

Log of Grid Incidences for the 2014-15(upto Nov 2014)							
	Category as per CEA Grid Standards						
	GD-I	GD-II	GD-III	GD-IV	GD-V	GI-I	GI-II
Region							
NR	52					1	6
WR	17					10	11
SR	9						8
ER	47					3	6
NER	31	4	3		1	1	
All India	156	4	3	0	1	15	31

A	B		C	D	E	F	G	H		I
S.NO.	Outage		Region	Name of Element	Owner / Agency*	Event	Generation/Load Loss	Revival		Category as per CEA
	Date	Time						Date	Time	
1	08.04.14	2204 hrs	NER	1). 400kV Silchar-Byrnihat S/C 2). 400kV Silchar-Pallatana D/C 3). 132kV Badarpur-Khlieriat S/C 4). 132kV Jiribam-Haflong S/C 5). 132kV Jiribam Loktak –II Ckt 6). 132kV Jiribam-Aizwal S/C 7). 132kV Loktak-Imphal S/C 8). 132kV Loktak-Ningthoukhong S/C 9). Pallatana Generation(GTG-I and STG-I) 10). Loktak Generation 11). RC Nagar Generation	NETCL/OTPC	Due to heavy rain alongwith thunderstorm and lightning in NER and also Y ph to earth fault in 400 KV Silchar-Byrnihat line, element given in coulum D got tripped.	Load Loss=335MW Gen Loss=517MW	08.04.14	2301 hrs	GD-III
2	28.04.14	0007 hrs	NER	1)400kV Silchar-Pallatana D/C 2)400kV Silchar-Byrnihat S/C 3)132kV Khondong-Haflong S/C 4)132kV Badarpur-Khliehriat 5)132kV PK Bari-Ambassa 6)132kV Dimapur Imphal 7)132kV Jiribam-Loktak 8)132kV Jiribam-Haflong line 9)Pallatana Generation	NER/OTPC	Multiple tripping occurred in NER which started with the tripping of 400 kV Palatana-Silchar-I(it appears from PMU plot that Fault was in B-Phase). Due to the Palatana Generation tripping, SPS-I operated causing load relief. Further tripping of few lines caused separation of Tripura from rest of grid and Tripura(islanded) survived with RC Nagar generation.	Load Loss=139MW Generation Loss=320 MW	28.04.14	0106 hrs	GD-II
3	09.05.14	1630 hrs	NER	1). 132kV Imphal-Imphal D/C	NETCL	Due to E/F given line tripped	Load Loss=55MW	09.05.14	1701 hrs	GD-I
4	10.05.14	0254 hrs	NER	1). 400kV Silchar- Byrnihat S/C 2).132kV Khliehirat -Badarpur 3).132kV Haflong-Jiribam 4).132kV Dimapur-Imphal 5). 132kV Loktak-Imphal 7). Palatana Generation	NETCL/OTPC	Due to B-Phase to Earth Fault in 400kV Silchar-Byrnihat line, elements given in Coulumn D tripped.	Load Loss=217MW Gen Loss=466MW	10.05.14	0707 hrs	GD-II
5	14.05.14	1015 hrs	NER	1).220kV Samaguri-Sarusajai D/C	AEGCL	Given line in Column D tripped on distance protection.(220kV BTPS-Agia was in shutdown)	Load Loss=200MW	14.05.14	1116 hrs	GD-II
6	41845	0521hrs	NER	1). 220 kV Misa-Samaguri D/C 2). 220 kV Azara-Agia line 3). 220 kV Azara-Boko-Agia line 4). all 400kV,220kV and 132kV lines of Meghalaya, Nagaland, Manipur,Tripura, Mizoram, Assam (except Dhaligaon & Agia load around 120 MW) 5) all running units of AGTPP,Loktak,RHEP,Doyang,AGBPP and Pallatana	PG/OTPC/	1) At around 0514 hrs, 400 kV Balipara-RHEP-I & II tripped on DP at Balipara end. [It is reported that Earth wire snapped in Balipara-RHEP line between Loc no 33 & 34.] At the same time 400 kV Balipara - Misa-I & II ckts tripped from Misa end and also 220 kV Balipara-Samaguri line tripped from Samaguri end. 2) At 0516 Hrs 400/220 kV, 315 MVA ICT of Bongaigaon tripped from HV side(Directional E/F relay at HV side) which led to the tripping of elements mentioned in coulum D .	Load Loss=1384MW Gen Loss=1564 MW	25-Jul-14	1354hrs	GD-V
7	12.08.2014	0406 hrs	NER	1). Imphal-Imphal(PG) D/C 2). Imphal(PG)-Loktak D/C	PG/NHPC	132 KV Imphal S/S became dead, due to tripping of Imphal-Imphal(PG) line in Zone II protection (fault reported in 33 KV system).	Load Loss=60MW Gen Loss=20MW(back down by Loktak)	12.08.20 14		GD-I

18	220 kV Balipara-Samaguri	POWERGRID/AEGCL	POWERGRID, AEGCL & MePTCL	06.09.14 to 0728 Hrs	Not Furnished	Balipara-DP,Y-ph & Samaguri- No tripping	-	-	0739 Hrs on 06.09.14	No SPS
19	220 kV Misa-Brynihat II	MePTCL				Misa-DP,Z1,B-ph & Brynihat-DP,Z2,B-ph			0805 Hrs on 06.09.14	
20	06.09.14	1335 Hrs	NER	1). 400kV Silchar-Byrnihat line 2). Palatana GTG I 3) Palatana STG I	NETC / OTPC	Due to tripping of 400 kV Silchar- Byrnihat and Palatana GTG-I & STG-I, SPS-I operated which provided load relief in South Assam area.	Load Loss: 70 (Assam) Generation Loss: 340	06.09.14	1609 hrs	GD-III
21	400/220 kV, 315 MVA ICT I at Azara	AEGCL	AEGCL	06.09.14 at 1346 Hrs	Not Furnished	Tripped	-	-	1721 Hrs on 06.09.14	No SPS
22	400/220 kV, 315 MVA ICT II at Azara	AEGCL							1721 Hrs on 06.09.14	
23	07.09.14	0350 Hrs	NER	1). 220 kV Misa- Samguri I 2). 220 kV Misa- Samguri II 220 kV Balipara-Samaguri kV,315 MVA ICT I at Misa 3) 4) 400/220	POWERGRID / AEGCL	Due to tripping of 220 kV Misa- Samguri I &II, 220 kV Balipara-Samaguri & 400/220 kV,315 MVA ICT I at Misa, Misa subststion was blacked-out	Load Loss: 40 (Assam)	07.09.14	0511 Hrs	GD-I
24	07.09.14	0350 Hrs	NER	1). 132 kV Jiribam- Haflong 2). 132 kV Khandong- Haflong	POWERGRID	Due to tripping of 220 kV Misa- Samguri I &II, 220 kV Balipara-Samaguri & 400/220 kV,315 MVA ICT I at Misa, Misa subststion was blacked-out	Load Loss: 2 (Assam)	11.09.14	0544 Hrs	GD-I
25	11.09.14	0420 hrs	NER	1)220kV AGBPP-N.Maraini 2)220kV AGBPP - Mariani 3)220kV AGBPP - Tinsukia D/C 4) AGBPP Generation(I-VIII except Unit-6)	NEEPCO	All the running units of AGBPP tripped due to loss of evacuation path as 220 kV AGBPP- Mariani and 220 kV AGBPP- Tinsukia D/C (while 220 kV AGBPP-New Mariani was out) tripped.	Gen Loss=195MW	12.09.14	1004 Hrs	GD-II
26	13.09.14	2104 Hrs	NER	1) 400 kV Silchar - Byrnihat S/C	NEEPCO	Due to tripping of 400 kV Silchar-Byrnihat line, SPS- I operated providing a load relief in South Assam area	Load Loss : 47 (Assam)	13.09.14	2130 Hrs	GD-I

27	13.09.14	2139 Hrs	NER	1) 400 kV Silchar - Byrnihat S/C	NEEPCO	Due to tripping of 400 kV Silchar-Byrnihat line, SPS- I operated providing a load relief in South Assam area	Load Loss : 48 (Assam)	13.09.14	2221 Hrs	GD-I
28	220 kV Misa- New Mariani	POWERGRID	POWERGRID	0016 Hrs on 12.09.14	Succesful at Misa end only	Misa- DP,Z1,B-ph (H/T later) & New Mariani- DP,Z1,B-ph	-	-	0310 Hrs on 12.09.14	No SPS
29	220 kV AGBPP- New Mariani	POWERGRID			Not furnished	AGBPP- Hand tripped & New Mariani- O/V			0526 Hrs on 12.09.14	No SPS
30	15.09.14	1055 Hrs	NER	1) 220 kV Samaguri-Jawaharnagar Jawaharnagar- Sarusajai 2) 220 kV	AEGCL	Due to tripping of 220 kV Samaguri-Jawaharnagar and 220 kV Jawaharnagar- Sarusajai, power supply to Jawaharnagar in Assam interrupted.	Load Loss : 46 (Assam)	15.09.14	1121 Hrs	GD-I
31	17.09.14	1150 Hrs	NER	1) 132 kV Dimapur - Kohima S/C	Nagaland	Due to tripping of 132 kV Dimapur- Kohima, power supply to Kohima area of Nagaland got interrupted.	Load Loss: 10 (Nagaland)	17.09.14	1155 Hrs	GD-I
32	18.09.14	1023 Hrs	NER	1) 132 kV Loktak - Ningthoukong Imphal- Ningthoukong 2) 132 kV	MSPCL	Due to tripping of 132 kV Loktak- Ningthoukong and 132 kV Imphal- Ningthoukong, power supply to Ningthoukong area of Manipur interrupted	Load Loss: 16 (Manipur)	18.09.14	1055 Hrs	GD-I
33	18.09.14	1023 Hrs	NER	1) 132 kV Silchar- Panchgram Silchar- Dullavchera 2) 132 kV	POWERGRID / AEGCL	Due to tripping of 132 kV Silchar- Panchgram and 132 kV Silchar- Dullavchera, power supply to Dullavchera area in Assam interrupted	Load Loss: 16 (Assam)	18.09.14	2015 Hrs	GD-I
34	21.09.14	2228 Hrs	NER	1) 132 kV Dimapur- Kohima	POWERGRID / AEGCL	Due to tripping of 132 kV Silchar- Panchgram and 132 kV Silchar- Dullavchera, power supply to Dullavchera area in Assam interrupted	Load Loss: 20 (Nagaland)	21.09.14	2234 Hrs	GD-I
35	22.09.14	1431 Hrs	NER	1) 132 kV Ranganadi - Nirjuli S/C	POWERGRID	Tripping of 132 kV Ranganadi - Nirjuli S/C	Load Loss: 42 (Assam), 33 (Arunachal Pradesh)	22.09.14	1447 Hrs	GD-I
36	22.09.14	1751 hrs	NER	1) Palatana GTG-I 2)Palatana STG-I 3)132 kV Badarpur-Panchgram 4) 132 kV Silchar-Srikona-I & II 5)132 kV Silchar-Panchgram	OTPC/AEGCL	Units tripped due to undervoltage protection operation and post tripping of units,lines tripped on SPS Operation.	Gen Loss=318 MW Load Loss = 79 MW (Assam)	22.09.14	1917 hrs	GD-I

37	23.09.14	1715 Hrs	NER	1) 220/132 kV, 50 MVA ICT-I at Balipara 2) 220/132 kV, 50 MVA ICT-II at Balipara 3)132 kV Balipara - Depota S/C 4) 132 kV Balipara - Khupi S/C 5)132 kV Balipara - Gohpur S/C	POWERGRID/ AEGCL/NEEPC O	ICTs at Balipara tripped due to Directional O/C protection (48 MW/ICT) leading to tripping of 132 kV downstream feeders from Balipara	Load Loss = 96 MW (Assam)	23.09.14	1740 Hrs	GD-I
38	28.09.14	0330 Hrs	NER	1) 220/132 kV, 50 MVA ICT-I at Balipara 2) 220/132 kV, 50 MVA ICT-II at Balipara 3)132 kV Balipara - Depota S/C 4) 132 kV Balipara - Khupi S/C 5)132 kV Balipara - Gohpur S/C	POWERGRID/ AEGCL/NEEPC O	ICTs at Balipara tripped along with downstream feeders from 132 kV Balipara	Load Loss = 63 MW (Assam)	28.09.14	0357 Hrs	GD-I
39	28.09.14	1240 Hrs	NER	1) 220 kV Balipara - Samaguri S/C 2) 220/132 kV, 50 MVA ICT-I at Balipara 3) 220/132 kV, 50 MVA ICT-II at Balipara 4)132 kV Balipara - Depota S/C 5) 132 kV Balipara - Khupi S/C 6)132 kV Balipara - Gohpur S/C	POWERGRID/ AEGCL/NEEPC O	Busbar protection operated at 220 kV Balipara bus, leading to tripping of 220kV Balipara- Samaguri S/C and 220/132 kV ICTs at Balipara tripped along with downstream feeders from 132 kV Balipara	Load Loss = 39 MW (Assam), 18 (Arunachal Pradesh)	28.09.14	1253 Hrs	GD-I
40	18.10.14	1412 hrs	NER	1). 132kV Dimapur-Imphal 2). 132kV Loktak-Jiribam-II 3). 132kV Loktak-Ninthoukhong 3). Unit-I and III at Loktak(35X2)	PG/NHPC	132kV Loktak-Jiribam-II tripped on R-Y phase fault, due to this, given elements tripped.	Load Loss=98MW Gen Loss=53MW	18.10.14	1649 hrs	GD-I

Major Grid Incidences

Annexure-I

A	B		C	D	E	F	G	H		I
S.NO.	Outage		Region	Name of Element	Owner / Agency*	Event	Generation/Load Loss	Revival		Category as per CEA Grid Standards
	Date	Time						Date	Time	
1	09.04.14	0541 hrs	NR	1). 220kV Harduaganj-Hathras Line 2). 220kV Harduaganj-Mainpuri Line 3). 220kV Harduaganj-Atrauli Line 4). 220kV Harduaganj-Khurja-D/C 5). 220kV Harduaganj-Etah line 6). Unit#8,9 at Harduaganj TPS	UPPTCL	Due to failure of R-Phase jumper of C-Isolator of 220kV Harduaganj-Hathras line at Harduaganj TPS, resulting in tripping of all the 220 KV lines and Generators at Harduaganj.	Load Loss=407MW Gen Loss=450MW	09.04.14	0820 hrs	GD-I
2	09.04.14	2140 hrs	NR	1). 220kV Panipat TPS-Panipat I,II,III &IV 2). 220kV Panipat-Narela-I,II &III 3). 220kV Panipat-Dhulkote-D/C 4). 220kV Panipat- Krukshetra line	HVPNL/BBMB	Due to Faliure of Y-Phase CT of Bus Coupler at Panitpat (BBMB) S/S, Bus Bar Protection operated and given element in Coulum D got tripped.	Load Loss=220MW	09.04.14	2256 hrs	GD-I
3	14.04.14	0902 hrs	NR	1). 400kV Sarnath-Anpara D/c 2). 400kV Sarnath-Pusauli line 3). 400kV Sarnath-Allahabad Line 4). 400kV Sarnath- Azamgarh line 5). 400kV Anpara-Mau line 6). 220 KV Sarnath-Gazipur 7). 220 KV Sarnath-Sahupuri 8). 220 KV Sarnath-Gajokhar 9). 400/220kV 315MVA ICT-I,II at Sarnath	PG/UPPTCL	Due to B-Phase to Earth fault in 400kV Sarnath-Azamgarh line, while online relay testing work was being carried out at Sarnath (UP)substation elements given in coulum D got tripped.	Load Loss=300MW	14.04.14	1026 hrs	GD-I
4	16.04.14	0640 hrs	NR	1). 220kV Nabha-Balwan ckt 2). 220kV Nabha -Faggan Majra -I &II 3). 220kV Patiala(PG)-Rajpura(PSEB) line 4). 220kV Nabha-Dhuri line 5). NPL Unit#1 (Hand tripped) (700MW)	PSEB/L&T	Due to failure of B-phase CT and breaker limb at Nabha S/S, given lines in coulum D got tripped.	Gen Loss=700MW	16.04.14	1750 hrs	GD-I
5	17.04.14	2326 hrs	NR	1). 400kV Jodhpur-Kankroli-I line 2). 400kV Jodhpur-Rajwest D/C 3). 400kV Barmer-Rajwest -I line 4). 400kV Merta-Jodhpur-I line 5). 400kV Akal-Jodhpur line 6). 400kV Akal-Barmer-I line 7). Rajwest(IPP) LTPS Unit#3,4,5,6,7 &8 (135MW each)	PG/RRVNL	Bus Bar protection operated at 400kV Jodhpur S/S due to damage of post inulator of 400kV main Bus-B in 400kV Merta-I Bay.	Gen Loss=600MW	18.04.14	0355 hrs	GD-I
6	29.04.14	1133 hrs	NR	1)400kV Chabra-Hindaun 2) 400kV Chabra-Bhilwara 3)400kV Chabra-Kawai(Adani) 4) 400kV Hindaun-Heerapura 5) 220kV Chabra-Kawai 6) 220kV Chabra-Jhalawar	PG/Adani/RVUP NL	Due to tripping of 400 kV Heerapura-Hindaun on distance protection , multiple tripping occurred in Kawai, Chabra and adjoining sub stations.	Load Loss=180MW Generation Loss=1100 MW	29.04.14	1211 hrs	GD-I

7	30.04.14	1201 hrs	NR	1)400kV Chabra-Hindaun 2) 400kV Chabra-Bhilwara 3) 400kV Chabra-Kawai(Adani) 4) 400kV Hindaun-Heerapura 5) 220kV Chabra-Kawai 6)220kV Chabra-Jhalawar 7)Chabra TPS Unit #1&2 8)Kawai(ADANI) TPS Unit #1 9)Kalisindh TPS Unit-1	PG/Adani/RVUP NL	400kV Heerapura-Hindaun ckt tripped on R-phase to ground fault.400kV Chabra-Hindaun ckt tripped on R-phase to ground fault.Kawai reported that its machine observed some oscillation and 400kV Chabra-Kawai line tripped from Chabra end on over voltage protection.Tripping also occurred in 220kV section of Chabra, Kawai, Jhalawar	Load Loss=200MW Generation Loss=1139 MW	30.04.14	1616 hrs	GD-I
8	03.05.14	1738 hrs	NR	1)220 kV Samaypur-Ballabgarh T/C 2)220 kV Faridabad-Samaypur-I 3) BTPS Unit-II & III(100 MW each)	NTPC/HVNL	While Charging 220 kV Samaypur-Ballabgarh-I , wave trap damaged at Samaypur and Y-pahse PT burst at Ballabgarh caused tripping of elements given in column D.	Gen Loss=180 MW	03.05.14	1845 hrs	GD-I
9	04.05.14	1201 hrs	NR	1) 400kV Chabra-Kawai(Adani) 2) 400 kV Bassi-kawai(Adani) 3)Kawai(ADANI) TPS Unit #1 & II(660 MW each)	Adani/PG	Due to DT received at Bassi & Chhabra end, elements given in column D tripped.	Generation Loss=1000 MW(approx figure)	04.05.14	1201 hrs	GD-I
10	05.05.14	0948 hrs	NR	1).220kV Sarna-Kishenpur D/C 2). 220kV Sarna-Udhampur 3). 220kV Dasuya-Sarna D/C 4). 220kV Hiranagar-Sarna	PG	Due to Failure of Y-Phase CT of Bus Coupler at Sarna end,given lines in Column D tripped	Load Loss=200MW	05.05.14	1234 hrs	GD-I

11	12.05.14	1721 hrs	NR	1). 220kV Auraiya-Sikandra D/C 2). 220kV Auraiya-Malanpur 3). 220kV Auraiya-Mahgaon 4). 400/220kV ICT-I & II at auraiya 5). UNIT-GT-3 & ST-2 at Auraiya	PG	Three Phase Fault occurred at 220kV Auraiya-Sikandra-I and at the same time bus bar protection operated at Auraiya, elements given in column D tripped.	Gen Loss=140MW	12.05.14	2012hrs	GD-I
12	17.05.14	2132 hrs	NR	1). 400kV Dadri-Muradnagar S/C 2).315MVA,400/220kV ICT-I,II&III at Muradnagar	UPPTCL	Due to snapping of Bus Isolator Jumper at Muradnagar S/S,elements given in Column D tripped.	Load Loss =650	17.05.14	0215 hrs	GD-I
13	25.05.14	1911 hrs	NR	1).400kV Ballabgarh-Mainpuri-D/C 2). 400kV Ballabgarh-Bamnoli D/C	PG/DTL	Y-Ph LA of Ballabgarh-Mainpuri-2 at Balabgarh end blasted and Bus-Bar-1 operated at Ballabgarh end	Load Loss=Nil	25.05.14	2330 hrs	GI-II
14	05.06.14	0103 hrs	NR	1).400 kV Azamgarh – Sultanpur 2).400 kV Azamgarh – Sarnath-I 3).400 kv Azamgarh – Mau 4).400kV Azamgarh-Gorakhpur 4).315 MVA 400/220kV ICT-I&II at Azamgarh	UPPTCL	Due to failure of R-Phase CT of Azamgarh-Gorakhpur Line, given elements in column D tripped	Load Loss=150MW	05.06.14	0300 hrs	GD-I
15	05.06.14	2249 hrs	NR	1).220kV Bamnauli-Dial -II	DTL	Due to tripping of 220kV Bamnauli Dial on Phase to earth fault Load loss occurred in Delhi network.	Load Loss=400MW	05.06.14	1108 hrs	GD-I
16	05.06.14	2356 hrs	NR	1)400/220kV 315MVA ICT-1&2 2)400/220kV 500MVA ICT-1 3)220kV Agra-Gokul ckt	PG/UPPCL	At 400kV Agra UP S/S, R-phase C.T. of 220kV side of 400/220kV 315MVA ICT-I failed. At the same time 400/220kV 315MVA ICT-1 tripped on differential protection, 400/220kV ICT-2, 500MVA ICT-1 tripped in cascading on overcurrent protection.	Load Loss=1059 MW	06.06.14	0050 hrs	GD-I
17	07.06.14	0011 hrs	NR	1).400 kV Azamgarh – Sultanpur 2).400 kV Azamgarh – Sarnath-I 3).400 kv Azamgarh – Mau 4).400kV Azamgarh-Gorakhpur 4).315 MVA 400/220kV ICT-I&II at Azamgarh	UPPTCL	Due to failure of B-Phase CT of Azamgarh-Sultanpur Line at Azamgarh end, given elements in column D tripped	Load Loss=300MW	07.06.14	0147 hrs	GD-I
18	07.06.14	1540 hrs	NR	1). 200kV Mehrauli-Dial-D/C 2). 220kV Bamnauli-Dial-II 3). 220kV Bamnauli-Najafgarh-D/C	DTL	Due to B-Phase to Earth fault on 220kV Mehrauli-Dial Ckt,given element tripped.	Load loss=60MW	07.06.14	1600 hrs	GD-I
19	09.06.14	2036 hrs	NR	1)400/220kV 315MVA ICT-1&2 2)400/220kV 500MVA ICT-1 3)220kV Agra-Sikandra ckt 4)220kV Agra-Hathras ckt	PG/UPPCL	At 400kV Agra UP S/S, B-phase C.T. of 220kV side of 400/220kV 315MVA ICT-2 failed. At the same time 400/220kV 315MVA ICT-2 tripped on differential protection, 400/220kV ICT-1, 400/220kV 500MVA ICT tripped in cascading on overcurrent protection.	Load loss=974 MW	09.06.14	2225 hrs	GD-I
20	11.06.14	1441 hrs	NR	1)400/220kV 315MVA ICT-1&2 2)400/220kV 500MVA ICT	PG/UPPCL	At 400kV Agra UP S/S, flashover has observed in the B-phase bushing of 400kV side of 400/220kV 500MVA ICT . At the same time 400/220kV 315MVA ICT-1 & 2, tripped in cascading on overcurrent protection.	Load loss=800 MW	11.06.14	1539 hrs	GD-I
21	16.06.14	1222 hrs	NR	1). 400kV Uri II(NHPC)-Uri(NHPC) 2). 400kV Uri(NHPC)-Wagoora(PG) D/C 3). All 4 units (120MW each) of Uri(NHPC)	PG	R-phase to ground fault occurred in 400kV Uri II(NHPC)-Uri(NHPC) ckt and LBB Protection operated at Uri-I due to which given elements in coulum D tripped.	Gen Loss=475MW	16.06.14	1737 hrs	GD-I

22	24.06.14	0934 hrs	NR	1). 220kV Akal-Bhu 2). 220kV Amarsagar-Tejwa D/C 3). Wind generation at Bhu, Mada, Tejwa & Bhesada	Suzlon	220 kV Akal-Bhu line tripped due to Broken jumper near Bhu Sub-Station resulted into wind power generation loss nearby Bhu area. At the same time wind generation connected at 220kV Tejwa, Mada & Dangri station also tripped.	Gen Loss=848MW	24.06.14	1735 hrs	GD-I
23	41822	0.585416667	NR	1) 220 KV Wazirabad-Kashmiri Gate D/C 2) 220 KV Wazirabad-Geeta Colony D/C 3) Pragati and Rajghat Generation	DTL	Due to inclement weather, towers at location no-14 & 15 of 220 KV Wazirabad-Kashmiri gate D/C line collapsed and fell on adjacent Wazirabad-Geeta Colony line causing tripping of elements given in column D.	Gen Loss- 400 MW Load Loss- 350 MW	41823	0.822917	GD-I
24	41841	1506 hrs	NR	1).220kV Mirbazar-Pampore-D/C 2).220kV Wagoora-Pampore D/C	PDD, J&K	Due to Earth fault in 220kV Mirbazar-Pampore-II line, all elements given in column D tripped	Load Loss=350MW	21-Jul-14	1745 hrs	GD-I
25	41845	1153 hrs	NR	1). 400kV Auraiya-Kanpur-D/C 2). 400kV Auraiya-Agra(PG) D/C 3). 220kV Auraiya-Mehgaon 4). 220kV Auraiya-Malanpur	PG	Due to bursting of Y-ph CT of 400 KV Auriya-Kanpur-II at Auriya, bus bar protection operated at 400kV Auraiya S/S and given elements in Column D tripped	Gen Loss=100MW	25.07.2014	2346hrs	GD-I
26	20.08.2014	1110 hrs	NR	1).400/220kV ICT-II at Agra(UPPCL) 2) 220kV Agra-Samsabad line 3).220kV Agra-Agra D/C 4). 220kV Agra-Gokul Line 5). 220132kV ICT-II	UPPCL	Due to tripping of ICT-II at Agra(UPPCL) given elements tripped.	Load Loss=437MW	20.08.2014	1158 hrs	GD-I
27	22.08.2014	1036hrs	NR	1). 220kV Panchkula-Rewali D/C 2). 220kV Panchkula-Baddi S/C 3). 220kV Panchkula-Kunihar S/C 4). 400/220kV ICT I & II at Panchkula	HVPNL/PG	Due to failure of jumper in 220kV Panchkula-Rewali lines, elements given in Column D tripped.	Load loss=120MW	22.08.2014	1140hrs	GD-I
28	27.08.2014	2322 hrs	NR	1). 220kV Samaypur-Charkhi Dadri S/C 2). 220kV Samaypur-Ballabgarh -II 3). 220kV Samaypur-Faridabad-II 4).220kV Samaypur-Pali-II 5). 220kV Samaypur -Badshahpur-I 6). 220kV Samaypur-Palwal-I 7)400/220kV, 315MVA ICT-III and IV at Samaypur	BBMB/PG	Y-phase CT of 220kV Samaypur-Charkhi Dadri ckt bursted. It resulted into operation of Bus Bar Protection for Bus-1. All the 220kV lines & two 315MVA ICT connected at Bus-1 tripped	Load Loss=350MW	28.08.2014	115hrs	GD-I
29	28.08.2014	1334 hrs	NR	1). 400kV Agra-Agra(PG) D/C 2). 400kV Agra-Unnao Line 3). 400kV Agra-Muradnagar Line 4). 220kV Agra-Gokul Line 5). 220kV Agra-Hathras Line 6). 220kV Agra-Samsabad Line 7). 220kV Agra-Sikandara D/C 8). 220kV Sikandara-Auraiya D/C 9) 400/220kV 315MVA ICT-I and II at Agra 10). 400/220kV 500MVA ICT at Agra	UPPTCL/PG	B-phase Transfer Isolator of 400kV Agra(UP)-Agra(PG) ckt-2 broke and fell on Bus and earthed and created Bus fault. Bus Bar protection at 400kV Agra(UP) end was out of service at that time. It resulted into tripping of all 400kV lines from remote end in zone-2. 400/220kV 315MVA ICT-2 also tripped at Agra(UP) end on direction over current/ earth fault protection while remaining two ICTs were manually opened.	Load Loss=754MW	28.08.2014	1615 hrs	GD-I

30	01.09.2014	02:35hrs	NR	400kV Kashipur(PTCUL)-Rishikesh(PTCUL) 400kV Kashipur(PTCUL)-Moradabad(UP)	PTCUL/UP	Due to transient fault 400kV Kashipur(PTCUL)-Rishikesh(PTCUL) & 400kV Kashipur(PTCUL)-Moradabad(UP) tripped	Load Loss=250MW	01.09.2014	15:20hrs	GD-1
31	11.09.2014	08:45hrs	NR	220kV Dhauliganga(NHPC)-Pithoragarh(PG) 220kV Dauliganga(NHPC)-Bareilly(UP) Unit #1, #3 & #4	NHPC/PG/UP	Internal DC supply failure during charging of unit-3 of 220kV Dhauliganga station resulted in tripping of Multiple element	Gen Loss=140MW	11.09.2014	09:20hrs	GD-1
32	12.09.2014	11:53hrs	NR	400kV Agra(UP)-Agra(PG) D/C 400kV Agra(UP)-Unnao(UP) 400kV Agra(UP)-Muradnagar(UP) 400/220kV 315MVA ICT #1 & #3 400/220kV 500MVA ICT #2	UP/PG	At 400 KV S/S Agra, at 09:47 hrs., shutdown was taken of 400 KV Bus coupler (CB-95). While doing maintenance/work, 400 KV Bus-Bar Protection operated, which resulted in multiple element trippings.	Load Loss=469MW	12.09.2014	12:15hrs	GD-1
33	13.09.2014	03:57hrs	NR	400kV Agra(PG)-Agra(UP) D/C 400kV Agra(PG)-Bhiwadi(PG)-1 400kV Agra(PG)-Bassi(PG)	PG	Multiple element tripping at Agra(PG) due to over voltage	NIL	13.09.2014	04:55hrs	GI-2
34	14.09.2014	17:09hrs	NR	765kV Agra(PG)-Meerut(PG) 400kV Agra(PG)-Agra(UP) D/C 400kV Agra(PG)-Bhiwadi(PG) 400kV Agra(PG)-Bassi(PG)	PG/UP	Multiple element tripping at Agra(PG) due to over voltage	NIL	14.09.2014	17:20hrs	GI-2
35	14.09.2014	17:50hrs	NR	400kV Dadri-Harsh Vihar D/C		400kV Dadri-Harsh Vihar D/C tripped due to delayed clearance of R-phase to earth fault.	NIL	14.09.2014	20:19hrs	GI-2
36	15.09.2014	11:26hrs	NR	400/220kV 240MVA ICT #1 & #2 at Paricha TPS(UP) Unit #5 & #6 at Paricha TPS(UP)	UP	Y-pole of Circuit Breaker of 240MVA ICT-2 burst resulted in tripping of Multiple elements at 400kV Paricha TPS(UP)	Gen Loss=485MW	15.09.2014	13:20hrs	GD-1
37	16.09.2014	05:03hrs	NR	400kV Unnao(UP)-Panki(UP) 400kV Unnao(UP)-Agra(UP) 1000MVA,765/400kV ICT #1 & #2 at Unnao(UP)	UP	R-phase to earth fault in 400kV 400kV Unnao-Panki, line auto reclosed early from Unnao end resulting in multiple element tripping at 765kV Unnao(UP)	NIL	16.09.2014	06:13hrs	GI-2
38	18.09.2014	17:56hrs	NR	400/220 KV, 500 MVA, ICT at Agra(UP) 400/220 KV, 315 MVA, ICT #2 & #3 at Agra(UP) 220 KV Agra- Sikandra-I line 220 KV Agra-Sikandra-II line 220 KV Agra-Shamsabad line	UP	Line fault took place on 220 KV Agra-Shamsabad (radial) line. At Agra S/S, circuit breaker did not trip. The fault was isolated by tripping of other elements.	Load Loss=1136MW	18.09.2014	18:55hrs	GD-1
39	19.09.2014	12:29hrs	NR	400kV Daultabad(HVPNL)-Jhajjar(APCPL)-1 400kV Daultabad(HVPNL)-Dhanonda(HVPNL) D/C 400kV Daultabad(HVPNL)-Gurgaon(PG)-2	Haryana/APCPL/ PG	R-ph to earth fault in 400kV Daultabad(HVPNL)-Jhajjar(APCPL)-1 the ckt tripped. At the same time, 400kV Daultabad(HVPNL)-Dhanonda D/C & 400kV Daultabad(HVPNL)-Gurgaon(PG)-2 tripped	Load Loss=400MW	19.09.2014	13:10hrs	GD-1
40	20.09.2014	14:15hrs	NR	400kV Nathpa Jhakri(SJVNL)-Rampur(SJVNL) Unit #2, #4 & #5 of Rampur HEP(SJVNL)	SJVNL	Due to R-phase to earth fault 400kV Nathpa Jhakri-Rampur ckt tripped along with Unit #2, #4 & #5 of Rampur HEP.	Gen Loss=220MW	20.09.2014	15:14hrs	GD-1

41	21.09.2014	15:47hrs	NR	220kV Jassore(HP)-Bairasiul(NHPC) 220kV Jassore(HP)-Pong(BBMB)	HP/NHPC/BBMB	As reported CT blast at Jassore end of 220kV Jassore-B'suil line resulted in tripping of 220kV Jassore(HP)-Bairasiul(NHPC) & 220kv Jassore(HP)-Pong(BBMB)	NIL	21.09.2014	16:33hrs	GI-1
42	23.09.2014	08:46 hrs	NR	400kV Dadri-Mandola-2 Runnig GT (155MW) Runnig ST (130MW)	NTPC/PG	400kV Dadri-Mandola tripped along with Runnig GT & ST at Dadri GPS.	Gen loss = 165MW	23.09.2014	09:50hrs	GD-I
43	24.09.2014	12:50 hrs	NR	1) 50 MW Generating Unit # 1 & #2 at Obra 2) 200 MW Generating Unit #12 & #13 at Obra 3) 220 KV Obra-Sahupuri D/C 4) 220 KV Obra- Rewa Road T/C 5) 400/220 KV, 240 MVA, ICT #1 & #2 at Obra 6) 220/132 KV, 100 MVA-Obra (H)-I 8) 220/132 KV, 100 MVA-Obra (H)-II	UP	line fault took place on 220 KV Obra-Rewa Road-1. At Obra TPS, delayed tripping of CB resulted in tripping of all the 220 KV elements. Tripping of STs at Obra TPS, resulted in tripping of running generating units nos. 12 & 13 which were on 400 KV Bus	Gen Loss=285MW	24.09.2014	13:44hrs	GD-I
44	24.09.2014	20:26 hrs	NR	1) 220 kV Nunamajra-Bahadurgarh-D/C 2) 220 kV Nunamajra-Daulatabad-D/C 3)220 kV Nunamajra-Rohtak D/C	PG/HVPNL	Due to Bus fault at 220 kV Nunamajra(HVPNL) multiple elements tripped.	Load Loss=150MW	24.09.2014	23:00hrs	GD-I
45	24.09.2014	20:41 hrs	NR	all three runnig units (100MW each)	NHPC	Due to butterfly valve supply failure all running units of Chamera-II HEP tripped	Gen loss = 280MW	25.09.2014	02:19hs	GD-I
46	25.09.2014	11:28 hrs	NR	1) 220 kV Salal-Kishenpur-III & IV 2) 220 kV Salal-Jammu-II 3) Unit #1 & #2 at Salal	PG/NHPC	During S/D of unit-2 of Salal HEP LBB protection operated & it resulted into tripping of all the elements connected to Bus-1	Gen Loss=100 MW	25.09.2014	12:24hrs	GD-I
47	28.09.2014	00:18 hrs	NR	1) 400/220kV, 315MVA, ICT #1 & #3	UP	Due to overloading both ICTs at Sarnath tripped	Load Loss=371MW	28.09.2014	00:47hrs	GD-I
48	30.09.2014	10:15hrs	NR	50 MW Unit #1 & #2 33 MW Unit # 2 at Obra (H) 220 kV Obra- Rewa Road #1 & #3 400/220 KV, 240 MVA, ICT #1 & #2 at Obra 220/132 KV, 100 MVA ICT #1 & #2 at Obra(H)	UP	Multiple element tripping at 400kV Obra(UP) TPS	Gen Loss=82MW	30.09.2014	10:25hrs	GD-1
49	09.10.14	1310 hrs	NR	1). 315MVA, 400/220kV ICT-I,II and III at Muzaffarnagar 2). 220kV Muzaffanagar-Shamli S/C	UPPTCL	Due to failure of jumper in 220kV Muzaffarnagar-shamli line,all ICTs tripped on back up protection.	Load Loss=400MW	09.10.14	1355 hrs	GD-1

50	07.10.2014	21:54hrs	NR	400kV Kishenpur(PG)-Dulhasti(NHPC) All runnig Unit #1, #2 & #3(130MW each) at Dulhasti HEP	PG/NHPC	Tripping of all the running unit of Dulhasti HEP due to tripping of evacuating line 400kV Kishenpur(PG)-Dulhasti(NHPC)	Gen Loss=390MW	07.10.2014	2218 hrs	GD-1
51	07.10.2014	22:21hrs	NR	400kV New Wanpoh-Wagoora D/C 400kV Uri(NHPC)-Wagoora(PG) D/C 400kV Uri-II(NHPC)-Wagoora(PG) D/C 220kV Pampore(J&K)-Wagoora(PG) D/C 220kV Wagoora(PG)-Zainkot(JK) D/C 220kV Kishenpur-Mirbazar 220kV KishenpurRamban All runnig Unit #2, #3, #4 (60MW each) at Uri-II HEP All runnig Unit #1, #2, #3, #4(120MW each) at Uri-II HEP	PG/NHPC/J&K	Tripping of Uri HEP on over frequency protection operation & bus voltage at Wagoora(PG) became zero due to isolation of the load-generation complex from the grid through 220kV Mirbazar station of J&K. 400kV Kishenpur-New Wanpoh was already tripped at 21:47hrs	Gen Loss=700MW Load Loss=400MW	07.10.2014	2330 hrs	GD-1
52	08.10.2014	07:53hrs	NR	400kV Dadri-HarshVihar D/C Unit #4(210MW) at Dadri TPS Stg-1 Both 400/220kV, 315MVA ICT #1 at HarshVihar	NTPC/DTL	Tripping of 400kV Dadri-Harsh Vihar D/C along with two ICT's at Harsh Vihar	Gen Loss=210MW Load Loss=100MW	08.10.2014	0815 hrs	GD-1
53	09.10.2014	13:09hrs	NR	220kV Muzaffarnagar-Shamli 400/220kV 315MVA ICT #1, #2 & #3	UP	Tripping of all three 315MVA 400/220kV ICTs at Muzaffarnagar	Load Loss=170MW	09.10.2014	1410 hrs	GD-1
54	10.10.2014	10:08hrs	NR	220kV Chhabra-Kawai Unit #1 & #2 at Chhabra TPS	Rajasthan	Tripping of Unit #1 & #2 at Chhabra along with 220kV Chhabra-Kawai ckt	Gen Loss=480MW Load Loss=50MW	10.10.2014	1055 hrs	GD-1
55	18.10.2014	0750 hrs	NR	1). Unit-3&5 of Salal HEP 2). 220kV Salal-Kishenpur ckt-1 &2 3). 220kV Salal-Jammu ckt	NHPC/PG/J&K	B-phase breaker of unit-5 stucked during opening of unit CB, it resulted into operation of LBB protection for Bus-B and all the elements connected to Bus-B tripped.	Load Loss=50MW Generation Loss=120MW	18.10.2014		GD-1
56	05.11.2014	1242 hrs	NR	1). 400kV Uri-II – Uri-I ckt 2). 400kV Uri-II—Wagoora ckt 3). 400kV Uri-I—Wagoora D/C 4). 220kV Wagoora-Pampore D/C 5). 220kV Pampore-Mirbazar D/C 6). 220kV Wagoora-Zainakote D/C 7). Uri-I(2x120MW) & Uri-II (3x60MW) 8). Units at Lower Jhelum (35MW)	NHPC/PG	Due to burning of R-phase jumper of 220kV Mirbazar-Pampore ckt-2 at Mirbazar, the ckt tripped rendering the valley deficit of power resulting in collapse of valley.	Gen Loss=400kV Load Loss=560MW	05.11.2014	2030 hrs	GD-1
57	05.11.2014	1032 hrs	NR	1). 400/220 kV,315 MVA ICT-I,II and III at Muzzafarnagar	UPPTCL	Due to Fault 220kV Muzzafarnagar-Nara,all the three ICTs at Muzzafarnagar tripped	Load Loss=350MW	05.11.2014	1120 hrs	GD-I
58	09.11.2014	2131 hrs	NR	1). 400kV Jhakri-Karcham-I 2). 400kV Jhakri-Panchkula-I 3). 400kV Jhakri-Rampur-I	PG	While opening of 400kV Jhakri-Karcham-I line, due to problem In R-phase CB at Jhakri, Bus Bar protection operated and given elements tripped.	Load Loss=Nil	10.11.2014	0707 hrs	GI-II
59	11.11.2014	1143 hrs	NR	1). 400kV Agra(UP)-Agra(PG) D/C 2). 400kV Agra-Muradnagar 3). 400kV Agra-Unnao 4). 400/220kV 315MVA ICT-I and II at Agra(UP)	PG/UPPTCL	LBB protection operated during relay testing work at Agra (UP) and all the elements tripped.	Load Loss=500MW	11.11.2014	1326 hrs	GD-I

A	B		C	D	E	F	G	H		I
S.NO.	Outage		Region	Name of Element	Owner / Agency*	Event	Generation/Load Loss	Revival		Category as per CEA Grid Standards
	Date	Time						Date	Time	
1	09.04.14	1220 hrs	WR	1). 220kV Mapusa-Tivim D/C 2). 220kV Mapusa-Ponda D/C 3). 400/220kV ICT- at Mapusa	GED/PG	Due to Bus bar protection operation at Mapusa S/S ,given element in Coulum D got tripped	Load Loss=180MW	09.04.14	1250 hrs	GD-I
2	27.04.14	1756 hrs	WR	1). 220kV Indore(MP)-Dewas S/C 2). 220kV Indore(MP)-Indore D/C 3). 220kV Indore(MP)-Indore STG-2 D/C 4). 220kV Indore(MP)-Indore-SZ D/C 5). 220kV Indore(MP)-Burwah D/C 6). 220kV Indore(MP)-Pithampur S/C 7). 220kV Indore(MP)-Badnagar S/C 8). 400/220 kV ICT-III &IV at Indore(MP)	MPPTCL	Due to failure of Y-Phase CT of 220kV Indore(MP)-Indore line, element given in coulum D got tripped.	Load Loss=500MW	27.04.14	1827 hrs	GD-I
3	06.05.14	0313 hrs	WR	1). 400kV Koradi-Koradi-II 2). 400kV Koradi-Bhilai S/C 3). 400kV Koradi-Khaparkheda-I 4). 400/220kV ICT-I at Koradi	MSETCL	Due to Bus Fault at Koradi S/S, elements given in column D tripped.	Load Loss=Nil Gen Loss=Nil	06.05.14	0704 hrs	GI-II
4	06.05.14	1006 hrs	WR	1). 220kV Urse-Chinchwad 2). 220kV Chinchwad-Chakan 3). 220kV Flagship-Chinchwad 4). 220kV Pirangut-Hinjewadi-II 5). 220kV Parvati-Chinchwad 6). 220kV Jejuri-Parvati 7). 220kV Jejuri-Lonand 8). 220kV Jejuri-Baramati 9). 220kV Kandalgaon-Lonand 10). 220kV Bhosari-II-Telco-Chinchwad	MSETCL	220 kV Chinchwad sub-station in the Pune Ring main has incoming sources from 400 kV Chakkan and 400 kV Lonikhand S/s. The tripping of 220 kV Urse-Chinchwad S/s has resulted in Overloading of other circuits which further tripped on overload. 7 circuits tripped on backup overcurrent protection and 3 circuits on Load trimming scheme operation.	Load Loss=1000MW(Approx)	07.05.14	1046 hrs	GD-I
5	12.05.14	1457 hrs	WR	1). 400kV Padge-Nagthone-II 2). 400kV Padge-Bableswar-I 3). 400kV Padge-Kalwa-I 4). 400kV Padge-Khargar 5). 400kV Padge-Tarapur-I 6) Padge-Chandrapur-Pole I,II 7). 400/220kV ICT-I &II at Padge	MSETCL	Due to conductor snapping and falling on Bus-I, Bus fault occurred on Bus-I at Padge S/S and elements given in column D tripped	Load Loss=Nil	12.05.14	1457 hrs	GI-II
6	15.05.14	1540 hrs	WR	1). 400 KV BINA(MP) - BINA(PG) – Q/C 2). 400 KV BINA – BHOPAL - D/C 3). 400 KV BINA - BINA(JP) 4). 400/220kV ICT-I,II &III at Bina 5). 220 KV BINA (MP) - BINA (JP)	MPPTCL/Jeypee	Due to Bus Bar Protection Operation at Bina S/S, all Elements given in column D tripped.	Load Loss -Nil	15.05.14	1758 hrs	GI-II
7	20.05.14	1957 hrs	WR	1). 400kV Tirora-Warora D/C 2). Unit#2,3&4 at Tirora	APL	Due to B-Phase LA Blast of 400kV Tirora-Warora-I,elements given in column D tripped.	Load Loss=Nil Gen Loss=1845MW	20.05.14	2007 hrs	GD-I
8	11.06.14	1005 hrs	WR	1) 400kV Nagothane-Padghe-I & II 2) 400kV Nagothane-Dabho-I & II 3) 400/220 kV ICT-I,II & III, Nagothane	MSEB	While awaiting outage of Bus-I at 400 kV Nagothane,elements given in column E tripped.	Load loss=145 MW	11.06.14	1205 hrs	GD-I
9	3-Jul-14	03:16	WR	1) 400 KV Lonikhand-New Lonikhand D/C 2) 400 KV Karad-Lonikhand 3) 400/220kV ICT-I,II at Lonikhand 4) 400 KV Pune-Lonikhand S/C	PG	Due to 400 KV CT failure at Lonikhand S/S, 400 KV Bus bar protection operated and given elements in column D tripped.	Nil	3-Jul-14	04:41	GI-II

10	28.08.2014	0135 hrs	WR	1)220 KV Mehgaon-Auraiya 2)220 KV Malanpur-Auraiya. 3)220 KV Malanpur- Gwalior (PGCIL)-I : 4) 220 KV Malanpur- Gwalior (PGCIL)-II :	MPPTCL	Due to fault at 220 kV Gwalior(PG) end, elements given in column E tripped.	Load Loss=350MW	28.08.2014		GD-I
11	28.08.2014	1740 hrs	WR	All 220/132 kv ICTs at Bina(MP)	MPPTCL	All ICTs at 220 kV Bina(MP) s/s tripped in the event.	Load Loss=234MW	28.08.2014		GD-I

List of Grid Disturbances and Grid incidents (GD/GI) in Sep-2014 : Western Region							
Sr. No.	Details of incident (Elements / Generation Tripped)	Owner Utility	Date	Time	Effect (Loss of generation/ Load), if any	Category as per Standards	DR/EL Receipt Status
1	400 kV Jetpur Bus 1 tripped on bus bar protection operation due to Bus fault	GETCO	01-Sep-14	13:24	NIL	GI-2	Yes
2	Toatl loss of supply to DD due to tripping of Vapi-Magarwada lines	DD/WRT S-2	04-Sep-14	12:44	Load Loss: 180 MW	GD-1	No
3	220 kV Bus 1 tripping at 220 kV Paras S/s	MSETCL	04-Sep-14	18:52	Gen Loss : 167 MW	GI-1	No
4	400 and 220 kV Bus 1 tripping at SSP due to LBB operation	SSP/WR TS-2/GETCO	09-Sep-14	14:25	Gen Loss : 590 MW	GI-2	No
5	Multiple tripping at Indore(MP) due to Line fault and LBB operation	MPPTCL	10-Sep-14	00:20	Load loss: 187 MW	GD-1	Yes
6	220 kV Bus 1 tripping at 220/66/11 kV Vapi(GETCO) S/s due to fault on 11 kV side	GETCO/NPCIL	15-Sep-14	13:05	NIL	GI-1	No
7	Tripping of JP Nigrie unit-1 due to loss of JP Nigre-Satna-II	MPPTCL / WRTS-2	17-Sep-14	19:45	Gen Loss: 340 MW	GD-1	No
8	Bus fault at Korba 400 kV (West)	CSPGCL/CSPTCL	19-Sep-14	12:55	Gen loss: 749 MW	GD-1	Yes
9	Bus Fault on 220/100 kV Boriwali	MSETCL	21-Sep-14	09:16	Not Known	GI-1	No

10	Bus fault on 220 kV Bus 1 at 220 kV Vani S/S	MSETCL	21-Sep-14	10:12	Load Loss : 9.3 MW	GI-1	No	
11	Bus fault at 220 kV Chindwara(MP) due to PT	MPPTCL /WRTS-	23-Sep-14	13:55	NIL	GI-1	No	
12	Multiple tripping at Bableswar on backup protection due to 220 kV CT burst of 220 kV Waluj-Benda Waluj(Aurangabad MSETCL) S/s	MSETCL	26-Sep-14	07:13	Load Loss :742 MW	GD-1	No	
13	Tripping at 220 kV Pithampur S/s	MPPTCL /WRTS-2	30-Sep-14	17:55	Load loss: 105 MW	GI-1	No	
14	Bus fault at Padghe causing loss os 4 ICTs & unit-4 at TAPS	MSETCL	01-Oct-14	10:22	Load Loss : 800 MW , Gen Loss: 540 MW	GD-1	Yes	Yes
15	Tripping of Satna-JP-Nigrie line 2 on Fault and 400/220 kV ICT 1 at Satna on Backup O/C protection	WRTS-2 (PG), JP NIGRIE	01-Oct-14	10:34	Nil	GI-2	PGCIL end DR is not received	No
16	LBB Operation at Koyna Generating station	MSEGCL	03-Oct-14	19:10	Not Known	GI-1	No	No
17	Bus fault at Badod due to Yph CT burst	MPPTCL	06-Oct-14	19:09	NIL	GI-1	No	Yes
18	Load Loss due to tripping of incoming feeders to 220/132 kV Saranpali S/s in	CSPTCL	06-Oct-14	10:35	Load loss : 145 MW	GD-1	No	Yes
19	Tripping of 400 kV Bus 1 at 400/220 kV New Koyna S/s	MSETCL	09-Oct-14	11:35	Nil	GI-2	No	Yes
20	220 kV Bus 2 at Kalwa and associated feeders and ICTs tripping due to CT burst	MSETCL	12-Oct-14	04:57	Load Loss : 150 MW	GI-1	No	Yes
21	400 kV Bus 1 tripping at Durg PS due to LBB operation of 400 kV Raipur-Durg ckt 1	PGCIL Chattishgarh	13-Oct-14	11:37	Nil	GI-2	Yes	Yes
22	Separation of SR & NEW Grid due to tripping of both the ICTs at Solapur	WRTS-1(PG)	16-Oct-14	13:17	NIL	GI-2	Yes	Yes

23	Blackout at SLPP sub-station due to 220 kV Bus PT failure	Gujarat	19-Oct-14	19:05	Not Known	GD-1	No	No
24	Black out at Uran Power Station	MSEGCL, MSETCL	23-Oct-14	08:37	Gen loss: 370 MW	GD-1	No	Yes
25	400 kV Chandrapur Bus 2 and associated feeder tripping	MSETCL, MSEGCL	23-Oct-14	02:39	Gen loss : 600 MW	GI-2	No	No
26	Cascade tripping at Uran	MSEGCL	25-Oct-14	05:07	Not Known	GI-1	No	No
27	Bus Fault at 220 kV Mudhsungi S/S	MSETCL	30-Oct-14	20:45	Not Known	GD-1	No	No

A	B		C	D	E	F	G	H		I
S.NO.	Outage		Region	Name of Element	Owner / Agency*	Event	Generation/Load Loss	Revival		Category as per CEA Grid Standards
	Date	Time						Date	Time	
1	03.04.14	1610 hrs	SR	1). 400kV Gooty-Raichur D/C 2). 400kV Gooty-Nellore PS D/C 3). 400kV Gooty-Kurnool (AP)Line 4). 400kV Gooty-Kurnool (PG) Line 5). 400/220kV ICT-1 &2 at Gooty S/S	PG/AP	In 400 kV Gooty-Raichur-I line B-Phase CT blasted. This caused a Bus fault and Bus-bar protection of both bus-I & II operated at Gooty S/S due to which given element in Coulum D got tripped.	-----	03.04.14	1644 hrs	GI-II
2	19.05.14	0041hrs	SR	1).220kV Chandrayangutta-Dindi-D/C 2).220kV Chandrayangutta-Ghanapur D/C 3).220kV Chandrayangutta-Hial S/C 4).220kV Chandrayangutta-Mimidpalli S/C	APTRANSCO	Due to CT failure of 220kV Chandrayangutta -Hial Ckt, all elements given in Coulum D tripped	Load Loss=450MW	19.05.14	0130 hrs	GD-I
3	02.06.14	1554 hrs	SR	1). 230kV Kayathar-Tirunelveli 2).09 no. of feeders of 230kV 3).11 no. of feeders of 132kV 4).230/110kV Transformer-I,II,III at Kayathar 5) Wind Power generation in tamilnadu	TNEB	Failure of Y-phase jumper caused bus fault in 110 kV bus at 230/110 kV Kayathar Substaion.There was also failure of CT in 110kV Periyar Kaither Feeder at Kayathar which caused tripping of all elements given in column D.	Gen Loss=1135MW	02.06.14	1634hrs	GD-I
4	05.06.14	1910 hrs	SR	1).400kV NeyveliTS2-Pondycherry line 2). 400kV NeyveliTS2-Trichy line 3). 400kV NeyveliTS2-TS1 EXP tie line 4). 400kV NeyveliTS2-Salem-1 5).400kV NeyveliTS2-TS2EXP tie line 6).765kV Raichur-Sholapur S/C 7). Unit 1,4,5 &7 at Neyveli 8).Unit-I at STCMS 9)920 MW of Tamilnadu wind generation	PG/STCMS	Due to heavy storm and rain, lighting cable of switchyard gantry tower broke and fell over 400kV bus-1 resulting into a bus fault on 400kV bus-1 at Neyveli TS2. This resulted in operation of bus bar protection of 400kV bus-1 which resulting in tripping of all elements given in column D.	Gen Loss=1800MW	05.06.14	2329 hrs	GD-I

5	26.06.14	0906 hrs	SR	1). 10 no.of 220kV lines 2). All running units of Kadra,Kodasalli and Nagjheri	KPCL	Due to sudden reduction in wind generation connected at 110kV Soundatti station which resulted in increased power flow on 220kV Bidnal-Soundatti line. Due to increased power flow, over current protection of line got operated which resulted in tripping of 220kV Bidnal-Soundatti line. After tripping of this line, 220kV lines connected to Bidnal, Hubli, Harthi, Gadag, Nagjheri stations tripped due to cascading.	Gen Loss=700MW	26.06.14	1534 hrs	GD-I
6	41843	1651 hrs	SR	1). 400kV UPCL-Hasan-I 2). 220kV Varahi-Kemar D/C 3). 220kV Varahi-Simoga D/C 4). Unit#1 at UPCL 5). Running Units of Varahi	KTPCL	400kV UPCL-Hasan-I tripped due to earth fault resulting in tripping of UPCL unit due to SPS action. At the same time , running units at Varahi Hydro Plant also tripped due to tripping of all the lines emanating from Varahi which had tripped on over load protection.	Gen Loss=900MW	23-Jul-14	1734 hrs	GD-I
7	03.09.2014	0.445139	SR	Tripping of 220 kV Bus-2 at Srisailam right bank. All elements and unit 2,4,6 connected to 220kV Bus-2 ripped.	APGENCO	LBB protection of 220kV Srisailam RB-Dindi 2 feeder got operated which resulted in tripping of Bus-2.	Gen loss=270 MW	03.09.2014	0.45694444	GI-2
8	03.09.2014	0.515278	SR	400kV Kaiga-I, Hiriyur-I, Narendra-I & ICT-I tripped at Guttur station due to operation of bus bar protection of 400kV Bus-1 at Guttur.	KPTCL	It was reported that the LBB protection acted due to wrong configuration of distance relay. Modification was being done for 400kV Kaiga-II line Over Voltage stage-I settings for Alarm circuit.	Load Loss=Nil	03.09.2014	0.66875	GI-2
9	03.09.2014	0.672917	SR	Tripping of 220 kV Bus-2 at Srisailam right bank. All elements and unit 1,3,5,7 connected to 220kV Bus-2 ripped.	APGENCO	Maloperation of LBB protection of 220kV Srisailam RB-Dindi-2 feeder	Gen loss=360MW	03.09.2014	0.68333333	GI-2
10	08.09.14	2240 hrs	SR	Srisailem RB Unit-I-VII(110 MW each)	APGENCO	All 7 units of 110 MW capacity were in operation at the time of incident. . The reason reported for the tripping is Transformer differential Protection.	Gen. Loss= 700 MW	08.09.14	0.96944444	GD-I

11	18.09.2014	0.877083	SR	Tripping of ICT-1&2 at Warangal Substation	POWERGRID, SR-1	400/220 KV 315 MVA ICT 1 & 2 tripped on operation of Directional Earth Fault relays on 400 KV side of ICT 1 & 2 due to down stream fault	Load Loss=Nil	18.09.2014	0.92777778	GI-2
12	19.09.14	1028 hrs	SR	400kV Gajwal-Sankarpally I &II	APTRANSCO	Due to D/T received at sankarpally while testing of Relay by TG.	Load Loss=Nil	19.09.14	1054 hrs	GI-II
13	19.09.14	1244 hrs	SR	400kV Ramgundam-Talapally-I	APTRANSCO	Due to the LBB operation of 400kV Ramagundam-Talapally -I, Bus-I become dead.	Load Loss=Nil	19.09.14	1430 hrs	GI-II
14	23.09.14	0114 hrs	SR	1) Srisailam RB Unit-I toVII (110 MW each) 2)220 kV Srisailam RB-Dindi-D/C 3)220 kV Srisailam RB-Somayajulapally 4) 220 kV Srisailam RB-Gudur 5) 220 kV Srisailam RB-Markapuram 6)220 kV Srisailam RB-Podili 7) 220 kV Srisailam RB-Talapally 8)220 kV Srisailam RB-Nagarjunasagar	APGENCO	Due to R-phase CT Blast of Srisailam RB Unit-IV, whole s/s became dead.	Gen Loss=630 MW	23.09.14	0214 hrs	GD-I
15	26.09.2014	1550	SR	Tripping of 220kV Kaiga-Kadra, 220kV Kaiga-Kodasalli, 220kV Kadra-Kodasalli, tripping of Unit at Kodasalli, 220kV Bus dead at Kadra and Kodasalli occurred.	KPCL	Due to delayed clearance of fault in 220kV Kadra-Kodasalli line	gen loss at Kodasalli=38MW	26.9.2014	1628 hrs	GD-I
16	05.11.2014	1142 hrs	SR	1). 400kV Guttur-Jindal 2). 400kV Guttur-Narendra D/C 3). 400kV Guttur-Munirabad 4). 400kV Guttur-Kaiga D/C 5). 400kV Guttur-Hiriyur D/C 6). 400/220kV ICT-I and II at Guttur	KPTCL	while allowing emergency S/D of Guttur-Hiriyur ckt-I due to flash over in B-Ph CB limb resulting in tripping of both bus on LBB operation	Load Loss=Nil	05.11.2014	1432hrs	GI-II

17	11.11.2014	0202 hrs	SR	<ul style="list-style-type: none"> 1). 220 kV Madakathara-Lower Periyar D/C 2).220 kV Madakathara-Pallakkad 3). 220 kV Madakathara-Areakode 4). 220 kV Madakathara-Shoranur 5). 220 kV Areakode-Vadakra 6). 220 kV Areakode-Kanhirode 7). 220 kV Areakode-Nallalam-I 	KSEB	<p>Heavy lengthening was reported near 220kv Areacode SS. Due to lightening, 220kV Areacode-Vadakara line and 220kV Areacode-Kanhirode lines tripped. Since the four sub stations mentioned below are having connectivity only from 220kV Areacode SS, 220kV substations become dead due to infeed loss</p>	Load Loss=470 MW	11.11.2014	0240 hrs	GD-I
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A	B		C	D	E	F	G	H		I
S.NO.	Outage		Region	Name of Element	Owner / Agency*	Event	Generation/Load Loss	Revival		Category as per CEA
	Date	Time						Date	Time	
1	07.04.14	0211 hrs	ER	1). 220kV Dhubri-New Dhubri D/C 2). 220kV Dhubri-Meramundali D/C 3). 220kV Baripada-Balasore D/C 4). 132kV Dhubri-Talcher D/C 5). 100MVA 220/132kV ICT-I & II at Dhubri	OPTCL	Due to snapping of B-Phase Jumper of 220kV Dhubri-Meramundali-I, given element in coulum D got tripped	Load Loss=480MW	07.04.14	0342 hrs	GD-I
2	13.04.14	1304 hrs	ER	1). 220/132kV ICT-I,II at Bokaro S/S 2). 220kV Bokaro -Ramgarh D/C 3). 220kV Bokaro-j'pur(DVC) 4). Bokaro B Generation	DVC	Due to sharp voltage Collapse at BTPS end (there is no any relay indication of fault) , elements given in coulum D got tripped	Load Loss=342MW Gen Loss=170MW	13.04.14	1402 hrs	GD-I
3	22.04.14	1109 hrs	ER	1).220kV Chandil-Ranchi D/C 2). 220kV Chandil -Santaldih S/C 3). 220kV Chandil-Ramchandrapur S/C	JSEB	Due to LBB operation at 220kV Chandil S/S, all lines got tripped.	Load Loss=290MW	22.04.14	1204 hrs	GD-I
4	23.04.14	1757 hrs	ER	1).220kV Bidhannagar-Santaldih 2). 220kV Bidhannagar-Waria-D/C 3). 220kV Bidhannagar-DPL D/C 4). 220kV Bidhannagar-Bakreshwar-I 5). 400/220kV,160MVA ICT-I,II&III at Bidhannagar 6).Unit#7 at DPL	WBSEB	Due to Bus fault at 220kV Bidhannagar S/S, elements given in coulum D got tripped.	Load Loss=298MW Gen Loss=170MW	23.04.14	1855 hrs	GD-I
5	25.04.14	1144 hrs	ER	1). 220kV Therubali-Bhanjnagar D/C 2). 220kV Therubali-Indravati Q/C 3). 220kV Therubali-Narendrapur D/C 4). 220kV Therubali-Jaynagar D/C 5). 220kV Therubali-U.Kolab S/C 6). 220/132kV 100MVA ICT-I,II &III at Therubali	OPTCL	R-Phase to ground fault occurred at 220kV Therubali-Narendrapur-I but main CB at Therubali end failed to open, due to which Earth fault protection at Theubali end operated and elements given in Coulum D got tripped.	Load Loss=130MW	25.04.14	1230 hrs	GD-I
6	27.04.14	0604 hrs	ER	1).132kV Purnea-Forbisgunj S/C 2).132kV Purnea(PG)-Purnea(BSEB) T/C	BSEB	Due to R-ph to ground fault at 132kV Purnea-Forbisgunj S/C, elements given in Coulum E got tripped.	Load Loss=80MW	27.04.14	0655 hrs	GD-I
7	27.04.14	1020 hrs	ER	1). 220kV Tenughat-Patratu S/C 2). UNIT# I&II(2x210MW) at Tenughat	TVNL/JSEB	Due to B-phase to earth fault in 220kV Tenughat S/S, elements given in coulum D got tripped. While 220kV Tenughat-Biharsharif was already out.	Gen Loss=225MW	27.04.14	1233hrs	GD-I

8	27.04.14	1202 hrs	ER	1). 220kV Tenughat-Biharsharif S/C 2).220kV Biharsharif-Patna S/C 3). 220kV Biharsharif-Bodhgaya D/C 4).220kV Biharsharif-Tenughat S/C 5).220kV Biharsharif-Fatua S/C 6). 400/220kV ICT-I,II &III at Biharsharif	JSEB/BSEB	While Charging 220kV Tenughat-Biharsharif S/C all ICTs at Biharsharif tripped, resulting in tripping of all 220kV network at Biharsharif.	Load Loss=350MW	27.04.14	1233 hrs	GD-I
9	27.04.14	1540 hrs	ER	1). 132kV Biharsharif-Hatia S/C 2). 220/132kV,150MVA ICT-I&II at Biharsharif	BSEB	Due to Jumper snapping of 132kV Biharsharif-Hatia line, element given in column D got tripped.	Load Loss=150MW	27.04.14	1609 hrs	GD-I
10	01.05.14	1755 hrs	ER	1) 132 kV Purnea-Forbisgunj 2)132 kV Purnea(PG)-Purnea(BSEB) T/C 3)132 kV Purnea(BSEB)-Kishanganj	BSEB/PG	Due to R-Phase to Ground fault in 132 kV Purnea-Forbisgunj, 132 kV bus at Purnea(BSEB) became dead.	Load Loss=50 MW	01.05.14	1908 hrs	GD-I
11	03.05.14	1407 hrs	ER	1)220kV Tenughat-Patratu 2)220 kV Patratu-Hatia D/C 3)132 kV patratu-Hatia D/C 4)UNIT # I,II,VI,X(210MW each) at Tenughat	TVNL/JSEB	Due to rain and thunderstorm elements given in column D tripped.	Load Loss= 270MW Generation Loss= 390 MW	03.05.14	1457 hrs	GD-I
12	11.05.14	2019 hrs	ER	1). 400kV Farakka-Behrampore 2). 400kV Farakka-Kahalgaoon II & IV 3).400kV Farakka-Malda-I 4). 400kV Farakka-Sagardighi 5). Unit#1,2(2X200) 4,6(2X500) at Farakka	NTPC/WBSETCL	Due to Bus-I fault at Farakka end , elements given in column D tripped.	Gen Loss=980MW	12.05.14	0106 hrs	GD-I
13	13-May-14	2147 hrs	ER	1).220kV Budhipadar-IBTPS Q/C 2). 220kV Budhipadar-Vedanta D/C 3). 220kV Budhipadar-Katapali D/C 4). 220kV Budhipadar-Korba D/C 5). 220kV Budhipadar-Raigarh 6). Unit #1&2 at IBTPS 7).Unit#2 at Sterlite	CSEB/Vedanta	Due to Bus fault at 220kV Budhipadar S/S, elements given in column D tripped	Load Loss=500MW Gen Loss=700MW	13.05.14	2347 hrs	GD-I
14	22.05.14	1502 hrs	ER/SR	1). 400kV Jeypore-Gazuwaka D/C 2). Gazuwaka B/B Poles	PG	400kV Jeypore-Gazuwaka tripped on Distance protection led to the blocking of HVDC poles.	Load Loss=Nil	22.05.14	1728 hrs	GI-II
15	31.05.14	0502 hrs	ER	1).200kV Tenughat-Patratu 2).220kV Patratu-Hatia D/C 3).Unit#1&2 at TTPS	JSEB	Due to inclement Weather Condition,elements given in column D tripped.	Load Loss=200MW Gen Loss=337MW	31.05.14	0515 hrs	GD-I
16	31.05.14	2355 hrs	ER	1). 220kV Sagardighi-Gokarno-I 2).315MVA 400/220kV ICT at Sagardighi 3).Units(2X300MW) of Sagardighi	WBSETCL	Due to Failure of B-Phase CT at 220kV side at Sagardighi, elements given in column D tripped	Gen Loss=390 MW	01.06.14	0015 hrs	GD-I
17	08.06.14	2003 hrs	ER	1).400kV Raigarh- Sterlite-II 2).400kV Sterlite-Rourkela-II 3). Unit#I &III at Sterlite	SEL	Due to Jumper Snapping of 400kV Sterlite-Rourkela-II, elements given in column D tripped.	Gen Loss=900MW(Approx)	08.06.14	2037 hrs	GD-I
18	12.06.14	1710 hrs	ER	1)220 kV Kalyaneswari-Maithon-I & II 2) 220 kV Kalyaneswari-Mejia-I,II 7 III 3)220 kV Kalyaneswari-Chandrapura-I & II 4)220 kV Kalyaneswari-Burnpur 5) 220/132 kV,150 MVA, ICT-I,II & III 6) 132 kv Maithon-Jamatra 7) CTPS Unit-8(250 MW)	DVC	Due to bursting of Y-Phase Bus Tie CT at DVC Kalyaneswari,elements given in column E tripped.	Load loss=300 MW Gen Loss=200 MW	12.06.14	1850 hrs	GD-I
19	18.06.14	1136 hrs	ER	1). 400 kV Arambag-Bakreshwar line 2). 400 kV Arambag-Kolaghat line 3). 400kV Arambag-PPSP 1 and 2 lines 4). 400/220kV, 315 MVA, ICT-III & IV at Arambag	WBSETCL	Due to bus-2 fault at Arambag, the given lines and ICT's at Arambag got tripped	Load Loss=245MW	18.06.14	1240 hrs	GD-I

20	20.06.14	1237hrs	ER	1). 400 kV Meramundli-GMR-Kaniha Ckt 2). 400 kV Meramundli-Mendhasal 3). 400 kV Meramundli-JSPL-Ckt-II 4). 400 kV Meramundli-Angul-Kaniha-Ckt-II 5). 220 kV Bhanjnagar- Meramundali Ckt-I	OPTCL	Due to snapping of B ph jumper from Wave trap to line isolator in 400 KV Meramundli-GMR line at Meramundali end, given elements in Coulum D tripped.	Load Loss=Nil	20.06.14	1351hrs	GI-II
21	26.06.14	1225 hrs	ER	1). 220kV Chukha-Birpara-D/C 2). Unit# 3&4(84 MW each) at Chukha HPS	PG/DGPC(Bhutan)	220 kv Chukha-Birpara I tripped on R-Y-B phase fault & 220 KV Chukha-Birpara-II tripped on R-Y phase fault. Consequently CHPC(U#3 & 4) tripped due to loss of evacuation path.	Gen Loss=120MW	26.06.14	1636 hrs	GD-I
22	26.06.14	1503 hrs	ER	1). 220kV Biharshariff-Fatuah D/C 2). 400/220kV 3X315MVA ICT at Biharshariff	BSPHCL/PG	While closing 220kV Tenughat-Biharsariff (BSEB) line through transfer bus at Biharshariff (BSEB) end which tripped earlier. The line was reportedly being closed through transfer bus isolator with circuit breaker in closed condition causing charging current flows through the isolator. However the said fault did not clear properly from Biharshariff (BSEB) end due to which all the three 400/220kV ICTs at Biharshariff (PG) tripped on back up O/C protection from HV side and LV side also.	Load Loss=300MW	26.06.14	2121 hrs	GD-I
23	7-Jul-14	15:19	ER	1). 220 KV Purnea-Dalkhola(PG) D/C 2). 220KV Purnea(old)-Purnea(new) D/C 3). 220 KV Purnea-Madhepura -I	BSPHCL/PG	Due to Insulator decapping of 220 KV Purnea-Dalkhola -II at loc no 41, elements given in Column D tripped.	Load Loss=150MW	7-Jul-14	17:00	GD-I
24	7-Jul-14	19:55	ER	1). 132kV Purnea-Purnea -I,II &III 2).132kV Purnea-Frobisganj	BSPHCL	Due to fault in 132kV Purnea-Forbisganj line, elements given in column D tripped	Load Loss=120MW	7-Jul-14	20:07	GD-I
25	8-Jul-14	13:53	ER	1). 220kV Chandil-Ranchi 2). 220kV Chandil-Santaldih 3). 220kV Chandil-Ramchandrapur 4). 132kV Chandil-Hatia 5). 132kV Chandil-Rajk'swan 6). 132kV Chandil-Rajk'swan-Adityapur 7).132kV Ramchandrapur-Adityapur D/C	JSEB/PG	Due to failure of R-Phase LA of 100MVA 132/33kV ICT-IV at Adityapur, given elements in column D tripped	Load Loss=111MW	8-Jul-14	14:27	GD-I
26	8-Jul-14	17:21	WR/ER	1). 220 kV Budhipadar -Raigarh S/C 2). 220 kV Budhipadar -Korba D/C 3). 220 kV Budhipadar -Tarkera D/C 4). 220 kV Budhipadar -Vedanta D/C 5). 220 kV Budhipadar -IB Valley Q/C 6). 220 kV Budhipadar -Katapalli D/C 7). 220 kV Budhipadar -Basundhara S/C 8). 220 kV Budhipadar -SPS S/C 9). 220 kV Budhipadar -BHUSAN D/C 10).220/132 kV ,160 MVA ICT-I & II, at Budhipadar 11). Unit#1 (600 MW) at SEL (Vedanta) 12). units #1&2 (210 MW each) at IB Valley	OPTCL/CSEB	Due to Bus Fault at 220kV Budhipadar S/S, all the elements given in column D tripped.	Load Loss=450MW Gen Loss=780MW	8-Jul-14	18:56	GD-I

27	12-Jul-14	16:57	ER	<ol style="list-style-type: none"> 1).220 KV Bokaro- Chandrapura – I & II. 2).220 KV Bokaro- Ramgarh- I & II. 3). 220 KV Bokaro- Jamshedpur – I & II. 4). 150 MVA 220/132 KV ICT- I & II at Bokaro. 5). 132 KV Bokaro – Bokaro ‘A’ – I & II. 6). 132 KV Bokaro- Barhi- I & II 7). 132 KV Bokaro- Gomia- I & II. 8). 220 KV Joda- Jindal- Jamshedpur. 9). 220 KV Joda- Ramchandrapur. 10). 220 KV Joda- TTPS- I & II. 11). 220 KV TTPS- TSTPS. 12). 220 KV TTPS- Meramundali- I & II. 13). 220 KV TTPS- Nalco. 14). 132 KV Lines at TTPS, Joda & Bokaro S/s. 15). Unit 2& 3(2*210 MW)at Bokaro 16). Unit -I,II,III,IV(4*60 MW) at Talcher 	DVC/OPTCL/J SEB	Major tripping occurred in GRIDCO, JSEB & DVC network which involved tripping of 22 elements including 220&132 KV transmission lines , ICTs as well as generating units at Bokaro & Talcher TPS.	Load Loss=340MW Gen Loss=560MW	12-Jul-14	19:30	GD-I
28	14-Jul-14	1003 hrs	ER/SR	<ol style="list-style-type: none"> 1). Talcher-Kolar Pole-I 2). 220kV Kolar(PG)-Chintamani D/C 3). 220kV Kolar(PG)-Kolar(KP) D/C 	PG	Due to problem in Valve Cooling UPS at Talcher. Pole 1 received ESOF signal from Talcher and Blocked at Kolar end. Changeover to Metallic Return mode was successful .Due to generation of SPS-1 at HVDC Kolar, all the 4 no's 220kV feeders at Kolar tripped	Load Loss=1403 MW	14-Jul-14	1032 hrs	GD-I
29	23-Jul-14	1041 hrs	ER	<ol style="list-style-type: none"> 1).400kV GMR-Meramundali 2). 400kV GMR-Talcher 3). Unit I&II at GMR 	PG/GMR	<ol style="list-style-type: none"> 1) At 1003hrs, 400kV GMR-Meramundali line tripped on Y-Phase to earth fault. 2) At 1041hrs, 400 KV GMR-Talcher line also tripped on Y-Phase to Earth fault and due to no evacuation path, GMR units tripped. 	Gen Loss=480MW	23-Jul-14	1211	GD-I
30	26-Jul-14	2331 hrs	ER	<ol style="list-style-type: none"> 1).220kV Biharshriff-Bodhgaya 2). 315MVA 400/220kV ICT-I,II and III at Biharshariff(PG) 	BSPHCL	Due to fault in 220kv Biharsarif-Bodhgaya line which was idle charged from Biharsarif (BSEB) all the 3 no. 400/220 KV ICTs at Biharshariff(PG) tripped to clear the fault beyond 220kv Biharsarif. S/S of BSEB.	Load Loss=465MW	27-Jul-14	0005hrs	GD-I
31	29-Jul-14	2010 hrs	WR/ER	<ol style="list-style-type: none"> 1).220kV Budhipadar-Korba D/C 2).220kV Budhipadar-Tarkera D/C 3).220kV Budhipadar-Vedanta D/C 4).220kV Budhipadar-IB Valley Q/C 5).220kV Budhipadar-Katapalli D/C 6).220kV Budhipadar-Basundhara S/C 7).220kV Budhipadar-SPS S/C 8).220kV Budhipadar-Bhusan D/C 9).Unit #1 at SEL Vedanta 10).Unit#1&2 at IB Valley 11).Burla & Chiplima 	OPTCL/CSEB	While charging 220kV Budhipadar-Tarkera-II from Budhipadar end, B-Phase breaker limb burst at Budhipadar and all 220kV elements emanating from Budhipadar S/S tripped. Generators also tripped due to loss of evacuation path.	Load Loss=430MW Generation Loss=815MW	29-Jul-14	2234 hrs	GD-I

32	07.08.2014	2118 hrs	ER	1).132kV Purnea-Saharsa D/C 2).132kV Purnea-Purnea(PG) T/C 3). 132kV Purnea-Katihar 4).132kV Purnea-Forbisgunj 5). 132kV Purnea-Naugachia 6). 132kV Purnea-Khagaria	BSPHCL	Due to fault in 132kV Purnea-Forbesganj line all 132kV lines emanating from Purnea (BSPHCL) S/S got tripped and led to total power failure at 132kV Purnea(BSPHCL) S/S.	Load loss=140MW	07.08.2014	2126 hrs	GD-I
33	07.08.2014	2248 hrs	ER	1).132kV Purnea-Saharsa D/C 2).132kV Purnea-Purnea(PG) T/C 3). 132kV Purnea-Katihar 4).132kV Purnea-Forbisgunj 5). 132kV Purnea-Naugachia 6). 132kV Purnea-Khagaria	BSPHCL	Due to non clearance of fault at Purnea(BSPHCL)end,all lines emanating from Purnea(BSPHCL) tripped causing total power failure at Purnea(BSPHCL) S/S.	Load loss=120MW	07.08.2014	2346 hrs	GD-I
34	11.08.2014	1052 hrs	ER	1).220kV Maithon-Kalyaneshwari D/C 2).220kV Maithon-Dhanbad D/C 3).315MVA 400/220kV ICT-I &II at Maithon	DVC/PG	Due to Failure of R-Phase CVT of Bus-II,given elements in Column D tripped	Load Loss=Nil	11.08.2014	1159 hrs	GI-I
35	13.08.2014	1608 hrs	ER	1).220kV Maithon-kalyaneshwari D/C 2).220kV Maithon-Dhanbad D/C 3).315MVA 400/220kV ICT-I &II at Maithon	DVC/PG	While taking Bus II in service at Maithon S/s (PG), due to suspected Busbar mal-operation given elements in coulum D tripped.	Load Loss=Nil	13.08.2014	1652 hrs	GI-I
36	15.08.2014	1406 hrs	ER	1).220kV Biharsariff-Tenughat line 2). 220kV Biharsariff-Begusarai D/C 3). 3*315MVA ICTs at Biharshariff	BSEB	Due to overflowing of adjacent river Panchyanan within the switchyard and control room ,given element were hand tripped.	Load loss =200MW	16.08.2014	1000hrs	GD-I
37	16.08.2014	1929 hrs	ER	1). 220kV Theruvali-U.Kolab Ckt 2). 220kV Theruvali-Jaynagar D/C 3).220kV Theruvali-Bhanjnagar D/C 4). 220kV Theruvali-Indravati D/C 5).220kV Theruvali-Narendrapur D/C	OPTCL	Due to failure of Y-Phase post insulator used for bypassing of Bus-I main Breaker of 220kV Theruvali-U.Kolab line and Y-Phase jumper along with breaker side post insulator fell on ground at Theruvali end causing Bus fault resulting in elements tripping given in coulum D .	Load Loss=Nil	16.08.2014	2211 hrs	GI-I
38	20.08.2014	1228hrs	ER	1). 220kV Biharsariff-Tenughat S/C 2). 220kV Biharsariff-Begusarai D/C 3). 220kV Biharsariff-Bodhgaya D/C 4). 315MVA ICT-I,II and III at Biharsariff(PG)	BSEB/PG	Due to Y-Phase to Earth fault in 220kV Biharsariff-Tenughat Ckt ,all elements given in coulumn D tripped.	Load Loss=150MW	20.08.2014	1348hrs	GD-I
39	26.08.2014	2308 hrs	ER	1).220 kV Jeypore-Jaynagar D/C 2).220 kV Jaynagar-Balimela- Ckt. I,II,III 3). 220 kV Jaynagar-U.Kolab D/C 4). 220 kV Theruvalli-Jaynagar Ckt-I,II 5). 220 kV Theruvalli-Indravati Ckt-I,II 6).Unit I,II,III and IV(150MW each) at Indravati, 7).Unit I ,II,III and IV(80MW each) at U.Kolab and Generation at Balimela	OPTCL	Due to R-Phase to Ground fault in 400kV Jeypore-Indravati line,all the elements given coulum D tripped.	Gen Loss=1100MW Load Loss=800MW	27.08.2014	0142 hrs	GD-I

40	28.08.2014	1113 hrs	ER	1). 400KV FSTPP-MALDA D/C 2). 400KV FSTPP-KHSTPP-Q/C 3). 400KV FSTPP-SAGARDIGHI-S/C 4). 400KV FSTPP-BERHAMPUR-S/C 5). 400KV FSTPP-DURGAPUR-D/C 6). 400KV JEERAT-BEHRAMPUR 7). 315 MVA, 400/220 KV ICT-III at MALDA 8)132KV MALDA-MALDA-II(tripped from Malda (WBSETCL) only) 9). Farakka Generation	NTPC/PG	Due to delyed fault in 400kV Farakka-Malda-II line, all the feeders at farakka alongwith generators tripped .	Gen Loss=1400MW Load Loss=390MW	28.08.2014	1852 hrs	GD-I
41	07.09.2014	1414 hrs	ER	1). 400kV Jeypore-Gazuwaka D/C 2). 400kV Jeypore-Bolangir line 3).Gazuwaka pole-I and II	PG	Due ot Thyristor related problem Gazuwaka pole-I tripped at 1411hrs, at1414 hrs pole-II blocked and all lines given in column D tripped on Overvoltage.	Load Loss=Nil	07.09.2014	1632 hrs	GI-II
42	08.09.14	1130 hrs	ER	1)220 kV Meramandali- Old Duburi-I. 2)132 KV Talcher- Old Duburi D/C	GRIDCO	220 kV Meramandali- Old Duburi-II under emergency S/D and lines given in column E tripped due to overload and Entire Duburi complex including old & new Duburi S.S , Visa, Rohit , JSL and Paradeep load was affected.	Load Loss=250 MW	08.09.14	1211 hrs	GD-I
43	10.09.14	1330 hrs	ER	1)400 KV Meramundali-Mendhashal 2)400 KV Meramundali-Baripada 3)220 KV Mendhasal-Bhanjnar 4)220 KV Mendhasal-Nayagarh-Bhanjnar 5)220 KV Mendhasal-Chandaka-I &II	OPTCL	All 400 KV and 220 KV lines emanating from Mendhasal tripped.	Load Loss=250 MW	10.09.14	1358 hrs	GD-I
44	12.09.14	1939 hrs	ER	1)400 KV Gaya-Koderma 2)400 KV Gaya-Maithon 3)765 KV Gaya-Fatehpur	PG	Due to lightning at Gaya, elements given in column E tripped.It was reported that a fault occurred due to Lightning at Gaya S/s. Blast of LA on B-ph of 400 kV Gaya- Biharshariff line at Gaya end was also reported.	Load Loss=Nil	12.09.14	1939 hrs	GD-I
45	13.09.14	1922 hrs	ER	1)400 KV Meramundali-Mendhasal 2)400 KV Meramundali-GMR	OPTCL	Due to transient fault in 400 KV Meramundali-Dubri, elements given in column D tripped.	Load Loss=Nil	13.09.14	2013 hrs	GD-I
46	14.09.14	1842 hrs	ER	1) 400 kV Angul-Meramundali-I & II 2)400 kV Angul-Bolangir 3) 400 kV Angul-Talcher 4) 400 kV Angul-JITPL-I & II 5)400 KV Meramundali-Mendhasal 6)400 KV Meramundali-GMR	PG/OPTCL	Due to fault caused by heavy rains and lightning, elements given in column D tripped.	Load Loss=Nil	14.09.14	2025 hrs	GD-I

47	19.09.14	1140 hrs	ER	400kV Barh-Kahalgaon-I and II	PG	Due to Bus bar protection operation at Barh S/S given elements tripped.	Load Loss=Nil	19.09.14	1231 hrs	GI-II
48	21.09.14	0632hrs	ER	1). 220kV Chandil-Ranchi line 2). 220kV Chandil-Santaldih 3). 220kV Chandil-Ramchandrapur 4). 132 kv Chandil-Hatia 5) 132 kv Chandil-Rajk'swan 6). 132 kv Chandil- Adityapur 7). 132 kv Chandil- Golmuri 8). 132 kv Chandil- Manique 9). 132 kv Ramchandrapur-Adityapur D/C	WBSETCL/JS EB	Due to R-B Phase fault in 220kV Chandil-Ranchi line all the elements tripped at 220kV Chandil S/S	Load loss=180MW	21.09.14	0730hrs	GD-I
49	23.09.14	1105 hrs	ER	1) 220 kV Bokaro-Jamshedpur-I & II 2) 220 kV and 132 kV Bus at Bokaro 3) 220 kV Bokaro-Chandrapura-I & II 4). 220 kV Bokaro-Ramgarh-I & II 5) BTPS U#3	DVC	Due to tripping of 220 kV Bokaro-Jamshedpur-I and non opening of Ckt Breaker caused bus fault at Bokaro-B	Gen Loss=200 MW	23.09.14	1150 hrs	GD-I
50	24.09.14	1415 hrs	ER	1) 400 kV Barh-Kahalgaon-D/C 2) 400 kV Barh-Patna-D/C	PG	Due to Mal operation of Bus Sectionalizer Relay of Bus Bar 3 & 4 at Barh,elements given in column E tripped.	Load Loss=Nil	24.09.14	1444 hrs	GI-II
51	01.10.14	10:36 hrs	ER	1)220kV FSTPP-Lalmatia 2)132 KV KHSTPP(NTPC)-Lalmatia	JSEB	Total power interrupted at 220/132 kV Lalmatia S.S	Load Loss=120 MW	01.10.14		GD-1
52	14.10.14	2056 hrs	ER	1). 400kV Meramundali-GMR 2). 220 kV Meramandali- Bhanjanagar D/C , 3). 220 kV Meramandali- Old Duburi- D/C 4). 220 kV Meramandali- TSTPS D/C 5). 220 kV Meramandali- TTPS D/C 6). 220 kV Meramandali- Nalco D/C 7). 220 kV Meramandali- BSL D/C 8). 315MVA, 400/220kV ICT-I and II at Meramundali	OPTCL	Due to failure of Y phase PT of 220kV Meramundali Bus-I, given elements in coulum D tripped.	Load Loss=477MW	14.10.14	2213 hrs	GD-I
53	07.11.2014	0237 hrs	ER	1). 400kV Jeerat-Bakreswar 2). 400kV Arambag-Bakreswar 3). Unit#I,II and III(3X210MW) at Bakreswar	WBSETCL	Due to LA problem in Bus reactor at Bakreswar, 400kV Bus tripped.	Gen Loss=370MW	07.11.2014	0350 hrs	GD-I
54	08.11.2014	2320 hrs	ER	1). 400kV Meramundali-Angul 2). 400kV Meramundali-Mendhsal 3). 400/220kV, 315MVA ICT-I and II at Meramundali	OPTCL	Due to LBB operation of 400kV Bus-I at Meramundali S/S,Given elements tripped.	Load Loss=Nil	09.11.2014	0400 hrs	GI-II
55	28.11.2014	0503 hrs	ER	1). 400kV Mejia B-Maithon-I,II and III 2). Unit-8 at Mejia	DVC	Due to DT received at Maithon and breaker lockout at Mejia B, LBB Operated at Mejia B and given elements tripped.	Gen Loss=385MW			GD-I

56	29.11.2014	1527 hrs	ER	1). 400kV Mendhasal-Meramundali 2). 220kV Mendhasal-Chandaka-I,II,III and IV	OPTCL	Due to Y-Phase LA failure at Mendhsal end and delyed fault clearance causes tripping of feeders.	Load Loss=160MW	29.11.14	1553 hrs	GD-I
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