

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 23.06.2012  
Date of Reporting : 24.06.2012

### 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
38062	3829	41891	49.81	39485	2806	42291	49.84	936.7	77.22

\* 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	46.72	17.98		64.70	120.28	129.94	9.66	194.64	19.46
Haryana	58.52	0.95		59.47	63.00	76.61	13.61	136.08	19.49
Rajasthan	70.52	0.00	28.46	98.98	40.89	57.19	16.30	156.17	2.07
Delhi	26.65			26.65	89.19	82.66	-6.53	109.31	0.14
UP	103.55	14.14	4.80	122.49	112.86	127.28	14.42	249.77	32.62
Uttarakhand		20.50		20.50	12.73	12.43	-0.30	32.92	0.41
HP		17.92		17.92	5.53	4.31	-1.22	22.23	0.08
J & K		15.10	0.00	15.10	14.18	14.17	-0.01	29.26	2.95
Chandigarh				0.00	7.07	6.35	-0.72	6.35	0.00
<b>Total</b>	<b>305.95</b>	<b>86.58</b>	<b>33.26</b>	<b>425.80</b>	<b>465.73</b>	<b>510.93</b>	<b>45.21</b>	<b>936.73</b>	<b>77.22</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	8243	1527	344	1881	8122	640	358	1943	46.51
Haryana	5803	798	731	406	5207	695	194	406	9.74
Rajasthan	6383	0	947	-229	6361	328	444	-229	-5.50
Delhi	4469	4	-311	654	4503	3	-176	517	17.53
UP	9272	1340	-474	0	11831	1040	1171	50	1.50
Uttarakhand	1515	0	95	31	1448	0	96	27	0.65
HP	754	10	-151	-1277	841	0	-12	-1285	-31.74
J&K	1368	150	60	-554	919	100	-234	-554	-13.53
Chandigarh	255	0	-58	40	253	0	-3	20	1.20
<b>Total</b>	<b>38062</b>	<b>3829</b>	<b>1183</b>	<b>952</b>	<b>39485</b>	<b>2806</b>	<b>1838</b>	<b>896</b>	<b>26.37</b>

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

### III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity	Declared	Peak MW	Off Peak MW	Energy	Average	Schedule	UI	
		(Effective) MW	Capacity(MW)	(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU	
A. NTPC	Singrauli STPS	2000	1578	1855	1334	37.81	1575	37.87	-0.06	
	Rihand I STPS	1000	887	980	973	21.50	896	21.30	0.20	
	Rihand II STPS	1000	950	1039	1035	23.42	976	22.80	0.62	
	Rihand III STPS	500		0	0	0.00	0		0.00	
	Dadri I STPS	840	793	870	870	19.06	794	19.04	0.02	
	Dadri II STPS	980	963	1011	1021	23.15	965	23.12	0.04	
	Unchahar I TPS	420	402	433	439	9.69	404	9.65	0.05	
	Unchahar II TPS	420	402	439	434	9.70	404	9.65	0.05	
	Unchahar III TPS	210	197	215	217	4.76	199	4.73	0.04	
	ISTPP (Jhajjar)	1000	920	973	1014	21.62	901	21.89	-0.27	
	Dadri GPS	830	760	554	717	15.64	652	15.68	-0.04	
	Anta GPS	419	252	182	245	5.09	212	4.99	0.09	
	Auraiya GPS	663	590	411	453	10.15	423	10.13	0.01	
	<b>Sub Total (A)</b>	<b>10282</b>	<b>8695</b>	<b>8962</b>	<b>8752</b>	<b>201.58</b>	<b>8399</b>	<b>200.83</b>	<b>0.75</b>	
	B. NPC	NAPS	440	254	289	294	6.11	255	6.10	0.01
RAPS- B		440	391	431	437	9.37	390	9.38	-0.02	
RAPS- C		440	200	221	229	4.84	202	4.80	0.04	
<b>Sub Total (B)</b>		<b>1320</b>	<b>845</b>	<b>941</b>	<b>960</b>	<b>20.32</b>	<b>847</b>	<b>20.28</b>	<b>0.04</b>	
C. NHPC	Chamera I HPS	540	534	540	540	12.84	535	12.82	0.02	
	Chamera II HPS	300	300	304	303	7.20	300	7.20	0.00	
	Chamera III HPS	231		77	77	3.60	150		3.60	
	Bairasuil HPS	180	182	182	120	3.15	131	3.22	-0.07	
	Salal-HPS	690	662	660	660	15.77	657	15.89	-0.12	
	Tanakpur-HPS	94	84	84	94	2.19	91	2.20	-0.01	
	Uri-HPS	480	473	480	480	11.58	482	11.52	0.06	
	Dhauliganga-HPS	280	277	285	285	6.80	283	6.87	-0.08	
	Dulhasti-HPS	390	387	405	401	9.25	386	9.31	-0.06	
	Sewa-II HPS	120	80	85	85	1.19	50	1.17	0.02	
	<b>Sub Total (C)</b>	<b>3305</b>	<b>2978</b>	<b>3102</b>	<b>3045</b>	<b>73.57</b>	<b>3065</b>	<b>70.19</b>	<b>3.37</b>	
	D. NJPC	Nathpa Jhakri	1500	1600	1620	1618	38.60	1608	38.40	0.20
		<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1620</b>	<b>1618</b>	<b>38.60</b>	<b>1608</b>	<b>38.40</b>	<b>0.20</b>
E. THDC	Tehri HPS	1000	520	520	517	8.38	349	8.50	-0.12	
	Koteshwar HPS	400	316	100	192	4.09	171	4.10	-0.01	
	<b>Sub Total (E)</b>	<b>1400</b>	<b>836</b>	<b>620</b>	<b>709</b>	<b>12.48</b>	<b>520</b>	<b>12.60</b>	<b>-0.12</b>	
F. BBMB	Bhakra HPS	1480	898	1093	746	22.26	928	21.56	0.70	
	Dehar HPS	990	603	825	645	14.87	620	14.48	0.39	
	Pong HPS	396	225	318	171	5.38	224	5.39	-0.01	
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1726</b>	<b>2236</b>	<b>1562</b>	<b>42.51</b>	<b>1771</b>	<b>41.43</b>	<b>1.08</b>	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	231	233	5.52	230	4.06	1.46	
	KWHEP HPS(IPP)	1000	0	1200	1200	28.51	1188	28.45	0.06	
	Malana Stg-II HPS	100	0	105	108	2.55	106	0.00	2.55	
	Shree Cement TPS	300	0	282	279	6.76	282	6.61	0.15	
	Budhil HPS(IPP)	70		71	70	1.22	51		1.22	
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1889</b>	<b>1890</b>	<b>44.56</b>	<b>1857</b>	<b>39.12</b>	<b>5.44</b>		
<b>H. Total Regional Entities (A-G)</b>	<b>22336</b>	<b>16680</b>	<b>19370</b>	<b>18536</b>	<b>433.61</b>	<b>18067</b>	<b>422.85</b>	<b>10.75</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	1030	1030	22.70	946	
	Guru Nanak Dev TPS(Bhatinda)	440	209	209	4.41	184	
	Guru Hargobind Singh TPS(L.mbt)	920	894	894	19.61	817	
	Thermal (Total)	2620	2133	2133	46.72	1947	
	Total Hydro	1148	777	757	17.98	749	
	<b>Total Punjab</b>	<b>3768</b>	<b>2910</b>	<b>2890</b>	<b>64.70</b>	<b>2696</b>	
Haryana	Panipat TPS	1367	988	1125	26.09	1087	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	356	376	8.71	363	
	RGTPP (khedar) (IPP)	1200	528	545	11.59	483	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	480	473	12.14	506	
	Thermal (Total)	4944	2352	2519	58.52	2438	
	Total Hydro	62	27	31	0.95	40	
		<b>Total Haryana</b>	<b>5006</b>	<b>2379</b>	<b>2550</b>	<b>59.47</b>	<b>2478</b>
	Rajasthan	kota TPS	1240	967	962	23.03	960
suratgarh TPS		1500	894	895	21.39	891	
Chabra TPS		500	166	203	4.59	191	
Dholpur GPS		330	147	155	2.73	114	
Ramgarh GPS		111	50	0	0.74	31	
RAPS A (NPC)		300	164	164	3.93	164	
Barsingsar (NLC)		250	170	198	4.67	194	
Giral LTPS		250	74	76	1.85	77	
Rajwest LTPS (IPP)		540	314	314	7.58	316	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5156	2946	2967	70.52	2938	
Total Hydro		550	0	0	0.00	0	
Wind power		1843	1030	1408	27.72	1155	
Biomass		91	18	18	0.43	18	
Solar		128	0	0	0.32	13	
Renewable/Others (Total)		2062	1048	1426	28.46	1186	
		<b>Total Rajasthan</b>	<b>7767</b>	<b>3994</b>	<b>4393</b>	<b>98.98</b>	<b>4124</b>
UP		Anpara TPS	1630	1146	1159	25.40	1058
		Obra TPS	1382	464	439	10.80	450
		Paricha TPS	890	450	466	10.40	433
	Panki TPS	210	77	63	1.70	71	
	Harduaganj TPS	665	234	186	5.10	213	
	Tanda TPS (NTPC)	440	384	382	9.40	392	
	Roza TPS (IPP)	1200	824	824	19.71	821	
	Anpara-C (IPP)	1200	569	565	13.06	544	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	311	311	7.98	333	
	Thermal (Total)	8067	4459	4395	103.55	4315	
	Vishnuparyag HPS (IPP)	400	396	436	10.10	421	
	Other Hydro	527	178	0	4.04	168	
	Cogeneration	981	200	200	4.80	200	
		<b>Total UP</b>	<b>9975</b>	<b>5233</b>	<b>5031</b>	<b>122.49</b>	<b>4683</b>
	Uttarakhand	Total Hydro	1303	901	822	20.50	854
<b>Total Uttarakhand</b>		<b>1303</b>	<b>901</b>	<b>822</b>	<b>20.50</b>	<b>854</b>	
Delhi	Rajghat TPS	135	103	103	2.43	101	
	Delhi Gas Turbine	282	202	213	5.05	210	
	Pragati Gas Turbine	330	269	282	6.12	255	
	Rithala GPS	108	22	22	0.59	25	
	Bawana GPS	677	174	212	3.44	143	
	Badarpur TPS (NTPC)	705	425	425	9.02	376	
	Thermal (Total)	2237	1195	1257	26.65	1110	
		<b>Total Delhi</b>	<b>2237</b>	<b>1195</b>	<b>1257</b>	<b>26.65</b>	<b>1110</b>
HP	Baspa HPS (IPP)	330	219	219	6.90	288	
	Malana HPS (IPP)	86	85	93	2.11	88	
	Other Hydro	589	382	333	8.91	371	
		<b>Total HP</b>	<b>1005</b>	<b>686</b>	<b>645</b>	<b>18</b>	<b>747</b>
J & K	Baglihar HPS (IPP)	450	439	440	10.55	440	
	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>617</b>	<b>637</b>	<b>15.10</b>	<b>629</b>
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>17915</b>	<b>18225</b>	<b>425.80</b>	<b>17321</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>3146</b>	<b>4578</b>	<b>101.20</b>	<b>4217</b>	
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>40431</b>	<b>41339</b>	<b>960.60</b>	<b>39604</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	9114	8475	203.73	8489
State Control Area Hydro	5368	3186	2892	76.48	3187
<b>Total Regional Hydro</b>	<b>15731</b>	<b>12300</b>	<b>11367</b>	<b>280.21</b>	<b>11675</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	500	500	100	6.27	0.52	5.76
Gwalior-Agra (D/C)	881	940	1291	0	24.73	0.00	24.73
Zerda-Kankroli	201	30	302	104	2.70	0.00	2.70
Zerda-Bhinmal	179	-4	300	162	2.29	0.00	2.29
Malanpur-Auraiya	9	-19	9	46	0.00	0.18	-0.18
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>1170</b>	<b>1447</b>			<b>35.99</b>	<b>0.70</b>	<b>35.29</b>
Pusauli Bypass	200	58	200	4	3.25	0.01	3.24
MZP- GKP (D/C)	470	1120	1156	0	20.61	0.00	20.61
Patna-Balia(D/C)	502	462	724	0	11.02	0.00	11.02
B'Sharif-Balia (D/C)	435	606	673	0	12.49	0.00	12.49
Barh - Balia(D/C)	277	568	606	0	11.69	0.00	11.69
Pusauli-Balia	-53	23	72	53	0.46	0.00	0.46
Gaya-Fatehpur (765 Kv)	59	171	343	0	4.23	0.00	4.23
Pusauli-Sahupuri	128	152	159	0	3.18	0.00	3.18
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-42	-29	0	48	0.00	1.02	-1.02
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1976</b>	<b>3131</b>			<b>66.94</b>	<b>1.03</b>	<b>65.91</b>
<b>Total IR Exch</b>	<b>3146</b>	<b>4578</b>			<b>102.92</b>	<b>1.72</b>	<b>101.20</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
28.22	1.56	29.78	1.24	24.29	-5.59	8.13	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
25.43	32.19	57.62	65.91	35.29	101.20	40.48	3.10	43.58

**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	0.50	13.40	47.70	86.10	51.80	5.40	0.50

<----- 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				
50.28	8.07	49.13	22.04	49.71	1.20	0.19	50.24	49.51

**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	17:54	396	13:56	0.0	0.0	0.0	0.0
Gorakhpur	400	421	08:02	392	14:05	0.0	0.0	6.2	0.0
Bareilly	400	414	18:38	383	13:59	0.0	5.0	0.0	0.0
Kanpur	400	411	18:00	386	13:59	0.0	2.5	0.0	0.0
Dadri	400	405	19:54	384	13:59	0.0	11.5	0.0	0.0
Ballabgarh	400	412	21:01	385	14:00	0.0	4.7	0.0	0.0
Bawana	400	410	21:02	388	14:12	0.0	0.5	0.0	0.0
Bassi	400	421	22:14	387	14:00	0.0	0.5	0.1	0.0
Hissar	400	409	21:48	382	09:15	0.0	23.8	0.0	0.0
Moga	400	415	19:33	388	13:55	0.0	0.7	0.0	0.0
Abdullapur	400	414	21:02	232	14:49	0.1	0.1	0.0	0.0
Nalagarh	400	407	21:47	376	09:15	2.4	35.2	0.0	0.0
Kishenpur	400	409	05:06	393	13:52	0.0	0.0	0.0	0.0
Wagoora	400	407	02:21	388	13:56	0.0	0.8	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	466.22	212.85	482.22	511.55	1100.25	841.75
Pong	426.72	384.05	395.25	131.24	411.36	544.90	214.44	420.50
Tehri	829.79	740.04	743.20	15.00	818.65	982.26	271.82	295.00
Koteshwar	612.50	598.50	604.70	2.25	NA	NA	295.00	271.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	378.17	328.03
Rihand	268.22	252.98	254.63	61.90	255.73	105.30	NA	NA
RPS	352.80	343.81	349.88	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.00	NA	NA	NA	NA	NA
RSD	527.91	487.91	499.28	NA	510.00	NA	256.89	329.95

\* NA: Not Available  
IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 23.06.2012 :  
1. Hot dry weather

XII. Synchronisation of new generating units :  
0.00

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 : 23.06.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER