

# पाँवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 07.08.2011  
Date of Reporting : 08.08.2011

### 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
33530	2430	35960	49.74	31445	650	32095	49.90	763.1	29.73

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

### II. A. State's Load Energy 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	48.22	16.62		64.84	97.24	97.30	0.05	162.14	1.80
Haryana	59.05	0.87		59.92	52.63	49.94	-2.70	109.86	5.77
Rajasthan	60.14	1.93	5.02	67.09	33.70	35.20	1.51	102.29	0.28
Delhi	22.05			22.05	66.94	64.67	-2.27	86.71	0.00
UP	60.12	14.56	0.00	74.67	139.48	142.32	2.84	216.99	21.08
Uttarakhand		20.44		20.44	8.63	9.46	0.83	29.90	0.80
HP		23.49		23.49	0.84	-0.88	-1.72	22.61	0.00
J & K		14.37	0.00	14.37	16.84	12.90	-3.95	27.27	0.00
Chandigarh				0.00	5.75	5.37	-0.38	5.37	0.00
<b>Total</b>	<b>249.57</b>	<b>92.27</b>	<b>5.02</b>	<b>346.86</b>	<b>422.06</b>	<b>416.27</b>	<b>-5.80</b>	<b>763.13</b>	<b>29.73</b>

\* Shortage furnished by the respective constituent.

### 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	7051	600	33	1844	6629	0	-7	2270	51.74
Haryana	5149	310	561	1247	4459	0	463	1224	28.70
Rajasthan	4548	40	631	-667	4173	0	850	-530	-14.16
Delhi	3968	0	-364	564	3080	0	-338	316	8.33
UP	8877	1400	845	1731	10043	650	1003	1687	41.04
Uttarakhand	1297	80	-28	-167	1160	0	466	-144	-3.89
HP	1020	0	83	-1828	814	0	-28	-1743	-41.74
J&K	1367	0	53	-374	914	0	-345	-377	-9.34
Chandigarh	253	0	-5	38	173	0	-28	14	0.81
<b>Total</b>	<b>33530</b>	<b>2430</b>	<b>1809</b>	<b>2388</b>	<b>31445</b>	<b>650</b>	<b>2036</b>	<b>2717</b>	<b>61.48</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
									UI
A. NTPC	Singrauli STPS	2000	531	2037	1785	43.58	1816	12.75	30.83
	Rihand I STPS	1000	947	1032	937	21.37	890	22.72	-1.36
	Rihand II STPS	1000	960	519	514	11.03	460	23.04	-12.01
	Dadri I STPS	840	590	634	460	10.86	453	12.52	-1.66
	Dadri II STPS	980	913	1018	726	19.13	797	21.37	-2.24
	Unchahar I TPS	440	400	363	355	7.67	319	9.59	-1.92
	Unchahar II TPS	440	399	363	308	7.17	299	9.54	-2.38
	Unchahar III TPS	210	197	196	171	3.80	158	4.71	-0.91
	ISTPP (Jhajjar)	500	470	418	410	8.80	367	10.19	-1.39
	Dadri GPS	830	752	375	330	9.55	398	16.21	-6.66
	Anta GPS	419	394	254	230	5.22	218	8.29	-3.07
	Auraiya GPS	663	612	314	280	6.62	276	12.98	-6.36
	<b>Sub Total (A)</b>	<b>9322</b>	<b>7164</b>	<b>7523</b>	<b>6506</b>	<b>154.78</b>	<b>6449</b>	<b>163.91</b>	<b>-9.12</b>
	B. NPC	NAPS	440	185	218	223	4.43	185	4.44
RAPS- B		440	380	422	423	9.10	379	9.12	-0.02
RAPS- C		440	420	466	470	10.13	422	10.08	0.05
<b>Sub Total (B)</b>		<b>1320</b>	<b>985</b>	<b>1106</b>	<b>1116</b>	<b>23.66</b>	<b>986</b>	<b>23.64</b>	<b>0.02</b>
C. NHPC	Chamera I HPS	540	534	540	540	12.30	513	8.23	4.07
	Chamera II HPS	300	297	301	300	7.08	295	7.21	-0.13
	Bairasuil HPS	180	146	179	120	1.98	83	2.58	-0.60
	Salal-HPS	690	633	625	625	14.52	605	15.19	-0.67
	Tanakpur-HPS	94	92	94	94	2.20	92	2.24	-0.04
	Uri-HPS	480	251	377	236	7.24	302	5.78	1.46
	Dhauliganga-HPS	280	277	280	280	7.10	296	6.66	0.44
	Dulhasti-HPS	390	387	410	154	8.45	352	9.36	-0.91
	Sewa-II HPS	120	119	121	0	1.60	67	1.47	0.13
	<b>Sub Total (C)</b>	<b>3074</b>	<b>2736</b>	<b>2927</b>	<b>2349</b>	<b>62.47</b>	<b>2603</b>	<b>58.72</b>	<b>3.74</b>
D. NJPC	Nathpa Jhakri	1500	1600	1607	1602	38.38	1599	38.39	-0.01
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1607</b>	<b>1602</b>	<b>38.38</b>	<b>1599</b>	<b>38.39</b>	<b>-0.01</b>
E. THDC	Tehri HPS	1000	880	792	921	22.78	949	20.00	2.78
	Koteshwar HPS	100	85	89	87	2.15	90	2.00	0.15
	<b>Sub Total (E)</b>	<b>1100</b>	<b>965</b>	<b>881</b>	<b>1008</b>	<b>24.93</b>	<b>1039</b>	<b>22.00</b>	<b>2.93</b>
F. BBMB	Bhakra HPS	1480	989	1233	1233	29.27	1220	23.73	5.54
	Dehar HPS	990	608	825	600	14.67	611	14.60	0.07
	Pong HPS	396	219	306	186	5.48	228	5.27	0.21
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1816</b>	<b>2364</b>	<b>2019</b>	<b>49.42</b>	<b>2059</b>	<b>43.59</b>	<b>5.83</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	100	89	2.05	85	2.33	-0.28
	KWHEP HPS(IPP)	500	0	700	700	13.81	575	14.85	-1.04
	Malana Stg-II HPS	50	0	0	90	1.69	70	0.00	1.69
	Shree Cement TPS	150	0	0	0	0.00	0	0.00	0.00
	<b>Sub Total (G)</b>	<b>892</b>	<b>0</b>	<b>800</b>	<b>879</b>	<b>17.55</b>	<b>731</b>	<b>17.18</b>	<b>0.36</b>

H. Total Regional Entities (A-G)	20075	15266	17208	15479	371.17	15466	367.43	3.74
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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	1250.00	1080.00	26.03	1085	
	Guru Nanak Dev TPS(Bhatinda)	440	202.00	197.00	4.17	174	
	Guru Hargobind Singh TPS(L.mbt)	920	959.00	782.00	18.02	751	
	Thermal (Total)	2620	2411.00	2059.00	48.22	2009	
	Total Hydro	1148	626.00	696.00	16.62	692	
	<b>Total Punjab</b>	<b>3768</b>	<b>3037</b>	<b>2755</b>	<b>64.84</b>	<b>2702</b>	
Haryana	Panipat TPS	1360	1169.00	1075.00	26.69	1112	
	DCRTPP (Yamuna nagar)	600	531.00	521.00	11.99	500	
	Faridabad GPS (NTPC)	432	401.00	322.00	8.12	339	
	RGTPP (khedar) (IPP)	1200	377.00	518.00	12.25	510	
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0	
	Thermal (Total)	3617	2478.00	2436.00	59.05	2461	
	Total Hydro	62	32.00	32.00	0.87	36	
		<b>Total Haryana</b>	<b>3679</b>	<b>2510</b>	<b>2468</b>	<b>59.92</b>	<b>2497</b>
	Rajasthan	kota TPS	1240	870.00	784.00	18.46	769
suratgarh TPS		1500	1120.00	980.00	23.38	974	
Chabra TPS		500	194.00	244.00	4.95	206	
Dholpur GPS		330	276.00	275.00	6.42	268	
Ramgarh GPS		113	62.00	62.00	0.99	41	
RAPS A (NPC)		300	172.00	174.00	4.22	176	
Barsingar (NLC)		250	90.00	61.00	1.72	72	
Giral LTPS (IPP)		250	0.00	0.00	0.00	0	
Rajwest LTPS (IPP)		135	0.00	0.00	0.00	0	
VSLP LTPS (IPP)		135	0.00	0.00	0.00	0	
Thermal (Total)		4753	2784.00	2580.00	60.14	2506	
Total Hydro		550	73.00	49.00	1.93	80	
Wind power		1294	207.00	112.00	4.61	192	
Biomass		71	18.00	18.00	0.40	17	
Renewable/Others (Total)		1365	225	130	5.02	209	
		<b>Total Rajasthan</b>	<b>6668</b>	<b>3082</b>	<b>2759</b>	<b>67.09</b>	<b>2795</b>
UP		Anpara TPS	1630	861	919	19.70	821
	Obra TPS	1442	422	549	11.40	475	
	Paricha TPS	640	401	391	8.60	358	
	Panki TPS	210	65	60	1.20	50	
	Harduaganj TPS	375	46	48	0.80	33	
	Tanda TPS (NTPC)	440	281	222	6.56	273	
	Roza TPS (IPP)	600	567	455	11.85	494	
	Anpara-C (IPP)	600	0	0	0.00	0	
	Thermal (Total)	5937	2643	2644	60.12	2505	
	Vishnuparyag HPS (IPP)	400	436	436	10.01	417	
	Other Hydro	527	288	0	4.55	190	
	Cogeneration	951	0	0	0.00	0	
		<b>Total UP</b>	<b>7815</b>	<b>3367</b>	<b>3080</b>	<b>74.67</b>	<b>2694</b>
Uttarakhand	Total Hydro	1303	900	845	20.44	851	
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>900</b>	<b>845</b>	<b>20.44</b>	<b>851</b>	
Delhi	Rajghat TPS	135	63	58	1.90	79	
	Delhi Gas Turbine	282	73	75	1.93	81	
	Pragati Gas Turbine	330	296	273	7.10	296	
	Rithala GPS	108	26	29	0.66	28	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	500	475	10.46	436	
	Thermal (Total)	2000	958	910	22.05	919	
	<b>Total Delhi</b>	<b>2000</b>	<b>958</b>	<b>910</b>	<b>22.05</b>	<b>919</b>	
HP	Baspa HPS (IPP)	330	330	330	7.92	330	
	Malana HPS (IPP)	101	88	78	1.91	80	
	Other Hydro	571	574	578	13.66	569	
	<b>Total HP</b>	<b>1002</b>	<b>992</b>	<b>986</b>	<b>23</b>	<b>979</b>	
J & K	Baqilhar HPS (IPP)	450	440	439	10.56	440	
	Other Hydro	323	155	180	3.81	159	
	Gas/Diesel/Others	183	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>956</b>	<b>595</b>	<b>619</b>	<b>14.37</b>	<b>599</b>	
<b>Total State Control Area Generation</b>		<b>27191</b>	<b>15441</b>	<b>14422</b>	<b>346.86</b>	<b>14036</b>	
<b>J. Net Inter Regional Exchange</b> [Import (+ve)/Export (-ve)]			<b>2300</b>	<b>2744</b>	<b>62.92</b>	<b>2622</b>	
<b>Total Regional Availability(Gross)</b>		<b>47266</b>	<b>34949</b>	<b>32645</b>	<b>780.95</b>	<b>32123</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	9433	8579	7857	192.73	8031
State Control Area Hydro	5365	3506	3227	82.26	3428
<b>Total Regional Hydro</b>	<b>14797</b>	<b>12085</b>	<b>11084</b>	<b>274.99</b>	<b>11458</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	0	400	500	50	5.71	0.06	5.65
Gwalior-Agra (D/C)	761	1049	1266	0	24.04	0.00	24.04
Zerda-Kankroli	51	0	179	44	0.90	0.00	0.90
Zerda-Bhinmal	145	397	404	27	5.30	0.00	5.30
Malanpur-Auraiya	4	-68	15	116	-1.34	0.00	-1.34
Badod-Kota/Morak	0	0	0	0	0.00	0.00	0.00
<b>Sub Total WR</b>	<b>961</b>	<b>1778</b>			<b>34.61</b>	<b>0.06</b>	<b>34.55</b>
Pusaali Bypass	-72	-167	40	321	0.22	3.53	-3.32
MZP- GKP (D/C)	716	628	994	0	16.34	0.00	16.34
Patna-Balia(D/C)	124	181	244	0	3.78	0.00	3.78
B'Sharif-Balia (D/C)	265	213	405	0	5.95	0.00	5.95
Barh - balia(D/C)	202	0	265	0	2.44	0.00	2.44
Pusaali-Sahupuri	140	143	186	0	3.93	0.00	3.93
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-32	0	38	0.00	0.75	-0.75
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1339</b>	<b>966</b>			<b>32.65</b>	<b>4.29</b>	<b>28.37</b>
<b>Total IR Exch</b>	<b>2300</b>	<b>2744</b>			<b>67.26</b>	<b>4.35</b>	<b>62.92</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
17.78	3.73	21.50	26.40	30.60	-0.54	3.06	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
47.36	33.21	80.58	28.37	34.55	62.92	-18.99	1.34	-17.66

**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	0.00	1.40	4.90	88.10	84.60	62.30	10.50

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.42	13.02	49.32	19.16	50.02	0.29	0.17	50.14	49.59

**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	413	07:02	402	00:05	0.0	0.0	0.0	0.0
Gorakhpur	400	435	06:45	10	05:03	0.1	0.1	81.5	16.6
Bareilly	400	422	08:00	401	00:08	0.0	0.0	0.5	0.0
Kanpur	400	420	09:00	401	23:29	0.0	0.0	0.0	0.0
Dadri	400	415	08:04	398	23:15	0.0	0.0	0.0	0.0
Ballabgarh	400	419	07:02	400	23:34	0.0	0.0	0.0	0.0
Bawana	400	416	07:02	397	12:37	0.0	0.0	0.0	0.0
Bassi	400	428	03:05	408	23:14	0.0	0.0	23.9	0.0
Hissar	400	410	08:05	389	12:36	0.0	0.2	0.0	0.0
Moga	400	415	03:04	397	12:37	0.0	0.0	0.0	0.0
Abdullapur	400	413	08:03	282	11:32	0.1	0.1	0.0	0.0
Nalagarh	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kishenpur	400	413	08:02	394	19:56	0.0	0.0	0.0	0.0
Wagoora	400	415	08:03	382	19:31	0.0	12.7	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	500.50	1114.30	498.74	1041.47	1237.78	767.10
Pong	426.72	384.05	415.47	693.24	406.09	370.28	668.50	333.71
Tehri	829.79	740.04	788.70	425.68	NA	NA	624.16	526.00
Koteshwar	612.50	598.50	606.90	3.10	NA	NA	526.00	132.00
Chamera-I	760.00	748.75	751.07	12.30	752.00	NA	265.13	297.67
Rihand	268.22	252.98	259.08	255.50	256.28	127.50	NA	NA
RPS	352.80	343.81	346.44	NA	NA	NA	246.70	0.00
Jawahar Sagar	298.70	295.78	297.27	NA	NA	NA	88.80	230.56
RSD	527.91	487.91	508.31	NA	515.85	NA	275.21	255.73

**IX. System Constraints:**

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

**XI. Weather Conditions For 07.08.2011 :**

1 :Partial Rains in NCR region , HP , J & K , Uttaranchal and east UP.

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

1. KWHEP (JP) UNIT -3 ( 250 MW ) Declared commercial w.e.f 00:00 hrs / 08-09-2011.

**XIII. Synchronisation of new 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 : 07.08.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER