

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पब्लिसिटी की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 07.07.2013  
Date of Reporting : 08.07.2013

### 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
38435	1610	40045	50.07	39382	1505	40887	50.18	927.7	45.39

\* 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)] Consumption Shortages *	
	Thermal	Hydro	Renewable/others \$	Total				(Net MU)	(MU)
Punjab	52.30	18.42		70.72	124.22	125.29	1.06	196.00	9.70
Haryana	68.27	0.60		68.87	105.74	103.84	-1.90	172.71	0.00
Rajasthan	78.78	0.09	15.32	94.19	57.90	52.36	-5.53	146.55	0.00
Delhi	27.11			27.11	72.93	69.92	-3.00	97.04	0.02
UP	113.62	3.89	3.00	120.52	111.48	108.91	-2.57	229.43	33.83
Uttarakhand		11.41		11.41	20.07	19.87	-0.20	31.27	0.14
HP		21.06		21.06	2.50	0.83	-1.67	21.89	0.00
J & K		13.76	0.00	13.76	16.99	14.40	-2.60	28.15	1.70
Chandigarh				0.00	5.58	4.69	-0.89	4.69	0.00
<b>Total</b>	<b>340.09</b>	<b>69.22</b>	<b>18.32</b>	<b>427.63</b>	<b>517.40</b>	<b>500.10</b>	<b>-17.30</b>	<b>927.73</b>	<b>45.39</b>

\* 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				Day Energy MU	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction	
Punjab	8470	400	34	1749	8208	400	25	1805	42.88	
Haryana	7129	0	-297	1685	7313	0	-191	1643	33.34	
Rajasthan	5684	0	-170	-64	6158	0	-230	-19	-0.58	
Delhi	4100	0	-27	10	4183	0	-158	-37	-0.13	
UP	9282	1040	76	335	10332	1105	-461	1333	13.87	
Uttarakhand	1406	70	59	330	1297	0	15	288	7.78	
HP	781	0	-205	-1025	874	0	-5	-1066	-22.87	
J&K	1365	100	-11	-243	818	0	-313	-344	-6.31	
Chandigarh	220	0	-16	0	199	0	-38	0	0.00	
<b>Total</b>	<b>38435</b>	<b>1610</b>	<b>-558</b>	<b>2777</b>	<b>39382</b>	<b>1505</b>	<b>-1356</b>	<b>3604</b>	<b>67.98</b>	

\* 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)	Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1935	2092	2080	45.91	1913	46.42	-0.51
	Rihand I STPS	1000	452	482	460	9.81	409	9.92	-0.11
	Rihand II STPS	1000	955	981	1019	21.51	896	22.16	-0.66
	Rihand III STPS	500	480	506	499	10.51	438	11.09	-0.58
	Dadri I STPS	840	810	667	671	14.41	600	14.72	-0.32
	Dadri II STPS	980	968	863	877	18.76	782	19.93	-1.17
	Unchahar I TPS	420	396	433	392	8.74	364	9.11	-0.37
	Unchahar II TPS	420	401	426	399	8.59	358	8.77	-0.18
	Unchahar III TPS	210	200	217	192	4.19	175	4.36	-0.16
	ISTPP (Jhajhar)	1500	1410	848	571	14.67	611	14.67	0.00
	Dadri GPS	830	790	392	392	9.16	381	9.50	-0.35
	Anta GPS	419	400	261	261	6.19	258	6.21	-0.03
	Auraiya GPS	663	607	314	307	7.14	297	7.15	-0.01
	<b>Sub Total (A)</b>	<b>10782</b>	<b>9804</b>	<b>8482</b>	<b>8120</b>	<b>179.58</b>	<b>7483</b>	<b>184.01</b>	<b>-4.43</b>
	B. NPC	NAPS	440	156	178	179	3.67	153	3.74
RAPS- B		440	380	422	426	9.20	383	9.12	0.08
RAPS- C		440	210	231	232	4.98	208	5.04	-0.06
<b>Sub Total (B)</b>		<b>1320</b>	<b>746</b>	<b>831</b>	<b>837</b>	<b>17.85</b>	<b>744</b>	<b>17.90</b>	<b>-0.05</b>
C. NHPC	Chamera I HPS	540	540	540	540	13.02	543	12.96	0.06
	Chamera II HPS	300	306	306	309	7.32	305	7.34	-0.02
	Chamera III HPS	231	231	232	231	5.51	229	5.54	-0.03
	Bairasuil HPS	180	179	180	120	2.48	104	2.17	0.32
	Salal-HPS	690	650	658	653	15.32	638	15.51	-0.19
	Tanakpur-HPS	94	71	69	75	1.65	69	1.69	-0.04
	Uri-HPS	480	465	446	456	10.89	454	11.17	-0.28
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	406	406	9.39	391	9.40	-0.01
	Sewa-II HPS	120	119	51	0	0.59	24	0.58	0.00
<b>Sub Total (C)</b>	<b>3305</b>	<b>2948</b>	<b>2888</b>	<b>2790</b>	<b>66.17</b>	<b>2757</b>	<b>66.37</b>	<b>-0.20</b>	
D. NJPC	Natpaa Jhakri	1500	1605	1621	1606	38.18	1591	37.50	0.67
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1621</b>	<b>1606</b>	<b>38.18</b>	<b>1591</b>	<b>37.50</b>	<b>0.67</b>
E. THDC	Tehri HPS	1000	825	825	834	19.97	832	19.80	0.17
	<b>Sub Total (E)</b>	<b>1400</b>	<b>1201</b>	<b>1203</b>	<b>1215</b>	<b>27.82</b>	<b>1159</b>	<b>27.70</b>	<b>0.12</b>
F. BBMB	Bhakra HPS	1480	1318	1351	1360	31.62	1318	31.63	-0.01
	Dehar HPS	990	413	0	606	10.19	425	9.91	0.28
	Pong HPS	396	146	372	0	3.77	157	3.51	0.26
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1877</b>	<b>1723</b>	<b>1966</b>	<b>45.58</b>	<b>1899</b>	<b>45.05</b>	<b>0.53</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	231	231	5.50	229	5.29	0.21
	KWHEP HPS(IPP)	1000	0	1200	1199	28.51	1188	28.51	0.01
	Malana Stg-II HPS	100	0	113	114	2.61	109	2.41	0.20
	Shree Cement TPS	300	0	235	147	3.87	161	3.86	0.01
	Budhil HPS(IPP)	70	0	70	70	1.66	69	1.65	0.00
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1849</b>	<b>1761</b>	<b>42.14</b>	<b>1756</b>	<b>41.72</b>	<b>0.43</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22836</b>	<b>18180</b>	<b>18597</b>	<b>18295</b>	<b>417.32</b>	<b>17388</b>	<b>420.25</b>	<b>-2.93</b>	

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	1205	27.43	1143	
	Guru Nanak Dev TPS(Bhatinda)	440	204	204	4.33	180	
	Guru Hargobind Singh TPS(L.mbt)	920	926	938	20.54	856	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2390	2347	52.30	2179	
	Total Hydro	1148	860	705	18.42	767	
	<b>Total Punjab</b>	<b>3768</b>	<b>3250</b>	<b>3052</b>	<b>70.72</b>	<b>2947</b>	
Haryana	Panipat TPS	1367	586	590	14.25	594	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	304	304	7.53	314	
	RGTPP (khedar) (IPP)	1200	898	941	22.32	930	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	864	1055	24.18	1007	
	Thermal (Total)	4944	2652	2890	68.27	2845	
	Total Hydro	62	23	22	0.60	25	
		<b>Total Haryana</b>	<b>5006</b>	<b>2675</b>	<b>2912</b>	<b>68.87</b>	<b>2870</b>
	Rajasthan	kota TPS	1240	943	879	21.71	905
suratgarh TPS		1500	1047	932	22.33	931	
Chabra TPS		500	213	390	7.20	300	
Dholpur GPS		330	128	128	3.10	129	
Ramgarh GPS		111	25	22	0.74	31	
RAPS A (NPC)		300	165	165	4.31	180	
Barsingar (NLC)		250	0	99	0.56	23	
Giral LTSP		250	62	62	1.36	57	
Rajwest LTSP (IPP)		1080	768	675	17.47	728	
VSLP LTSP (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	0	0	0.00	0	
Thermal (Total)		6956	3351	3352	78.78	3283	
Total Hydro		550	34	0	0.09	4	
Wind power		2191	452	825	13.50	563	
Biomass		91	25	25	0.61	25	
Solar		201	0	0	1.21	50	
Renewable/Others (Total)		2483	477	850	15.32	638	
		<b>Total Rajasthan</b>	<b>9989</b>	<b>3862</b>	<b>4202</b>	<b>94.19</b>	<b>3924</b>
UP		Anpara TPS	1630	1249	1168	26.20	1092
	Obra TPS	1288	486	359	9.50	396	
	Paricha TPS	1140	625	819	14.70	613	
	Panki TPS	210	150	130	2.90	121	
	Harduaganj TPS	665	360	392	8.30	346	
	Tanda TPS (NTPC)	440	396	395	9.89	412	
	Roza TPS (IPP)	1200	878	1008	23.49	979	
	Anpara-C (IPP)	1200	429	511	10.66	444	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	313	405	7.99	333	
	Thermal (Total)	8223	4886	5187	113.62	4734	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	168	244	3.89	162	
	Cogeneration	981	125	125	3.00	125	
		<b>Total UP</b>	<b>10131</b>	<b>5179</b>	<b>5556</b>	<b>120.52</b>	<b>5022</b>
	Uttarakhand	Total Hydro	1303	482	486	11.41	475
<b>Total Uttarakhand</b>		<b>1303</b>	<b>482</b>	<b>486</b>	<b>11.41</b>	<b>475</b>	
Delhi	Rajghat TPS	135	90	88	2.38	99	
	Delhi Gas Turbine	282	77	76	1.85	77	
	Pragati Gas Turbine	330	259	265	6.57	274	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	215	284	5.14	214	
	Badarpur TPS (NTPC)	705	505	510	11.17	465	
	Thermal (Total)	2232	1146	1223	27.11	1130	
		<b>Total Delhi</b>	<b>2232</b>	<b>1146</b>	<b>1223</b>	<b>27.11</b>	<b>1130</b>
HP	Baspa HPS (IPP)	330	304	334	7.59	316	
	Malana HPS (IPP)	86	94	107	2.35	98	
	Other Hydro	589	561	468	11.12	463	
		<b>Total HP</b>	<b>1005</b>	<b>959</b>	<b>909</b>	<b>21.06</b>	<b>878</b>
J & K	Baglihar HPS (IPP)	450	436	436	10.46	436	
	Other Hydro	323	130	142	3.30	137	
	Gas/Diesel/Others	183	0	0	0.00	0	
		<b>Total J &amp; K</b>	<b>956</b>	<b>566</b>	<b>578</b>	<b>13.76</b>	<b>573</b>
<b>Total State Control Area Generation</b>		<b>34390</b>	<b>18119</b>	<b>18918</b>	<b>427.63</b>	<b>17818</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>3970</b>	<b>3944</b>	<b>86.08</b>	<b>3587</b>	
<b>Total Regional Availability(Gross)</b>		<b>57226</b>	<b>40686</b>	<b>41157</b>	<b>931.03</b>	<b>38793</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	8979	9121	214.36	8932
State Control Area Hydro	5368	3092	2944	69.22	2884
<b>Total Regional Hydro</b>	<b>15731</b>	<b>12071</b>	<b>12065</b>	<b>283.59</b>	<b>11816</b>

**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	-250	300	300	250	2.45	1.94	0.51
Gwalior-Agra (D/C)	1249	1152	1544	0	23.74	0.00	23.74
Zerda-Kankroli	20	-111	90	210	0.00	2.49	-2.49
Zerda-Bhinmal	17	-138	94	220	0.00	2.52	-2.52
Malanpur-Auraiya	-90	-69	0	124	0.00	2.19	-2.19
Badod-Kota/Morak	-22	-35	87	66	0.00	0.44	-0.44
Mundra-Mohindergarh(HVDC)	1449	1151	1450	0	29.85	0.00	29.85
<b>Sub Total WR</b>	<b>2373</b>	<b>2250</b>			<b>56.04</b>	<b>9.59</b>	<b>46.46</b>
Pusauli Bypass	-233	-205	0	281	0.00	4.97	-4.97
MZP- GKP (D/C)	720	806	872	0	18.10	0.00	18.10
Patna-Balia(D/C)	444	442	490	0	10.05	0.00	10.05
B'Sharif-Balia (D/C)	250	238	301	0	5.80	0.00	5.80
Pusauli-Balia	-42	-42	0	56	0.00	0.84	-0.84
Gaya-Fatehpur (765 Kv)	58	57	123	5	1.90	0.00	1.90
Pusauli-Sahupuri	145	159	160	0	3.46	0.00	3.46
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)	293	279	324	0	7.01	0.00	7.01
<b>Sub Total ER</b>	<b>1597</b>	<b>1694</b>			<b>46.33</b>	<b>6.70</b>	<b>39.63</b>
<b>Total IR Exch</b>	<b>3970</b>	<b>3944</b>			<b>102.37</b>	<b>16.29</b>	<b>86.08</b>

**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
35.70	3.83	39.54	5.40	39.93	-6.05	-7.79	2.33	-2.32

  

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
41.22	73.86	115.08	39.63	46.46	86.08	-1.59	-27.41	-29.00

**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	0.00	87.90	0.00	87.90	75.70	12.10

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					
50.50	17.05	49.77	22.16	50.08	0.18	0.01	50.45	50.00

**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	416	17:28	402	02:44	0.0	0.0	0.0	0.0
Gorakhpur	400	419	17:26	407	12:24	0.0	0.0	0.0	0.0
Bareilly	400	417	08:03	402	00:27	0.0	0.0	0.0	0.0
Kanpur	400	420	17:05	405	00:01	0.0	0.0	0.0	0.0
Dadri	400	414	17:33	401	00:19	0.0	0.0	0.0	0.0
Ballabgarh	400	422	17:38	408	00:01	0.0	0.0	5.2	0.0
Bawana	400	414	17:05	403	00:01	0.0	0.0	0.0	0.0
Bassi	400	425	17:03	405	23:07	0.0	0.0	19.0	0.0
Hissar	400	406	18:05	395	00:17	0.0	0.0	0.0	0.0
Moga	400	409	08:01	400	00:06	0.0	0.0	0.0	0.0
Abdullapur	400	407	08:02	397	00:19	0.0	0.0	0.0	0.0
Nalagarh	400	409	08:02	401	00:14	0.0	0.0	0.0	0.0
Kishenpur	400	415	08:03	407	11:36	0.0	0.0	0.0	0.0
Wagoora	400	412	03:11	401	20:28	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	760	14:20	725	02:30	0.0	0.0	0.0	0.0
Balia	765	758	15:04	726	02:45	0.8	47.6	0.0	0.0
Moga	765	781	18:03	763	21:23	0.0	0.0	0.0	0.0
Agra	765	807	17:04	772	22:14	0.0	0.0	6.3	0.0
Bhiwani	765	797	08:01	774	00:20	0.0	0.0	0.0	0.0
Unnao	765	771	15:10	745	00:01	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 <sup>3</sup> /s)	Usage (m <sup>3</sup> /s)
Bhakra	513.59	445.62	494.78	891.94	469.73	262.21	1961.85	1058.20
Pong	426.72	384.05	405.37	352.07	393.50	102.14	1026.51	194.42
Tehri	829.79	740.04	781.90	358.00	818.65	982.26	680.47	537.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	373.00	351.89
Rihand	268.22	252.98	254.42	65.50	254.17	44.30	325.13	NA
RPS	352.80	343.81	349.00	NA	NA	NA	NA	54.71
Jawahar Sagar	298.70	295.78	298.12	NA	NA	NA	NA	7.36
RSD	527.91	487.91	512.12	144.00	499.33	124.80	363.98	461.48

\* NA: Not Available

**X. System Constraints:**

**XI. Grid Disturbance / Any Other Significant Event:**

**XII. Weather Conditions For 07.07.2013 :**

1. Rains in Uttrakhand and Hot & Humid Weather in rest parts of 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 :**

1. Dhauliganga (280 MW) closed down till 30.09.2013 due to flooding of power house.
2. Vishnuprayg( UPPCL) ( 400 MW ) Closed due to High Silt level in river water.
3. MANERI BHALI(280MW)/Uttrakhand closed down due to flush flooding.

Report for : 07.07.2013

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER