

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पॉवरसिस्ट की पूर्ण व्यापारिक प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 14.10.2015
Date of Reporting : 15.10.2015

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
42128	1196	43324	50.14	37708	2202	39909	50.12	930.1	45.82

* Half hourly (two 15 minutes block—one block each before and after the designated time) average frequency

II. A. State's Load Details (At States periphery) in MUs:

State	State's Control Area Generation (Net MU)				Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages* (MU)	UI (OD:(+ve), UD: (-ve))
	Thermal	Hydro	Renewable/others \$	Total						
Punjab	55.71	10.89		66.60	52.27	51.13	-1.14	117.73	0.00	
Haryana	71.32	0.53		71.85	78.73	76.10	-2.62	147.95	0.00	
Rajasthan	127.52	3.10	11.12	141.74	64.13	66.85	2.72	208.60	0.85	
Delhi	13.77			13.77	77.29	75.28	-2.01	89.05	0.07	
UP	139.29	11.04		150.33	127.25	121.58	-5.67	271.90	36.99	
Uttarakhand		15.79		15.79	17.73	18.58	0.85	34.37	0.00	
HP		9.17		9.17	14.64	13.56	-1.08	22.73	0.00	
J & K		12.41	0.00	12.41	23.84	21.24	-2.60	33.64	7.91	
Chandigarh				0.00	4.41	4.11	0.27	4.11	0.00	
Total	407.61	62.92	11.12	481.65	460.28	448.43	-11.29	930.08	45.82	

* Shortage furnished by the respective constituent. \$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				# Max(hourly) Demand Met of Day (MW)	UI/OA/PX (OD/Import: (+ve), UD/Export: (-ve))
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction		
Punjab	5205	0	-208	5	5190	0	-54	-12	6065	
Haryana	6860	0	-159	220	5374	0	56	235	7414	
Rajasthan	9103	0	-77	546	8988	0	235	614	9513	
Delhi	4051	20	-94	287	3569	0	25	335	4300	
UP	12277	710	-384	256	10902	1960	-672	768	12277	
Uttarakhand	1567	0	-86	183	1315	0	82	200	1596	
HP	1003	0	-155	-557	857	0	-140	118	1304	
J&K	1862	466	-21	81	1371	242	3	120	1930	
Chandigarh	200	0	-9	0	142	0	3	10	229	
Total	42128	1196	-1193	1020	37708	2202	-462	2388	42128	

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

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III. Regional Entities :

Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI	
								Net MU	Net MU
A. NTPC									
Singrauli STPS (5*200+2*500)	2000	1877	2036	2022	44.86	1869	44.72	0.14	
Rihand I STPS (2*500)	1000	770	866	875	17.76	740	17.73	0.03	
Rihand II STPS (2*500)	1000	920	778	990	20.26	844	20.05	0.21	
Rihand III STPS (2*500)	1000	480	505	512	10.96	457	11.02	-0.06	
Dadri I STPS (4*210)	840	800	414	418	11.09	462	11.21	-0.12	
Dadri II STPS (2*490)	980	970	723	723	17.94	747	19.29	-1.36	
Unchahar I TPS (2*210)	420	200	146	219	3.88	162	4.29	-0.40	
Unchahar II TPS (2*210)	420	400	310	433	7.68	320	8.08	-0.40	
Unchahar III TPS (1*220)	210	200	140	213	3.77	157	4.20	-0.43	
ISTPP (Jhajjar) (3*500)	1500	1436	768	660	15.60	650	15.93	-0.33	
Dadri GPS (4*130.19+2*154.51)	830	670	341	367	7.09	295	7.32	-0.23	
Anta GPS (3*88.71+1*153.2)	419	409	0	0	0.00	0	0.00	0.00	
Auraiya GPS (4*111.19+2*109.30)	663	526	302	244	6.29	262	6.38	-0.09	
Dadri Solar	5	1	0	0	0.02	1	0.02	-0.01	
Unchahar Solar	10	3	0	0	0.02	1	0.06	-0.04	
Singrauli Solar	15	3	0	0	0.03	1	0.08	-0.05	
KHEP	800	850	602	0	4.52	188	4.31	0.20	
Sub Total (A)	12112	10515	7931	7676	172	7157	175	-3	
B. NPC									
NAPS (2*220)	440	385	424	434	9.33	389	9.24	0.08	
RAPS- B (2*220)	440	397	436	447	9.51	396	9.53	-0.02	
RAPS- C (2*220)	440	206	229	231	4.78	199	4.94	-0.17	
Sub Total (B)	1320	988	1089	1112	23.61	984	23.71	-0.10	
C. NHPC									
Chamera I HPS (3*180)	540	540	371	0	2.03	85	2.00	0.03	
Chamera II HPS (3*100)	300	300	267	0	2.87	120	2.87	0.00	
Chamera III HPS (3*77)	231	229	232	0	2.02	84	1.90	0.13	
Bairasuli HPS(3*60)	180	179	181	0	0.98	41	0.91	0.07	
Saikal-HPS (6*115)	690	324	494	345	8.42	351	7.66	0.76	
Tanakpur-HPS (3*40)	94	51	47	58	1.35	56	1.24	0.11	
Uri-I HPS (4*120)	480	225	224	226	5.71	238	5.39	0.32	
Uri-II HPS (4*60)	240	135	170	125	3.32	138	3.24	0.08	
Dhauliganga-HPS (4*70)	280	280	277	0	2.08	87	1.94	0.14	
Dulhasti-HPS (3*130)	390	257	261	268	6.11	254	5.98	0.13	
Sewa-II HPS (3*40)	120	119	77	0	1.01	42	0.91	0.10	
Parbati 3 (4*130)	520	282	283	0	0.81	34	0.85	-0.04	
Sub Total (C)	4065	2923	2885	1022	37	1529	35	2	
D.SJVNL									
NJPC (6*250)	1500	1605	1370	0	14.49	604	14.46	0.02	
Rampur HEP (6*68.67)	412	425	395	0	4.18	174	4.05	0.14	
Sub Total (D)	1912	2030	1765	0	18.67	778	18.51	0.16	
E. THDC									
Tehri HPS (4*250)	1000	1080	910	0	8.49	354	8.40	0.09	
Koteshwar HPS (4*100)	400	121	101	91	2.92	122	2.90	0.02	
Sub Total (E)	1400	1201	1011	91	11.41	476	11.30	0.11	
F. BBMB									
Bhakra HPS (2*108+3*126+5*157)	1379	663	1039	525	15.90	663	15.90	0.00	
Dehar HPS (6*165)	990	277	660	140	6.58	274	6.66	-0.08	
Pong HPS (6*66)	396	193	318	66	4.58	191	4.64	-0.06	
Sub Total (F)	2765	1133	2017	731	27.05	1127	27.20	-0.15	
G. IPP(s)/JV(s)									
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	86	0	1.07	44	1.07	0.00	
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	760	180	7.62	318	7.70	-0.08	
Malana Stg-II HPS (2*50)	100	0	105	25	0.60	25	0.56	0.04	
Shree Cement TPS (2*150)	300	0	213	165	4.26	177	3.67	0.58	
Budhil HPS(IPP) (2*35)	70	0	75	0	0.57	24	0.56	0.01	
Sub Total (G)	1662	0	1239	370	14.11	588	13.57	0.55	
H. Total Regional Entities (A-G)	25237	18789	17937	11002	303.32	12638	303.87	-0.54	

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)
Punjab	Guru Gobind Singh TPS (Ropar) (6*210)	1260	920	1060	22.95	956
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	90	90	2.01	84
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	213	592	4.02	167
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	759	776	20.49	854
	Talwandi Saboo (1*660)	660	349	171	6.25	260
	Thermal (Total)	4700	2331	2689	55.71	2321
Total Hydro	1000	482	432	10.89	454	
Total Punjab	5700	2813	3121	66.60	2775	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	618	630	14.57	607
	DCRTPP (Yamuna nagar) (2*300)	600	554	464	12.13	506
	Faridabad GPS (NTPC)	432	158	115	3.75	156
	RGTTP (khedar) (IPP) (2*600)	1200	776	778	21.29	887
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	738	742	19.58	816
	Thermal (Total)	4944	2844	2729	71.32	2972
	Total Hydro	62	15	28	0.53	22
	Total Haryana	5006	2859	2757	71.85	2994
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	705	750	17.35
suratgarh TPS (6*250)		1500	733	684	16.13	672
Chabra TPS (4*250)		1000	212	399	9.07	378
Dholpur GPS (3*110)		330	0	0	0.00	0
Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)		271	215	216	5.07	211
RAPS A (NPC) (1*100+1*200)		300	155	160	3.93	164
Barsingar (NLC) (2*125)		250	66	95	1.45	60
Giral LTPS (2*125)		250	87	63	1.57	65
Rajwest LTPS (IPP) (8*135)		1080	835	821	19.89	829
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(2*600)		1200	1093	1083	25.00	1042
Kawati(Adani) (2*660)		1320	1089	1186	28.07	1169
Thermal (Total)		8876	5190	5457	128	5313
Total Hydro		550	124	150	3.10	129
Wind power		3214	432	546	10.64	443
Biomass		99	20	20	0.48	20
Solar		730	0	0	0.00	0
Renewable/Others (Total)		4043	452	566	11.12	463
Total Rajasthan		13469	5766	6173	141.74	5906
UP		Anpara TPS (3*210+2*500)	1630	1325	1326	31.80
	Obra TPS (2*50+2*94+5*200)	1194	293	293	7.00	292
	Paricha TPS (2*110+2*220+2*250)	1140	639	603	15.00	625
	Panki TPS (2*105)	210	63	59	1.50	63
	Haridwar TPS (1*60+1*105+2*250)	665	533	530	12.60	525
	Tanda TPS (NTPC) (4*110)	440	375	376	8.98	374
	Roza TPS (IPP) (4*300)	1200	829	811	19.59	816
	Anpara-C (IPP) (2*600)	1200	1084	540	22.61	942
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	324	363	8.42	351
	Anpara-D(1*500)	500	0	0	0.00	0
	Lalitpur TPS(1*660)	660	324	392	9.40	392
	Thermal (Total)	9289	5789	5293	137	5704
	Vishnuparyag HPS (IPP)(4*110)	440	241	246	5.57	232
	Alakanada(4*82.5)	330	82	129	2.68	112
	Other Hydro	527	41	211	2.78	116
	Cogeneration	981	100	100	2.40	100
Total UP	11567	6253	5979	150	6264	
Uttarakhand	Total Hydro	1398	755	636	15.79	658
	Total Uttarakhand	1398	755	636	15.79	658
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	36	36	0.91	38
	Pragati Gas Turbine (2x104+ 1x122)	330	147	150	3.59	150
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (4*216+2*253)	1370	252	252	5.99	250
	Badarpur TPS (NTPC) (3*95+2*210)	705	165	190	3.28	137
	Thermal (Total)	2917	600	628	13.77	574
	Total Delhi	2917	600	628	13.77	574
HP	Baspa HPS (IPP) (3*100)	300	59	59	2.28	95
	Malana HPS (IPP) (2*43)	86	61	45	0.57	24
	Other Hydro	878	295	238	6.32	263
	Total HP	1264	415	342	9.17	382
J & K	Baglihar HPS (IPP) (3*150)	450	450	378	10.41	434
	Other Hydro/IPP	560	91	75	1.99	83
	Gas/Diesel/Others	190	0	0	0.00	0
	Total J & K	1200	541	453	12.41	517
Total State Control Area Generation		42521	20002	20089	481.65	20069
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			4871.21	7723.68	159.63	6651
Total Regional Availability(Gross)		67758	42810	38815	944.61	39359

IV. Total Hydro Generation:

Regional Entities Hydro	12234	9231	2049	107.64	4485
State Control Area Hydro	6581	2696	2627	63	2622
Total Regional Hydro	18815	11927	4676	170.56	7107

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal(HVDC B/B)	-250	-50	0	250	0.00	4.03	-4.03
765 KV Gwalior-Agra (D/C)	2090	2642	2914	0	58.39	0.00	58.39
400 KV Zerda-Kankrol	-40	-16	32	96	0.00	1.02	-1.02
400 KV Zerda-Bhinmal	-36	18	83	149	0.00	0.26	-0.26
220 KV Auraiya-Malanpur	-142	-121	0	160	0.00	2.63	-2.63
220 KV Badoh-Kota/Morak	12	26	100	53	0.19	0.00	0.19
Mundra-Mohindergarh(HVDC Bipole)	2502	2498	2507	0	58.92	0.00	58.92
400 KV Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
765 kV Phagi-Gwalior (D/C)	384	927	927	0	15.79	0.00	15.79
Sub Total WR	4520	5924			133.29	7.95	125.34
Pusaali Bypass/HVDC	400	400	400	0	8.97	0.00	8.97
400 KV MZP- GKP (D/C)	44	352	466	0	6.12	0.00	6.12
400 KV Patna-Balia(D/C) X 2	64	273	365	0	5.51	0.00	5.51
400 KV B'Shanif-Balia (D/C)	-127	74	166	127	0.83	0.00	0.83
765 KV Gaya-Balia	0	122	187	0	1.24	0.00	1.24
765 KV Gaya-Fatehpur	-90	176	231	90	3.32	0.00	3.32
220 KV Pusaali-Sahupuri	202	148	202	0	3.63	0.00	3.63
132 KV K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
132 KV Son Ngr-Rihand	-35	-34	0	38	0.00	0.97	-0.97
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-295	1	61	295	0.00	1.07	-1.07
400 KV Barh -GKP (D/C)	188	288	308	0	6.03	0.00	6.03
Sub Total ER	351	1800			36.13	2.04	34.09
+/- 800 KV BiswanathChariali-Agra	0	0	450	0	0.20	0.00	0.20
Sub Total NER	0	0			0.20	0.00	0.20
Total IR Exch	4871	7724			169.63	9.99	159.63

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)			Power Exchange Shdi (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Total	Through ER	Through WR	Through ER	Through WR
35.10	2.33	37.43	5.15	-0.90	12.03	24.79	2.03	-2.03	
Total IR Schedule (MU)									
Through ER	Through WR Incids Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total	
56.65	112.70	169.35	34.09	125.34	159.43	-22.56	12.65	-9.91	

V(C). Inter National Exchange with Nepal [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
132 KV Tanakpur - Mahendarnagar	0	0	0	0	0	0	0.00

VI. Frequency Profile <----- % of Time Frequency ----->

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	0.00	0.07	6.52	48.50	72.74	16.45	4.20	0.17	0.00

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.24	13.02	49.78	5.13	50.00	0.039	0.063	50.17	49.97

VII. Voltage profile 400 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<380 kV	<390 kV	>420 kV	>430 kV
Rihand	400	405	16:02	399	09:12	0.0	0.0	0.0	0.0
Gorakhpur	400	416	16:32	399	19:12	0.0	0.0	0.0	0.0
Bareilly	400	413	04:02	396	10:12	0.0	0.0	0.0	0.0
Kanpur	400	411	04:02	400	10:13	0.0	0.0	0.0	0.0
Dadri	400	416	02:54	402	11:16	0.0	0.0	0.0	0.0
Ballabhgarh	400	421	02:45	404	11:17	0.0	0.0	3.4	0.0
Bawana	400	418	02:43	402	11:17	0.0	0.0	0.0	0.0
Bassi	400	422	21:47	397	10:14	0.0	0.0	1.5	0.0
Hissar	400	417	02:45	401	11:17	0.0	0.0	0.0	0.0
Moga	400	423	02:41	407	18:53	0.0	0.0	12.3	0.0
Abdullapur	400	422	01:00	402	11:18	0.0	0.0	2.4	0.0
Nalagarh	400	434	04:01	412	09:28	0.0	0.0	56.3	11.1
Kishenpur	400	430	11:05	404	19:13	0.0	0.0	39.1	0.0
Wagoora	400	421	11:06	383	19:11	0.0	11.1	0.0	0.0
Amritsar	400	429	02:04	411	09:27	0.0	0.0	59.1	0.0
Kashipur	400	418	17:03	409	09:36	0.0	0.0	0.0	0.0
Hamirpur	400	423	21:52	410	18:40	0.0	0.0	20.2	0.0
Rishikesh	400	413	17:03	384	11:17	0.0	16.5	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	772	17:03	743	10:16	0.0	0.0	0.0	0.0
Balia	765	768	16:31	741	10:14	0.0	0.2	0.0	0.0
Moga	765	803	02:46	776	10:13	0.0	0.0	4.2	0.0
Agra	765	788	21:48	757	10:13	0.0	0.0	0.0	0.0
Bhiwani	765	796	21:30	772	10:08	0.0	0.0	0.0	0.0
Unnao	765	780	11:11	731	10:54	0.0	56.4	0.0	0.0
Lucknow	765	770	16:32	740	10:15	0.0	0.5	0.0	0.0
Meerut	765	806	21:48	774	10:14	0.0	0.0	12.2	0.0
Jhatikara	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	765	774	03:19	763	00:17	0.0	0.0	0.0	0.0
Anta	765	768	00:00	768	00:00	0.0	0.0	0.0	0.0
Phagi	765	785	21:30	751	09:29	0.0	0.0	0.0	0.0

IX. Reservoir Parameters:

Name of Reservoir	Parameters		Present Parameters		Last Year		Last day	
	FRL (m)	MDDL (m)	Level (m)	Energy (MU)	Level (m)	Energy (MU)	Inflow (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	510.35	1560.04	508.80	1485.27	309.56	452.84
Pong	426.72	384.05	419.92	889.22	415.62	705.67	127.06	268.08
Tehri	829.79	740.04	820.05	1003.00	824.60	1099.49	100.29	190.00
Koteshwar	612.50	598.50	610.76	4.95	608.94	4.06	190.00	192.39
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	95.03	55.44
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	513.25	3.49	511.64	3.03	123.66	143.63

* NA: Not Available

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-91	79	0	-95	100	0	-2.20	2.18	-0.01
Delhi	-95	430	0	-95	381	0	-1.85	10.88	9.03
Haryana	-3	238	0	-3	223	0	-0.07	3.66	3.58
HP	-50	168	0	-50	-507	0	-1.21	-0.18	-1.39
J&K	16	104	0	16	65	0	0.39	2.42	2.80
CHD	0	10	0	0	0	0	0.00	0.69	0.69
Rajasthan	-57	669	2	-20	564	2	0.87	13.35	14.23
UP	275	493	0	239	18	0	6.18	8.15	14.33
Uttarakhand	160	40	0	160	23	0	3.85	1.82	5.67
Total	156	2230	2	152	866	2	5.96	42.97	48.93

X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-91	-95	161	68	0	0
Delhi	-41	-95	799	75	0	0
Haryana	-3	-3	254	-181	0	0
HP	-50	-50	272	-555	0	0
J&K	16	16	313	-85	0	0
CHD	0	0	79	0	0	0
Rajasthan	171	-57	945	-347	2	2
UP	301	203	789	0	0	0
Uttarakhand	160	160	195	-80	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 14.10.2015 :
Normal.

XIV. Synchronisation of new generating units :

XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :
I. 125 MVAR bus reactor charged at Rewa Road first time at 1432 hrs. dated 14/10/15

XVI. Tripping of lines in pooling stations :

XVII. Complete generation loss in a generating station :