

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.11.2012

Date of Reporting : 14.11.2012

### I. Regional Availability/Demand:

Evening Peak (19:00 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
33523	1350	34873	50.24	27579	1344	28923	50.20	704.4	24.56

\* 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	44.43	7.12		51.55	33.33	32.13	-1.21	83.67	1.80
Haryana	50.43	0.76		51.19	52.30	48.49	-3.81	99.68	0.66
Rajasthan	83.83	4.74	7.44	96.01	58.03	59.53	1.50	155.54	3.98
Delhi	31.41			31.41	26.32	21.54	-4.78	52.94	0.00
UP	122.70	6.48	1.68	130.86	100.24	97.06	-3.18	227.92	16.07
Uttarakhand		8.96		8.96	17.64	17.30	-0.34	26.26	0.35
HP		6.15		6.15	11.44	12.30	0.86	18.45	0.00
J & K		9.18	0.00	9.18	28.36	27.77	-0.59	36.95	1.70
Chandigarh				0.00	3.28	2.96	-0.32	2.96	0.00
<b>Total</b>	<b>332.80</b>	<b>43.39</b>	<b>9.12</b>	<b>385.30</b>	<b>330.94</b>	<b>319.06</b>	<b>-11.87</b>	<b>704.37</b>	<b>24.56</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	4065	600	-277	-373	3198	0	-15	-226	-5.04	
Haryana	5460	0	-35	-39	3420	0	-8	46	5.33	
Rajasthan	6023	0	-447	116	6295	464	179	713	15.82	
Delhi	2870	0	-254	-1464	1704	0	-160	-2145	-37.28	
UP	10867	650	-708	1976	9696	880	263	795	20.38	
Uttarakhand	1393	0	-129	359	1010	0	24	359	8.73	
HP	879	0	-101	-255	730	0	114	51	-0.01	
J&K	1804	100	-470	553	1430	0	123	434	11.53	
Chandigarh	161	0	-41	-20	95	0	14	-31	-0.38	
<b>Total</b>	<b>33523</b>	<b>1350</b>	<b>-2462</b>	<b>853</b>	<b>27579</b>	<b>1344</b>	<b>535</b>	<b>-4</b>	<b>19.08</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	1905	2033	1882	45.45	1894	45.72	-0.27
Rihand I STPS	1000	460	505	509	10.51	438	10.89	-0.38
Rihand II STPS	1000	824	1009	518	18.90	788	19.37	-0.47
Rihand III STPS	500	0	0	0	0.00	0		0.00
Dadri I STPS	840	810	797	870	17.49	729	18.07	-0.58
Dadri II STPS	980	975	978	1022	22.29	929	22.89	-0.60
Unchahar I TPS	420	402	361	393	8.73	364	9.40	-0.67
Unchahar II TPS	420	405	384	360	8.77	365	9.27	-0.50
Unchahar III TPS	210	202	188	194	4.39	183	4.63	-0.24
ISTPP (Jhajjar)	1500	617	792	343	12.05	502	12.89	-0.84
Dadri GPS	830	835	689	635	14.61	609	14.86	-0.25
Anta GPS	419	409	221	254	5.54	231	5.99	-0.45
Auraiya GPS	663	657	315	328	7.41	309	8.58	-1.18
<b>Sub Total (A)</b>	<b>10782</b>	<b>8501</b>	<b>8272</b>	<b>7308</b>	<b>176.14</b>	<b>7339</b>	<b>182.55</b>	<b>-6.42</b>
<b>B. NPC</b>								
NAPS	440	277	316	316	6.68	278	6.65	0.03
RAPS- B	440	417	460	463	10.03	418	10.01	0.02
RAPS- C	440	440	473	473	10.16	423	10.56	-0.40
<b>Sub Total (B)</b>	<b>1320</b>	<b>1134</b>	<b>1249</b>	<b>1252</b>	<b>26.86</b>	<b>1119</b>	<b>27.22</b>	<b>-0.36</b>
<b>C. NHPC</b>								
Chamera I HPS	540	545	540	0	1.96	82	2.20	-0.24
Chamera II HPS	300	303	296	0	1.66	69	1.89	-0.23
Chamera III HPS	231	231	226	0	1.10	46	1.10	0.00
Bairasuil HPS	180	182	120	0	0.65	27	0.72	-0.08
Salai-HPS	690	160	257	62	3.18	132	3.85	-0.68
Tanakpur-HPS	94	45	60	41	1.06	44	1.07	-0.01
Uri-HPS	480	113	232	43	2.58	108	2.58	0.01
Dhauliganga-HPS	280	288	284	0	1.41	59	1.45	-0.05
Dulhasti-HPS	390	388	333	0	3.55	148	4.06	-0.51
Sewa-II HPS	120	120	54	0	0.19	8	0.29	-0.10
<b>Sub Total (C)</b>	<b>3305</b>	<b>2374</b>	<b>2402</b>	<b>146</b>	<b>17.33</b>	<b>722</b>	<b>19.22</b>	<b>-1.89</b>
<b>D.NJPC</b>								
Nathpa Jhakri	1500	1605	1455	0	9.18	383	9.25	-0.07
<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1455</b>	<b>0</b>	<b>9.18</b>	<b>383</b>	<b>9.25</b>	<b>-0.07</b>
<b>E. THDC</b>								
Tehri HPS	1000	1050	940	0	6.03	251	6.00	0.03
Koteswar HPS	400	310	312	0	1.51	63	1.35	0.16
<b>Sub Total (E)</b>	<b>1400</b>	<b>1360</b>	<b>1252</b>	<b>0</b>	<b>7.54</b>	<b>314</b>	<b>7.35</b>	<b>0.19</b>
<b>F. BBMB</b>								
Bhakra HPS	1480	691	1266	403	16.64	693	16.57	0.07
Dehar HPS	990	173	660	0	3.75	156	4.15	-0.40
Pong HPS	396	328	366	366	7.89	329	5.01	2.88
<b>Sub Total (F)</b>	<b>2866</b>	<b>1192</b>	<b>2292</b>	<b>769</b>	<b>28.28</b>	<b>1178</b>	<b>25.73</b>	<b>2.55</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	0	0	0.65	27	0.65	0.00
KWHEP HPS(IPP)	1000	0	400	0	4.95	206	5.04	-0.09
Malana Stg-II HPS	100	0	30	13	0.28	12	0.26	0.02
Shree Cement TPS	300	0	277	220	5.77	240	5.81	-0.04
Budhil HPS(IPP)	70	0	9	9	0.22	9	0.42	-0.20
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>716</b>	<b>242</b>	<b>11.87</b>	<b>495</b>	<b>12.17</b>	<b>-0.30</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22836</b>	<b>16165</b>	<b>17638</b>	<b>9717</b>	<b>277.20</b>	<b>11550</b>	<b>283.49</b>	<b>-6.29</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	1080	1270	26.89	1120	
	Guru Nanak Dev TPS(Bhatinda)	440	120	121	2.60	108	
	Guru Hargobind Singh TPS(L.mbt)	920	633	745	14.94	623	
	Thermal (Total)	2620	1833	2136	44.43	1851	
	Total Hydro	1148	284	286	7.12	297	
	<b>Total Punjab</b>	<b>3768</b>	<b>2117</b>	<b>2422</b>	<b>51.55</b>	<b>2148</b>	
Haryana	Panipat TPS	1367	862	703	16.90	704	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	340	421	9.82	409	
	RGTPP (khedar) (IPP)	1200	523	422	12.11	505	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	774	170	11.61	484	
	Thermal (Total)	4944	2499	1716	50.43	2101	
	Total Hydro	62	26	35	0.76	32	
	<b>Total Haryana</b>	<b>5006</b>	<b>2525</b>	<b>1751</b>	<b>51.19</b>	<b>2133</b>	
Rajasthan	kota TPS	1240	1137	1169	27.33	1139	
	suratgarh TPS	1500	1047	1071	25.24	1052	
	Chabra TPS	500	421	386	9.94	414	
	Dholpur GPS	330	138	130	3.41	142	
	Ramgarh GPS	111	72	77	1.92	80	
	RAPS A (NPC)	300	172	172	4.25	177	
	Barsingsar (NLC)	250	105	105	2.42	101	
	Giral LTPS	250	55	26	0.76	32	
	Rajwest LTPS (IPP)	540	365	365	8.58	358	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3512	3461	83.83	3493	
	Total Hydro	550	231	225	4.74	198	
	Wind power	2191	24	39	2.54	106	
	Biomass	91	20	20	0.05	2	
	Solar	201	1	0	0.11	4	
	Renewable/Others (Total)	2483	44	59	7.44	310	
	<b>Total Rajasthan</b>	<b>8189</b>	<b>3787</b>	<b>3745</b>	<b>96.01</b>	<b>4000</b>	
	UP	Anpara TPS	1630	1406	1432	34.00	1417
		Obra TPS	1382	501	488	11.90	496
Paricha TPS		890	456	449	10.80	450	
Panki TPS		210	158	171	3.80	158	
Harduaganj TPS		665	172	107	3.10	129	
Tanda TPS (NTPC)		440	392	298	8.50	354	
Roza TPS (IPP)		1200	1067	1080	25.76	1073	
Anpara-C (IPP)		1200	833	884	20.19	841	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	202	203	4.65	194	
Thermal (Total)		8067	5187	5112	122.70	5113	
Vishnuparyag HPS (IPP)		400	123	118	2.84	118	
Other Hydro		527	258	128	3.64	152	
Cogeneration		981	70	70	1.68	70	
<b>Total UP</b>		<b>9975</b>	<b>5638</b>	<b>5428</b>	<b>130.86</b>	<b>5334</b>	
Uttarakhand		Total Hydro	1303	541	343	8.96	373
		<b>Total Uttarakhand</b>	<b>1303</b>	<b>541</b>	<b>343</b>	<b>8.96</b>	<b>373</b>
Delhi	Raighat TPS	135	104	103	2.28	95	
	Delhi Gas Turbine	282	159	156	3.88	162	
	Pragati Gas Turbine	330	309	316	7.18	299	
	Rithala GPS	108	0	0	0.17	7	
	Bawana GPS	677	272	266	6.07	253	
	Badarpur TPS (NTPC)	705	495	575	11.83	493	
	Thermal (Total)	2237	1339	1416	31.41	1309	
	<b>Total Delhi</b>	<b>2237</b>	<b>1339</b>	<b>1416</b>	<b>31.41</b>	<b>1309</b>	
HP	Baspa HPS (IPP)	330	31	92	1.16	48	
	Malana HPS (IPP)	86	34	12	0.34	14	
	Other Hydro	589	231	213	4.65	194	
	<b>Total HP</b>	<b>1005</b>	<b>296</b>	<b>317</b>	<b>6</b>	<b>256</b>	
J & K	Baglihar HPS (IPP)	450	148	144	6.00	250	
	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>268</b>	<b>319</b>	<b>9.18</b>	<b>383</b>	
<b>Total State Control Area Generation</b>		<b>32439</b>	<b>16511</b>	<b>15741</b>	<b>385.30</b>	<b>15936</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1406</b>	<b>3030</b>	<b>54.72</b>	<b>2280</b>	
<b>Total Regional Availability(Gross)</b>		<b>55275</b>	<b>35555</b>	<b>28488</b>	<b>717.23</b>	<b>29766</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	7831	928	68.21	2842
State Control Area Hydro	5368	1904	1653	43.39	1690
<b>Total Regional Hydro</b>	<b>15731</b>	<b>9735</b>	<b>2581</b>	<b>111.61</b>	<b>4532</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	-500	50	50	500	0.64	3.20	-2.56
Gwalior-Agra (D/C)	202	283	722	0	7.52	0.00	7.52
Zerda-Kankroli	-92	-28	56	194	0.00	1.11	-1.11
Zerda-Bhinmal	-39	82	187	176	1.11	0.00	1.11
Malanpur-Auraiya	-150	-127	0	-176	0.00	2.92	-2.92
Badod-Kota/Morak	-155	-89	0	176	0.00	2.81	-2.81
Mundra-Mohindergarh(HVDC)	742	743	857	0	17.84	0.00	17.84
<b>Sub Total WR</b>	<b>8</b>	<b>914</b>			<b>27.12</b>	<b>10.04</b>	<b>17.08</b>
Pusauli Bypass	250	50	250	0	3.35	0.00	3.35
MZP- GKP (D/C)	212	590	660	0	9.82	0.00	9.82
Patna-Balia(D/C)	294	490	490	0	7.62	0.00	7.62
B'Sharif-Balia (D/C)	201	341	341	0	5.13	0.00	5.13
Barh - Balia(D/C)	299	301	385	0	6.75	0.00	6.75
Pusauli-Balia	0	0	50	90	0.00	1.26	-1.26
Gaya-Fatehpur (765 Kv)	47	236	246	62	3.43	0.00	3.43
Pusauli-Sahupuri	135	142	185	0	3.75	0.00	3.75
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>1398</b>	<b>2116</b>			<b>39.86</b>	<b>2.21</b>	<b>37.64</b>
<b>Total IR Exch</b>	<b>1406</b>	<b>3030</b>			<b>66.97</b>	<b>12.25</b>	<b>54.72</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
31.16	0.71	31.87	7.96	-18.75	0.69	19.27	2.31	-2.23
<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
42.83	20.10	62.93	37.64	17.08	54.72	-5.19	-3.02	-8.20

**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	1.11	74.75	73.64	89.51	25.25
Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.64	14.04	49.69	0.15	50.20	0.62	0.13	50.49	49.86

**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	415	3:53	407	11:45	0.0	0.0	0.0	0.0
Gorakhpur	400	432	6:19	407	18:38	0.0	0.0	48.5	1.8
Bareilly	400	421	15:11	400	18:34	0.0	0.0	0.2	0.0
Kanpur	400	423	16:06	404	18:45	0.0	0.0	1.5	0.0
Dadri	400	425	15:05	412	18:34	0.0	0.0	48.0	0.0
Ballabhgarh	400	430	15:06	414	11:08	0.0	0.0	67.1	0.0
Bawana	400	426	0:24	411	18:34	0.0	0.0	43.2	0.0
Bassi	400	433	16:05	405	7:49	0.0	0.0	56.3	1.2
Hissar	400	420	0:24	400	11:10	0.0	0.0	0.0	0.0
Moga	400	426	0:24	407	11:09	0.0	0.0	21.1	0.0
Abdullapur	400	427	15:04	291	18:23	0.2	0.2	45.5	0.0
Nalagarh	400	432	15:06	415	5:26	0.0	0.0	85.2	0.9
Kishenpur	400	426	0:24	394	7:49	0.0	0.0	2.2	0.0
Wagoora	400	417	0:23	372	7:51	8.1	38.7	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	502.93	1219.07	509.06	1500.16	194.68	447.72
Pong	426.72	384.05	418.15	807.91	419.36	861.93	55.25	470.48
Tehri	829.79	740.04	823.50	1080.00	818.65	982.26	64.97	131.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	70.59	70.59
Rihand	268.22	252.98	NA	500.10	264.96	617.70	NA	NA
RPS	352.80	343.81	351.34	NA	350.67	NA	NA	257.26
Jawahar Sagar	298.70	295.78	297.79	NA	297.67	NA	NA	241.63
RSD	527.91	487.91	520.87	NA	521.76	NA	70.79	78.83

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 13.11.2012 :**

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 : 13.11.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER