

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पब्लिसिड की पूर्ण स्वामित्व प्राप्त सार्वजनिक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 08.08.2015
Date of Reporting : 09.08.2015

I. Regional Availability/Demand:

Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
43946	2723	46668	50.09	41128	3392	44520	50.11	1003.7	60.34

* 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)
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	51.47	21.38		72.85	124.15	123.73	-0.42	196.58	0.00
Haryana	26.51	0.61		27.12	128.37	127.17	-1.20	154.29	0.00
Rajasthan	100.31	7.06	20.93	128.30	56.38	56.49	0.11	184.80	0.00
Delhi	12.81			12.81	81.20	80.30	-0.91	93.11	0.04
UP	115.81	5.60		129.21	144.95	148.53	3.57	277.74	52.35
Uttarakhand		20.47		20.47	12.37	12.84	0.47	33.31	0.00
HP		23.91		23.91	0.27	1.61	1.33	25.51	0.00
J & K		14.44	0.00	14.44	19.28	18.97	-0.31	33.41	7.95
Chandigarh				0.00	5.72	4.92	0.27	4.92	0.00
Total	306.92	93.46	20.93	429.11	572.70	574.55	2.92	1003.66	60.34

* 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)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	8518	0	-101	1519	7673	0	134	1769	8685
Haryana	7496	0	-37	1827	6715	0	50	1893	7524
Rajasthan	7830	0	47	182	7585	0	17	246	8197
Delhi	3992	0	20	385	3862	0	31	329	4379
UP	11321	2275	68	658	11850	3205	179	1022	12430
Uttarakhand	1669	0	103	-127	1260	0	50	-388	1669
HP	1096	0	136	-1427	934	0	54	-1629	1238
J&K	1792	448	160	-455	1060	187	-54	-818	1792
Chandigarh	232	0	-31	0	189	0	-30	0	232
Total	43946	2723	365	2561	41128	3392	431	2424	44368

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

III. Regional Entities :

Entity	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 [OG:(+ve), UG: (-ve)]	
									Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1865	2033	1436	41.13	1714	40.69	0.44	
	Rihand I STPS (2*500)	1000	857	925	674	17.84	743	17.82	0.02	
	Rihand II STPS (2*500)	1000	472	516	350	9.47	395	9.27	0.20	
	Rihand III STPS (2*500)	1000	480	500	380	9.32	388	9.38	-0.06	
	Dadri I STPS (4*210)	840	810	472	499	10.92	455	11.53	-0.61	
	Dadri II STPS (2*490)	980	975	648	659	15.94	664	16.49	-0.55	
	Unchahar I TPS (2*210)	420	400	297	264	6.20	258	7.39	-1.19	
	Unchahar II TPS (2*210)	420	400	274	244	5.64	235	6.72	-1.08	
	Unchahar III TPS (1*220)	210	200	128	124	2.91	121	3.36	-0.45	
	ISTPP (Jhajjar) (3*500)	1500	1436	915	622	14.71	613	14.57	0.14	
	Dadri GPS (4*130.19+2*154.51)	830	800	559	485	11.03	459	11.27	-0.25	
	Anta GPS (3*88.71+1*153.2)	419	396	-1	-1	0.00	0	0.00	0.00	
	Auraiya GPS (4*111.19+2*109.30)	663	638	323	271	6.07	253	6.10	-0.03	
	Dadri Solar	5	1	0	0	0.04	2	0.02	0.02	
	Unchahar Solar	10	3	0	0	0.02	1	0.06	-0.04	
	Singrauli Solar	15	3	0	0	0.07	3	0.07	0.00	
	KHEP	800	830	830	831	20.01	834	19.92	0.09	
Sub Total (A)	12112	10565	8419	6838	171	7138	175	-3		
B. NPC	NAPS (2*220)	440	372	422	422	9.16	382	8.93	0.23	
	RAPS- B (2*220)	440	388	432	435	9.32	388	9.31	0.01	
	RAPS- C (2*220)	440	375	410	409	8.75	365	9.00	-0.25	
	Sub Total (B)	1320	1135	1264	1266	27.23	1134	27.24	-0.02	
C. NHPC	Chamera I HPS (3*180)	540	537	549	542	13.10	546	12.89	0.21	
	Chamera II HPS (3*100)	300	300	301	303	7.23	301	7.20	0.03	
	Chamera III HPS (3*77)	231	229	233	233	5.61	234	5.50	0.11	
	Bairasuil HPS(3*60)	180	179	181	124	3.31	138	3.17	0.13	
	Salal-HPS (6*115)	690	657	668	668	16.08	670	15.76	0.32	
	Tanakpur-HPS (3*40)	94	89	94	96	2.20	92	2.15	0.05	
	Uri-I HPS (4*120)	480	473	468	472	11.45	477	11.35	0.10	
	Uri-II HPS (4*60)	240	230	232	232	5.56	231	5.52	0.04	
	Dhauliganga-HPS (4*70)	280	280	277	274	6.75	281	6.72	0.03	
	Dulhasti-HPS (3*130)	390	386	395	397	9.34	389	9.26	0.07	
	Sewa-II HPS (3*40)	120	119	128	62	2.14	89	1.95	0.19	
	Parbati 3 (4*130)	520	390	398	131	6.78	283	6.73	0.05	
	Sub Total (C)	4065	3870	3926	3534	90	3731	88	1	
	D.SJVNL	NJPC (6*250)	1500	1605	1600	1598	38.40	1600	38.52	-0.11
Rampur HEP (6*68.67)		412	428	429	429	10.33	430	10.27	0.05	
Sub Total (D)		1912	2033	2029	2027	48.73	2030	48.79	-0.06	
E. THDC	Tehri HPS (4*250)	1000	964	951	213	12.69	529	12.50	0.19	
	Koteshwar HPS (4*100)	400	192	304	203	4.59	191	4.60	-0.01	
	Sub Total (E)	1400	1156	1255	416	17.28	720	17.10	0.18	
F. BBMB	Bhakra HPS (3*108+2*126+5*157)	1361	1431	1447	1452	34.72	1447	34.34	0.38	
	Dehar HPS (6*165)	990	605	660	560	14.63	609	14.52	0.11	
	Pong HPS (6*66)	396	376	384	384	9.15	381	9.02	0.12	
	Sub Total (F)	2747	2412	2491	2396	58.49	2437	57.89	0.61	
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	222	181	4.52	189	4.80	-0.27	
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1200	1200	28.71	1196	28.51	0.20	
	Malana Stg-II HPS (2*50)	100	0	111	111	2.64	110	2.48	0.16	
	Shree Cement TPS (2*150)	300	0	287	275	6.52	272	6.59	-0.06	
	Budhil HPS(IPP) (2*35)	70	0	76	75	1.80	75	1.80	0.00	
Sub Total (G)	1662	0	1896	1843	44.20	1842	44.18	0.02		
H. Total Regional Entities (A-G)	25219	21171	21280	18319	456.77	19032	458.05	-1.27		

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	900	1080	21.74	906	
	Guru Nanak Dev TPS(Bhatinda) (2*110+2*120)	460	80	80	1.72	72	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	423	387	8.90	371	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	1011	714	19.11	796	
	Talwandi Saboo (1*660)	660	0	0	0.00	0	
	Thermal (Total)	4700	2414	2261	51.47	2145	
	Total Hydro	1000	912	911	21.38	891	
	Total Punjab	5700	3326	3172	72.85	3035	
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00	0
DCRTPP (Yamuna nagar) (2*300)		600	271	475	9.30	387	
Faridabad GPS (NTPC)		432	373	317	7.97	332	
RGTPP (khedar) (IPP) (2*600)		1200	554	365	9.24	385	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP) (2*660)		1320	0	0	0.00	0	
Thermal (Total)		4944	1198	1157	26.51	1105	
Total Hydro		62	24	27	0.61	25	
Total Haryana		5006	1222	1184	27.12	1130	
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	763	732	18.06	753
		suratgarh TPS (6*250)	1500	726	725	17.25	719
		Chabra TPS (4*250)	1000	0	360	4.53	189
		Dholpur GPS (3*110)	330	78	78	1.91	80
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	185	188	4.86	203	
	RAPS A (NPC) (1*100+1*200)	300	184	183	4.28	178	
	Barsingar (NLC) (2*125)	250	189	189	4.33	181	
	Giral LTPS (2*125)	250	58	45	0.87	36	
	Rajwest LTPS (IPP) (8*135)	1080	813	442	12.30	512	
	V/S LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0	
	Kalisindh Thermal(2*600)	1200	465	480	11.18	466	
	Kawai(Adani) (2*660)	1320	864	860	20.74	864	
	Thermal (Total)	8876	4325	4282	100	4180	
	Total Hydro	550	316	265	7.06	294	
	Wind power	3214	653	801	17.64	735	
	Biomass	99	24	24	0.57	24	
	Solar	730	0	0	2.73	114	
	Renewable/Others (Total)	4043	677	825	20.93	872	
	Total Rajasthan	13469	5318	5372	128.30	5346	
	UP	Anpara TPS (3*210+2*500)	1630	1198	1197	28.50	1188
Obra TPS (2*50+2*94+5*200)		1194	422	435	10.20	425	
Panicha TPS (2*110+2*220+2*250)		1140	781	734	17.90	746	
Panki TPS (2*105)		210	113	95	2.40	100	
Harduaganj TPS (1*60+1*105+2*250)		665	196	502	8.70	363	
Tanda TPS (NTPC) (4*110)		440	260	276	6.51	271	
Roza TPS (IPP) (4*300)		1200	802	810	19.30	804	
Anpara-C (IPP) (2*600)		1200	545	540	12.90	538	
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	365	363	8.20	342	
Anpara-D(1*500)		500	0	0	0.00	0	
Lalitpur TPS(1*660)		660	0	0	0.00	0	
Thermal (Total)		9289	4682	4952	115	4776	
Vishnuparyag HPS (IPP)(4*110)		440	0	0	0.00	0	
Alakananda(4*82.5)		330	325	330	7.80	325	
Other Hydro		527	183	321	5.60	233	
Cogeneration		981	50	50	1.20	50	
Total UP	11237	4915	5323	129.212	5059		
Uttarakhand	Total Hydro	1398	885	927	20.47	853	
	Total Uttarakhand	1398	885	927	20.47	853	
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	35	29	0.47	20	
	Pragati Gas Turbine (2x104+ 1x122)	330	265	261	5.61	234	
	Riithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (4*216+2*253)	1370	0	0	0.00	0	
	Badarpur TPS (NTPC) (3*95+2*210)	705	315	320	6.73	280	
	Thermal (Total)	2917	615	610	12.81	534	
	Total Delhi	2917	615	610	12.81	534	
HP	Baspa HPS (IPP) (3*100)	300	330	300	7.64	318	
	Malana HPS (IPP) (2*43)	86	106	106	2.53	105	
	Other Hydro	878	517	617	13.74	572	
	Total HP	1264	953	1023	23.91	996	
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.56	440	
	Other Hydro/IPP	560	178	173	3.88	162	
	Gas/Diesel/Others	190	0	0	0.00	0	
	Total J & K	1200	618	613	14.44	602	
Total State Control Area Generation		42191	17852	18224	429.11	17554	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6220	4726	125.75	5240	
Total Regional Availability(Gross)		67410	45352	41269	1011.63	41826	

IV. Total Hydro Generation:

Regional Entities Hydro	12216	12064	10696	269.92	11247
State Control Area Hydro	5811	3891	4087	93.46	3894
Total Regional Hydro	18027	15955	14783	363.38	15141

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	250	250	0	6.02	0.00	6.02
765 KV Gwalior-Agra (D/C)	2450	1663	2450	0	43.42	0.00	43.42
400 KV Zerda-Kankroli	0	-191	0	303	0.00	4.97	-4.97
400 KV Zerda-Bhimmal	-68	-211	0	287	0.00	4.06	-4.06
220 KV Auraiya-Malanpur	-44	-88	0	105	0.00	1.34	-1.34
220 KV Badod-Kota/Morak	14	-58	24	95	0.00	0.86	-0.86
Mundra-Mohinderqarh(HVDC Bipole)	2000	1898	2006	0	45.92	0.00	45.92
400 KV Vindhychal - Rihand	506	479	507	0	11.64	0.00	11.64
Sub Total WR	5108	3742			106.99	11.22	95.77
Pusauli Bypass/HVDC	400	400	400	0	8.97	0.00	8.97
400 KV MZP- GKP (D/C)	156	58	502	0	5.10	0.00	5.10
400 KV Patna-Balia(D/C) X 2	154	249	378	0	5.47	0.00	5.47
400 KV B'Sharif-Balia (D/C)	-16	20	168	92	1.07	0.00	1.07
765 KV Pusauli-Balia	42	94	164	53	0.82	0.00	0.82
765 KV Gaya-Fatehpur	126	12	171	0	2.06	0.00	2.06
220 KV Pusauli-Sahupuri	130	169	201	0	4.02	0.00	4.02
132 KV Knasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
132 KV Son Ngr-Rihand	-40	-46	0	-46	0.00	0.89	-0.89
132 KV Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
765 KV Sasaram - Fatehpur	-72	-164	13	173	0.00	2.01	-2.01
400 KV Barh -GKP (D/C)	232	192	288	0	4.90	0.00	4.90
Sub Total ER	1112	984			32.88	2.90	29.98
Total IR Exch	6220	4726			139.87	14.12	125.75

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
22.32	3.96	26.28	22.63	8.79	2.63	-1.15	1.08	-1.08

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
52.62	80.75	133.37	29.98	95.77	125.75	-22.63	15.01	-7.62

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	-16	-20	0	30	0	0	-0.47

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	0.06	6.02	45.59	75.46	15.68	2.94	0.00	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)		
50.18	17.03	49.79	19.36	50.00	0.03	0.06	50.20	49.91

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	02:52	399	22:11	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	414	00:00	414	00:00	0.0	0.0	0.0	0.0
Kanpur	400	418	02:07	404	14:38	0.0	0.0	0.0	0.0
Dadri	400	414	05:27	399	19:28	0.0	0.0	0.0	0.0
Ballabgarh	400	420	03:08	403	19:30	0.0	0.0	0.0	0.0
Bawana	400	416	05:28	400	19:33	0.0	0.0	0.0	0.0
Bassi	400	422	03:02	405	19:40	0.0	0.0	1.1	0.0
Hissar	400	411	05:29	394	19:42	0.0	0.0	0.0	0.0
Moga	400	410	05:28	396	14:49	0.0	0.0	0.0	0.0
Abdullapur	400	411	05:31	396	19:28	0.0	0.0	0.0	0.0
Nalagarh	400	413	05:14	402	14:47	0.0	0.0	0.0	0.0
Kishenpur	400	413	05:27	402	19:26	0.0	0.0	0.0	0.0
Wagoora	400	406	01:49	386	14:59	0.0	18.9	0.0	0.0
Amritsar	400	412	05:04	399	12:49	0.0	0.0	0.0	0.0
Kashipur	400	420	05:18	413	11:11	0.0	0.0	0.0	0.0
Hamirpur	400	402	00:00	402	00:00	0.0	0.0	0.0	0.0
Rishikesh	400	408	04:04	392	19:41	0.0	0.0	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	776	03:01	748	14:49	0.0	0.0	0.0	0.0
Balia	765	757	00:00	757	00:00	0.0	0.0	0.0	0.0
Moga	765	784	05:28	756	19:36	0.0	0.0	0.0	0.0
Agra	765	792	03:02	756	19:42	0.0	0.0	0.0	0.0
Bhiwani	765	788	03:04	761	19:28	0.0	0.0	0.0	0.0
Unnao	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Lucknow	765	781	18:04	755	14:49	0.0	0.0	0.0	0.0
Meerut	765	802	08:03	765	19:42	0.0	0.0	0.2	0.0
Jhatikara	765	791	05:22	762	19:40	0.0	0.0	0.0	0.0
Bareilly	765	795	05:31	765	14:39	0.0	0.0	0.0	0.0
Anta	765	760	00:00	760	00:00	0.0	0.0	0.0	0.0
Phagi	765	774	03:04	753	19:29	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	505.79	1339.30	505.91	1352.81	2133.67	1161.98
Pong	426.72	384.05	419.90	889.22	409.08	464.36	4238.26	540.28
Tehri	829.79	740.04	803.80	680.00	803.40	675.00	748.53	305.00
Koteshwar	612.50	598.50	611.36	5.20	610.65	4.69	305.00	302.29
Chamera-I	760.00	748.75	757.12	0.00	0.00	0.00	396.26	354.92
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	523.45	10.79	519.78	11.62	482.13	417.89

* 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	1616	153	0	1465	55	0	38.48	2.66	41.14
Delhi	367	-36	-2	361	26	-2	8.70	2.73	11.43
Haryana	1628	265	0	1580	247	0	38.63	3.18	41.82
HP	-1217	-413	0	-1000	-427	0	-25.15	-11.02	-36.17
J&K	-742	-76	0	-490	35	0	-13.36	-1.00	-14.37
CHD	0	0	0	0	0	0	0.24	-0.01	0.22
Rajasthan	-496	741	2	-496	676	2	-11.91	14.77	2.86
UP	1022	0	0	658	0	0	16.56	2.75	19.31
Uttarakhand	-240	-148	0	-150	23	0	-4.46	-1.72	-6.18
Total	1938	486	0	1926	635	0	47.71	12.35	60.06

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1693	1465	153	44	0	0
Delhi	685	104	445	-225	-2	-2
Haryana	1680	1563	265	-280	0	0
HP	-915	-1253	-362	-587	0	0
J&K	-490	-742	35	-151	0	0
CHD	30	0	0	-15	0	0
Rajasthan	-496	-496	777	-21	2	2
UP	1037	514	392	0	0	0
Uttarakhand	-150	-240	41	-152	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 08.08.2015 :

XIV. Synchronisation of new generating units :

XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

240 MVAR (80 *3) Bus Reactor at Phagi first time charged at 19.01 Hrs on 08.08.2015.

XVI. Tripping of lines in pooling stations :

XVII. Complete generation loss in a generating station :