

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.05.2012  
Date of Reporting : 25.05.2012

### 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
32772	3416	36188	49.87	34481	3580	38061	49.69	817.0	65.63

\* 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	48.63	15.31		63.94	73.19	75.94	2.74	139.87	4.35
Haryana	54.89	0.60		55.49	43.10	48.92	5.82	104.40	16.14
Rajasthan	80.18	0.00	14.86	95.04	41.88	51.88	10.00	146.92	3.16
Delhi	35.44			35.44	74.98	65.51	-9.47	100.95	0.14
UP	94.77	11.32	7.20	113.29	93.91	120.11	26.21	233.40	36.67
Uttarakhand		15.05		15.05	13.37	15.74	2.37	30.79	2.22
HP		13.68		13.68	11.19	10.43	-0.76	24.11	0.00
J & K		14.25	0.00	14.25	16.94	16.78	-0.16	31.03	2.95
Chandigarh				0.00	5.20	5.56	0.36	5.56	0.00
<b>Total</b>	<b>313.90</b>	<b>70.21</b>	<b>22.06</b>	<b>406.17</b>	<b>373.76</b>	<b>410.87</b>	<b>37.11</b>	<b>817.04</b>	<b>65.63</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	5608	450	-239	569	5694	0	-104	570	13.66
Haryana	4315	985	267	205	4469	1013	238	205	4.91
Rajasthan	6330	36	323	-131	6189	14	185	-431	-8.24
Delhi	4212	0	-420	608	3797	0	-680	599	14.51
UP	8556	1715	101	70	10866	2383	1938	75	1.71
Uttarakhand	1473	80	218	27	1256	70	-9	27	0.66
HP	663	0	-154	-609	817	0	-70	-391	-12.66
J&K	1363	150	-79	-408	1195	100	-152	-428	-10.18
Chandigarh	252	0	26	0	198	0	7	0	0.57
<b>Total</b>	<b>32772</b>	<b>3416</b>	<b>43</b>	<b>331</b>	<b>34481</b>	<b>3580</b>	<b>1353</b>	<b>226</b>	<b>4.93</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	1614	1557	2021	39.20	1634	38.74	0.47
	Rihand I STPS	1000	898	979	982	21.69	904	21.55	0.13
	Rihand II STPS	1000	938	1034	1036	23.00	958	22.52	0.48
	Dadri I STPS	840	646	822	655	14.32	597	15.50	-1.17
	Dadri II STPS	980	958	1012	1022	23.15	965	23.00	0.15
	Unchahar I TPS	420	402	442	440	9.71	405	9.64	0.07
	Unchahar II TPS	420	403	440	441	9.72	405	9.67	0.05
	Unchahar III TPS	210	201	220	219	4.95	206	4.82	0.13
	ISTPP (Jhajjar)	1000	379	472	323	9.24	385	8.96	0.28
	Dadri GPS	830	742	621	765	16.68	695	16.88	-0.19
	Anta GPS	419	380	286	394	8.49	354	8.44	0.05
	Auraiya GPS	663	585	584	612	13.55	565	13.25	0.30
	<b>Sub Total (A)</b>	<b>9782</b>	<b>8146</b>	<b>8469</b>	<b>8910</b>	<b>193.71</b>	<b>8071</b>	<b>192.97</b>	<b>0.74</b>
	B. NPC	NAPS	440	136	148	150	3.09	129	3.26
RAPS- B		440	389	431	437	9.32	389	9.34	-0.01
RAPS- C		440	232	230	222	4.92	205	5.57	-0.65
<b>Sub Total (B)</b>		<b>1320</b>	<b>757</b>	<b>809</b>	<b>809</b>	<b>17.34</b>	<b>722</b>	<b>18.17</b>	<b>-0.83</b>
C. NHPC	Chamera I HPS	540	534	540	540	8.28	345	8.49	-0.21
	Chamera II HPS	300	269	299	200	5.43	226	5.41	0.03
	Bairasuil HPS	180	182	161	182	3.38	141	3.30	0.09
	Salal-HPS	690	466	569	549	10.97	457	11.25	-0.28
	Tanakpur-HPS	94	33	53	34	1.05	44	0.98	0.07
	Uri-HPS	480	476	480	480	11.59	483	11.51	0.08
	Dhauliganga-HPS	280	277	277	143	3.24	135	3.40	-0.16
	Dulhasti-HPS	390	388	414	393	9.20	383	9.31	-0.11
	Sewa-II HPS	120	80	85	86	1.89	79	1.83	0.06
	<b>Sub Total (C)</b>	<b>3074</b>	<b>2704</b>	<b>2878</b>	<b>2606</b>	<b>55.03</b>	<b>2293</b>	<b>55.47</b>	<b>-0.45</b>
D. NJPC	Nathpa Jhakri	1500	1600	1625	539	17.00	709	20.66	-3.66
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1625</b>	<b>539</b>	<b>17.00</b>	<b>709</b>	<b>20.66</b>	<b>-3.66</b>
E. THDC	Tehri HPS	1000	520	390	390	5.01	209	5.00	0.01
	Koteshwar HPS	400	400	199	92	2.66	111	2.60	0.06
	<b>Sub Total (E)</b>	<b>1400</b>	<b>920</b>	<b>589</b>	<b>482</b>	<b>7.67</b>	<b>320</b>	<b>7.60</b>	<b>0.07</b>
F. BBMB	Bhakra HPS	1480	701	1139	5366	17.16	715	16.83	0.33
	Dehar HPS	990	415	660	420	10.89	454	9.97	0.92
	Pong HPS	396	194	302	182	4.80	200	4.66	0.14
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1311</b>	<b>2101</b>	<b>5968</b>	<b>32.85</b>	<b>1369</b>	<b>31.46</b>	<b>1.39</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	161	9	2.74	114	1.90	0.84
	KWHEP HPS(IPP)	1000	0	685	370	9.95	415	11.50	-1.55
	Malana Stg-II HPS	100	0	35	34	0.77	32	0.00	0.77
	Shree Cement TPS	300	0	144	143	3.43	143	3.05	0.38
	<b>Sub Total (G)</b>	<b>1592</b>	<b>0</b>	<b>1025</b>	<b>555.83</b>	<b>16.88</b>	<b>704</b>	<b>16.45</b>	<b>0.44</b>
<b>H. Total Regional Entities (A-G)</b>	<b>21535</b>	<b>15437</b>	<b>17496</b>	<b>19870</b>	<b>340.47</b>	<b>14186</b>	<b>342.77</b>	<b>-2.30</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	1045	1050	23.42	976
	Guru Nanak Dev TPS(Bhatinda)	440	210	165	3.83	159
	Guru Hargobind Singh TPS(L.mbt)	920	961	962	21.38	891
	Thermal (Total)	2620	2216	2177	48.63	2026
	Total Hydro	1148	419	676	15.31	638
	<b>Total Punjab</b>	<b>3768</b>	<b>2635</b>	<b>2853</b>	<b>63.94</b>	<b>2664</b>
Haryana	Panipat TPS	1367	1107	1128	27.00	1125
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0
	Faridabad GPS (NTPC)	432	360	374	8.81	367
	RGTPP (khedar) (IPP)	1200	545	540	13.29	554
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	0	421	5.79	241
	Thermal (Total)	4944	2012	2463	54.89	2287
	Total Hydro	62	9	17	0.60	25
	<b>Total Haryana</b>	<b>5006</b>	<b>2021</b>	<b>2480</b>	<b>55.49</b>	<b>2312</b>
Rajasthan	kota TPS	1240	971	973	22.93	955
	suratgarh TPS	1500	1353	1358	32.23	1343
	Chabra TPS	500	0	0	0.00	0
	Dholpur GPS	330	94	190	2.72	113
	Ramgarh GPS	111	54	53	1.33	55
	RAPS A (NPC)	300	171	164	4.21	175
	Barsingsar (NLC)	250	211	185	5.04	210
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	540	465	465	11.73	489
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Thermal (Total)	5156	3319	3388	80.18	3341
	Total Hydro	550	0	0	0.00	0
	Wind power	1843	754	556	14.03	584
	Biomass	91	35	35	0.83	35
	Solar	128	0	0	0.00	0
	Renewable/Others (Total)	2062	789	591	14.86	619
	<b>Total Rajasthan</b>	<b>7767</b>	<b>4108</b>	<b>3979</b>	<b>95.04</b>	<b>3960</b>
	UP	Anpara TPS	1630	1196	1205	28.10
Obra TPS		1382	350	368	8.60	358
Paricha TPS		640	397	530	8.60	358
Panki TPS		210	70	55	1.60	67
Harduaganj TPS		665	248	244	6.50	271
Tanda TPS (NTPC)		440	189	293	5.61	234
Roza TPS (IPP)		1200	819	824	19.70	821
Anpara-C (IPP)		1200	314	306	7.55	315
Bajaj Energy Pvt.Ltd(IPP) TPS		450	388	336	8.51	355
Thermal (Total)		7817	3971	4161	94.77	3949
Vishnuparyag HPS (IPP)		400	397	313	7.73	322
Other Hydro		527	158	0	3.59	150
Cogeneration		981	300	300	7.20	300
<b>Total UP</b>		<b>9725</b>	<b>4826</b>	<b>4774</b>	<b>113.29</b>	<b>4398</b>
Uttarakhand		Total Hydro	1303	656	614	15.05
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>656</b>	<b>614</b>	<b>15.05</b>	<b>627</b>
Delhi	Rajghat TPS	135	51	96	2.04	85
	Delhi Gas Turbine	282	215	224	5.35	223
	Pragati Gas Turbine	330	272	275	6.89	287
	Rithala GPS	108	32	33	0.78	33
	Bawana GPS	677	224	212	5.40	225
	Badarpur TPS (NTPC)	705	600	595	14.98	624
	Thermal (Total)	2237	1394	1435	35.44	1477
	<b>Total Delhi</b>	<b>2237</b>	<b>1394</b>	<b>1435</b>	<b>35.44</b>	<b>1477</b>
HP	Baspa HPS (IPP)	330	168	59	3.53	147
	Malana HPS (IPP)	86	33	13	0.86	36
	Other Hydro	589	327	389	9.29	387
	<b>Total HP</b>	<b>1005</b>	<b>528</b>	<b>461</b>	<b>14</b>	<b>570</b>
J & K	Baglihar HPS (IPP)	450	437	437	10.50	437
	Other Hydro	323	166	155	3.76	156
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>603</b>	<b>592</b>	<b>14.25</b>	<b>594</b>
<b>Total State Control Area Generation</b>		<b>31767</b>	<b>16771</b>	<b>17188</b>	<b>406.17</b>	<b>16602</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1914</b>	<b>4123</b>	<b>76.08</b>	<b>3170</b>
<b>Total Regional Availability(Gross)</b>		<b>53302</b>	<b>36181</b>	<b>41181</b>	<b>822.73</b>	<b>33958</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10133	8074	10008	126.00	5250
State Control Area Hydro	5368	2373	2360	62.48	2603
<b>Total Regional Hydro</b>	<b>15500</b>	<b>10447</b>	<b>12368</b>	<b>188.49</b>	<b>7854</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	400	-100	400	100	5.23	0.17	5.06
Gwalior-Agra (D/C)	503	1204	1367	0	22.56	0.00	22.56
Zerda-Kankroli	11	109	185	160	0.78	0.00	0.78
Zerda-Bhinmal	2	142	290	177	1.38	0.00	1.38
Malanpur-Auraiya	-140	5	12	135	0.00	1.16	-1.16
Badod-Kota/Morak	38	82	142	0	1.88	0.00	1.88
<b>Sub Total WR</b>	<b>814</b>	<b>1442</b>			<b>31.83</b>	<b>1.33</b>	<b>30.50</b>
Pusauli Bypass	-216	87	216	251	1.11	1.02	0.09
MZP- GKP (D/C)	84	822	906	0	13.66	0.00	13.66
Patna-Balia(D/C)	465	437	643	0	9.13	0.00	9.13
B'Sharif-Balia (D/C)	319	617	650	0	11.13	0.00	11.13
Barh - Balia(D/C)	286	437	449	0	8.95	0.00	8.95
Pusauli-Balia	0	112	112	0	0.22	0.00	0.22
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	154	141	154	0	3.24	0.00	3.24
K'nasa-Sahupuri	48	60	60	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-32	0	47	0.00	0.84	-0.84
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1100</b>	<b>2681</b>			<b>47.43</b>	<b>1.86</b>	<b>45.58</b>
<b>Total IR Exch</b>	<b>1914</b>	<b>4123</b>			<b>79.26</b>	<b>3.18</b>	<b>76.08</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
29.53	0.71	30.24	-0.80	8.40	-3.81	-0.39	2.99	-2.99

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
28.61	5.61	34.22	45.58	30.50	76.08	16.97	24.89	41.86

**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	4.00	20.90	51.40	78.40	47.90	6.90	0.70

----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.32	18.05	49.03	23.10	49.68	1.60	0.23	50.20	0.00

**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	404	00:00	395	23:05	0.0	0.0	0.0	0.0
Gorakhpur	400	428	13:24	410	07:43	0.5	0.5	22.2	0.0
Bareilly	400	418	19:06	389	04:22	0.0	0.3	0.0	0.0
Kanpur	400	413	13:21	397	04:39	0.0	0.0	0.0	0.0
Dadri	400	410	13:20	397	07:51	0.0	0.0	0.0	0.0
Ballabgarh	400	414	19:02	398	16:51	0.0	0.0	0.0	0.0
Bawana	400	412	05:41	399	16:49	0.0	0.0	0.0	0.0
Bassi	400	419	00:00	393	08:28	0.0	0.0	0.0	0.0
Hissar	400	409	13:21	390	07:09	0.0	0.0	0.0	0.0
Moga	400	416	18:03	396	08:38	0.0	0.0	0.0	0.0
Abdullapur	400	415	06:03	283	09:29	0.1	0.1	0.0	0.0
Nalagarh	400	417	05:16	401	07:49	0.0	0.0	0.0	0.0
Kishenpur	400	414	18:02	397	22:05	0.0	0.0	0.0	0.0
Wagoora	400	409	18:03	387	22:02	0.0	2.4	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	469.05	252.64	479.56	447.75	428.38	610.37
Pong	426.72	384.05	401.58	259.17	411.36	544.90	65.44	344.59
Tehri	829.79	740.04	745.40	23.98	818.65	982.26	113.32	160.00
Koteshwar	612.50	598.50	610.05	4.69	NA	NA	160.00	182.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	256.70	145.10	254.23	46.70	NA	NA
RPS	352.80	343.81	349.71	NA	344.97	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.73	NA	295.81	NA	NA	NA
RSD	527.91	487.91	500.02	NA	510.40	NA	191.76	213.54

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 24.05.2012 :**

Hot weather

**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 : 24.05.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER