi-Bhilosa Ckt also tripped on Zone-2 protection operation at the same time at 220 kV Bhilosa end only. Load loss of 373 MW is reported at 220kV Kharadpada SS and 220kV Bhilosa SS.	Tripping of following elements- 1. 220 kV Kharadpada- New Kharadpada Ckt 1 & 2 2. 220kV Kharadpada-Vapi 3. 220kV Kharadpada-Bhilosa 4. 220kV Bhilosa Vapi
7	GD-1	WR	14:55 / 29-12-2023	15:13 / 29-12-2023	00:18	-	37	-	0.05%	75086	68504	At 14:55 Hrs/27.12.2023, 220 kV Kalwa- Bappaon tripped on 3-Ph fault due to wave trap jumper snapped at Kalwa end. 220 kV Ghatgar- Bappaon tripped from Ghatgar end only at same time and 220kV Bappaon S/s got dead. Load loss of 37 MW was reported.	Tripping of following elements- 1.220 kV Ghatgar Bappaon Ckt 2. 220 kV Kalwa Bappaon Ckt 3. 50 MVA X-MER-1&2

**Details of Grid Events during the Month of December 2023 in Southern Region**



Sl No.	Category of Grid Event ( GI Ior GI 2/ GD-1 to GD-5)	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration (HH:MM)	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load w.r.t Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid*		Brief details of the event ( pre fault and post fault system conditions)	Elements Tripped
						Generation Loss(MW)	Load Loss (MW)	% Generation Loss (MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GD-1	Tamil Nadu	04-12-2023 07:14	04-12-2023 08:23	1 hr min	0	0	0.00%	0.00%	35704	43674	Complete Outage of 400kV Manali and Pulyanthope SS of TANTRANSO. During antecedent conditions, 400V Pulyanthope SS was being radially fed from 400kV Manali SS. As per the reports submitted,during Michaung cyclone, due to moisture ingress in the Manali GIS, 400kV Manali NCTPS line tripped at 04:52hrs and 400kV Alamathy Manali line tripped at 07:14hrs. Tripping of the both the source feeders resulted in complete outage of 400kV Manali and Pulyanthope SS.	1. 400kV Manali NCTPS 2. 400kV Manali Alamathy
2	GD-1	Karnataka	08-12-2023 14:37	08-12-2023 14:48	11mins	510	600	1.32%	1.28%	38764	46956	Complete Outage of 400kV Talaguppa SS, 220kV Shimoga SS, Chikkamangalore SS, Heggunje SS, Katur SS, Shirakoppa SS, Siri SS, Arasikere SS and 220kV Bus-2 of Homnali SS of KPCL and 220kV Varahi and Sharavathy SS of KPCL. As per the reports submitted, the triggering incident was R/N fault in 220kV Sharavathy Shimoga Line-1. Sharavathy end failed to clear the fault causing LBB to operate and all the elements connected to the East wing of the bus tripped. Subsequently, other units tripped on Under frequency protection. Consequently, 220kV Hassan Chikkamangalore line was hand tripped due to arcing and 220kV Hassan Anthrasanahalli and 220kV Hassan Shimoga lines tripped on PSB operation. After these trippings, 400kV Talaguppa Hassan and 400kV Talaguppa Nelamangala lines tripped on overvoltage protection. This resulted in complete outage of 400kV Talaguppa SS, 220kV Shimoga SS, Chikkamangalore SS, Heggunje SS, Katur SS, Shirakoppa SS, Siri SS, Arasikere SS and 220kV Bus-2 of Homnali SS and 220kV Varahi and Sharavathy SS.	1. 400kV Talaguppa Nelamangala 2. 400kV Talaguppa Hassan 3. 220kV Sharavathy Shimoga Line-1 4. 220kV Hassan Chikkamangalore 5. 220kV Hassan Shimoga
3	GD-1	Karnataka	25-12-2023 14:48	25-12-2023 19:02	4hrs 14mins	0	0	0.00%	0.00%	46612	50813	Complete Outage of 230kV GRT Station: As per the reports submitted, the triggering incident was LBB relay maloperation at 230kV GRT Bay of 400kV/230kV TTGS station causing tripping of the line. Tripping of the only connected line led to complete outage of 230kV GRT station.	1. 230kV TTGS GRT line

**Details of Grid Events during the Month of December 2023 in Eastern Region**



Sl No.	Category of Grid Event	Affected Area	Time and Date of occurrence of Grid Event	Time and Date of Restoration	Duration (HH:MM)	Loss of generation / loss of load during the Grid Event		% Loss of generation / loss of load w.r.t Antecedent Generation/Load in the Regional Grid during the Grid Event		Antecedent Generation/Load in the Regional Grid*		Brief details of the event ( pre fault and post fault system conditions)	Elements Tripped
	( GI 1or GI 2/ GD-1 to GD-5)					Generation Loss(MW)	Load Loss (MW)	% Generation Loss (MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GD-1	Rengali, Rengali PH	04.12.2023 10:49	04.12.2023 11:33	0.030556	0	0	0.00%	0.00%	25910	18653	On 04th December 2023 at 10:49 Hrs, Due to flashover in bus isolator, all the emanating lines from Rengali (OPTCL) were hand tripped at 10:49 hrs causing bus dead in the S/S.	220KV Bus#1 at Rengali (OPTCL) 220KV Bus#2 at Rengali (OPTCL) 220KV-RENGALI(PG)-RENGALI(OPTCL)-1 220KV-RENGALI(PG)-RENGALI(OPTCL)-2 220KV-RENGALI(PH)-RENGALI(OPTCL)-1 220KV-RENGALI(PH)-RENGALI(OPTCL)-2
2	GD-1	Tenughat	06.12.2023 07:04	06.12.2023 07:27	0.015972	330	0	1.25%	0.00%	26413	18257	At 07:04 Hrs on 06.12.2023, all emanating lines at 400/220 kv Tenughat S/s tripped leading to loss of evacuation path for its 2 running units (2*210 MW). Consequently, 220 kv Tenughat S/s became dead and 330 MW generation loss occurred.	220 kv Tenughat-Govindpur-1 220 kv Tenughat-Govindpur-2 220 kv Tenughat-Biharsharh-1 2*210 MW Units at Tenughat
3	GD-1	Purnea	14.12.2023 11:58	14.12.2023 13:41	0.071528	0	0	0.00%	0.00%	24244	18023	At 11:58 Hrs on 14th December 2023, 220 kv Bus-1&2 at 220/132 kv Purnea S/s tripped leading to total power interruption. No load loss or generation loss occurred.	220 kv Bus#1 at Purnea 220 kv Bus#2 at Purnea 220 kv Purnea-New Purnea-1 220 kv Purnea-New Purnea-2 220 kv Purnea-Dalkhola-2
4	GD-1	Therubali	28.12.2023 12:32	28.12.2023 15:51	0.138194	0	75	0.00%	0.38%	25522	19838	At 12:32 Hrs on 28th December 2023, a fire incident occurred in 132 kv Panel of 220/132 kv ATR-1 at Therubali, leading to failure of DC supply. Consequently, total power failed at Therubali S/s. Around 75 MW load loss occurred at Kashipur, Jaypatna	220KV Therubali-Laximpur-D/c 220KV Therubali-Bhanjanagar D/c 220KV Therubali-Kashipur-1 220KV Therubali-Indravati T/c 220KV Therubali-Gunupur-1 220KV Therubali-Narendraapur-1

**Details of Grid Events during the Month of December 2023 in North Eastern Region**



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	( GI Ior GI 2/ GD-I to GD-5)					Generation Loss(MW)	Load Loss (MW)	% Generation Loss (MW)	% Load Loss (MW)	Antecedent Generation (MW)	Antecedent Load (MW)		
1	GD-I	Lakwa area of Assam Power System	06-12-2023 14:19	06-12-2023 16:38	02:19:00	100	0	5.69%	0.00%	1756	1918	Lakwa area of Assam Power system, LTPS & LRPP generation was connected with the rest of the grid by 132 kv LTPS-Nazira D/C, 132 kv LTPS-Moran, 132 kv LTPS-Sonari, 132 kv LTPS-NTPS and 132 kv LTPS-Mariani(AS) lines. At 14:19 Hrs of 06/12/2023, 132 kv LTPS-Nazira D/C, 132 kv LTPS-Moran, 132 kv LTPS-Sonari, 132 kv LTPS-NTPS and 132 kv LTPS-Mariani(AS) lines tripped and LTPS & LRPP generation of Assam Power system got separated from rest of the grid due to load generation mismatch in this area. Power was extended to Lakwa area of Assam Power system by charging 132 kv LTPS-NTPS line at 16:38 Hrs.	132 kv LTPS-Nazira D/C, 132 kv LTPS-Moran, 132 kv LTPS-Sonari, 132 kv LTPS-NTPS and 132 kv LTPS-Mariani(AS) lines
2	GD-I	Umiam Stg-II of Meghalaya Power System	09-12-2023 12:12	09-12-2023 12:40	00:28:00	4	0	0.23%	0.00%	1703	1847	Umiam Stg-II area of Meghalaya Power system was connected with the rest of the grid by 132 kv Umiam Stage 1 – Umiam Stage 2 line. At 12:12 Hrs of 09/12/2023, 132 kv Umiam Stage 1 – Umiam Stage 2 line tripped and Umiam Stg-II generation of Meghalaya Power system got separated from rest of the grid due to load generation mismatch in this area. Power was extended to Umiam Stg-II area of Meghalaya Power system by charging 132 kv Umiam Stage 1 – Umiam Stage 2 line at 12:40 Hrs.	132 kv Umiam Stage 1 – Umiam Stage 2; Umiam Stage 1- Umiam Stage 3 (Line 1&2); Umiam Stage 3- Umiam Stage 4 (Line 1&2); Umiam Stage 4- Umtru P.S (Line 2)
3	GD-I	Kohima area of Nagaland Power System	11-12-2023 09:52	11-12-2023 10:16	00:24:00	6	20	0.30%	1.01%	2007	1979	Kohima area of Nagaland Power system was connected with the rest of the grid by 132 kv Kohima-Dimapur(PG), 132 kv Kohima-Karong, 132 kv Kohima-Meluri & 132 kv Kohima-Chiephobozou lines. 132 kv Kohima-Chiephobozou line and 132 kv Kohima-Meluri was under shutdown. At 09:52 Hrs of 11/12/2023, 132 kv Dimapur(PG)-Kohima & 132 kv Karong-Kohima lines tripped. Due to these trippings, Kohima area of Nagaland power system got separated from rest of the grid. Power was extended to Kohima area of Nagaland Power system by charging 132 kv Kohima-Karong line at 10:16 Hrs.	132 kv Dimapur(PG)-Kohima & 132 kv Karong-Kohima lines
4	Near Miss	Kopili S/S of NEEPCO power system	13-12-2023 16:58	13-12-2023 19:53	02:55:00	50	0	1.83%	0.00%	2732	2470	Kopili HEP of NEEPCO Power system was connected with the rest of the grid by 220 kv Misa-Kopili I, II & III lines. Also, connected with 132 kv Khandong- Kopili & 132 kv Khleirhat- Kopili Lines. At 16:58 Hrs of 13/12/2023, 220 kv Bus-II tripped on operation of LBB. Due to this tripping, Kopili S/S of NEEPCO power system got separated from rest of the grid due to load generation mismatch in this area. Power was extended to Kopili area of NEEPCO Power system by charging 220 kv Misa-Kopili I line at 17:22 Hrs.	Bus-II & Kopili Unit-4
5	GD-I	Kopili S/S of NEEPCO power system	14-12-2023 16:31	14-12-2023 17:22	00:51:00	50	0	2.28%	0.00%	2195	2257	Kopili HEP of NEEPCO Power system was connected with the rest of the grid by 220 kv Misa-Kopili I, II & III lines. Also, connected with 132 kv Khandong- Kopili & 132 kv Khleirhat- Kopili Lines. At 16:31 Hrs of 14/12/2023, 220 kv Bus-I & II at Kopili tripped on operation of LBB. Due to this tripping, Kopili S/S of NEEPCO power system got separated from rest of the grid due to load generation mismatch in this area. Power was extended to Kopili area of NEEPCO Power system by charging 220 kv Misa-Kopili I line at 17:22 Hrs.	Bus-I & II, Kopili Unit-2