

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 08.05.2012  
Date of Reporting : 09.05.2012

### 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
32841	2966	35807	50.02	32045	1384	33429	49.93	770.0	58.03

\* 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	49.54	10.24		59.78	55.81	56.38	0.56	116.16	2.15
Haryana	46.21	0.67		46.87	43.36	59.52	16.16	106.39	8.85
Rajasthan	70.71	0.00	9.27	79.98	49.20	51.98	2.78	131.96	0.72
Delhi	35.19			35.19	66.91	54.13	-12.78	89.32	0.00
UP	93.28	8.50	7.20	108.98	89.04	130.62	41.58	239.59	41.38
Uttarakhand		14.18		14.18	11.34	15.00	3.66	29.18	3.03
HP		13.14		13.14	12.00	10.08	-1.92	23.22	0.00
J & K		13.85	0.00	13.85	16.18	15.15	-1.02	29.01	1.90
Chandigarh				0.00	4.70	5.13	0.44	5.13	0.00
<b>Total</b>	<b>294.92</b>	<b>60.58</b>	<b>16.47</b>	<b>371.97</b>	<b>348.53</b>	<b>397.99</b>	<b>49.46</b>	<b>769.96</b>	<b>58.03</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	
Punjab	5147	450	-212	429	4778	0	-14	431	10.31
Haryana	4899	491	875	181	4790	279	1148	169	4.12
Rajasthan	5615	0	74	-403	5184	0	260	-403	-9.66
Delhi	4032	0	-510	438	3169	0	-1001	438	10.51
UP	9461	1615	986	-3	10833	1105	2216	0	-0.06
Uttarakhand	1053	300	-141	34	1212	0	328	32	0.79
HP	975	10	-209	-570	833	0	-136	-340	-10.33
J&K	1416	100	-89	-358	1081	0	-104	-358	-8.83
Chandigarh	243	0	13	0	165	0	-4	0	0.24
<b>Total</b>	<b>32841</b>	<b>2966</b>	<b>787</b>	<b>-252</b>	<b>32045</b>	<b>1384</b>	<b>2694</b>	<b>-31</b>	<b>-2.92</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)	UI [OG:(+ve), UG: (-ve)]	
								Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1450	1584	1581	35.02	1459	34.80	0.22
	Rihand I STPS	1000	915	995	998	22.04	918	21.96	0.08
	Rihand II STPS	1000	825	1042	1047	20.15	839	19.80	0.35
	Dadri I STPS	840	593	646	636	14.15	590	14.24	-0.09
	Dadri II STPS	980	940	936	1020	22.17	924	22.57	-0.40
	Unchahar I TPS	420	395	429	439	9.48	395	9.47	0.02
	Unchahar II TPS	420	404	438	440	9.79	408	9.70	0.09
	Unchahar III TPS	210	200	218	220	4.84	202	4.80	0.04
	ISTPP (Jhajjar)	1000	480	393	406	8.72	364	8.64	0.09
	Dadri GPS	830	790	673	621	15.27	636	15.51	-0.25
	Anta GPS	419	389	332	260	6.67	278	6.63	0.04
	Auraiya GPS	663	612	301	311	7.13	297	7.38	-0.26
	<b>Sub Total (A)</b>	<b>9782</b>	<b>7993</b>	<b>7987</b>	<b>7979</b>	<b>175.42</b>	<b>7309</b>	<b>175.48</b>	<b>-0.06</b>
B. NPC	NAPS	440	266	296	302	6.27	261	6.38	-0.11
	RAPS- B	440	371	414	419	8.95	373	8.90	0.04
	RAPS- C	440	420	468	470	10.06	419	10.08	-0.02
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1057</b>	<b>1178</b>	<b>1191</b>	<b>25.28</b>	<b>1053</b>	<b>25.37</b>	<b>-0.09</b>
C. NHPC	Chamera I HPS	540	534	540	180	7.26	303	7.10	0.16
	Chamera II HPS	300	297	274	0	5.32	221	5.20	0.12
	Bairasuil HPS	180	182	182	182	3.73	155	3.56	0.17
	Salal-HPS	690	429	585	354	10.32	430	10.37	-0.05
	Tanakpur-HPS	94	21	42	31	0.66	28	0.63	0.04
	Uri-HPS	480	480	479	479	11.50	479	11.49	0.00
	Dhauliganga-HPS	280	277	278	0	2.21	92	2.14	0.07
	Dulhasti-HPS	390	388	406	413	9.41	392	8.79	0.62
	Sewa-II HPS	120	80	85	80	1.93	81	1.90	0.03
	<b>Sub Total (C)</b>	<b>3074</b>	<b>2687</b>	<b>2871</b>	<b>1719</b>	<b>52.33</b>	<b>2181</b>	<b>51.18</b>	<b>1.16</b>
D. NJPC	Nathpa Jhakri	1500	1600	1562	243	16.60	692	15.16	1.43
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1562</b>	<b>243</b>	<b>16.60</b>	<b>692</b>	<b>15.16</b>	<b>1.43</b>
E. THDC	Tehri HPS	1000	440	440	0	5.05	210	5.00	0.05
	Koteshwar HPS	400	300	305	0	2.48	103	2.40	0.08
	<b>Sub Total (E)</b>	<b>1400</b>	<b>740</b>	<b>745</b>	<b>0</b>	<b>7.53</b>	<b>314</b>	<b>7.40</b>	<b>0.13</b>
F. BBMB	Bhakra HPS	1480	679	1173	547	16.62	693	16.30	0.32
	Dehar HPS	990	302	435	330	9.21	384	7.25	1.96
	Pong HPS	396	93	240	0	2.52	105	2.23	0.29
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1074</b>	<b>1848</b>	<b>877</b>	<b>28.35</b>	<b>1181</b>	<b>25.78</b>	<b>2.57</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	160	0	1.61	67	1.33	0.28
	KWHEP HPS(IPP)	1000	0	600	300	9.14	381	9.55	-0.41
	Malana Stg-II HPS	100	0	0	15	0.56	23	0.00	0.56
	Shree Cement TPS	300	0	130	132	3.12	130	3.05	0.07
	<b>Sub Total (G)</b>	<b>1592</b>	<b>0</b>	<b>890</b>	<b>447</b>	<b>14.42</b>	<b>601</b>	<b>13.93</b>	<b>0.49</b>
<b>H. Total Regional Entities (A-G)</b>	<b>21535</b>	<b>15152</b>	<b>17081</b>	<b>12456</b>	<b>319.92</b>	<b>13330</b>	<b>314.30</b>	<b>5.62</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	1050	1050	23.63	985	
	Guru Nanak Dev TPS(Bhatinda)	440	216	218	4.66	194	
	Guru Hargobind Singh TPS(L.mbt)	920	954	968	21.25	885	
	Thermal (Total)	2620	2220	2236	49.54	2064	
	Total Hydro	1148	369	444	10.24	427	
	<b>Total Punjab</b>	<b>3768</b>	<b>2589</b>	<b>2680</b>	<b>59.78</b>	<b>2491</b>	
Haryana	Panipat TPS	1367	1020	1087	25.45	1060	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	369	303	8.50	354	
	RGTPP (khedar) (IPP)	1200	462	493	12.26	511	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	0	0.00	0	
	Thermal (Total)	4944	1851	1883	46.21	1925	
	Total Hydro	62	18	25	0.67	28	
	<b>Total Haryana</b>	<b>5006</b>	<b>1869</b>	<b>1908</b>	<b>46.87</b>	<b>1953</b>	
Rajasthan	kota TPS	1240	1172	1179	27.58	1149	
	suratgarh TPS	1500	1130	1141	26.68	1112	
	Chabra TPS	500	219	213	5.13	214	
	Dholpur GPS	330	96	98	2.33	97	
	Ramgarh GPS	111	23	23	0.70	29	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	103	134	2.55	106	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	540	233	215	5.74	239	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	2976	3003	70.71	2946	
	Total Hydro	550	0	0	0.00	0	
	Wind power	1843	85	477	8.09	337	
	Biomass	91	49	49	1.18	49	
	Solar	128	0	0	0.00	0	
	Renewable/Others (Total)	2062	134	526	9.27	386	
	<b>Total Rajasthan</b>	<b>7767</b>	<b>3110</b>	<b>3529</b>	<b>79.98</b>	<b>3333</b>	
	UP	Anpara TPS	1630	1100	1134	23.80	992
		Obra TPS	1382	520	543	11.70	488
Paricha TPS		640	368	337	7.80	325	
Panki TPS		210	140	125	2.80	117	
Harduaganj TPS		415	212	36	3.80	158	
Tanda TPS (NTPC)		440	294	291	7.12	297	
Roza TPS (IPP)		1200	847	689	18.37	765	
Anpara-C (IPP)		1200	455	450	10.82	451	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	254	334	7.08	295	
Thermal (Total)		7567	4190	3939	93.28	3887	
Vishnuparyag HPS (IPP)		400	179	168	4.08	170	
Other Hydro		527	218	0	4.42	184	
Cogeneration		981	300	300	7.20	300	
<b>Total UP</b>		<b>9475</b>	<b>4887</b>	<b>4407</b>	<b>108.98</b>	<b>4371</b>	
Uttarakhand		Total Hydro	1303	559	467	14.18	591
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>559</b>	<b>467</b>	<b>14.18</b>	<b>591</b>	
Delhi	Rajghat TPS	135	99	99	2.68	111	
	Delhi Gas Turbine	282	188	193	4.55	190	
	Pragati Gas Turbine	330	279	292	7.08	295	
	Rithala GPS	108	24	0	0.64	27	
	Bawana GPS	677	256	270	6.82	284	
	Badarpur TPS (NTPC)	705	620	595	13.41	559	
	Thermal (Total)	2237	1466	1449	35.19	1466	
	<b>Total Delhi</b>	<b>2237</b>	<b>1466</b>	<b>1449</b>	<b>35.19</b>	<b>1466</b>	
HP	Baspa HPS (IPP)	330	82	61	2.42	101	
	Malana HPS (IPP)	86	59	0	0.72	30	
	Other Hydro	589	420	405	10.00	416	
	<b>Total HP</b>	<b>1005</b>	<b>561</b>	<b>466</b>	<b>13</b>	<b>547</b>	
J & K	Baglihar HPS (IPP)	450	438	442	10.54	439	
	Other Hydro	323	140	133	3.31	138	
	Gas/Diesel/Others	183	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>956</b>	<b>578</b>	<b>575</b>	<b>13.85</b>	<b>577</b>	
<b>Total State Control Area Generation</b>		<b>31517</b>	<b>15619</b>	<b>15481</b>	<b>371.97</b>	<b>15329</b>	
<b>J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))</b>			<b>1840</b>	<b>4930</b>	<b>87.85</b>	<b>3660</b>	
<b>Total Regional Availability(Gross)</b>		<b>53052</b>	<b>34540</b>	<b>32867</b>	<b>779.74</b>	<b>32320</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10133	7786	3154	116.11	4838
State Control Area Hydro	5368	2303	1977	56.50	2354
<b>Total Regional Hydro</b>	<b>15500</b>	<b>10089</b>	<b>5131</b>	<b>172.61</b>	<b>7192</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	500	400	500	0	9.88	0.00	9.88
Gwalior-Agra (D/C)	299	1196	1225	0	21.16	0.00	21.16
Zerda-Kankroli	-112	13	110	177	0.00	0.59	-0.59
Zerda-Bhinmal	-33	88	235	200	1.25	0.00	1.25
Malanpur-Auraiya	-98	59	59	151	0.00	0.29	-0.29
Badod-Kota/Morak	75	58	115	0	1.46	0.00	1.46
<b>Sub Total WR</b>	<b>631</b>	<b>1814</b>			<b>33.75</b>	<b>0.88</b>	<b>32.88</b>
Pusauli Bypass	-132	220	330	132	3.35	0.17	3.18
MZP- GKP (D/C)	408	836	854	0	16.69	0.00	16.69
Patna-Balia(D/C)	361	566	575	0	10.39	0.00	10.39
B'Sharif-Balia (D/C)	204	645	647	0	10.12	0.00	10.12
Barh - Balia(D/C)	222	691	703	0	11.85	0.00	11.85
Pusauli-Balia	0	0	6	0	0.01	0.00	0.01
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	138	130	181	0	3.12	0.00	3.12
K'nasa-Sahupuri	48	60	60	0	0.10	0.00	0.10
Son Ngr-Rihand	-40	-32	0	47	0.00	0.48	-0.48
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1209</b>	<b>3116</b>			<b>55.63</b>	<b>0.65</b>	<b>54.98</b>
<b>Total IR Exch</b>	<b>1840</b>	<b>4930</b>			<b>89.38</b>	<b>1.53</b>	<b>87.85</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
35.61	0.57	36.17	-4.04	3.59	4.38	5.42	2.84	-2.84

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
39.36	6.50	45.86	54.98	32.88	87.85	15.62	26.37	41.99

**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	2.20	19.00	97.40	80.60	10.00	0.40

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.27	9.04	49.20	22.08	49.82	0.54	0.15	50.20	49.64

**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	403	06:52	390	15:20	0.0	0.0	0.0	0.0
Gorakhpur	400	431	18:36	400	01:11	0.0	0.0	23.3	0.5
Bareilly	400	402	23:42	394	23:28	0.0	0.0	0.0	0.0
Kanpur	400	411	06:53	387	15:21	0.0	0.5	0.0	0.0
Dadri	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Ballabgarh	400	418	06:52	392	15:22	0.0	0.0	0.0	0.0
Bawana	400	417	06:51	394	15:22	0.0	0.0	0.0	0.0
Bassi	400	421	04:05	393	13:46	0.0	0.0	0.0	0.0
Hissar	400	409	05:11	392	13:46	0.0	0.0	0.0	0.0
Moga	400	417	05:11	400	12:09	0.0	0.0	0.0	0.0
Abdullapur	400	420	05:10	280	14:08	0.2	0.2	0.0	0.0
Nalagarh	400	427	05:12	404	14:53	0.0	0.0	5.8	0.0
Kishenpur	400	413	18:03	400	12:09	0.0	0.0	0.0	0.0
Wagoora	400	408	04:04	386	22:07	0.0	5.4	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	472.03	303.45	491.69	495.33	348.50	569.17
Pong	426.72	384.05	403.11	296.79	411.14	534.70	61.33	166.64
Tehri	829.79	740.04	750.50	63.00	818.65	982.26	102.66	168.00
Koteshwar	612.50	598.50	610.50	4.95	NA	NA	168.00	164.00
Chamera-I	760.00	748.75	754.30	NA	NA	NA	238.51	196.29
Rihand	268.22	252.98	257.56	181.70	254.48	56.10	NA	NA
RPS	352.80	343.81	348.73	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.18	NA	NA	NA	NA	NA
RSD	527.91	487.91	499.80	NA	510.07	NA	164.86	110.86

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 08.05.2012 :**

1. Normal weather in NR.

**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 : 08.05.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER