

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 16.11.2012

Date of Reporting : 17.11.2012

### I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
31705	2225	33930	50.30	26073	866	26939	50.23	694.4	40.97

\* 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 * (MU)
Punjab	43.93	8.84		52.77	34.76	34.88	0.12	87.65	1.80
Haryana	46.36	0.68		47.03	45.85	46.87	1.02	93.90	1.86
Rajasthan	91.09	4.51	5.70	101.30	60.18	61.30	1.13	162.60	0.42
Delhi	27.78			27.78	31.19	28.33	-2.87	56.10	0.04
UP	115.59	5.99	1.68	123.26	83.25	80.36	-2.89	203.62	34.04
Uttarakhand		9.01		9.01	17.46	18.90	1.43	27.91	1.11
HP		6.78		6.78	14.83	16.32	1.50	23.10	0.00
J & K		9.58	0.00	9.58	26.58	26.51	-0.07	36.10	1.70
Chandigarh				0.00	3.31	3.44	0.13	3.44	0.00
<b>Total</b>	<b>324.74</b>	<b>45.40</b>	<b>7.38</b>	<b>377.51</b>	<b>317.41</b>	<b>316.92</b>	<b>-0.49</b>	<b>694.43</b>	<b>40.97</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 (19:00 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	4449	600	-252	-47	3012	0	111	-213	-2.27	
Haryana	4468	575	16	114	3137	0	-86	54	1.93	
Rajasthan	6770	0	-130	306	6487	116	82	710	16.79	
Delhi	3017	0	-64	-1148	1502	0	-150	-2052	-36.41	
UP	8587	950	-266	-32	8757	750	-81	634	3.66	
Uttarakhand	1540	0	80	397	970	0	-52	359	8.43	
HP	1190	0	83	4	720	0	72	145	2.80	
J&K	1490	100	-435	533	1397	0	73	389	8.53	
Chandigarh	194	0	-5	0	91	0	6	-31	-0.34	
<b>Total</b>	<b>31705</b>	<b>2225</b>	<b>-973</b>	<b>129</b>	<b>26073</b>	<b>866</b>	<b>-25</b>	<b>-4</b>	<b>3.13</b>	

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

### III. Regional Entities :

Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	UI [OG:(+ve), UG: (-ve)]	
							Schedule Net MU	UI Net MU
<b>A. NTPC</b>								
Singrauli STPS	2000	1871	2076	1735	44.70	1863	44.89	-0.19
Rihand I STPS	1000	460	505	505	10.91	455	11.04	-0.13
Rihand II STPS	1000	975	1033	1004	23.32	972	23.40	-0.08
Rihand III STPS	500	0	0	0	0.00	0		0.00
Dadri I STPS	840	810	853	850	18.94	789	19.42	-0.48
Dadri II STPS	980	975	989	1005	22.70	946	23.34	-0.64
Unchahar I TPS	420	402	437	351	8.76	365	9.21	-0.45
Unchahar II TPS	420	405	439	339	8.72	364	8.93	-0.20
Unchahar III TPS	210	202	219	174	4.48	187	4.58	-0.10
ISTPP (Jhajhar)	1500	470	425	300	9.02	376	9.22	-0.19
Dadri GPS	830	834	518	560	13.53	564	13.72	-0.19
Anta GPS	419	410	198	244	5.79	241	5.84	-0.05
Auraiya GPS	663	668	315	325	7.45	311	8.40	-0.95
<b>Sub Total (A)</b>	<b>10782</b>	<b>8482</b>	<b>8007</b>	<b>7392</b>	<b>178.32</b>	<b>7430</b>	<b>181.98</b>	<b>-3.66</b>
<b>B. NPC</b>								
NAPS	440	280	313	316	6.70	279	6.72	-0.02
RAPS- B	440	418	460	464	9.98	416	10.03	-0.05
RAPS- C	440	460	456	474	10.13	422	11.04	-0.91
<b>Sub Total (B)</b>	<b>1320</b>	<b>1158</b>	<b>1229</b>	<b>1254</b>	<b>26.80</b>	<b>1117</b>	<b>27.79</b>	<b>-0.99</b>
<b>C. NHPC</b>								
Chamera I HPS	540	545	540	0	2.20	92	2.20	0.00
Chamera II HPS	300	303	278	0	1.75	73	1.81	-0.06
Chamera III HPS	231	231	202	0	1.05	44	1.11	-0.06
Bairasuil HPS	180	182	20	0	0.64	27	0.72	-0.08
Salai-HPS	690	147	133	146	3.17	132	3.21	-0.04
Tanakpur-HPS	94	46	45	48	1.10	46	1.11	-0.01
Uri-HPS	480	128	161	51	2.65	110	2.93	-0.28
Dhauliganga-HPS	280	288	282	0	1.40	58	1.41	-0.01
Dulhasi-HPS	390	388	79	0	0.21	9	3.85	-3.64
Sewa-II HPS	120	120	356	0	3.59	149	0.21	3.38
<b>Sub Total (C)</b>	<b>3305</b>	<b>2376</b>	<b>2096</b>	<b>245</b>	<b>17.76</b>	<b>740</b>	<b>18.55</b>	<b>-0.79</b>
<b>D.NJPC</b>								
Nathpa Jhakri	1500	1605	1019	0	8.43	351	8.50	-0.07
<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1019</b>	<b>0</b>	<b>8.43</b>	<b>351</b>	<b>8.50</b>	<b>-0.07</b>
<b>E. THDC</b>								
Tehri HPS	1000	1050	1001	0	5.14	214	5.00	0.14
Koteshwar HPS	400	310	307	0	1.36	57	1.35	0.01
<b>Sub Total (E)</b>	<b>1400</b>	<b>1360</b>	<b>1308</b>	<b>0</b>	<b>6.49</b>	<b>271</b>	<b>6.35</b>	<b>0.14</b>
<b>F. BBMB</b>								
Bhakra HPS	1480	655	1099	412	16.04	668	15.73	0.31
Dehar HPS	990	169	495	0	4.31	180	4.06	0.25
Pong HPS	396	337	366	306	8.29	345	5.01	3.28
<b>Sub Total (F)</b>	<b>2866</b>	<b>1161</b>	<b>1960</b>	<b>718</b>	<b>28.64</b>	<b>1193</b>	<b>24.80</b>	<b>3.84</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	0	0	0.64	26	0.65	-0.01
KWHEP HPS(IPP)	1000	0	250	0	4.76	198	4.85	-0.09
Malana Stg-II HPS	100	0	32	13	0.28	11	0.28	-0.01
Shree Cement TPS	300	0	275	262	5.85	244	5.90	-0.06
Budhil HPS(IPP)	70	0	9	0	0.22	9	0.42	-0.20
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>566</b>	<b>275</b>	<b>11.74</b>	<b>489</b>	<b>12.10</b>	<b>-0.36</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22836</b>	<b>16143</b>	<b>16185</b>	<b>9884</b>	<b>278.19</b>	<b>11591</b>	<b>280.07</b>	<b>-1.88</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	1160	1080	26.42	1101	
	Guru Nanak Dev TPS(Bhatinda)	440	95	217	2.96	123	
	Guru Hargobind Singh TPS(L.mbt)	920	750	649	14.55	606	
	Thermal (Total)	2620	2005	1946	43.93	1830	
	Total Hydro	1148	458	271	8.84	368	
	<b>Total Punjab</b>	<b>3768</b>	<b>2463</b>	<b>2217</b>	<b>52.77</b>	<b>2199</b>	
Haryana	Panipat TPS	1367	943	904	22.07	920	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	104	104	2.45	102	
	RGTPP (khedar) (IPP)	1200	536	436	12.46	519	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	374	372	9.38	391	
	Thermal (Total)	4944	1957	1816	46.36	1932	
	Total Hydro	62	26	28	0.68	28	
	<b>Total Haryana</b>	<b>5006</b>	<b>1983</b>	<b>1844</b>	<b>47.03</b>	<b>1960</b>	
Rajasthan	kota TPS	1240	1163	1162	27.88	1162	
	suratgarh TPS	1500	1232	1244	29.95	1248	
	Chabra TPS	500	438	384	9.85	410	
	Dholpur GPS	330	133	137	3.16	132	
	Ramgarh GPS	111	72	73	1.91	79	
	RAPS A (NPC)	300	172	172	4.25	177	
	Barsingsar (NLC)	250	103	106	2.40	100	
	Giral LTPS	250	64	63	1.39	58	
	Rajwest LTPS (IPP)	540	486	365	10.31	429	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3863	3706	91.09	3795	
	Total Hydro	550	184	230	4.51	188	
	Wind power	2191	44	19	0.60	25	
	Biomass	91	19	19	0.45	19	
	Solar	201	4	0	0.14	6	
	Renewable/Others (Total)	2483	63	38	5.70	238	
	<b>Total Rajasthan</b>	<b>8189</b>	<b>4110</b>	<b>3974</b>	<b>101.30</b>	<b>4221</b>	
	UP	Anpara TPS	1630	1210	1243	29.00	1208
		Obra TPS	1382	354	500	10.80	450
		Paricha TPS	890	362	345	8.80	367
Panki TPS		210	133	144	3.30	138	
Harduaganj TPS		665	160	175	4.10	171	
Tanda TPS (NTPC)		440	291	400	8.55	356	
Roza TPS (IPP)		1200	959	1062	25.27	1053	
Anpara-C (IPP)		1200	882	844	21.02	876	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	200	203	4.75	198	
Thermal (Total)		8067	4551	4916	115.59	4816	
Vishnuparyag HPS (IPP)		400	123	114	2.47	103	
Other Hydro		527	131	147	3.53	147	
Cogeneration		981	70	70	1.68	70	
<b>Total UP</b>		<b>9975</b>	<b>4875</b>	<b>5247</b>	<b>123.26</b>	<b>5033</b>	
Uttarakhand		Total Hydro	1303	439	366	9.01	376
		<b>Total Uttarakhand</b>	<b>1303</b>	<b>439</b>	<b>366</b>	<b>9.01</b>	<b>376</b>
Delhi	Raighat TPS	135	99	75	2.08	87	
	Delhi Gas Turbine	282	114	84	2.08	87	
	Pragati Gas Turbine	330	306	266	7.33	305	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	677	221	219	6.20	258	
	Badarpur TPS (NTPC)	705	490	420	10.10	421	
	Thermal (Total)	2237	1230	1064	27.78	1157	
	<b>Total Delhi</b>	<b>2237</b>	<b>1230</b>	<b>1064</b>	<b>27.78</b>	<b>1157</b>	
HP	Baspa HPS (IPP)	330	0	53	1.51	63	
	Malana HPS (IPP)	86	15	17	0.35	15	
	Other Hydro	589	212	171	4.91	205	
	<b>Total HP</b>	<b>1005</b>	<b>227</b>	<b>241</b>	<b>7</b>	<b>282</b>	
J & K	Baglihar HPS (IPP)	450	254	288	6.40	267	
	Other Hydro	323	120	175	3.18	133	
	Gas/Diesel/Others	183	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>956</b>	<b>374</b>	<b>463</b>	<b>9.58</b>	<b>399</b>	
<b>Total State Control Area Generation</b>		<b>32439</b>	<b>15701</b>	<b>15416</b>	<b>377.51</b>	<b>15627</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>753</b>	<b>1368</b>	<b>51.57</b>	<b>2149</b>	
<b>Total Regional Availability(Gross)</b>		<b>55275</b>	<b>32639</b>	<b>26668</b>	<b>707.27</b>	<b>29367</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	6665	976	67.00	2791
State Control Area Hydro	5368	1839	1746	45.40	1789
<b>Total Regional Hydro</b>	<b>15731</b>	<b>8504</b>	<b>2722</b>	<b>112.39</b>	<b>4580</b>

**V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]**

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	-250	-400	0	400	0.00	5.77	-5.77
Gwalior-Agra (D/C)	250	356	552	0	7.68	0.00	7.68
Zerda-Kankroli	-60	-118	0	178	0.00	2.17	-2.17
Zerda-Bhinmal	-10	88	131	158	0.24	0.00	0.24
Malanpur-Auraiya	-143	-131	0	179	0.00	3.00	-3.00
Badod-Kota/Morak	-116	-107	0	148	0.00	2.50	-2.50
Mundra-Mohindergarh(HVDC)	250	250	250	0	20.41	0.00	20.41
<b>Sub Total WR</b>	<b>-79</b>	<b>-62</b>			<b>28.33</b>	<b>13.44</b>	<b>14.89</b>
Pusauli Bypass	250	250	250	0	6.43	0.00	6.43
MZP- GKP (D/C)	184	350	476	0	7.97	0.00	7.97
Patna-Balia(D/C)	402	294	619	0	10.53	0.00	10.53
B'Sharif-Balia (D/C)	70	214	314	0	5.23	0.00	5.23
Barh - Balia(D/C)	0	292	306	0	2.95	0.00	2.95
Pusauli-Balia	-234	-170	0	274	0.00	1.92	-1.92
Gaya-Fatehpur (765 Kv)	51	102	213	0	3.10	0.00	3.10
Pusauli-Sahupuri	149	132	156	0	3.34	0.00	3.34
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-34	0	46	0.00	0.95	-0.95
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>832</b>	<b>1430</b>			<b>39.55</b>	<b>2.87</b>	<b>36.68</b>
<b>Total IR Exch</b>	<b>753</b>	<b>1368</b>			<b>67.88</b>	<b>16.31</b>	<b>51.57</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
34.68	0.67	35.35	3.57	-14.24	-3.09	6.54	1.08	-1.00
<b>Total IR Schedule (MU)</b>			<b>Total IR Actual (MU)</b>			<b>Net IR UI (MU)</b>		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
36.92	15.18	52.10	36.68	14.89	51.57	-0.24	-0.29	-0.53

**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	0.00	0.00	0.00	0.10	81.20	81.10	71.80	18.80
<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.48	14.11	49.70	17.41	50.08	0.25	0.13	50.45	49.97

**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	417	1:28	415	11:44	4.0	4.0	0.0	0.0
Gorakhpur	400	431	8:10	416	11:37	0.0	0.0	91.6	3.8
Bareilly	400	419	2:00	406	6:24	0.0	0.0	0.0	0.0
Kanpur	400	424	1:58	405	11:30	0.0	0.0	7.8	0.0
Dadri	400	426	1:27	409	11:11	0.0	0.0	36.1	0.0
Ballabhgarh	400	434	1:58	412	11:09	0.0	0.0	58.4	5.7
Bawana	400	429	1:57	411	11:27	0.0	0.0	41.9	0.0
Bassi	400	432	20:34	404	8:51	0.0	0.0	59.9	1.7
Hissar	400	420	0:55	404	10:38	0.0	0.0	0.0	0.0
Moga	400	427	0:38	406	9:06	0.0	0.0	19.9	0.0
Abdullapur	400	428	0:37	412	11:09	0.0	0.0	40.5	0.0
Nalagarh	400	432	0:14	415	11:09	0.0	0.0	60.1	2.7
Kishenpur	400	424	0:36	395	18:31	0.0	0.0	3.1	0.0
Wagoora	400	413	0:55	372	18:31	8.4	37.8	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	502.66	1209.87	508.90	1500.16	222.83	435.40
Pong	426.72	384.05	417.81	794.52	419.10	848.35	60.77	507.35
Tehri	829.79	740.04	823.35	1065.84	818.65	982.26	69.98	110.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	61.93	50.50
Rihand	268.22	252.98	262.95	500.10	264.81	617.70	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	520.96	NA	519.58	NA	62.47	41.23

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 16.11.2012 :**

Normal

**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 : 16.11.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER