

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.06.2014  
Date of Reporting : 20.06.2014

### 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
44819	1362	46181	50.04	43693	2249	45942	50.07	1052.0	59.29

\* 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	73.76	21.05		94.81	124.40	124.28	-0.12	219.09	0.65
Haryana	60.04	0.54		60.58	104.53	105.16	0.63	165.74	0.13
Rajasthan	123.14	0.00	13.72	136.86	56.19	58.13	1.95	194.99	0.60
Delhi	34.06			34.06	82.56	79.13	-3.43	113.19	1.17
UP	129.73	12.48	1.20	143.42	123.60	123.63	0.03	267.04	52.38
Uttarakhand		16.97		16.97	16.90	18.55	1.65	35.52	2.40
HP		24.81		24.81	-0.92	-1.49	-0.58	23.31	0.26
J & K		10.55	0.00	10.55	17.00	16.07	-0.93	26.62	1.70
Chandigarh				0.00	5.24	6.53	1.30	6.53	0.00
<b>Total</b>	<b>420.73</b>	<b>86.40</b>	<b>14.92</b>	<b>522.04</b>	<b>529.50</b>	<b>530.00</b>	<b>0.49</b>	<b>1052.04</b>	<b>59.29</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	9682	0	-2	1379	9239	0	-4	1555	40.13	
Haryana	7211	0	-647	750	6864	0	-107	846	12.11	
Rajasthan	7377	0	24	-323	7921	0	-113	15	-0.88	
Delhi	4872	12	-75	596	4483	15	-5	434	13.15	
UP	11289	1250	-310	505	11754	2190	-10	665	13.69	
Uttarakhand	1727	0	122	277	1475	0	135	175	4.42	
HP	1002	0	-62	-965	792	44	150	-1107	-23.16	
J&K	1384	100	8	-301	922	0	-23	-649	-11.42	
Chandigarh	275	0	45	0	244	0	67	0	0.42	
<b>Total</b>	<b>44819</b>	<b>1362</b>	<b>-898</b>	<b>1918</b>	<b>43693</b>	<b>2249</b>	<b>89</b>	<b>1935</b>	<b>48.46</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 (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI	
								Net MU	Net MU
<b>A. NTPC</b>									
Singrauli STPS	2000	1415	1557	1551	33.85	1411	33.95		-0.09
Rihand I STPS	1000	861	913	934	20.54	856	20.48		0.07
Rihand II STPS	1000	472	513	507	11.10	463	11.21		-0.11
Rihand III STPS	1000	862	885	881	20.51	855	20.49		0.02
Dadri I STPS	840	812	766	786	16.34	681	16.93		-0.59
Dadri II STPS	980	966	938	973	21.87	911	22.83		-0.96
Unchahar I TPS	420	404	382	418	8.86	369	9.57		-0.72
Unchahar II TPS	420	406	371	431	9.13	380	9.57		-0.44
Unchahar III TPS	210	202	161	216	4.56	190	4.73		-0.17
ISTPP (Jhajjar)	1500	1359	1356	1473	30.01	1250	30.96		-0.95
Dadri GPS	830	793	440	340	9.62	401	10.10		-0.48
Anta GPS	419	245	244	235	5.57	232	5.48		0.09
Auraiya GPS	663	427	146	68	3.25	135	3.53		-0.27
Dadri Solar	5	1	0	0	0.02	1	0.03		0.00
Unchahar Solar	10	3	0	0	0.03	1	0.07		-0.04
<b>Sub Total (A)</b>	<b>11297</b>	<b>9227</b>	<b>8672</b>	<b>8813</b>	<b>195</b>	<b>8136</b>	<b>200</b>		<b>-5</b>
<b>B. NPC</b>									
NAPS	440	267	305	314	6.56	274	6.41		0.16
RAPS- B	440	389	434	440	9.35	390	9.34		0.02
RAPS- C	440	200	222	221	4.76	198	4.80		-0.04
<b>Sub Total (B)</b>	<b>1320</b>	<b>856</b>	<b>961</b>	<b>975</b>	<b>20.68</b>	<b>862</b>	<b>20.54</b>		<b>0.13</b>
<b>C. NHPC</b>									
Chamera I HPS	540	534	540	540	12.98	541	12.82		0.16
Chamera II HPS	300	306	308	308	7.34	306	7.34		-0.01
Chamera III HPS	231	229	233	232	5.58	232	5.50		0.08
Bairasui HPS	180	176	180	180	3.68	153	3.54		0.14
Salal-HPS	690	602	668	638	14.78	616	14.48		0.31
Tanakpur-HPS	94	64	85	72	1.63	68	1.54		0.09
Uri-HPS	480	475	478	474	11.49	479	11.40		0.09
Uri-II HPS	240	176	187	181	4.19	175	4.22		-0.03
Dhauliganga-HPS	280	148	207	207	4.90	204	3.50		1.40
Dulhasti-HPS	390	284	398	272	7.01	292	6.83		0.19
Sewa-II HPS	120	119	123	120	2.97	124	2.86		0.11
Parbati 3	390	120	30	30	2.90	121	2.88		0.02
<b>Sub Total ©</b>	<b>3935</b>	<b>3234</b>	<b>3437</b>	<b>3254</b>	<b>79</b>	<b>3311</b>	<b>77</b>		<b>3</b>
<b>D. SJVNL</b>									
NJPC	1500	769	1351	0	18.10	754	17.87		0.23
Rampur HEP	206	142	286	0	3.29	137	3.40		-0.11
<b>Sub Total (D)</b>	<b>1706</b>	<b>911</b>	<b>1637</b>	<b>0</b>	<b>21.39</b>	<b>891</b>	<b>21.27</b>		<b>0.12</b>
<b>E. THDC</b>									
Tehri HPS	1000	385	385	385	9.07	378	9.00		0.07
Koteshwar HPS	400	213	400	202	5.00	209	5.00		0.00
<b>Sub Total (E)</b>	<b>1400</b>	<b>598</b>	<b>785</b>	<b>587</b>	<b>14.07</b>	<b>586</b>	<b>14.00</b>		<b>0.07</b>
<b>F. BBMB</b>									
Bhakra HPS	1514	848	1216	637	20.74	864	20.36		0.38
Dehar HPS	990	480	660	495	13.02	543	11.52		1.50
Pong HPS	396	220	364	122	5.43	226	5.28		0.15
<b>Sub Total (F)</b>	<b>2900</b>	<b>1548</b>	<b>2240</b>	<b>1254</b>	<b>39.19</b>	<b>1633</b>	<b>37.16</b>		<b>2.03</b>
<b>G. IPP(s)/JV(s)</b>									
ADHPL HPS(IPP)	192	0	146	230	5.05	210	5.25		-0.20
KWHEP HPS(IPP)	1000	0	1063	0	14.37	599	14.33		0.04
Malana Stg-II HPS	100	0	115	114	2.74	114	2.55		0.19
Shree Cement TPS	300	0	193	201	4.92	205	4.70		0.22
Budhil HPS(IPP)	70	0	71	71	1.68	70	1.64		0.04
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1587</b>	<b>617</b>	<b>28.75</b>	<b>1198</b>	<b>28.46</b>		<b>0.29</b>
<b>H. Total Regional Entities (A-G)</b>	<b>24221</b>	<b>16374</b>	<b>19319</b>	<b>15500</b>	<b>398.80</b>	<b>16617</b>	<b>398.24</b>		<b>0.57</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	1250	1260	28	1160
	Guru Nanak Dev TPS(Bhatinda)	440	304	332	6	230
	Guru Hargobind Singh TPS(L.mbt)	920	918	926	20	840
	Goindwal(GVK)		0	0	0	0
	Rajpura	700	371	369	8	328
	Talwandi Saboo	660	518	596	12.36	515
	Thermal (Total)	<b>3980</b>	<b>3361</b>	<b>3483</b>	<b>74</b>	<b>3073</b>
	Total Hydro	1148	841	930	21.05	877
	<b>Total Punjab</b>	<b>5128</b>	<b>4202</b>	<b>4413</b>	<b>94.81</b>	<b>3950</b>
Haryana	Panipat TPS	1367	532	529	12.45	519
	DCRTPP (Yamuna nagar)	600	561	537	12.50	521
	Faridabad GPS (NTPC)	432	377	187	7.55	315
	RGTPP (khedar) (IPP)	1200	554	580	12.95	540
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	683	572	14.59	608
	Thermal (Total)	4944	2707	2405	60	2502
	Total Hydro	62	26	23	0.54	23
	<b>Total Haryana</b>	<b>5006</b>	<b>2733</b>	<b>2428</b>	<b>60.58</b>	<b>2524</b>
	Rajasthan	kota TPS	1240	930	929	21.98
suratgarh TPS		1500	1194	1062	26.20	1091
Chabra TPS		750	558	537	13.08	545
Dholpur GPS		330	103	107	2.58	107
Ramgarh GPS		221	64	81	2.38	99
RAPS A (NPC)		300	170	170	4.44	185
Barsingsar (NLC)		250	95	99	2.09	87
Giral LTPS		250	67	67	1.48	62
Rajwest LTPS (IPP)		1080	949	827	20.89	871
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		1320	1069	1164	28.03	1168
Thermal (Total)		7976	5199	5043	123	5131
Total Hydro		550	0	0	0.00	0
Wind power		2798	316	830	12.32	513
Biomass		99	41	41	0.97	41
Solar		730	0	0	0.43	18
Renewable/Others (Total)		3627	357	871	14	572
<b>Total Rajasthan</b>		<b>12153</b>	<b>5556</b>	<b>5914</b>	<b>136.86</b>	<b>5702</b>
UP	Anpara TPS	1630	1432	1412	30.90	1288
	Obra TPS	1288	565	589	12.10	504
	Paricha TPS	1140	412	810	9.10	379
	Panki TPS	210	170	170	3.60	150
	Harduaganj TPS	665	427	436	9.30	388
	Tanda TPS (NTPC)	440	401	201	6.96	290
	Roza TPS (IPP)	1200	1112	1107	25.58	1066
	Anpara-C (IPP)	1200	990	990	23.59	983
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	401	404	8.61	359
	Thermal (Total)	8223	5910	6119	130	5406
	Vishnuparyag HPS (IPP)	400	396	436	9.31	388
	Other Hydro	527	158	135	3.17	132
	Cogeneration	981	50	50	1.20	50
	<b>Total UP</b>	<b>10131</b>	<b>6514</b>	<b>6740</b>	<b>143.42</b>	<b>5588</b>
	Uttarakhand	Total Hydro	1303	749	717	16.97
<b>Total Uttarakhand</b>		<b>1303</b>	<b>749</b>	<b>717</b>	<b>16.97</b>	<b>707</b>
Delhi	Rajghat TPS	135	94	96	2.23	93
	Delhi Gas Turbine	282	168	179	4.18	174
	Pragati Gas Turbine	330	277	292	6.91	288
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	1370	465	450	10.72	447
	Badarpur TPS (NTPC)	705	475	490	10.01	417
	Thermal (Total)	2917	1479	1507	34.06	1419
	<b>Total Delhi</b>	<b>2917</b>	<b>1479</b>	<b>1507</b>	<b>34.06</b>	<b>1419</b>
HP	Baspa HPS (IPP)	300	304	334	7.66	319
	Malana HPS (IPP)	86	103	103	2.48	103
	Other Hydro	728	550	634	14.67	611
	<b>Total HP</b>	<b>1114</b>	<b>957</b>	<b>1071</b>	<b>24.81</b>	<b>1034</b>
J & K	Baglihar HPS (IPP)	450	440	438	10.55	439
	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>440</b>	<b>438</b>	<b>10.55</b>	<b>439</b>
<b>Total State Control Area Generation</b>		<b>38846</b>	<b>22630</b>	<b>23228</b>	<b>522.04</b>	<b>21364</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>5588</b>	<b>6109</b>	<b>141.74</b>	<b>5906</b>
<b>Total Regional Availability(Gross)</b>		<b>63067</b>	<b>47537</b>	<b>44837</b>	<b>1062.58</b>	<b>43886</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	11233	9422	5439	176.27	7344
State Control Area Hydro	5589	3171	3314	86.40	3212
<b>Total Regional Hydro</b>	<b>16823</b>	<b>12593</b>	<b>8753</b>	<b>262.66</b>	<b>10556</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	500	500	500	0	12.00	0.00	12.00
Gwalior-Agra (D/C)	1869	1939	2218	0	46.27	0.00	46.27
Zerda-Kankroli	-122	-189	0	198	0.00	3.23	-3.23
Zerda-Bhinmal	-102	-181	36	208	0.00	2.57	-2.57
Malanpur-Auraiya	19	0	116	0	0.36	0.00	0.36
Badod-Kota/Morak	-60	-68	0	68	0.00	10.06	-10.06
Mundra-Mohindergarh(HVDC)	2047	2184	2185	0	51.53	0.00	51.53
<b>Sub Total WR</b>	<b>4151</b>	<b>4185</b>			<b>110.16</b>	<b>15.86</b>	<b>94.30</b>
Pusaali Bypass	400	400	400	0	9.71	0.00	9.71
MZP- GKP (D/C)	252	338	636	0	10.61	0.00	10.61
Patna-Balia(D/C)	301	552	582	0	10.57	0.00	10.57
B Sharif-Balia (D/C)	335	415	653	0	11.02	0.00	11.02
Pusaali-Balia	-36	-9	0	36	0.00	0.18	-0.18
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusaali-Sahupuri	176	165	194	0	4.07	0.00	4.07
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	18	17	0	18	0.00	0.45	-0.45
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-9	46	207	46	2.10	0.00	2.10
<b>Sub Total ER</b>	<b>1437</b>	<b>1924</b>			<b>48.07</b>	<b>0.64</b>	<b>47.44</b>
<b>Total IR Exch</b>	<b>5588</b>	<b>6109</b>			<b>158.23</b>	<b>16.49</b>	<b>141.74</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
37.70	1.43	39.13	14.19	2.03	-6.97	21.62	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
46.35	101.20	147.55	47.44	94.30	141.74	1.08	-6.90	-5.82

**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	1.60	8.60	29.54	67.20	54.87	9.61	5.95	0.35	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				
50.26	18.02	49.47	0.06	49.95	0.14	0.11	50.21	49.68

**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	404	17:46	398	00:07	0.0	0.0	0.0	0.0
Gorakhpur	400	432	06:06	413	13:54	0.0	0.0	84.5	3.7
Bareilly	400	413	18:01	393	14:38	0.0	0.0	0.0	0.0
Kanpur	400	412	06:04	396	14:35	0.0	0.0	0.0	0.0
Dadri	400	409	07:02	393	14:31	0.0	0.0	0.0	0.0
Ballabgarh	400	416	07:02	395	14:32	0.0	0.0	0.0	0.0
Bawana	400	412	07:00	394	14:37	0.0	0.0	0.0	0.0
Bassi	400	420	18:34	397	10:44	0.0	0.0	0.0	0.0
Hissar	400	405	07:02	386	14:32	0.0	3.2	0.0	0.0
Moga	400	412	00:26	397	11:07	0.0	0.0	0.0	0.0
Abdullapur	400	413	07:01	396	10:51	0.0	0.0	0.0	0.0
Nalagarh	400	414	00:22	386	10:53	0.0	0.4	0.0	0.0
Kishenpur	400	411	00:24	397	20:16	0.0	0.0	0.0	0.0
Wagoora	400	401	03:00	392	08:00	0.0	6.1	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	767	18:01	732	14:32	0.0	8.3	0.0	0.0
Balia	765	775	06:04	743	13:54	0.0	0.0	0.0	0.0
Moga	765	798	00:28	770	14:35	0.0	0.0	0.0	0.0
Agra	765	786	18:02	746	14:32	0.0	0.0	0.0	0.0
Bhiwani	765	788	18:00	766	00:07	0.0	0.0	0.0	0.0
Unnao	765	753	18:01	724	14:35	1.9	61.0	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 19.06.2014 :**

1. Hot & Humid weather.

**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 : 19.06.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER