

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.06.2014  
Date of Reporting : 15.06.2014

### 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
40496	1915	42411	49.88	39651	650	40301	50.08	940.2	34.79

\* 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	61.54	19.87		81.41	118.54	117.77	-0.77	199.18	0.00
Haryana	28.54	0.54		29.08	100.14	97.20	-2.94	126.28	0.05
Rajasthan	111.48	0.00	28.06	139.54	50.54	49.14	-1.40	188.68	0.00
Delhi	21.87			21.87	74.75	70.58	-4.18	92.45	0.43
UP	115.00	12.83	1.20	129.03	111.31	107.03	-4.27	236.07	32.12
Uttarakhand		17.04		17.04	20.23	20.39	0.16	37.43	0.49
HP		24.07		24.07	1.99	1.94	-0.05	26.01	0.00
J & K		10.51	0.00	10.51	17.25	18.30	1.05	28.80	1.70
Chandigarh				0.00	5.34	5.31	-0.03	5.31	0.00
<b>Total</b>	<b>338.43</b>	<b>84.87</b>	<b>29.26</b>	<b>452.55</b>	<b>500.09</b>	<b>487.65</b>	<b>-12.44</b>	<b>940.20</b>	<b>34.79</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	8745	0	-7	1213	8069	0	91	1260	37.73
Haryana	6055	0	-259	475	5148	0	-9	564	11.33
Rajasthan	7097	0	-448	-301	7579	0	36	93	-4.27
Delhi	4094	0	253	327	3885	0	-159	371	9.70
UP	10142	1740	-484	447	11317	650	-461	722	12.07
Uttarakhand	1746	75	84	333	1502	0	-65	310	7.18
HP	1001	0	-65	-1150	925	0	0	-1216	-27.53
J&K	1370	100	5	-431	1051	0	60	-766	-13.49
Chandigarh	247	0	21	0	175	0	-18	0	0.43
<b>Total</b>	<b>40496</b>	<b>1915</b>	<b>-900</b>	<b>913</b>	<b>39651</b>	<b>650</b>	<b>-525</b>	<b>1338</b>	<b>33.16</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	1905	2070	2076	45.29	1887	45.08	0.21
Rihand I STPS	1000	866	956	907	20.45	852	20.00	0.45
Rihand II STPS	1000	470	496	520	10.70	446	10.81	-0.12
Rihand III STPS	1000	909	761	946	21.10	879	20.73	0.37
Dadri I STPS	840	813	707	844	15.47	644	15.77	-0.30
Dadri II STPS	980	966	761	808	17.67	736	18.00	-0.33
Unchahar I TPS	420	402	406	382	7.87	328	8.13	-0.27
Unchahar II TPS	420	403	373	322	7.55	315	7.69	-0.14
Unchahar III TPS	210	201	164	152	3.72	155	3.75	-0.03
ISTPP (Jhajjar)	1500	1436	1218	950	23.84	994	24.18	-0.34
Dadri GPS	830	797	146	136	3.54	148	3.74	-0.20
Anta GPS	419	385	201	222	5.62	234	5.53	0.09
Auraiya GPS	663	474	137	121	3.22	134	3.27	-0.05
Dadri Solar	5	1	0	0	0.00	0	0.02	-0.02
Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.07
<b>Sub Total (A)</b>	<b>11297</b>	<b>10031</b>	<b>8396</b>	<b>8386</b>	<b>186</b>	<b>7752</b>	<b>187</b>	<b>-1</b>
<b>B. NPC</b>								
NAPS	440	268	311	320	6.63	276	6.43	0.19
RAPS- B	440	380	438	443	9.50	396	9.12	0.38
RAPS- C	440	200	221	222	4.66	194	4.80	-0.14
<b>Sub Total (B)</b>	<b>1320</b>	<b>848</b>	<b>970</b>	<b>985</b>	<b>20.79</b>	<b>866</b>	<b>20.35</b>	<b>0.44</b>
<b>C. NHPC</b>								
Chamera I HPS	540	536	540	540	13.02	542	12.86	0.15
Chamera II HPS	300	303	315	313	7.45	310	7.27	0.18
Chamera III HPS	231	229	240	230	5.60	233	5.50	0.10
Bairasui HPS	180	166	180	180	3.90	163	3.88	0.03
Salal-HPS	690	643	679	674	15.83	660	15.43	0.40
Tanakpur-HPS	94	60	79	62	1.48	62	1.43	0.05
Uri-HPS	480	475	474	474	11.52	480	11.40	0.12
Uri-II HPS	240	240	247	249	5.86	244	5.76	0.10
Dhauliganga-HPS	280	60	69	68	1.46	61	1.44	0.01
Dulhasti-HPS	390	387	403	414	9.45	394	9.29	0.16
Sewa-II HPS	120	119	130	121	2.10	87	2.00	0.10
Parbati 3	390	252	260	130	3.99	166	3.88	0.11
<b>Sub Total ©</b>	<b>3935</b>	<b>3471</b>	<b>3616</b>	<b>3455</b>	<b>82</b>	<b>3402</b>	<b>80</b>	<b>2</b>
<b>D. SJVNL</b>								
NJPC	1500	1605	1632	1623	38.85	1619	38.45	0.40
Rampur HEP	206	206	214	209	5.03	210	4.94	0.09
<b>Sub Total (D)</b>	<b>1706</b>	<b>1811</b>	<b>1846</b>	<b>1832</b>	<b>43.88</b>	<b>1828</b>	<b>43.40</b>	<b>0.49</b>
<b>E. THDC</b>								
Tehri HPS	1000	375	379	377	5.57	232	5.50	0.07
Koteshwar HPS	400	132	395	90	3.11	130	3.10	0.01
<b>Sub Total (E)</b>	<b>1400</b>	<b>507</b>	<b>774</b>	<b>467</b>	<b>8.68</b>	<b>362</b>	<b>8.60</b>	<b>0.08</b>
<b>F. BBMB</b>								
Bhakra HPS	1514	847	1105	634	20.23	843	20.33	-0.10
Dehar HPS	990	480	495	495	11.81	492	11.52	0.29
Pong HPS	396	255	368	122	6.21	259	6.12	0.09
<b>Sub Total (F)</b>	<b>2900</b>	<b>1582</b>	<b>1968</b>	<b>1251</b>	<b>38.25</b>	<b>1594</b>	<b>37.97</b>	<b>0.28</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	228	188	4.74	198	4.37	0.38
KWHEP HPS(IPP)	1000	0	957	1103	24.42	1017	24.69	-0.27
Malana Stg-II HPS	100	0	104	65	1.72	72	1.76	-0.03
Shree Cement TPS	300	0	136	136	4.42	184	4.42	0.00
Budhil HPS(IPP)	70	0	70	70	1.67	69	1.64	0.02
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1495</b>	<b>1562</b>	<b>36.98</b>	<b>1541</b>	<b>36.88</b>	<b>0.09</b>
<b>H. Total Regional Entities (A-G)</b>	<b>24221</b>	<b>18250</b>	<b>19065</b>	<b>17938</b>	<b>416.26</b>	<b>17344</b>	<b>414.12</b>	<b>2.14</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	1260	27	1137
	Guru Nanak Dev TPS(Bhatinda)	440	333	330	7	290
	Guru Hargobind Singh TPS(L.mbt)	920	740	774	18	770
	Goindwal(GVK)		0	0	0	0
	Rajpura	700	346	285	9	367
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	<b>3980</b>	<b>2679</b>	<b>2649</b>	<b>62</b>	<b>2564</b>
	Total Hydro	1148	824	926	19.87	828
<b>Total Punjab</b>	<b>5128</b>	<b>3503</b>	<b>3575</b>	<b>81.41</b>	<b>3392</b>	
Haryana	Panipat TPS	1367	457	434	10.44	435
	DCRTPP (Yamuna nagar)	600	296	0	2.73	114
	Faridabad GPS (NTPC)	432	190	190	3.94	164
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	548	391	11.43	476
	Thermal (Total)	4944	1491	1015	29	1189
	Total Hydro	62	24	24	0.54	23
	<b>Total Haryana</b>	<b>5006</b>	<b>1515</b>	<b>1039</b>	<b>29.08</b>	<b>1212</b>
Rajasthan	kota TPS	1240	900	901	21.40	892
	suratgarh TPS	1500	1008	991	24.70	1029
	Chabra TPS	750	505	541	13.52	563
	Dholpur GPS	330	104	104	2.50	104
	Ramgarh GPS	221	105	32	2.74	114
	RAPS A (NPC)	300	170	170	4.15	173
	Barsingsar (NLC)	250	174	176	3.95	165
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	483	805	19.08	795
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	1065	503	19.44	810
	Thermal (Total)	7976	4514	4223	111	4645
	Total Hydro	550	0	0	0.00	0
	Wind power	2191	1032	1106	26.50	1104
	Biomass	91	33	33	0.80	33
	Solar	201	0	0	0.76	32
Renewable/Others (Total)	2483	1065	1139	28	1169	
<b>Total Rajasthan</b>	<b>11009</b>	<b>5579</b>	<b>5362</b>	<b>139.54</b>	<b>5814</b>	
UP	Anpara TPS	1630	1407	1358	22.60	942
	Obra TPS	1288	518	514	11.80	492
	Paricha TPS	1140	184	770	17.00	708
	Panki TPS	210	160	120	3.00	125
	Harduaganj TPS	665	397	402	8.90	371
	Tanda TPS (NTPC)	440	224	286	6.03	251
	Roza TPS (IPP)	1200	761	932	19.22	801
	Anpara-C (IPP)	1200	1072	1062	23.72	988
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	112	137	2.74	114
	Thermal (Total)	8223	4835	5581	115	4792
	Vishnuparyag HPS (IPP)	400	435	435	10.46	436
	Other Hydro	527	68	150	2.37	99
	Cogeneration	981	50	50	1.20	50
	<b>Total UP</b>	<b>10131</b>	<b>5388</b>	<b>6216</b>	<b>129.03</b>	<b>4941</b>
Uttarakhand	Total Hydro	1303	733	691	17.04	710
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>733</b>	<b>691</b>	<b>17.04</b>	<b>710</b>
Delhi	Rajghat TPS	135	99	98	2.41	101
	Delhi Gas Turbine	282	150	146	3.58	149
	Pragati Gas Turbine	330	140	143	3.28	137
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	0	0	0.00	0
	Badarpur TPS (NTPC)	705	560	570	12.59	525
	Thermal (Total)	2917	949	957	21.87	911
<b>Total Delhi</b>	<b>2917</b>	<b>949</b>	<b>957</b>	<b>21.87</b>	<b>911</b>	
HP	Baspa HPS (IPP)	300	239	329	7.77	324
	Malana HPS (IPP)	86	103	54	1.71	71
	Other Hydro	728	594	608	14.59	608
	<b>Total HP</b>	<b>1114</b>	<b>936</b>	<b>991</b>	<b>24.07</b>	<b>1003</b>
J & K	Baglihar HPS (IPP)	450	438	440	10.51	438
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>1094</b>	<b>438</b>	<b>440</b>	<b>10.51</b>	<b>438</b>
<b>Total State Control Area Generation</b>		<b>37702</b>	<b>19041</b>	<b>19271</b>	<b>452.55</b>	<b>18421</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>4524</b>	<b>3947</b>	<b>102.87</b>	<b>4286</b>
<b>Total Regional Availability(Gross)</b>		<b>61923</b>	<b>42630</b>	<b>41156</b>	<b>971.68</b>	<b>40051</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	11233	9493	8361	203.34	8473
State Control Area Hydro	5589	3023	3222	84.87	3100
<b>Total Regional Hydro</b>	<b>16823</b>	<b>12516</b>	<b>11583</b>	<b>288.21</b>	<b>11573</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	500	500	0	7.84	0.00	7.84
Gwalior-Agra (D/C)	1917	1305	1917	0	36.21	0.00	36.21
Zerda-Kankroli	-76	-125	0	321	0.00	4.67	-4.67
Zerda-Bhinmal	-50	-109	0	334	0.00	4.35	-4.35
Malanpur-Auraiya	-46	-15	0	52	0.00	0.55	-0.55
Badod-Kota/Morak	-113	-84	0	113	0.00	1.89	-1.89
Mundra-Mohindergarh(HVDC)	1999	1999	2011	0	48.13	0.00	48.13
<b>Sub Total WR</b>	<b>3831</b>	<b>3471</b>			<b>92.18</b>	<b>11.46</b>	<b>80.72</b>
Pusaui Bypass	100	-424	100	450	0.87	0.00	0.87
MZP- GKP (D/C)	190	310	532	0	7.51	0.00	7.51
Patna-Balia(D/C)	-25	-6	62	136	0.00	0.12	-0.12
B'Sharif-Balia (D/C)	215	251	340	0	6.18	0.00	6.18
Pusaui-Balia	-30	50	63	52	0.52	0.00	0.52
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusaui-Sahupuri	174	167	197	0	4.13	0.00	4.13
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)	69	128	235	0	3.06	0.00	3.06
<b>Sub Total ER</b>	<b>693</b>	<b>476</b>			<b>22.27</b>	<b>0.12</b>	<b>22.16</b>
<b>Total IR Exch</b>	<b>4524</b>	<b>3947</b>			<b>114.45</b>	<b>11.58</b>	<b>102.87</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
31.42	1.35	32.77	17.16	1.71	-11.76	2.05	-1.20	1.20

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
36.96	68.25	105.21	22.16	80.72	102.87	-14.80	12.46	-2.34

**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	4.07	22.20	41.44	70.64	45.23	7.28	5.84	0.25	0.00

<----- 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				
50.22	6.04	49.59	15.16	49.92	0.23	0.13	50.21	49.79

**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	408	08:02	399	22:14	0.0	0.0	0.0	0.0
Gorakhpur	400	434	08:01	417	15:42	0.0	0.0	88.3	6.1
Bareilly	400	419	08:01	394	23:09	0.0	0.0	0.0	0.0
Kanpur	400	420	07:58	398	00:10	0.0	0.0	0.0	0.0
Dadri	400	417	08:02	394	22:10	0.0	0.0	0.0	0.0
Ballabgarh	400	426	08:02	400	22:13	0.0	0.0	6.8	0.0
Bawana	400	419	07:58	396	22:14	0.0	0.0	0.0	0.0
Bassi	400	420	05:01	397	22:48	0.0	0.0	0.0	0.0
Hissar	400	409	06:04	389	15:01	0.0	0.4	0.0	0.0
Moga	400	411	08:01	391	15:02	0.0	0.0	0.0	0.0
Abdullapur	400	419	07:47	396	15:02	0.0	0.0	0.0	0.0
Nalagarh	400	412	07:46	394	15:47	0.0	0.0	0.0	0.0
Kishenpur	400	411	07:45	395	20:49	0.0	0.0	0.0	0.0
Wagoora	400	406	03:40	384	20:49	0.0	9.6	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	775	08:02	735	22:52	0.0	13.3	0.0	0.0
Balia	765	783	08:01	746	22:14	0.0	0.0	0.0	0.0
Moga	765	791	08:02	750	20:24	0.0	0.0	0.0	0.0
Agra	765	792	08:03	748	15:14	0.0	0.0	0.0	0.0
Bhiwani	765	801	08:02	750	22:12	0.0	0.0	0.3	0.0
Unnao	765	766	08:01	727	22:15	0.1	39.3	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 14.06.2014 :**

1. Partial rains in some parts of 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 : 14.06.2014

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER