

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.06.2012  
Date of Reporting : 12.06.2012

### 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
34037	4795	38832	49.64	33196	2789.5	35986	49.72	798.9	107.72

\* 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	51.44	14.26		65.70	91.66	87.33	-4.33	153.04	4.75
Haryana	49.03	0.64		49.67	56.48	55.92	-0.56	105.58	19.09
Rajasthan	72.39	0.00	17.04	89.43	39.43	43.95	4.52	133.37	16.55
Delhi	23.23			23.23	82.00	74.98	-7.02	98.21	0.82
UP	91.79	14.20	4.80	110.79	90.11	116.88	26.78	227.67	53.79
Uttarakhand		14.44		14.44	12.13	13.07	0.94	27.51	4.99
HP		13.65		13.65	6.64	6.98	0.34	20.62	4.78
J & K		15.00	0.00	15.00	10.89	12.43	1.55	27.43	2.95
Chandigarh				0.00	6.42	5.45	-0.97	5.45	0.00
<b>Total</b>	<b>287.88</b>	<b>72.18</b>	<b>21.84</b>	<b>381.90</b>	<b>395.75</b>	<b>416.99</b>	<b>21.24</b>	<b>798.89</b>	<b>107.72</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	7041	276	-96	1735	5220	0	-1012	1875	42.31
Haryana	4704	1005	159	427	4250	422	-177	427	10.24
Rajasthan	5296	807	38	-213	6291	58	493	-213	-5.11
Delhi	3979	0	-324	591	3965	0	-372	491	15.04
UP	9153	2240	653	0	10426	2210	1849	0	1.20
Uttarakhand	1322	160	62	10	1263	0	169	10	0.25
HP	1009	157	177	-1161	704	0	-122	-1137	-27.25
J&K	1290	150	89	-570	911	100	-120	-570	-13.92
Chandigarh	244	0	-39	40	167	0	-67	20	1.20
<b>Total</b>	<b>34037</b>	<b>4795</b>	<b>719</b>	<b>859</b>	<b>33196</b>	<b>2789.5</b>	<b>640</b>	<b>904</b>	<b>23.96</b>

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

### III. Regional Entities :

A. NTPC	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
	Singrauli STPS	2000	1730	1860	1869	41.99	1750	41.52	0.47
	Rihand I STPS	1000	898	980	981	21.69	904	21.55	0.14
	Rihand II STPS	1000	965	1032	1043	23.41	975	23.16	0.25
	Rihand III STPS	500		0	0	0.00	0		0.00
	Dadri I STPS	840	798	868	865	19.36	807	19.16	0.20
	Dadri II STPS	980	963	1019	1023	23.39	975	23.12	0.28
	Unchahar I TPS	420	307	427	355	7.44	310	7.34	0.10
	Unchahar II TPS	420	404	442	439	9.76	407	9.62	0.14
	Unchahar III TPS	210	201	221	218	4.85	202	4.80	0.05
	ISTPP (Jhajjar)	1000	931	865	889	21.93	914	21.77	0.16
	Dadri GPS	830	744	693	677	16.24	677	16.07	0.17
	Anta GPS	419	383	394	345	8.86	369	8.11	0.74
	Auraiya GPS	663	429	433	443	10.33	430	9.38	0.94
	<b>Sub Total (A)</b>	<b>10282</b>	<b>8752</b>	<b>9234</b>	<b>9147</b>	<b>209.24</b>	<b>8718</b>	<b>205.61</b>	<b>3.63</b>
B. NPC	NAPS	440	256	293	296	6.09	254	6.14	-0.06
	RAPS- B	440	388	428	434	9.31	388	9.31	-0.01
	RAPS- C	440	210	216	219	4.64	193	5.04	-0.40
	<b>Sub Total (B)</b>	<b>1320</b>	<b>854</b>	<b>937</b>	<b>949</b>	<b>20.04</b>	<b>835</b>	<b>20.50</b>	<b>-0.46</b>
C. NHPC	Chamera I HPS	540	534	540	540	5.88	245	6.04	-0.16
	Chamera II HPS	300	200	203	202	4.82	201	4.80	0.02
	Chamera III HPS	231		0	0	0.00	0		0.00
	Bairasuil HPS	180	182	120	180	2.56	107	2.33	0.23
	Salal-HPS	690	583	594	614	14.29	596	13.98	0.31
	Tanakpur-HPS	94	39	50	34	1.11	46	1.00	0.11
	Uri-HPS	480	476	479	479	11.59	483	11.62	-0.03
	Dhauliganga-HPS	280	277	224	137	3.19	133	3.06	0.13
	Dulhasti-HPS	390	388	409	413	9.69	404	9.57	0.12
	Sewa-II HPS	120	80	86	85	1.98	83	1.88	0.11
	<b>Sub Total (C)</b>	<b>3305</b>	<b>2758</b>	<b>2705</b>	<b>2684</b>	<b>55.12</b>	<b>2297</b>	<b>54.28</b>	<b>0.84</b>
D.NJPC	Nathpa Jhakri	1500	1600	1536	1079	24.41	1017	23.66	0.75
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1536</b>	<b>1079</b>	<b>24.41</b>	<b>1017</b>	<b>23.66</b>	<b>0.75</b>
E. THDC	Tehri HPS	1000	500	367	0	3.13	131	3.00	0.13
	Koteshwar HPS	400	254	291	101	1.68	70	1.60	0.08
	<b>Sub Total (E)</b>	<b>1400</b>	<b>754</b>	<b>658</b>	<b>101</b>	<b>4.82</b>	<b>201</b>	<b>4.60</b>	<b>0.22</b>
F. BBMB	Bhakra HPS	1480	818	1119	765	20.21	842	19.63	0.58
	Dehar HPS	990	381	660	330	9.91	413	9.16	0.76
	Pong HPS	396	175	348	60	4.55	190	4.21	0.34
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1375</b>	<b>2127</b>	<b>1155</b>	<b>34.67</b>	<b>1445</b>	<b>33.00</b>	<b>1.67</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	95	160	1.87	78	3.88	-2.02
	KWHEP HPS(IPP)	1000	0	600	600	14.32	597	18.41	-4.09
	Malana Stg-II HPS	100	0	35	54	1.06	44	0.00	1.06
	Shree Cement TPS	300	0	0	0	0.00	0	0.00	0.00
	Budhil HPS(IPP)	70	0	0	35	0.55	23		0.55
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>730</b>	<b>849</b>	<b>17.80</b>	<b>742</b>	<b>22.29</b>	<b>-4.49</b>
<b>H. Total Regional Entities (A-G)</b>		<b>22336</b>	<b>16093</b>	<b>17927</b>	<b>15964</b>	<b>366.09</b>	<b>15254</b>	<b>363.93</b>	<b>2.16</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	1260	1215	27.85	1160	
	Guru Nanak Dev TPS(Bhatinda)	440	210	105	3.16	132	
	Guru Hargobind Singh TPS(L.mbt)	920	903	965	20.43	851	
	Thermal (Total)	2620	2373	2285	51.44	2143	
	Total Hydro	1148	769	363	14.26	594	
	<b>Total Punjab</b>	<b>3768</b>	<b>3142</b>	<b>2648</b>	<b>65.70</b>	<b>2738</b>	
Haryana	Panipat TPS	1367	1128	1142	27.39	1141	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	366	379	8.80	367	
	RGTPP (khedar) (IPP)	1200	548	524	12.84	535	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	0	0.00	0	
	Thermal (Total)	4944	2042	2045	49.03	2043	
	Total Hydro	62	17	20	0.64	27	
		<b>Total Haryana</b>	<b>5006</b>	<b>2059</b>	<b>2065</b>	<b>49.67</b>	<b>2069</b>
	Rajasthan	kota TPS	1240	821	821	20.68	862
suratgarh TPS		1500	1137	1139	26.81	1117	
Chabra TPS		500	185	0	2.45	102	
Dholpur GPS		330	174	80	2.74	114	
Ramgarh GPS		111	56	53	1.37	57	
RAPS A (NPC)		300	150	0	4.13	172	
Barsingsar (NLC)		250	176	194	4.55	190	
Giral LTPS		250	69	66	1.49	62	
Rajwest LTPS (IPP)		540	344	337	8.18	341	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5156	3112	2690	72.39	3016	
Total Hydro		550	0	0	0.00	0	
Wind power		1843	304	1249	15.62	651	
Biomass		91	45	45	1.07	45	
Solar		128	0	0	0.34	14	
Renewable/Others (Total)		2062	349	1294	17.04	710	
		<b>Total Rajasthan</b>	<b>7767</b>	<b>3461</b>	<b>3984</b>	<b>89.43</b>	<b>3726</b>
UP		Anpara TPS	1630	704	573	14.30	596
		Obra TPS	1382	522	482	11.10	463
		Paricha TPS	890	545	577	12.20	508
	Panki TPS	210	80	115	2.00	83	
	Harduaganj TPS	665	111	141	2.30	96	
	Tanda TPS (NTPC)	440	289	288	7.13	297	
	Roza TPS (IPP)	1200	824	734	19.06	794	
	Anpara-C (IPP)	1200	741	711	16.61	692	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	246	310	7.09	295	
	Thermal (Total)	8067	4062	3931	91.79	3825	
	Vishnuparyag HPS (IPP)	400	436	436	9.40	392	
	Other Hydro	527	210	0	4.80	200	
	Cogeneration	981	200	200	4.80	200	
		<b>Total UP</b>	<b>9975</b>	<b>4908</b>	<b>4567</b>	<b>110.79</b>	<b>4224</b>
	Uttarakhand	Total Hydro	1303	656	539	14.44	602
<b>Total Uttarakhand</b>		<b>1303</b>	<b>656</b>	<b>539</b>	<b>14.44</b>	<b>602</b>	
Delhi	Rajghat TPS	135	102	101	2.38	99	
	Delhi Gas Turbine	282	215	177	4.81	200	
	Pragati Gas Turbine	330	276	282	6.70	279	
	Rithala GPS	108	20	27	0.48	20	
	Bawana GPS	677	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	400	395	8.87	369	
	Thermal (Total)	2237	1013	982	23.23	968	
		<b>Total Delhi</b>	<b>2237</b>	<b>1013</b>	<b>982</b>	<b>23.23</b>	<b>968</b>
HP	Baspa HPS (IPP)	330	217	217	4.54	189	
	Malana HPS (IPP)	86	33	35	0.80	33	
	Other Hydro	589	346	321	8.31	346	
		<b>Total HP</b>	<b>1005</b>	<b>596</b>	<b>573</b>	<b>14</b>	<b>569</b>
J & K	Baglihar HPS (IPP)	450	435	477	10.45	435	
	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>613</b>	<b>674</b>	<b>15.00</b>	<b>625</b>
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>16448</b>	<b>16032</b>	<b>381.90</b>	<b>15521</b>	
<b>J. Net Inter Regional Exchange</b> (Import (+ve)/Export (-ve))			<b>1107</b>	<b>2127</b>	<b>54.95</b>	<b>2290</b>	
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>35482</b>	<b>34123</b>	<b>802.94</b>	<b>33064</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	7756	5833	136.27	5678
State Control Area Hydro	5368	2861	2169	62.78	2616
<b>Total Regional Hydro</b>	<b>15731</b>	<b>10617</b>	<b>8002</b>	<b>199.04</b>	<b>8293</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	4.29	0.63	3.66
Gwalior-Agra (D/C)	520	1044	1402	0	24.55	0.00	24.55
Zerda-Kankroli	-61	53	144	92	0.25	0.00	0.25
Zerda-Bhinmal	-20	24	176	118	0.56	0.00	0.56
Malanpur-Auraiya	-55	-65	0	65	0.00	0.73	-0.73
Badod-Kota/Morak	22	22	22	0	0.53	0.00	0.53
Mundra-Mohindergarh(HVDC)	0	0	0	0	0.00	0.00	0.00
<b>Sub Total WR</b>	<b>806</b>	<b>978</b>			<b>30.18</b>	<b>1.36</b>	<b>28.83</b>
Pusauli Bypass	-328	-90	102	328	0.07	3.05	-2.99
MZP- GKP (D/C)	138	272	630	0	8.29	0.00	8.29
Patna-Balia(D/C)	236	277	500	0	9.02	0.00	9.02
B'Sharif-Balia (D/C)	100	204	414	0	6.53	0.00	6.53
Barh - Balia(D/C)	0	275	363	0	1.46	0.00	1.46
Pusauli-Balia	0	0	0	0	0.00	0.00	0.00
Gaya-Fatehpur (765 Kv)	0	45	150	19	1.74	0.00	1.74
Pusauli-Sahupuri	149	135	183	0	3.09	0.00	3.09
K'nasa-Sahupuri	48	60	60	0	0.00	0.00	0.00
Son Ngr-Rihand	-42	-29	0	48	0.00	1.01	-1.01
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>301</b>	<b>1149</b>			<b>30.19</b>	<b>4.07</b>	<b>26.12</b>
<b>Total IR Exch</b>	<b>1107</b>	<b>2127</b>			<b>60.37</b>	<b>5.43</b>	<b>54.95</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
24.59	0.75	25.33	-0.59	26.19	-6.55	0.59	1.08	-1.08
<b>Total IR Schedule (MU)</b>			<b>Total IR Actual (MU)</b>			<b>Net IR UI (MU)</b>		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
19.27	25.23	44.49	26.12	28.83	54.95	6.86	3.60	10.46

**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	8.30	21.90	51.80	81.40	48.20	18.60	0.90	0.00

<----- 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)		
50.14	6.03	48.79	15.46	49.44	3.93	0.28	49.94	48.98

**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	410	04:02	402	12:14	0.0	0.0	0.0	0.0
Gorakhpur	400	432	05:08	403	11:41	0.0	0.0	54.8	5.3
Bareilly	400	417	04:08	393	15:43	0.0	0.0	0.0	0.0
Kanpur	400	415	19:01	401	23:09	0.0	0.0	0.0	0.0
Dadri	400	413	05:29	395	13:55	0.0	0.0	0.0	0.0
Ballabgarh	400	417	05:27	397	14:19	0.0	0.0	0.0	0.0
Bawana	400	415	05:28	396	13:51	0.0	0.0	0.0	0.0
Bassi	400	420	12:01	396	08:14	0.0	0.0	0.0	0.0
Hissar	400	411	16:55	390	13:55	0.0	0.0	0.0	0.0
Moga	400	416	06:01	399	13:59	0.0	0.0	0.0	0.0
Abdullapur	400	416	06:04	284	01:09	0.1	0.1	0.0	0.0
Nalagarh	400	414	06:04	393	13:58	0.0	0.0	0.0	0.0
Kishenpur	400	413	04:05	400	13:55	0.0	0.0	0.0	0.0
Wagoora	400	408	04:03	394	14:01	0.0	0.0	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	467.84	234.83	479.07	441.00	413.62	744.51
Pong	426.72	384.05	398.44	185.67	411.52	544.90	65.07	329.72
Tehri	829.79	740.04	740.70	4.00	818.65	982.26	163.20	112.00
Koteshwar	612.50	598.50	607.75	3.54	NA	NA	112.00	129.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	212.70	166.96
Rihand	268.22	252.98	255.67	96.70	254.08	40.90	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	501.29	NA	512.14	NA	179.08	363.76

\* NA: Not Available  
IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 11.06.2012 :  
1. Hot 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 : 11.06.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER