

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 07.07.2012

Date of Reporting : 08.07.2012

### 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
34329	2480	36809	49.47	34782	1485	36267	50.12	816.4	39.96

\* 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	49.03	14.15		63.19	114.11	124.86	10.74	188.04	11.09
Haryana	51.06	0.73		51.78	72.59	78.84	6.25	130.62	2.87
Rajasthan	61.99	0.00	31.69	93.67	45.53	53.11	7.58	146.79	0.24
Delhi	19.44			19.44	74.71	64.78	-9.93	84.21	0.04
UP	64.08	13.39	2.40	79.87	96.70	106.04	9.34	185.91	22.65
Uttarakhand		19.21		19.21	9.72	11.99	2.27	31.20	0.12
HP		21.22		21.22	3.21	-1.22	-4.43	20.00	0.00
J & K		15.03	0.00	15.03	18.33	9.68	-8.65	24.71	2.95
Chandigarh				0.00	6.94	4.87	-2.06	4.87	0.00
<b>Total</b>	<b>245.59</b>	<b>83.73</b>	<b>34.09</b>	<b>363.41</b>	<b>441.84</b>	<b>452.94</b>	<b>11.10</b>	<b>816.35</b>	<b>39.96</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	8129	655	99	1984	8141	535	537	1780	46.68	
Haryana	5470	0	860	900	5470	0	-153	900	21.61	
Rajasthan	5893	0	-193	-457	5930	0	328	-481	-11.26	
Delhi	3681	0	-373	521	3609	0	-258	531	14.32	
UP	7644	1675	325	-85	8536	850	849	15	-0.08	
Uttarakhand	1454	0	221	-114	1265	0	155	-101	-2.67	
HP	791	0	-223	-1419	802	0	-97	-1416	-33.09	
J&K	1044	150	-373	-337	826	100	-478	-337	-7.39	
Chandigarh	224	0	-65	40	203	0	-70	0	1.07	
<b>Total</b>	<b>34329</b>	<b>2480</b>	<b>277</b>	<b>1033</b>	<b>34782</b>	<b>1485</b>	<b>813</b>	<b>892</b>	<b>29.19</b>	

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

### 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)	UI [OG:(+ve), UG: (-ve)]	
							Schedule Net MU	UI Net MU
<b>A. NTPC</b>								
Singrauli STPS	2000	1915	2068	2044	45.23	1884	45.43	-0.20
Rihand I STPS	1000	878	983	913	20.12	838	20.14	-0.02
Rihand II STPS	1000	960	1036	1003	22.29	929	22.04	0.25
Rihand III STPS	500		0	0	0.00	0		0.00
Dadri I STPS	840	793	525	597	11.85	494	12.24	-0.38
Dadri II STPS	980	963	983	732	17.73	739	18.78	-1.05
Unchahar I TPS	420	403	435	373	8.50	354	8.61	-0.11
Unchahar II TPS	420	403	439	360	8.12	338	8.13	-0.01
Unchahar III TPS	210	201	217	172	4.11	171	4.01	0.10
ISTPP (Jhajjar)	1000	940	738	719	16.72	697	16.69	0.03
Dadri GPS	830	780	565	480	10.90	454	11.12	-0.22
Anta GPS	419	366	225	160	4.20	175	4.20	0.00
Auraiya GPS	663	612	306	242	6.13	255	6.04	0.09
<b>Sub Total (A)</b>	<b>10282</b>	<b>9212</b>	<b>8520</b>	<b>7795</b>	<b>175.89</b>	<b>7329</b>	<b>177.42</b>	<b>-1.53</b>
<b>B. NPC</b>								
NAPS	440	257	298	304	6.26	261	6.17	0.10
RAPS- B	440	397	439	443	9.42	393	9.53	-0.11
RAPS- C	440	440	229	228	4.92	205	10.56	-5.64
<b>Sub Total (B)</b>	<b>1320</b>	<b>1094</b>	<b>966</b>	<b>975</b>	<b>20.61</b>	<b>859</b>	<b>26.26</b>	<b>-5.65</b>
<b>C. NHPC</b>								
Chamera I HPS	540	534	540	540	12.85	535	12.82	0.03
Chamera II HPS	300	300	303	302	7.11	296	7.24	-0.13
Chamera III HPS	231	231	79	78	5.57	232	5.42	0.15
Bairasuil HPS	180	182	180	171	2.81	117	3.43	-0.62
Salal-HPS	690	665	662	662	15.95	665	15.96	-0.01
Tanakpur-HPS	94	88	90	88	2.06	86	2.20	-0.15
Uri-HPS	480	470	480	466	11.44	477	11.65	-0.21
Dhauliganga-HPS	280	277	285	280	6.65	277	6.75	-0.09
Dulhasi-HPS	390	387	412	389	9.21	384	9.32	-0.11
Sewa-II HPS	120	80	82	32	1.04	43	1.13	-0.10
<b>Sub Total (C)</b>	<b>3305</b>	<b>3213</b>	<b>3113</b>	<b>3008</b>	<b>74.68</b>	<b>3112</b>	<b>75.92</b>	<b>-1.24</b>
<b>D.NJPC</b>								
Nathpa Jhakri	1500	1600	1615	1612	38.57	1607	38.40	0.17
<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1615</b>	<b>1612</b>	<b>38.57</b>	<b>1607</b>	<b>38.40</b>	<b>0.17</b>
<b>E. THDC</b>								
Tehri HPS	1000	387	435	125	4.62	193	5.00	-0.38
Koteshwar HPS	400	230	170	163	1.95	81	2.00	-0.05
<b>Sub Total (E)</b>	<b>1400</b>	<b>617</b>	<b>605</b>	<b>288</b>	<b>6.57</b>	<b>274</b>	<b>7.00</b>	<b>-0.43</b>
<b>F. BBMB</b>								
Bhakra HPS	1480	901	1046	776	22.51	938	21.63	0.88
Dehar HPS	990	611	825	600	14.97	624	14.68	0.29
Pong HPS	396	203	300	300	5.26	219	5.01	0.25
<b>Sub Total (F)</b>	<b>2866</b>	<b>1716</b>	<b>2171</b>	<b>1676</b>	<b>42.74</b>	<b>1781</b>	<b>41.31</b>	<b>1.43</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	209	233	4.59	191	4.30	0.29
KWHEP HPS(IPP)	1000	0	1200	1200	28.66	1194	28.63	0.03
Malana Stg-II HPS	100	0	110	109	2.31	96	0.00	2.31
Shree Cement TPS	300	0	126	140	2.91	121	3.48	-0.57
Budhil HPS(IPP)	70	35	35	35	0.94	39		0.94
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1680</b>	<b>1717</b>	<b>39.40</b>	<b>1642</b>	<b>36.41</b>	<b>2.99</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22336</b>	<b>17451</b>	<b>18670</b>	<b>17071</b>	<b>398.46</b>	<b>16602</b>	<b>402.71</b>	<b>-4.25</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	1265	1131	26.13	1089	
	Guru Nanak Dev TPS(Bhatinda)	440	211	190	4.29	179	
	Guru Hargobind Singh TPS(L.mbt)	920	900	892	18.61	775	
	Thermal (Total)	2620	2376	2213	49.03	2043	
	Total Hydro	1148	757	587	14.15	590	
	<b>Total Punjab</b>	<b>3768</b>	<b>3133</b>	<b>2800</b>	<b>63.19</b>	<b>2633</b>	
Haryana	Panipat TPS	1367	791	1114	22.25	927	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	191	248	6.93	289	
	RGTPP (kheadar) (IPP)	1200	534	535	12.54	523	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	565	9.34	389	
	Thermal (Total)	4944	1516	2462	51.06	2127	
	Total Hydro	62	28	24	0.73	30	
	<b>Total Haryana</b>	<b>5006</b>	<b>1544</b>	<b>2486</b>	<b>51.78</b>	<b>2158</b>	
	Rajasthan	kota TPS	1240	665	611	15.43	643
suratgarh TPS		1500	901	753	20.03	835	
Chabra TPS		500	194	187	4.29	179	
Dholpur GPS		330	100	99	2.65	110	
Ramgarh GPS		111	55	55	1.40	58	
RAPS A (NPC)		300	181	181	4.24	177	
Barsingsar (NLC)		250	203	208	4.68	195	
Giral LTPS		250	54	68	1.36	57	
Rajwest LTPS (IPP)		540	330	330	7.91	329	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5156	2683	2492	61.99	2583	
Total Hydro		550	0	0	0.00	0	
Wind power		1843	1123	1351	30.81	1284	
Biomass		91	21	21	0.51	21	
Solar		128	0	0	0.36	15	
Renewable/Others (Total)		2062	1144	1372	31.69	1320	
<b>Total Rajasthan</b>		<b>7767</b>	<b>3827</b>	<b>3864</b>	<b>93.67</b>	<b>3903</b>	
UP		Anpara TPS	1630	764	802	18.20	758
		Obra TPS	1382	432	432	10.50	438
	Paricha TPS	890	327	527	11.90	496	
	Panki TPS	210	56	0	1.00	42	
	Harduaganj TPS	665	34	34	0.80	33	
	Tanda TPS (NTPC)	440	195	290	5.79	241	
	Roza TPS (IPP)	1200	198	45	2.02	84	
	Anpara-C (IPP)	1200	306	496	9.36	390	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	189	203	4.51	188	
	Thermal (Total)	8067	2501	2829	64.08	2670	
	Vishnuparyag HPS (IPP)	400	436	436	10.46	436	
	Other Hydro	527	160	0	2.93	122	
	Cogeneration	981	100	100	2.40	100	
	<b>Total UP</b>	<b>9975</b>	<b>3197</b>	<b>3365</b>	<b>79.87</b>	<b>2892</b>	
	Uttarakhand	Total Hydro	1303	831	698	19.21	801
<b>Total Uttarakhand</b>		<b>1303</b>	<b>831</b>	<b>698</b>	<b>19.21</b>	<b>801</b>	
Delhi	Rajghat TPS	135	0	30	0.16	7	
	Delhi Gas Turbine	282	145	148	3.62	151	
	Pragati Gas Turbine	330	287	144	5.11	213	
	Rithala GPS	108	28	0	0.55	23	
	Bawana GPS	677	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	500	460	10.00	417	
	Thermal (Total)	2237	960	782	19.44	810	
	<b>Total Delhi</b>	<b>2237</b>	<b>960</b>	<b>782</b>	<b>19.44</b>	<b>810</b>	
HP	Baspa HPS (IPP)	330	330	330	7.92	330	
	Malana HPS (IPP)	86	96	105	2.45	102	
	Other Hydro	589	484	417	10.86	452	
	<b>Total HP</b>	<b>1005</b>	<b>910</b>	<b>852</b>	<b>21</b>	<b>884</b>	
J & K	Baglihar HPS (IPP)	450	438	436	10.48	437	
	Other Hydro	323	178	197	4.55	189	
	Gas/Diesel/Others	183	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>956</b>	<b>616</b>	<b>633</b>	<b>15.03</b>	<b>626</b>	
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>15018</b>	<b>15480</b>	<b>363.41</b>	<b>14706</b>	
<b>J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))</b>			<b>3750</b>	<b>3153</b>	<b>73.90</b>	<b>3079</b>	
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>37438</b>	<b>35704</b>	<b>835.77</b>	<b>34388</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	9023	8126	198.11	8255
State Control Area Hydro	5368	3302	2794	73.27	3053
<b>Total Regional Hydro</b>	<b>15731</b>	<b>12325</b>	<b>10920</b>	<b>271.39</b>	<b>11308</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	100	-100	100	400	1.05	3.78	-2.73
Gwalior-Agra (D/C)	960	958	1284	0	22.24	0.00	22.24
Zerda-Kankroli	101	60	175	129	1.31	0.00	1.31
Zerda-Bhinmal	72	62	228	107	1.04	0.00	1.04
Malanpur-Auraiya	-17	8	0	34	0.00	1.40	-1.40
Badod-Kota/Morak	0	0	0	0	0.00	0.00	0.00
Mundra-Mohindergarh(HVDC)	0	0	0	0	0.00	0.00	0.00
<b>Sub Total WR</b>	<b>1216</b>	<b>988</b>			<b>25.64</b>	<b>5.18</b>	<b>20.46</b>
Pusauli Bypass	250	250	250	0	5.91	0.00	5.91
MZP- GKP (D/C)	900	820	1072	0	20.48	0.00	20.48
Patna-Balia(D/C)	544	383	678	0	10.96	0.00	10.96
B'Sharif-Balia (D/C)	544	449	730	0	11.82	0.00	11.82
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	58	57	94	0	0.05	0.00	0.05
Gayaa-Fatehpur (765 Kv)	161	52	221	0	2.21	0.00	2.21
Pusauli-Sahupuri	117	179	143	0	3.04	0.00	3.04
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-25	0	47	0.00	1.03	-1.03
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>2534</b>	<b>2165</b>			<b>54.47</b>	<b>1.03</b>	<b>53.44</b>
<b>Total IR Exch</b>	<b>3750</b>	<b>3153</b>			<b>80.11</b>	<b>6.21</b>	<b>73.90</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
26.51	3.72	30.23	2.29	31.60	-0.61	-0.94	0.00	0.00
<b>Total IR Schedule (MU)</b>			<b>Total IR Actual (MU)</b>			<b>Net IR UI (MU)</b>		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
31.91	25.16	57.07	53.44	20.46	73.90	21.53	-4.70	16.84

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

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.28	1.11	17.19	86.22	70.14	59.58	12.67
Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum		Hz			MAX (Hz)	MIN (Hz)
50.55	8.06	49.11	20.13	50.03	0.54	0.22	50.44	49.37

**VII. Voltage profile**

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	412	07:21	400	20:01	0.0	0.0	0.0	0.0
Gorakhpur	400	434	08:05	409	14:27	0.0	0.0	52.7	7.9
Bareilly	400	425	08:04	394	20:09	0.0	0.0	3.2	0.0
Kanpur	400	426	08:14	395	14:33	0.0	0.0	8.1	0.0
Dadri	400	418	08:04	394	14:40	0.0	0.0	0.0	0.0
Ballabgarh	400	422	04:01	395	14:41	0.0	0.0	3.5	0.0
Bawana	400	418	04:08	397	14:36	0.0	0.0	0.0	0.0
Bassi	400	430	04:02	390	12:38	0.0	0.0	12.8	0.0
Hissar	400	407	01:54	388	14:45	0.0	2.7	0.0	0.0
Moga	400	416	03:59	391	12:55	0.0	0.0	0.0	0.0
Abdullapur	400	417	08:11	398	14:41	0.0	0.0	0.0	0.0
Nalagarh	400	416	08:12	391	15:01	0.0	0.0	0.0	0.0
Kishenpur	400	416	04:02	398	15:01	0.0	0.0	0.0	0.0
Wagoora	400	414	04:02	392	15:01	0.0	0.0	0.0	0.0

**VIII. 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	470.20	272.43	488.51	690.35	1192.02	828.95
Pong	426.72	384.05	393.68	106.94	411.98	566.84	651.43	434.52
Tehri	829.79	740.04	751.80	63.22	818.65	982.26	434.61	153.00
Koteshwar	612.50	598.50	602.80	1.33	NA	NA	178.00	232.00
Chamera-I	760.00	748.75	754.78	NA	NA	NA	420.91	347.90
Rihand	268.22	252.98	254.20	45.50	256.61	141.20	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	499.33	NA	510.08	NA	315.48	323.52

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 07.07.2012 :**

1. Rains in NCR , Partial rains in Punjab, Haryana ,Raj, HP,J&K,Uttranchal.

**XII. Synchronisation of new generating units :**

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

**XIV. Tripping of lines in pooling stations :**

**XV. Complete generation loss in a generating station :**

Report for : 07.07.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER