

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पब्लिसिटी की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.06.2013  
Date of Reporting : 30.06.2013

### 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
35223	650	35873	50.01	38495	1258	39753	50.31	884.0	25.32

\* 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)	UI [OD:(+ve), UD: (-ve)]	
	Thermal	Hydro	Renewable/others \$	Total				Consumption (Net MU)	Shortages *
Punjab	39.23	18.13		57.36	119.62	114.28	-5.34	171.64	10.23
Haryana	59.72	0.51		60.24	101.12	100.66	-0.45	160.90	0.00
Rajasthan	79.65	0.00	34.80	114.45	58.71	51.50	-7.22	165.95	0.00
Delhi	28.55			28.55	69.77	71.45	1.67	100.00	1.49
UP	96.65	2.88	3.60	103.13	99.79	93.89	-5.91	197.02	11.04
Uttarakhand		11.66		11.66	19.10	20.70	1.60	32.36	0.86
HP		22.91		22.91	4.15	0.98	-3.17	23.89	0.00
J & K		13.39	0.00	13.39	13.61	13.95	0.34	27.34	1.70
Chandigarh				0.00	5.69	4.89	-0.81	4.89	0.00
<b>Total</b>	<b>303.80</b>	<b>69.49</b>	<b>38.40</b>	<b>411.69</b>	<b>491.57</b>	<b>472.28</b>	<b>-19.29</b>	<b>883.97</b>	<b>25.32</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				UI [OD:(+ve), UD: (-ve)]	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction	
Punjab	7347	400	-21	1747	8024	400	-11	1717	42.14	
Haryana	6575	0	-243	1098	6931	0	-149	1088	24.94	
Rajasthan	6235	0	-557	257	6978	0	-501	219	4.90	
Delhi	3902	0	507	-335	4148	68	-64	-384	-6.44	
UP	7315	150	-410	143	9013	790	20	383	5.37	
Uttarakhand	1454	0	287	355	1400	0	102	282	7.21	
HP	892	0	-180	-937	924	0	-184	-903	-21.30	
J&K	1285	100	60	-277	876	0	-103	-503	-9.09	
Chandigarh	218	0	-40	0	201	0	-23	0	0.00	
<b>Total</b>	<b>35223</b>	<b>650</b>	<b>-597</b>	<b>2051</b>	<b>38495</b>	<b>1258</b>	<b>-913</b>	<b>1899</b>	<b>47.74</b>	

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

### III. Regional Entities :

Entity	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 [OG:(+ve), UG: (-ve)]	
									Net MU	Net MU
A. NTPC	Singrauli STPS	2000	1935	1945	2080	42.39	1766	42.72	-0.33	
	Rihand I STPS	1000	259	0	410	5.59	233	5.85	-0.26	
	Rihand II STPS	1000	955	843	1012	20.00	833	20.46	-0.46	
	Rihand III STPS	500	480	446	391	9.43	393	10.00	-0.57	
	Dadri I STPS	840	810	693	638	15.36	640	17.92	-2.56	
	Dadri II STPS	980	480	476	445	9.47	394	9.83	-0.36	
	Unchahar I TPS	420	394	310	302	6.53	272	7.89	-1.36	
	Unchahar II TPS	420	201	163	196	3.54	147	3.86	-0.32	
	Unchahar III TPS	210	198	163	178	3.46	144	3.51	-0.06	
	ISTPP (Jhajhar)	1500	1410	798	772	17.68	737	18.51	-0.83	
	Dadri GPS	830	804	378	416	9.81	409	9.95	-0.14	
	Anta GPS	419	398	254	261	5.76	240	5.83	-0.07	
	Auraiya GPS	663	631	312	287	7.07	295	6.99	0.08	
	<b>Sub Total (A)</b>	<b>10782</b>	<b>8954</b>	<b>6781</b>	<b>7388</b>	<b>156.08</b>	<b>6503</b>	<b>163.32</b>	<b>-7.24</b>	
B. NPC	NAPS	440	295	336	342	7.01	292	7.08	-0.07	
	RAPS- B	440	388	431	432	9.28	387	9.31	-0.03	
	RAPS- C	440	400	455	466	9.90	412	9.60	0.30	
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1083</b>	<b>1222</b>	<b>1240</b>	<b>26.19</b>	<b>1091</b>	<b>25.99</b>	<b>0.20</b>	
C. NHPC	Chamera I HPS	540	540	540	540	13.00	542	12.96	0.04	
	Chamera II HPS	300	306	306	304	7.31	305	7.34	-0.03	
	Chamera III HPS	231	231	233	226	5.50	229	5.51	-0.01	
	Bairasuil HPS	180	179	179	60	2.12	88	2.53	-0.42	
	Salal-HPS	690	558	560	560	13.35	556	13.40	-0.05	
	Tanakpur-HPS	94	85	78	85	1.87	78	2.03	-0.16	
	Uri-HPS	480	465	467	461	11.16	465	11.02	0.14	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	387	402	372	9.33	389	9.34	-0.02	
	Sewa-II HPS	120	119	84	0	1.00	42	1.12	-0.13	
<b>Sub Total (C)</b>	<b>3305</b>	<b>2870</b>	<b>2849</b>	<b>2608</b>	<b>64.64</b>	<b>2693</b>	<b>65.27</b>	<b>-0.63</b>		
D. NJPC	Natpaa Jhakri	1500	1558	1618	1516	37.11	1546	37.38	-0.26	
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1558</b>	<b>1618</b>	<b>1516</b>	<b>37.11</b>	<b>1546</b>	<b>37.38</b>	<b>-0.26</b>	
E. THDC	Tehri HPS	1000	795	785	786	18.66	778	18.50	0.16	
	<b>Sub Total (E)</b>	<b>1400</b>	<b>1179</b>	<b>1167</b>	<b>1162</b>	<b>25.95</b>	<b>1081</b>	<b>25.90</b>	<b>0.05</b>	
F. BBMB	Bhakra HPS	1480	1143	1152	1151	27.81	1159	27.42	0.39	
	Dehar HPS	990	605	825	620	15.03	626	14.53	0.50	
	Pong HPS	396	140	310	60	3.56	148	3.36	0.20	
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1888</b>	<b>2287</b>	<b>1831</b>	<b>46.40</b>	<b>1933</b>	<b>45.32</b>	<b>1.08</b>	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	230	230	4.99	208	5.00	0.00	
	KWHEP HPS(IPP)	1000	0	1196	961	26.05	1085	28.49	-2.45	
	Malana Stg-II HPS	100	0	111	113	2.54	106	2.23	0.31	
	Shree Cement TPS	300	0	262	260	6.23	260	6.37	-0.14	
	Budhil HPS(IPP)	70	0	70	69	1.65	69	1.65	0.00	
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1869</b>	<b>1633</b>	<b>41.46</b>	<b>1727</b>	<b>43.74</b>	<b>-2.29</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>22836</b>	<b>17531</b>	<b>17793</b>	<b>17378</b>	<b>397.82</b>	<b>16576</b>	<b>406.92</b>	<b>-9.09</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	1015	1020	24.33	1014	
	Guru Nanak Dev TPS(Bhatinda)	440	145	90	1.55	64	
	Guru Hargobind Singh TPS(L.mbt)	920	0	908	13.35	556	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	1160	2018	39.23	1635	
	Total Hydro	1148	739	847	18.13	756	
	<b>Total Punjab</b>	<b>3768</b>	<b>1899</b>	<b>2865</b>	<b>57.36</b>	<b>2390</b>	
Haryana	Panipat TPS	1367	594	643	14.75	615	
	DCRTPP (Yamuna nagar)	600	262	280	6.16	257	
	Faridabad GPS (NTPC)	432	186	186	4.38	182	
	RGTPP (khedar) (IPP)	1200	941	1109	24.09	1004	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	0	597	10.35	431	
	Thermal (Total)	4944	1983	2815	59.72	2489	
	Total Hydro	62	22	22	0.51	21	
		<b>Total Haryana</b>	<b>5006</b>	<b>2005</b>	<b>2837</b>	<b>60.24</b>	<b>2510</b>
Rajasthan	kota TPS	1240	706	634	15.60	650	
	suratgarh TPS	1500	715	974	20.11	838	
	Chabra TPS	500	190	191	4.58	191	
	Dholpur GPS	330	110	121	2.92	121	
	Ramgarh GPS	111	49	65	1.47	61	
	RAPS A (NPC)	300	179	179	4.24	177	
	Barsingsar (NLC)	250	157	154	3.74	156	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	1080	510	614	13.65	569	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	0	0	0.00	0	
	Kawai(Adani)	660	489	610	13.34	556	
	Thermal (Total)	6956	3105	3542	79.65	3319	
	Total Hydro	550	0	0	0.00	0	
	Wind power	2191	1429	1425	32.69	1362	
	Biomass	91	26	26	0.61	26	
	Solar	201	0	0	1.51	63	
	Renewable/Others (Total)	2483	1455	1451	34.80	1450	
		<b>Total Rajasthan</b>	<b>9989</b>	<b>4560</b>	<b>4993</b>	<b>114.45</b>	<b>4769</b>
	UP	Anpara TPS	1630	881	1157	25.90	1079
Obra TPS		1288	479	430	11.40	475	
Paricha TPS		1140	687	537	14.20	592	
Panki TPS		210	122	140	3.20	133	
Harduaganj TPS		665	0	0	0.00	0	
Tanda TPS (NTPC)		440	186	190	4.80	200	
Roza TPS (IPP)		1200	775	779	19.46	811	
Anpara-C (IPP)		1200	414	509	11.42	476	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	313	223	6.26	261	
Thermal (Total)		8223	3857	3965	96.65	4027	
Vishnuparyag HPS (IPP)		400	0	0	0.00	0	
Other Hydro		527	127	106	2.88	120	
Cogeneration		981	150	150	3.60	150	
		<b>Total UP</b>	<b>10131</b>	<b>4134</b>	<b>4221</b>	<b>103.13</b>	<b>4297</b>
Uttarakhand		Total Hydro	1303	475	512	11.66	486
		<b>Total Uttarakhand</b>	<b>1303</b>	<b>475</b>	<b>512</b>	<b>11.66</b>	<b>486</b>
Delhi	Rajghat TPS	135	91	91	1.72	72	
	Delhi Gas Turbine	282	159	118	3.06	127	
	Pragati Gas Turbine	330	270	278	7.22	301	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	211	218	4.84	202	
	Badarpur TPS (NTPC)	705	555	540	11.71	488	
	Thermal (Total)	2232	1286	1245	28.55	1190	
	<b>Total Delhi</b>	<b>2232</b>	<b>1286</b>	<b>1245</b>	<b>28.55</b>	<b>1190</b>	
HP	Baspa HPS (IPP)	330	333	333	7.68	320	
	Malana HPS (IPP)	86	102	95	2.26	94	
	Other Hydro	589	458	576	12.97	541	
		<b>Total HP</b>	<b>1005</b>	<b>893</b>	<b>1004</b>	<b>22.91</b>	<b>954</b>
J & K	Baglihar HPS (IPP)	450	409	458	10.43	435	
	Other Hydro	323	110	128	2.95	123	
	Gas/Diesel/Others	183	0	0	0.00	0	
		<b>Total J &amp; K</b>	<b>956</b>	<b>519</b>	<b>586</b>	<b>13.39</b>	<b>558</b>
<b>Total State Control Area Generation</b>		<b>34390</b>	<b>15771</b>	<b>18263</b>	<b>411.69</b>	<b>17154</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>4304</b>	<b>3292</b>	<b>84.91</b>	<b>3538</b>	
<b>Total Regional Availability(Gross)</b>		<b>57226</b>	<b>37868</b>	<b>38933</b>	<b>894.42</b>	<b>37268</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	9458	8421	207.68	8653
State Control Area Hydro	5368	2775	3077	69.49	2895
<b>Total Regional Hydro</b>	<b>15731</b>	<b>12233</b>	<b>11498</b>	<b>277.16</b>	<b>11548</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	50	100	300	0	3.42	0.00	3.42
Gwalior-Agra (D/C)	1365	1044	1495	0	24.80	0.00	24.80
Zerda-Kankroli	-73	-222	0	332	0.00	5.22	-5.22
Zerda-Bhinmal	-80	-229	0	359	0.00	4.99	-4.99
Malanpur-Auraiya	-42	-50	0	117	0.00	1.61	-1.61
Badod-Kota/Morak	-38	-98	0	167	0.00	2.37	-2.37
Mundra-Mohindergarh(HVDC)	1212	1249	1400	0	30.70	0.00	30.70
<b>Sub Total WR</b>	<b>2394</b>	<b>1794</b>			<b>58.92</b>	<b>14.19</b>	<b>44.73</b>
Pusauli Bypass	-114	-274	0	302	0.00	4.58	-4.58
MZP- GKP (D/C)	670	744	862	0	17.99	0.00	17.99
Patna-Balia(D/C)	517	432	536	0	8.91	0.00	8.91
B'Sharif-Balia (D/C)	297	218	297	0	5.65	0.00	5.65
Pusauli-Balia	-23	-22	11	28	0.00	0.35	-0.35
Gaya-Fatehpur (765 Kv)	104	62	214	0	2.99	0.00	2.99
Pusauli-Sahupuri	150	116	161	0	2.90	0.00	2.90
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	45	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	347	262	398	0	7.57	0.00	7.57
<b>Sub Total ER</b>	<b>1910</b>	<b>1498</b>			<b>46.00</b>	<b>5.83</b>	<b>40.18</b>
<b>Total IR Exch</b>	<b>4304</b>	<b>3292</b>			<b>104.92</b>	<b>20.01</b>	<b>84.91</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
40.04	3.92	43.96	-1.82	15.08	-1.26	-3.36	1.15	-1.15

  

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
42.04	59.41	101.44	40.18	44.73	84.91	-1.86	-14.67	-16.53

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

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.10	70.10	0.80	70.00	84.60	29.90

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.62	13.09	49.64	19.50	50.13	0.34	0.13	50.52	49.90

**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	420	18:10	407	12:48	0.0	0.0	0.0	0.0
Gorakhpur	400	427	04:14	407	20:23	0.0	0.0	42.6	0.0
Bareilly	400	423	17:36	401	23:05	0.0	0.0	2.4	0.0
Kanpur	400	425	04:02	407	00:12	0.0	0.0	14.1	0.0
Dadri	400	421	17:54	398	12:38	0.0	0.0	1.1	0.0
Ballabgarh	400	425	04:06	404	12:12	0.0	0.0	8.9	0.0
Bawana	400	421	17:47	401	12:40	0.0	0.0	1.0	0.0
Bassi	400	427	04:02	400	23:06	0.0	0.0	7.3	0.0
Hissar	400	408	17:24	391	19:47	0.0	0.0	0.0	0.0
Moga	400	417	13:11	398	12:04	0.0	0.0	0.0	0.0
Abdullapur	400	416	18:00	399	12:14	0.0	0.0	0.0	0.0
Nalagarh	400	413	04:01	397	12:03	0.0	0.0	0.0	0.0
Kishenpur	400	419	13:08	407	12:04	0.0	0.0	0.0	0.0
Wagoora	400	416	03:57	396	21:06	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	789	17:33	752	00:13	0.0	0.0	0.0	0.0
Balia	765	768	17:31	734	19:51	0.0	7.6	0.0	0.0
Moga	765	797	13:10	763	19:47	0.0	0.0	0.0	0.0
Agra	765	812	04:04	769	23:07	0.0	0.0	10.6	0.0
Bhiwani	765	799	18:01	760	19:45	0.0	0.0	0.0	0.0
Unnao	765	770	18:08	739	00:13	0.0	3.2	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 (m <sup>3</sup> /s)	Usage (m <sup>3</sup> /s)
Bhakra	513.59	445.62	490.71	758.57	467.71	230.40	1988.19	927.94
Pong	426.72	384.05	404.22	320.28	394.31	116.59	601.84	227.44
Tehri	829.79	740.04	780.05	322.00	818.65	982.26	603.78	462.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	351.16	373.15
Rihand	268.22	252.98	254.69	64.30	254.42	53.70	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	513.15	NA	499.58	NA	447.92	427.73

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 29.06.2013 :**

1. Rain in most part of NR.

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

**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 :**

1. Dhauliganga (280 MW) closed down till 30.09.2013 due to flooding of power house.
2. Vishnuprayg( UPPCL) ( 400 MW ) Closed due to High Silt level in river water.

Report for : 29.06.2013

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER