

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 07.06.2014  
Date of Reporting : 08.06.2014

### 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
41883	2142	44025	50.04	43074	1550	44624	50.14	1011.8	49.48

\* 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:

UI [OD:(+ve), UD: (-ve)]

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	56.29	16.23		72.52	94.60	93.97	-0.63	166.49	0.30
Haryana	51.50	0.55		52.05	97.83	97.67	-0.16	149.72	0.00
Rajasthan	103.79	0.00	13.10	116.89	84.47	85.89	1.43	202.79	0.00
Delhi	28.30			28.30	81.67	78.96	-2.71	107.26	2.20
UP	135.60	15.05	1.20	151.86	135.40	136.20	0.81	288.06	44.21
Uttarakhand		16.01		16.01	19.72	20.23	0.52	36.24	1.07
HP		23.01		23.01	1.23	1.25	0.02	24.26	0.00
J & K		13.69	0.00	13.69	18.27	17.13	-1.14	30.82	1.70
Chandigarh				0.00	5.28	6.17	0.89	6.17	0.00
<b>Total</b>	<b>375.48</b>	<b>84.54</b>	<b>14.30</b>	<b>474.33</b>	<b>538.45</b>	<b>537.48</b>	<b>-0.97</b>	<b>1011.80</b>	<b>49.48</b>

\* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

### II. B. State's Demand Met in MWs:

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)]

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	STOA/PX transaction
Punjab	6985	0	-145	890	7325	0	8	890	18.19
Haryana	6621	0	35	498	6554	0	93	605	10.78
Rajasthan	7577	0	-238	601	8429	0	110	796	23.10
Delhi	4282	177	-309	277	4591	0	-7	430	7.40
UP	12164	1790	258	758	12518	1550	130	1425	25.22
Uttarakhand	1704	75	121	245	1492	0	-39	325	6.64
HP	914	0	-81	-1070	869	0	51	-1377	-27.07
J&K	1384	100	-4	-375	1065	0	-192	-624	-12.10
Chandigarh	252	0	13	9	230	0	40	0	0.59
<b>Total</b>	<b>41883</b>	<b>2142</b>	<b>-349</b>	<b>1833</b>	<b>43074</b>	<b>1550</b>	<b>194</b>	<b>2470</b>	<b>52.76</b>

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

### III. Regional Entities :

UI [OG:(+ve), UG: (-ve)]

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
<b>A. NTPC</b>								
Singrauli STPS	2000	1904	2052	1986	45.77	1907	45.70	0.07
Rihand I STPS	1000	850	913	915	20.44	852	20.26	0.18
Rihand II STPS	1000	470	517	514	11.14	464	11.23	-0.09
Rihand III STPS	1000	894	894	947	21.26	886	21.30	-0.04
Dadri I STPS	840	813	748	650	16.16	673	16.70	-0.55
Dadri II STPS	980	966	902	730	19.81	825	20.75	-0.95
Unchahar I TPS	420	400	402	382	8.72	363	9.25	-0.53
Unchahar II TPS	420	400	393	338	8.61	359	8.92	-0.31
Unchahar III TPS	210	200	197	155	4.21	176	4.36	-0.15
ISTPP (Jhajjar)	1500	992	1009	662	19.40	809	20.26	-0.86
Dadri GPS	830	794	171	176	3.93	164	4.43	-0.50
Anta GPS	419	383	242	238	5.70	237	5.88	-0.18
Auraiya GPS	663	420	148	148	3.30	137	3.38	-0.08
Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.07
<b>Sub Total (A)</b>	<b>11297</b>	<b>9490</b>	<b>8588</b>	<b>7841</b>	<b>188</b>	<b>7853</b>	<b>193</b>	<b>-4</b>
<b>B. NPC</b>								
NAPS	440	268	303	309	6.45	269	6.43	0.02
RAPS- B	440	386	416	438	9.22	384	9.26	-0.04
RAPS- C	440	200	222	220	4.79	200	4.80	-0.01
<b>Sub Total (B)</b>	<b>1320</b>	<b>854</b>	<b>941</b>	<b>967</b>	<b>20.46</b>	<b>853</b>	<b>20.50</b>	<b>-0.04</b>
<b>C. NHPC</b>								
Chamera I HPS	540	534	540	540	12.91	538	12.82	0.10
Chamera II HPS	300	300	306	308	7.37	307	7.20	0.17
Chamera III HPS	231	229	229	228	5.54	231	5.50	0.04
Bairasui HPS	180	180	180	180	4.42	184	4.32	0.10
Salal-HPS	690	650	674	675	15.81	659	15.59	0.22
Tanakpur-HPS	94	73	90	76	1.67	70	1.67	0.00
Uri-HPS	480	469	474	474	11.31	471	11.26	0.06
Uri-II HPS	240	240	244	245	5.83	243	5.76	0.07
Dhauliganga-HPS	280	67	68	68	1.63	68	1.61	0.02
Dulhasti-HPS	390	387	403	384	9.37	390	9.30	0.07
Sewa-II HPS	120	120	127	127	3.02	126	2.89	0.14
Parbati 3	390	362	260	260	4.07	169	4.46	-0.39
<b>Sub Total ©</b>	<b>3935</b>	<b>3611</b>	<b>3595</b>	<b>3565</b>	<b>83</b>	<b>3456</b>	<b>82</b>	<b>1</b>
<b>D. SJVNL</b>								
NJPC	1500	1605	1619	1613	38.36	1598	38.37	-0.01
Rampur HEP	206	206	216	210	5.15	215	4.94	0.20
<b>Sub Total (D)</b>	<b>1706</b>	<b>1811</b>	<b>1835</b>	<b>1823</b>	<b>43.50</b>	<b>1813</b>	<b>43.31</b>	<b>0.19</b>
<b>E. THDC</b>								
Tehri HPS	1000	375	376	242	5.04	210	5.00	0.04
Koteshwar HPS	400	129	399	90	3.13	130	3.10	0.03
<b>Sub Total (E)</b>	<b>1400</b>	<b>504</b>	<b>775</b>	<b>332</b>	<b>8.17</b>	<b>340</b>	<b>8.10</b>	<b>0.07</b>
<b>F. BBMB</b>								
Bhakra HPS	1514	703	1205	477	17.18	716	16.86	0.32
Dehar HPS	990	528	660	610	12.98	541	12.66	0.32
Pong HPS	396	58	248	0	1.45	60	1.38	0.07
<b>Sub Total (F)</b>	<b>2900</b>	<b>1288</b>	<b>2113</b>	<b>1087</b>	<b>31.61</b>	<b>1317</b>	<b>30.91</b>	<b>0.71</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	224	224	5.25	219	4.88	0.37
KWHEP HPS(IPP)	1000	0	1200	1191	27.19	1133	27.97	-0.78
Malana Stg-II HPS	100	0	112	100	1.81	76	1.69	0.12
Shree Cement TPS	300	0	259	282	6.62	276	6.56	0.06
Budhil HPS(IPP)	70	0	69	69	1.65	69	1.64	0.01
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1864</b>	<b>1866</b>	<b>42.53</b>	<b>1772</b>	<b>42.74</b>	<b>-0.21</b>
<b>H. Total Regional Entities (A-G)</b>	<b>24221</b>	<b>17558</b>	<b>19711</b>	<b>17481</b>	<b>417.68</b>	<b>17403</b>	<b>420.42</b>	<b>-2.74</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	947
	Guru Nanak Dev TPS(Bhatinda)	440	0	320	5	191
	Guru Hargobind Singh TPS(L.mbt)	920	712	924	19	787
	Goindwal(GVK)		0	0	0	0
	Rajpura	700	330	263	10	420
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	<b>3980</b>	<b>2092</b>	<b>2557</b>	<b>56</b>	<b>2345</b>
	Total Hydro	1148	752	770	16.23	676
<b>Total Punjab</b>	<b>5128</b>	<b>2844</b>	<b>3327</b>	<b>72.52</b>	<b>3022</b>	
Haryana	Panipat TPS	1367	811	825	19.83	826
	DCRTPP (Yamuna nagar)	600	536	535	12.53	522
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	800	800	19.14	797
	Thermal (Total)	4944	2147	2160	51	2146
	Total Hydro	62	19	25	0.55	23
	<b>Total Haryana</b>	<b>5006</b>	<b>2166</b>	<b>2185</b>	<b>52.05</b>	<b>2169</b>
	Rajasthan	kota TPS	1240	1078	956	24.03
suratgarh TPS		1500	852	887	20.64	1001
Chabra TPS		750	460	466	10.25	578
Dholpur GPS		330	101	101	2.49	130
Ramgarh GPS		221	123	121	3.47	30
RAPS A (NPC)		300	180	180	4.11	144
Barsingsar (NLC)		250	182	99	3.12	104
Giral LTPS		250	77	77	1.77	71
Rajwest LTPS (IPP)		1080	837	741	19.38	450
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		1320	609	598	14.53	804
Thermal (Total)		7976	4499	4226	104	4325
Total Hydro		550	0	0	0.00	0
Wind power		2191	187	961	11.57	296
Biomass		91	34	34	0.82	31
Solar		201	0	0	0.71	18
Renewable/Others (Total)		2483	221	995	13	546
<b>Total Rajasthan</b>		<b>11009</b>	<b>4720</b>	<b>5221</b>	<b>116.89</b>	<b>4871</b>
UP		Anpara TPS	1630	1551	1546	32.50
	Obra TPS	1288	421	282	7.40	308
	Paricha TPS	1140	632	805	16.20	675
	Panki TPS	210	155	150	3.20	133
	Harduaganj TPS	665	401	444	9.40	392
	Tanda TPS (NTPC)	440	362	375	9.19	383
	Roza TPS (IPP)	1200	1116	1116	26.83	1118
	Anpara-C (IPP)	1200	1060	797	21.84	910
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	401	401	9.04	377
	Thermal (Total)	8223	6099	5916	136	5650
	Vishnuparyag HPS (IPP)	400	436	435	10.45	435
	Other Hydro	527	193	202	4.61	192
	Cogeneration	981	50	50	1.20	50
	<b>Total UP</b>	<b>10131</b>	<b>6778</b>	<b>6603</b>	<b>151.86</b>	<b>5892</b>
	Uttarakhand	Total Hydro	1303	712	635	16.01
<b>Total Uttarakhand</b>		<b>1303</b>	<b>712</b>	<b>635</b>	<b>16.01</b>	<b>667</b>
Delhi	Rajghat TPS	135	87	98	2.24	93
	Delhi Gas Turbine	282	118	121	2.89	120
	Pragati Gas Turbine	330	130	138	3.29	137
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	25	268	6.30	263
	Badarpur TPS (NTPC)	705	580	680	13.59	566
	Thermal (Total)	2917	940	1305	28.30	1179
	<b>Total Delhi</b>	<b>2917</b>	<b>940</b>	<b>1305</b>	<b>28.30</b>	<b>1179</b>
HP	Baspa HPS (IPP)	300	299	299	7.50	312
	Malana HPS (IPP)	86	84	88	1.72	72
	Other Hydro	728	587	584	13.79	574
	<b>Total HP</b>	<b>1114</b>	<b>970</b>	<b>971</b>	<b>23.01</b>	<b>959</b>
J & K	Baglihar HPS (IPP)	450	440	440	10.55	440
	Other Hydro/IPP	436	128	132	3.14	131
	Gas/Diesel/Others	209	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>1094</b>	<b>568</b>	<b>572</b>	<b>13.69</b>	<b>570</b>
<b>Total State Control Area Generation</b>		<b>37702</b>	<b>19698</b>	<b>20819</b>	<b>474.33</b>	<b>19328</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>4290</b>	<b>6344</b>	<b>136.69</b>	<b>5695</b>
<b>Total Regional Availability(Gross)</b>		<b>61923</b>	<b>43699</b>	<b>44644</b>	<b>1028.70</b>	<b>42427</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	11233	9854	8322	200.49	8354
State Control Area Hydro	5589	3214	3175	84.54	3087
<b>Total Regional Hydro</b>	<b>16823</b>	<b>13068</b>	<b>11497</b>	<b>285.03</b>	<b>11441</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	500	500	0	7.05	0.05	7.00
Gwalior-Agra (D/C)	1206	2106	2266	0	44.77	0.00	44.77
Zerda-Kankroli	-90	-89	7	106	0.00	1.34	-1.34
Zerda-Bhinmal	-63	-56	112	110	0.00	0.19	-0.19
Malanpur-Auraiya	-49	-25	0	71	0.00	0.71	-0.71
Badod-Kota/Morak	36	12	59	38	0.27	0.00	0.27
Mundra-Mohindergarh(HVDC)	1252	2002	2005	0	41.30	0.00	41.30
<b>Sub Total WR</b>	<b>2692</b>	<b>4450</b>			<b>93.39</b>	<b>2.30</b>	<b>91.10</b>
Pusauli Bypass	400	400	400	0	9.77	0.00	9.77
MZP- GKP (D/C)	356	510	662	0	11.54	0.00	11.54
Patna-Balia(D/C)	309	379	631	0	9.99	0.00	9.99
B'Sharif-Balia (D/C)	255	355	396	0	7.59	0.00	7.59
Pusauli-Balia	-77	-41	0	90	0.00	1.39	-1.39
Gaya-Fatehpur (765 Kv)	175	137	271	71	3.76	0.00	3.76
Pusauli-Sahupuri	180	154	200	0	4.35	0.00	4.35
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	0	0	0	0	0.00	0.00	0.00
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1598</b>	<b>1894</b>			<b>46.98</b>	<b>1.39</b>	<b>45.60</b>
<b>Total IR Exch</b>	<b>4290</b>	<b>6344</b>			<b>140.38</b>	<b>3.69</b>	<b>136.69</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
34.05	1.78	35.83	9.70	1.12	0.70	12.70	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
46.22	92.10	138.32	45.60	91.10	136.69	-0.63	-1.00	-1.63

**VI. Frequency Profile** <----- % of Time Frequency ----->

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	0.44	6.71	16.35	51.99	61.25	13.46	8.40	0.58	0.00

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN
Freq	Time	Freq	Time	Hz				
50.29	6.03	49.63	15.22	49.98	0.10	0.10	50.27	49.80

**VII. Voltage profile 400 kV**

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	406	06:06	398	22:08	0.0	0.0	0.0	0.0
Gorakhpur	400	402	21:09	382	15:24	0.0	7.0	0.0	0.0
Bareilly	400	406	06:04	373	12:20	0.1	1.3	0.0	0.0
Kanpur	400	416	06:06	395	00:28	0.0	0.0	0.0	0.0
Dadri	400	411	06:09	392	14:47	0.0	0.0	0.0	0.0
Ballabgarh	400	417	06:03	394	14:43	0.0	0.0	0.0	0.0
Bawana	400	410	06:03	391	00:06	0.0	0.0	0.0	0.0
Bassi	400	423	19:03	394	09:44	0.0	0.0	1.9	0.0
Hissar	400	407	06:03	390	23:22	0.0	0.0	0.0	0.0
Moga	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Abdullapur	400	0	00:00	396	00:00	0.0	0.0	0.0	0.0
Nalagarh	400	410	19:05	400	14:43	0.0	0.0	0.0	0.0
Kishenpur	400	411	17:55	400	14:50	0.0	0.0	0.0	0.0
Wagoora	400	409	03:23	391	20:32	0.0	0.0	0.0	0.0

**VIII. Voltage profile 765 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	772	19:02	729	11:09	0.0	21.3	0.0	0.0
Balia	765	774	18:05	745	11:08	0.0	0.0	0.0	0.0
Moga	765	777	18:03	754	01:28	0.0	0.0	0.0	0.0
Agra	765	781	19:03	739	11:09	0.0	0.3	0.0	0.0
Bhiwani	765	773	06:04	747	23:23	0.0	0.0	0.0	0.0
Unnao	765	754	06:09	722	11:10	13.8	69.2	0.0	0.0

**IX. 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	480.09	461.24	480.49	468.02	722.28	640.02
Pong	426.72	384.05	402.33	273.51	399.69	209.93	100.72	131.59
Tehri	829.79	740.04	741.70	9.37	NA	NA	224.93	171.00
Koteshwar	612.50	598.50	610.82	4.95	608.40	3.98	171.00	168.00
Chamera-I	760.00	748.75	755.44	12.77	NA	NA	359.20	351.28
Rihand	268.22	252.98	258.07	205.10	256.79	149.00	NA	NA
RPS	352.80	343.81	348.06	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.80	NA	NA	NA	NA	NA
RSD	527.91	487.91	516.64	144.00	506.65	144.00	224.47	197.51

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 07.06.2014 :**

1. Hot weather in NR.

**XIII. Synchronisation of new generating units :**

0.00

**XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :**

**XV. Tripping of lines in pooling stations :**

**XVI. Complete generation loss in a generating station :**

Report for : 07.06.2014

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER