

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 17.05.2012  
Date of Reporting : 18.05.2012

### 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
33453	3809	37262	49.83	32661	1350	34011	50.08	775.8	73.07

\* 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	47.85	12.37		60.22	62.19	62.97	0.77	123.19	5.83
Haryana	55.93	0.75		56.67	47.26	47.08	-0.18	103.75	7.95
Rajasthan	67.97	0.13	18.32	86.43	43.39	47.62	4.22	134.04	6.80
Delhi	32.96			32.96	71.03	60.39	-10.64	93.34	0.06
UP	89.05	11.02	7.20	107.27	100.66	126.69	26.04	233.96	45.57
Uttarakhand		15.44		15.44	12.17	14.49	2.32	29.93	3.42
HP		13.61		13.61	11.68	9.62	-2.06	23.23	0.49
J & K		14.26	0.00	14.26	16.84	14.82	-2.01	29.08	2.95
Chandigarh				0.00	5.48	5.26	-0.23	5.26	0.00
<b>Total</b>	<b>293.76</b>	<b>67.57</b>	<b>25.52</b>	<b>386.85</b>	<b>370.70</b>	<b>388.94</b>	<b>18.24</b>	<b>775.79</b>	<b>73.07</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	5398	743	97	491	5330	0	-30	492	11.79
Haryana	4537	783	-53	169	4548	0	493	169	4.05
Rajasthan	6095	273	513	-396	4229	0	-937	-396	-9.27
Delhi	3957	0	-512	396	3792	0	-473	396	9.51
UP	9567	1710	558	70	11276	1250	1646	75	1.71
Uttarakhand	1348	150	36	28	1320	0	169	27	0.68
HP	934	0	-136	-659	864	0	-144	-441	-13.86
J&K	1380	150	-73	-393	1107	100	-160	-393	-9.67
Chandigarh	238	0	-10	0	195	0	-6	0	0.57
<b>Total</b>	<b>33453</b>	<b>3809</b>	<b>420</b>	<b>-293</b>	<b>32661</b>	<b>1350</b>	<b>557</b>	<b>-70</b>	<b>-4.48</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 Net MU
A. NTPC	Singrauli STPS	2000	1695	1735	1648	40.72	1697	40.56	0.16
	Rihand I STPS	1000	915	1000	996	22.03	918	21.91	0.12
	Rihand II STPS	1000	965	1048	1039	23.38	974	23.11	0.28
	Dadri I STPS	840	598	654	627	13.84	577	13.73	0.11
	Dadri II STPS	980	960	1004	1009	22.27	928	22.23	0.04
	Unchahar I TPS	420	391	442	438	9.40	392	9.36	0.04
	Unchahar II TPS	420	404	440	440	9.67	403	9.63	0.04
	Unchahar III TPS	210	201	219	219	4.82	201	4.80	0.02
	ISTPP (Jhajjar)	1000	940	868	964	21.00	875	20.26	0.74
	Dadri GPS	830	777	706	770	15.99	666	16.15	-0.16
	Anta GPS	419	381	325	383	7.73	322	7.71	0.02
	Auraiya GPS	663	609	563	614	12.74	531	12.31	0.42
	<b>Sub Total (A)</b>	<b>9782</b>	<b>8837</b>	<b>9004</b>	<b>9147</b>	<b>203.57</b>	<b>8482</b>	<b>201.75</b>	<b>1.82</b>
	B. NPC	NAPS	440	68	132	0	1.07	44	1.62
RAPS- B		440	373	408	413	8.80	367	8.95	-0.16
RAPS- C		440	420	376	437	8.47	353	10.08	-1.61
<b>Sub Total (B)</b>		<b>1320</b>	<b>861</b>	<b>916</b>	<b>850</b>	<b>18.34</b>	<b>764</b>	<b>20.65</b>	<b>-2.32</b>
C. NHPC	Chamera I HPS	540	534	534	534	7.46	311	7.30	0.16
	Chamera II HPS	300	297	298	279	6.82	284	6.73	0.09
	Bairasuil HPS	180	182	182	182	3.98	166	3.58	0.40
	Salal-HPS	690	513	568	403	12.54	523	12.30	0.24
	Tanakpur-HPS	94	23	60	23	0.82	34	0.83	-0.01
	Uri-HPS	480	477	480	479	11.58	483	11.55	0.03
	Dhauliganga-HPS	280	277	68	0	2.11	88	2.04	0.07
	Dulhasti-HPS	390	388	415	258	9.05	377	9.44	-0.39
	Sewa-II HPS	120	80	84	78	1.93	80	1.96	-0.03
	<b>Sub Total (C)</b>	<b>3074</b>	<b>2769</b>	<b>2689</b>	<b>2236</b>	<b>56.30</b>	<b>2346</b>	<b>55.72</b>	<b>0.57</b>
D. NJPC	Nathpa Jhakri	1500	1600	1600	1400	22.65	944	22.04	0.61
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1600</b>	<b>1400</b>	<b>22.65</b>	<b>944</b>	<b>22.04</b>	<b>0.61</b>
E. THDC	Tehri HPS	1000	410	412	0	5.06	211	5.00	0.06
	Koteshwar HPS	400	276	203	88	2.81	117	2.40	0.41
	<b>Sub Total (E)</b>	<b>1400</b>	<b>686</b>	<b>615</b>	<b>88</b>	<b>7.87</b>	<b>328</b>	<b>7.40</b>	<b>0.47</b>
F. BBMB	Bhakra HPS	1480	714	1049	498	17.32	722	17.14	0.18
	Dehar HPS	990	454	660	310	11.94	498	10.90	1.04
	Pong HPS	396	57	183	0	1.47	61	1.37	0.10
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1226</b>	<b>1892</b>	<b>808</b>	<b>30.73</b>	<b>1280</b>	<b>29.41</b>	<b>1.32</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	209	0	2.25	94	1.81	0.44
	KWHEP HPS(IPP)	1000	0	750	400	12.34	514	12.68	-0.34
	Malana Stg-II HPS	100	0	42	41	0.94	39	0.00	0.94
	Shree Cement TPS	300	0	140	147	3.42	142	3.05	0.37
	<b>Sub Total (G)</b>	<b>1592</b>	<b>0</b>	<b>1141</b>	<b>588</b>	<b>18.95</b>	<b>790</b>	<b>17.54</b>	<b>1.41</b>
<b>H. Total Regional Entities (A-G)</b>	<b>21535</b>	<b>15978</b>	<b>17857</b>	<b>15117</b>	<b>358.41</b>	<b>14934</b>	<b>354.53</b>	<b>3.88</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	23.17	966	
	Guru Nanak Dev TPS(Bhatinda)	440	105	216	3.72	155	
	Guru Hargobind Singh TPS(L.mbt)	920	962	968	20.96	873	
	Thermal (Total)	2620	2117	2234	47.85	1994	
	Total Hydro	1148	438	594	12.37	515	
	<b>Total Punjab</b>	<b>3768</b>	<b>2555</b>	<b>2828</b>	<b>60.22</b>	<b>2509</b>	
Haryana	Panipat TPS	1367	988	980	23.31	971	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	266	379	7.26	303	
	RGTPP (kheldar) (IPP)	1200	533	496	12.55	523	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	584	339	12.80	533	
	Thermal (Total)	4944	2371	2194	55.93	2330	
	Total Hydro	62	15	12	0.75	31	
	<b>Total Haryana</b>	<b>5006</b>	<b>2386</b>	<b>2206</b>	<b>56.67</b>	<b>2361</b>	
Rajasthan	kota TPS	1240	1146	1154	27.05	1127	
	suratgarh TPS	1500	1106	1131	24.89	1037	
	Chabra TPS	500	204	199	4.79	200	
	Dholpur GPS	330	96	180	2.34	98	
	Ramgarh GPS	111	27	29	0.73	30	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingsar (NLC)	250	0	0	0.00	0	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	540	340	340	8.18	341	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	2919	3033	67.97	2832	
	Total Hydro	550	11	0	0.13	6	
	Wind power	1843	729	667	16.95	706	
	Biomass	91	52	52	1.24	52	
	Solar	128	0	0	0.00	0	
	Renewable/Others (Total)	2062	781	719	18.32	763	
	<b>Total Rajasthan</b>	<b>7767</b>	<b>3711</b>	<b>3752</b>	<b>86.43</b>	<b>3601</b>	
	UP	Anpara TPS	1630	1064	1074	25.70	1071
		Obra TPS	1382	317	286	7.20	300
Paricha TPS		640	353	372	8.50	354	
Panki TPS		210	117	122	2.30	96	
Harduaganj TPS		665	225	199	5.10	213	
Tanda TPS (NTPC)		440	287	283	7.13	297	
Roza TPS (IPP)		1200	739	693	17.12	713	
Anpara-C (IPP)		1200	368	297	7.90	329	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	329	350	8.09	337	
Thermal (Total)		7817	3799	3676	89.05	3710	
Vishnuparyag HPS (IPP)		400	282	258	6.10	254	
Other Hydro		527	230	0	4.92	205	
Cogeneration		981	300	300	7.20	300	
<b>Total UP</b>		<b>9725</b>	<b>4611</b>	<b>4234</b>	<b>107.27</b>	<b>4215</b>	
Uttarakhand		Total Hydro	1303	679	629	15.44	643
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>679</b>	<b>629</b>	<b>15.44</b>	<b>643</b>	
Delhi	Rajghat TPS	135	104	95	2.63	110	
	Delhi Gas Turbine	282	221	225	5.67	236	
	Pragati Gas Turbine	330	278	279	6.99	291	
	Rithala GPS	108	31	30	0.76	32	
	Bawana GPS	677	267	292	6.32	263	
	Badarpur TPS (NTPC)	705	510	495	10.59	441	
	Thermal (Total)	2237	1411	1416	32.96	1373	
	<b>Total Delhi</b>	<b>2237</b>	<b>1411</b>	<b>1416</b>	<b>32.96</b>	<b>1373</b>	
HP	Baspa HPS (IPP)	330	95	53	2.83	118	
	Malana HPS (IPP)	86	35	15	0.82	34	
	Other Hydro	589	414	423	9.96	415	
	<b>Total HP</b>	<b>1005</b>	<b>544</b>	<b>491</b>	<b>14</b>	<b>567</b>	
J & K	Baglihar HPS (IPP)	450	438	436	10.50	438	
	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>604</b>	<b>591</b>	<b>14.26</b>	<b>594</b>	
<b>Total State Control Area Generation</b>		<b>31767</b>	<b>16501</b>	<b>16147</b>	<b>386.85</b>	<b>15865</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1118</b>	<b>2397</b>	<b>44.21</b>	<b>1842</b>	
<b>Total Regional Availability(Gross)</b>		<b>53302</b>	<b>35476</b>	<b>33661</b>	<b>789.46</b>	<b>32640</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10133	7797	4973	133.08	5545
State Control Area Hydro	5368	2521	2317	61.47	2561
<b>Total Regional Hydro</b>	<b>15500</b>	<b>10318</b>	<b>7290</b>	<b>194.55</b>	<b>8106</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	200	200	200	200	1.52	1.37	0.15
Gwalior-Agra (D/C)	307	747	1115	0	15.02	0.00	15.02
Zerda-Kankroli	-44	-75	132	358	0.00	1.41	-1.41
Zerda-Bhinmal	-54	-82	177	441	0.00	1.14	-1.14
Malanpur-Auraiya	-57	-82	0	101	0.00	2.45	-2.45
Badod-Kota/Morak	11	2	94	45	0.46	0.00	0.46
<b>Sub Total WR</b>	<b>363</b>	<b>710</b>			<b>17.00</b>	<b>6.37</b>	<b>10.63</b>
Pusauli Bypass	-209	-76	216	242	0.60	1.92	-1.32
MZP- GKP (D/C)	282	656	804	0	14.09	0.00	14.09
Patna-Balia(D/C)	202	552	597	0	8.39	0.00	8.39
B'Sharif-Balia (D/C)	130	393	458	0	7.33	0.00	7.33
Barh - Balia(D/C)	202	0	355	0	2.85	0.00	2.85
Pusauli-Balia	0	0	0	0	0.00	0.00	0.00
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	140	134	157	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	0.97	-0.97
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>755</b>	<b>1687</b>			<b>36.47</b>	<b>2.89</b>	<b>33.58</b>
<b>Total IR Exch</b>	<b>1118</b>	<b>2397</b>			<b>53.47</b>	<b>9.26</b>	<b>44.21</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
31.29	0.92	32.21	-2.91	0.74	-1.72	1.52	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
30.57	-1.60	28.97	33.58	10.63	44.21	3.01	12.23	15.24

**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	0.30	9.00	31.70	88.90	66.20	16.60	2.10

<----- 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				
50.49	4.04	49.08	23.49	49.80	0.88	0.22	50.39	49.47

**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	409	04:35	400	02:02	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kanpur	400	415	04:01	396	10:19	0.0	0.0	0.0	0.0
Dadri	400	420	04:40	397	12:10	0.0	0.0	0.0	0.0
Ballabgarh	400	427	04:00	399	14:14	0.0	0.0	6.3	0.0
Bawana	400	423	04:01	400	14:14	0.0	0.0	5.2	0.0
Bassi	400	435	03:59	394	08:25	0.0	0.0	9.3	1.2
Hissar	400	406	21:38	0	17:16	34.9	34.9	0.0	0.0
Moga	400	431	04:03	399	10:20	0.0	0.0	6.7	0.2
Abdullapur	400	414	17:59	286	09:32	0.2	0.2	0.0	0.0
Nalagarh	400	430	04:04	399	08:25	0.0	0.0	4.4	0.0
Kishenpur	400	421	04:03	399	21:06	0.0	0.0	0.2	0.0
Wagoora	400	413	04:01	386	21:04	0.0	8.1	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	470.18	272.43	479.88	454.47	442.65	618.24
Pong	426.72	384.05	402.51	281.22	411.09	534.70	52.05	99.45
Tehri	829.79	740.04	747.85	35.00	818.65	982.26	99.67	172.00
Koteshwar	612.50	598.50	611.20	5.20	NA	NA	176.00	186.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	235.37	238.89
Rihand	268.22	252.98	257.10	162.00	254.33	50.20	NA	NA
RPS	352.80	343.81	349.36	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.03	NA	NA	NA	NA	NA
RSD	527.91	487.91	500.39	NA	510.23	NA	227.24	315.65

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 17.05.2012 :**

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 : 17.05.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER