

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पब्लिसिटी की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 10.06.2013
Date of Reporting : 11.06.2013

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
38474	2126	40600	50.08	38274	1050	39324	50.10	908.7	65.61

* 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)	UI [OD:(+ve), UD: (-ve)]	
	Thermal	Hydro	Renewable/others \$	Total				Consumption (Net MU)	Shortages *
Punjab	51.93	12.53		64.46	115.42	113.66	-1.76	178.13	10.75
Haryana	53.28	0.72		54.00	92.76	89.41	-3.35	143.41	0.17
Rajasthan	75.77	0.00	11.66	87.44	65.60	63.53	-2.07	150.97	3.77
Delhi	26.92			26.92	83.40	82.71	-0.69	109.63	0.00
UP	116.16	14.45	5.40	136.02	104.45	99.74	-4.71	235.75	46.69
Uttarakhand		17.31		17.31	15.80	17.05	1.24	34.36	0.00
HP		21.58		21.58	1.09	1.51	0.43	23.10	2.54
J & K		13.41	0.00	13.41	12.31	13.99	1.69	27.40	1.70
Chandigarh				0.00	5.93	6.01	0.08	6.01	0.00
Total	324.07	80.01	17.06	421.14	496.76	487.61	-9.15	908.75	65.61

* 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				UI [OD:(+ve), UD: (-ve)]	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction	Day Energy MU
Punjab	7828	85	26	1402	7532	0	-49	2176	39.26	
Haryana	6280	0	-322	685	5760	0	-260	718	13.61	
Rajasthan	6082	22	-153	475	6163	0	-121	344	9.20	
Delhi	4832	0	60	-59	4366	0	-46	57	3.54	
UP	9429	1832	-170	42	10968	1050	116	880	10.89	
Uttarakhand	1599	0	116	129	1305	0	-7	107	2.49	
HP	1000	87	70	-592	912	0	77	-1087	-16.63	
J&K	1144	100	-63	-318	1042	0	30	-417	-9.51	
Chandigarh	279	0	27	0	225	0	-18	0	0.30	
Total	38474	2126	-409	1764	38274	1050	-278	2778	53.14	

* STOA figures are at sellers boundary & PX figures are at regional boundary.

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)	UI [OG:(+ve), UG: (-ve)]		
								Schedule Net MU	UI Net MU	
A. NTPC	Singrauli STPS	2000	1626	1552	2084	38.41	1600	39.03	-0.63	
	Rihand I STPS	1000	914	997	836	21.30	888	21.60	-0.30	
	Rihand II STPS	1000	965	1038	983	22.53	939	22.79	-0.26	
	Rihand III STPS	500	376	503	59	8.83	368	9.01	-0.18	
	Dadri I STPS	840	809	856	618	17.20	717	17.72	-0.52	
	Dadri II STPS	980	973	1010	751	21.42	893	22.32	-0.90	
	Unchahar I TPS	420	402	428	306	8.60	358	9.33	-0.72	
	Unchahar II TPS	420	201	217	193	4.33	180	4.61	-0.28	
	Unchahar III TPS	210	200	220	178	4.43	185	4.61	-0.18	
	ISTPP (Jhajihar)	1500	409	333	314	7.04	293	7.89	-0.85	
	Dadri GPS	830	790	373	351	8.07	336	8.49	-0.42	
	Anta GPS	419	398	249	197	5.37	224	5.66	-0.30	
	Auraiya GPS	663	618	291	152	4.29	179	4.64	-0.35	
	Sub Total (A)	10782	8681	8067	7022	171.81	17159	177.69	-5.88	
	B. NPC	NAPS	440	290	327	328	6.94	289	6.96	-0.02
		RAPS- B	440	387	427	430	9.23	385	9.29	-0.06
		RAPS- C	440	430	449	460	9.65	402	10.32	-0.67
Sub Total (B)		1320	1107	1203	1218	25.81	1076	26.57	-0.76	
C. NHPC	Chamera I HPS	540	540	540	540	13.03	543	12.96	0.07	
	Chamera II HPS	300	310	308	311	7.37	307	7.43	-0.06	
	Chamera III HPS	231	231	234	234	5.32	222	5.56	-0.23	
	Bairasuil HPS	180	179	179	120	2.90	121	2.77	0.13	
	Salal-HPS	690	627	662	655	15.21	634	15.12	0.09	
	Tanakpur-HPS	94	86	91	85	2.09	87	2.05	0.03	
	Uri-HPS	480	475	472	471	11.33	472	11.38	-0.05	
	Dhauliganga-HPS	280	280	280	280	6.73	281	6.67	0.06	
	Dulhasti-HPS	390	387	404	403	9.38	391	9.29	0.09	
	Sewa-II HPS	120	119	121	0	1.16	48	1.17	-0.01	
	Sub Total (C)	3305	3234	3291	3099	74.52	3105	74.41	0.12	
D. NJPC	Natpcha Jhakri	1500	1605	0	1621	9.01	376	9.15	-0.14	
	Sub Total (D)	1500	1605	0	1621	9.01	376	9.15	-0.14	
E. THDC	Tehri HPS	1000	540	540	545	12.77	532	12.50	0.27	
	Sub Total (E)	1400	829	837	836	19.10	796	18.80	0.30	
F. BBMB	Bhakra HPS	1480	1228	1259	1256	30.22	1259	29.47	0.75	
	Dehar HPS	990	604	825	600	14.91	621	14.50	0.42	
	Pong HPS	396	18	120	0	0.82	34	0.43	0.39	
	Sub Total (F)	2866	1850	2204	1856	45.95	1915	44.39	1.56	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	324	233	5.55	231	5.27	0.28	
	KWHEP HPS(IPP)	1000	0	0	1012	5.95	248	10.15	-4.20	
	Malana Stg-II HPS	100	0	114	113	2.72	113	2.45	0.27	
	Shree Cement TPS	300	0	247	252	5.61	234	6.36	-0.75	
	Budhil HPS(IPP)	70	0	34	35	0.82	34	0.72	0.10	
	Sub Total (G)	1662	0	719	1645	20.66	861	24.95	-4.30	
H. Total Regional Entities (A-G)	22836	17306	16321	17297	366.87	15286	375.96	-9.09		

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)	1260	1260	890	25.16	1048
	Guru Nanak Dev TPS(Bhatinda)	440	337	300	7.07	295
	Guru Hargobind Singh TPS(L.mbt)	920	942	678	19.71	821
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2539	1868	51.93	2164
	Total Hydro	1148	541	558	12.53	522
Total Punjab	3768	3080	2426	64.46	2686	
Haryana	Panipat TPS	1367	808	791	19.04	793
	DCRTPP (Yamuna nagar)	600	279	259	6.32	263
	Faridabad GPS (NTPC)	432	178	164	4.34	181
	RGTPP (khedar) (IPP)	1200	542	464	12.41	517
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	584	402	11.17	466
	Thermal (Total)	4944	2391	2080	53.28	2220
	Total Hydro	62	30	27	0.72	30
	Total Haryana	5006	2421	2107	54.00	2250
	Rajasthan	kota TPS	1240	744	738	17.64
suratgarh TPS		1500	1080	936	25.35	1056
Chabra TPS		500	226	205	5.12	213
Dholpur GPS		330	109	116	2.74	114
Ramgarh GPS		111	61	62	1.58	66
RAPS A (NPC)		300	179	179	4.30	179
Barsingar (NLC)		250	203	202	4.71	196
Giral LTPS		250	112	90	2.50	104
Rajwest LTPS (IPP)		1080	380	406	8.85	369
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	0	455	2.98	124
Thermal (Total)		6956	3094	3389	75.77	3157
Total Hydro		550	0	0	0.00	0
Wind power		2191	286	378	9.80	408
Biomass		91	13	13	0.31	13
Solar		201	0	0	1.56	65
Renewable/Others (Total)		2483	299	391	11.66	486
Total Rajasthan		9989	3393	3780	87.44	3643
UP		Anpara TPS	1630	1341	1264	28.60
	Obra TPS	1288	528	546	11.50	479
	Paricha TPS	1140	626	614	13.80	575
	Panki TPS	210	75	75	1.50	63
	Harduaganj TPS	665	431	446	9.30	388
	Tanda TPS (NTPC)	440	291	298	7.30	304
	Roza TPS (IPP)	1200	1058	999	24.27	1011
	Anpara-C (IPP)	1200	473	448	11.25	469
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	391	396	8.64	360
	Thermal (Total)	8223	5214	5086	116.16	4840
	Vishnuparyag HPS (IPP)	400	436	396	10.10	421
	Other Hydro	527	188	188	4.35	181
	Cogeneration	981	225	225	5.40	225
	Total UP	10131	6063	5895	136.02	5246
	Uttarakhand	Total Hydro	1303	789	653	17.31
Total Uttarakhand		1303	789	653	17.31	721
Delhi	Rajghat TPS	135	88	98	2.13	89
	Delhi Gas Turbine	282	147	76	2.81	117
	Pragati Gas Turbine	330	278	279	6.69	279
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	227	0	1.39	58
	Badarpur TPS (NTPC)	705	655	575	13.90	579
	Thermal (Total)	2232	1395	1028	26.92	1122
	Total Delhi	2232	1395	1028	26.92	1122
HP	Baspa HPS (IPP)	330	331	300	7.86	328
	Malana HPS (IPP)	86	104	103	2.47	103
	Other Hydro	589	463	356	11.25	469
	Total HP	1005	898	759	21.58	899
J & K	Baglihar HPS (IPP)	450	434	436	10.45	436
	Other Hydro	323	110	128	2.95	123
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	544	564	13.41	559
Total State Control Area Generation		34390	18583	17212	421.14	17127
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			6295	5314	144.97	6041
Total Regional Availability(Gross)		57226	41199	39823	932.98	38453

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6770	8770	162.82	6784
State Control Area Hydro	5368	2990	2749	80.01	2913
Total Regional Hydro	15731	9760	11519	242.82	9697

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 B/B	0	400	500	0	11.48	0.00	11.48
Gwalior-Agra (D/C)	2115	1684	2303	0	44.04	0.00	44.04
Zerda-Kankroli	68	-51	68	159	0.00	1.15	-1.15
Zerda-Bhinmal	130	9	157	101	0.37	0.00	0.37
Malanpur-Auraiya	-32	-2	0	32	0.00	1.69	-1.69
Badod-Kota/Morak	58	20	88	11	0.74	0.00	0.74
Mundra-Mohindergarh(HVDC)	1431	1237	1432	0	32.47	0.00	32.47
Sub Total WR	3770	3297			89.10	2.84	86.26
Pusauli Bypass	400	400	400	0	9.41	0.00	9.41
MZP- GKP (D/C)	664	660	784	0	16.28	0.00	16.28
Patna-Balia(D/C)	970	563	1019	0	19.20	0.00	19.20
B'Sharif-Balia (D/C)	345	238	467	0	8.40	0.00	8.40
Pusauli-Balia	-97	-136	0	136	0.00	1.97	-1.97
Gaya-Fatehpur (765 Kv)	43	57	115	0	1.53	0.00	1.53
Pusauli-Sahupuri	145	163	168	0	3.37	0.00	3.37
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	45	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	93	112	170	0	3.39	0.00	3.39
Sub Total ER	2525	2017			61.58	2.87	58.71
Total IR Exch	6295	5314			150.68	5.70	144.97

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

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
41.71	2.99	44.70	14.36	20.20	2.31	-4.50	0.95	-0.95

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
62.32	73.74	136.05	58.71	86.26	144.97	-3.60	12.52

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

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	1.94	94.16	1.84	92.22	76.70	5.84

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.59	6.05	49.57	19.43	50.10	0.30	0.12	50.43	49.82

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	408	06:08	401	01:17	0.0	0.0	0.0	0.0
Gorakhpur	400	425	07:30	405	15:30	0.0	0.0	3.5	0.0
Bareilly	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kanpur	400	419	06:04	401	15:45	0.0	0.0	0.0	0.0
Dadri	400	413	06:03	393	08:24	0.0	0.0	0.0	0.0
Ballabgarh	400	420	06:03	400	15:44	0.0	0.0	0.0	0.0
Bawana	400	416	06:02	399	14:39	0.0	0.0	0.0	0.0
Bassi	400	424	04:02	402	08:41	0.0	0.0	4.2	0.0
Hissar	400	408	06:03	392	08:42	0.0	0.0	0.0	0.0
Moga	400	413	06:01	399	15:44	0.0	0.0	0.0	0.0
Abdullapur	400	421	06:06	283	14:57	0.3	0.3	0.2	0.0
Nalagarh	400	421	06:08	401	15:45	0.0	0.0	0.1	0.0
Kishenpur	400	414	06:00	401	15:51	0.0	0.0	0.0	0.0
Wagoora	400	416	06:00	400	22:04	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	778	06:08	744	15:44	0.0	0.0	0.0	0.0
Balia	765	774	06:04	722	12:13	1.8	45.9	0.0	0.0
Moga	765	783	06:03	754	15:44	0.0	0.0	0.0	0.0
Agra	765	797	06:03	758	15:45	0.0	0.0	0.0	0.0
Bhiwani	765	785	06:03	752	15:44	0.0	0.0	0.0	0.0
Unnao	765	763	06:04	734	11:44	0.0	26.7	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	482.92	527.87	468.32	239.26	1639.15	1020.31
Pong	426.72	384.05	400.24	223.85	398.64	191.43	296.70	118.68
Tehri	829.79	740.04	746.65	34.10	818.65	982.26	489.38	437.00
Koteswar	612.50	598.50	609.36	4.21	NA	NA	437.00	420.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	496.53	352.55
Rihand	288.22	252.98	255.64	101.60	255.85	110.20	NA	NA
RPS	352.80	343.81	347.51	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.94	NA	NA	NA	NA	NA
RSD	527.91	487.91	510.33	NA	501.56	NA	320.21	230.41

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

765 kV Gwalior-Agra were carrying 940 MW each circuit. At 01:51 hrs circuit-1 tripped on R-phase earth fault from Gwalior end, loading on circuit-2 shootup to more than 1800 MW. Loading controlled by proper load shedding. Ckt-1 synchronised at 02:13 hrs. In apprehension of further tripping, TTC on WR-NR is revised to 3100 MW including HVDC Mundra-Mohendergarh. STOA on WR-NR path curtailed accordingly.

XII. Weather Conditions For 10.06.2013 :

1. Hot & Humid weather in NR.

XIII. Synchronisation of new generating units :

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

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

NJPC (1600 MW) & KWHEP (1200 MW) closed down since at 06:00 hrs of dt. 10.06.2013 due to high silt.

Report for : 10.06.2013

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER