

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 25.10.2012

Date of Reporting : 26.10.2012

### 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
30980	2426	33406	50.24	26060	750	26810	50.38	678.6	45.29

\* 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:

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	44.74	6.65		51.40	37.22	37.39	0.17	88.79	2.48
Haryana	49.38	0.88		50.25	43.46	45.62	2.17	95.88	4.77
Rajasthan	87.75	2.94	4.80	95.49	54.45	56.72	2.27	152.20	0.42
Delhi	20.72			20.72	36.39	35.03	-1.36	55.75	0.00
UP	113.07	7.94	2.40	123.41	86.45	78.88	-7.57	202.29	32.98
Uttarakhand		10.82		10.82	13.69	14.88	1.19	25.69	2.65
HP		9.24		9.24	11.12	11.62	0.49	20.86	0.30
J & K		9.39	0.00	9.39	22.56	24.50	1.94	33.90	1.70
Chandigarh				0.00	3.73	3.28	-0.45	3.28	0.00
<b>Total</b>	<b>315.66</b>	<b>47.86</b>	<b>7.20</b>	<b>370.71</b>	<b>309.08</b>	<b>307.92</b>	<b>-1.15</b>	<b>678.64</b>	<b>45.29</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	UI [OD:(+ve), UD/Export: (-ve)]
Punjab	4424	387	-25	-83	2743	0	-36	108		3.65
Haryana	4219	645	273	172	3693	0	45	139		4.66
Rajasthan	6341	0	1	544	6181	0	218	563		14.26
Delhi	3054	0	-10	-822	1436	0	-103	-1095		-20.19
UP	8733	1120	-596	93	9080	750	-390	949		7.82
Uttarakhand	1245	150	48	91	909	0	1	166		3.67
HP	1105	24	-34	-149	604	0	23	-14		-2.53
J&K	1676	100	-103	43	1323	0	73	125		1.68
Chandigarh	183	0	-23	0	92	0	-20	0		0.13
<b>Total</b>	<b>30980</b>	<b>2426</b>	<b>-470</b>	<b>-110</b>	<b>26060</b>	<b>750</b>	<b>-189</b>	<b>941</b>		<b>13.16</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	1910	2012	1830	43.98	1833	44.27	-0.29
Rihand I STPS	1000	935	1016	932	21.29	887	21.63	-0.34
Rihand II STPS	1000	970	1034	893	22.14	922	22.74	-0.61
Rihand III STPS	500	0	0	0	0.00	0		0.00
Dadri I STPS	840	810	850	622	16.74	698	17.30	-0.56
Dadri II STPS	980	416	503	443	8.49	354	8.96	-0.47
Unchahar I TPS	420	404	401	352	8.78	366	9.17	-0.39
Unchahar II TPS	420	404	422	310	8.51	354	8.67	-0.16
Unchahar III TPS	210	202	193	155	4.19	175	4.40	-0.21
ISTPP (Jhajhar)	1000	950	460	334	10.42	434	10.03	0.39
Dadri GPS	830	824	493	460	11.26	469	11.36	-0.09
Anta GPS	419	406	202	189	4.80	200	4.82	-0.02
Auraiya GPS	663	646	270	250	6.26	261	6.53	-0.27
<b>Sub Total (A)</b>	<b>10282</b>	<b>8877</b>	<b>7856</b>	<b>6770</b>	<b>166.86</b>	<b>6952</b>	<b>169.89</b>	<b>-3.03</b>
<b>B. NPC</b>								
NAPS	440	273	316	319	6.68	278	6.55	0.13
RAPS- B	440	411	458	465	9.98	416	9.86	0.11
RAPS- C	440	440	456	474	10.05	419	10.56	-0.51
<b>Sub Total (B)</b>	<b>1320</b>	<b>1124</b>	<b>1230</b>	<b>1258</b>	<b>26.70</b>	<b>1113</b>	<b>26.98</b>	<b>-0.27</b>
<b>C. NHPC</b>								
Chamera I HPS	540	535	540	0	2.80	117	3.05	-0.25
Chamera II HPS	300	303	300	0	2.42	101	2.34	0.08
Chamera III HPS	231	154	44	0	1.63	68	1.60	0.03
Bairasuil HPS	180	182	182	0	0.89	37	0.86	0.03
Salai-HPS	690	211	331	131	4.52	188	5.03	-0.51
Tanakpur-HPS	94	61	70	58	1.48	62	1.48	-0.01
Uri-HPS	480	179	312	137	4.28	178	4.35	-0.06
Dhauliganga-HPS	280	288	286	0	2.06	86	2.03	0.03
Dulhasi-HPS	390	387	287	11	4.76	198	4.85	-0.09
Sewa-II HPS	120	80	48	0	0.32	13	0.35	-0.03
<b>Sub Total (C)</b>	<b>3305</b>	<b>2380</b>	<b>2400</b>	<b>337</b>	<b>25.16</b>	<b>1048</b>	<b>25.95</b>	<b>-0.79</b>
<b>D.NJPC</b>								
Nathpa Jhakri	1500	1605	1435	0	11.50	479	11.40	0.10
<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1435</b>	<b>0</b>	<b>11.50</b>	<b>479</b>	<b>11.40</b>	<b>0.10</b>
<b>E. THDC</b>								
Tehri HPS	1000	656	920	0	4.50	187	4.50	0.00
Koteshwar HPS	400	255	238	0	1.62	67	1.65	-0.03
<b>Sub Total (E)</b>	<b>1400</b>	<b>911</b>	<b>1158</b>	<b>0</b>	<b>6.12</b>	<b>255</b>	<b>6.15</b>	<b>-0.04</b>
<b>F. BBMB</b>								
Bhakra HPS	1480	355	578	299	8.63	360	8.52	0.11
Dehar HPS	990	204	495	165	5.28	220	4.89	0.40
Pong HPS	396	235	306	186	5.83	243	5.01	0.82
<b>Sub Total (F)</b>	<b>2866</b>	<b>793</b>	<b>1379</b>	<b>650</b>	<b>19.74</b>	<b>823</b>	<b>18.41</b>	<b>1.33</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	61	0	0.84	35	0.82	0.03
KWHEP HPS(IPP)	1000	0	250	150	6.06	253	6.13	-0.06
Malana Stg-II HPS	100	0	17	18	0.42	17	0.38	0.04
Shree Cement TPS	300	0	206	172	5.22	217	5.67	-0.45
Budhil HPS(IPP)	70	0	34	11	0.34	14	0.37	-0.04
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>568</b>	<b>351</b>	<b>12.88</b>	<b>537</b>	<b>13.37</b>	<b>-0.49</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22336</b>	<b>15690</b>	<b>16026</b>	<b>9366</b>	<b>268.96</b>	<b>11207</b>	<b>272.15</b>	<b>-3.20</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	1055	720	20.94	872	
	Guru Nanak Dev TPS(Bhatinda)	440	175	257	4.28	178	
	Guru Hargobind Singh TPS(L.mbt)	920	969	754	19.53	814	
	Thermal (Total)	2620	2199	1731	44.74	1864	
	Total Hydro	1148	355	243	6.65	277	
	<b>Total Punjab</b>	<b>3768</b>	<b>2554</b>	<b>1974</b>	<b>51.40</b>	<b>2142</b>	
Haryana	Panipat TPS	1367	974	932	23.39	975	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	157	193	4.57	190	
	RGTPP (khedar) (IPP)	1200	370	680	12.86	536	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	288	371	8.56	357	
	Thermal (Total)	4944	1789	2176	49.38	2057	
	Total Hydro	62	36	36	0.88	37	
	<b>Total Haryana</b>	<b>5006</b>	<b>1825</b>	<b>2212</b>	<b>50.25</b>	<b>2094</b>	
Rajasthan	kota TPS	1240	1060	1055	26.44	1102	
	suratgarh TPS	1500	1159	1142	28.66	1194	
	Chabra TPS	500	309	376	7.48	312	
	Dholpur GPS	330	134	137	3.09	129	
	Ramgarh GPS	111	61	62	1.59	66	
	RAPS A (NPC)	300	173	173	4.19	175	
	Barsingar (NLC)	250	211	209	4.86	203	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	540	486	472	11.43	476	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3593	3626	87.75	3656	
	Total Hydro	550	76	152	2.94	123	
	Wind power	1843	30	10	0.82	34	
	Biomass	91	35	35	0.83	35	
	Solar	128	5	0	0.21	9	
	Renewable/Others (Total)	2062	65	45	4.80	200	
	<b>Total Rajasthan</b>	<b>7767</b>	<b>3734</b>	<b>3823</b>	<b>95.49</b>	<b>3979</b>	
	UP	Anpara TPS	1630	1391	1395	30.00	1250
		Obra TPS	1382	459	467	10.20	425
		Paricha TPS	890	480	468	10.40	433
Panki TPS		210	125	105	2.70	113	
Harduaganj TPS		665	0	251	3.80	158	
Tanda TPS (NTPC)		440	396	400	9.73	405	
Roza TPS (IPP)		1200	1080	900	24.06	1002	
Anpara-C (IPP)		1200	793	386	14.54	606	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	324	327	7.65	319	
Thermal (Total)		8067	5048	4699	113.07	4711	
Vishnuparyag HPS (IPP)		400	158	148	3.61	150	
Other Hydro		527	151	0	4.33	180	
Cogeneration		981	100	100	2.40	100	
<b>Total UP</b>		<b>9975</b>	<b>5457</b>	<b>4947</b>	<b>123.41</b>	<b>4992</b>	
Uttarakhand		Total Hydro	1303	479	390	10.82	451
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>479</b>	<b>390</b>	<b>10.82</b>	<b>451</b>	
Delhi	Raighat TPS	135	169	56	1.92	80	
	Delhi Gas Turbine	282	84	84	1.95	81	
	Pragati Gas Turbine	330	304	266	6.99	291	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	677	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	475	420	9.86	411	
	Thermal (Total)	2237	1032	826	20.72	863	
	<b>Total Delhi</b>	<b>2237</b>	<b>1032</b>	<b>826</b>	<b>20.72</b>	<b>863</b>	
HP	Baspa HPS (IPP)	330	29	76	2.24	93	
	Malana HPS (IPP)	86	45	0	0.42	18	
	Other Hydro	589	280	255	6.58	274	
	<b>Total HP</b>	<b>1005</b>	<b>354</b>	<b>331</b>	<b>9</b>	<b>385</b>	
J & K	Baglihar HPS (IPP)	450	294	232	5.84	244	
	Other Hydro	323	140	175	3.55	148	
	Gas/Diesel/Others	183	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>956</b>	<b>434</b>	<b>407</b>	<b>9.39</b>	<b>391</b>	
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>15869</b>	<b>14910</b>	<b>370.71</b>	<b>15296</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>869</b>	<b>2589</b>	<b>42.43</b>	<b>1768</b>	
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>32764</b>	<b>26865</b>	<b>682.10</b>	<b>28270</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	6700	1155	69.84	2910
State Control Area Hydro	5368	1885	1559	47.86	1844
<b>Total Regional Hydro</b>	<b>15731</b>	<b>8585</b>	<b>2714</b>	<b>117.70</b>	<b>4754</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	Import	Export	
Vindhychal B/B	-300	-400	0	400	0.00	7.89	0.00	-7.89	
Gwalior-Agra (D/C)	-168	397	668	168	6.64	0.00	6.64		
Zerda-Kankroli	-213	-146	0	219	0.00	3.72	-3.72		
Zerda-Bhinmal	-139	-53	107	228	0.00	1.46	-1.46		
Malanpur-Auraiya	-208	-80	0	208	0.00	2.52	-2.52		
Badod-Kota/Morak	-143	-102	0	177	0.00	3.06	-3.06		
Mundra-Mohindergarh(HVDC)	924	926	926	0	22.18	0.00	22.18		
<b>Sub Total WR</b>	<b>-247</b>	<b>542</b>			<b>28.82</b>	<b>18.65</b>	<b>10.17</b>		
Pusauli Bypass	-50	-100	0	100	0.00	1.77	-1.77		
MZP- GKP (D/C)	300	830	830	0	14.34	0.00	14.34		
Patna-Balia(D/C)	264	394	533	0	7.86	0.00	7.86		
B'Sharif-Balia (D/C)	73	288	288	0	4.49	0.00	4.49		
Barh - Balia(D/C)	380	392	562	0	3.23	0.00	3.23		
Pusauli-Balia	20	122	123	0	1.53	0.00	1.53		
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00		
Pusauli-Sahupuri	169	155	169	0	3.49	0.00	3.49		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-40	-34	0	46	0.00	0.92	-0.92		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
<b>Sub Total ER</b>	<b>1116</b>	<b>2047</b>			<b>34.94</b>	<b>2.69</b>	<b>32.25</b>		
<b>Total IR Exch</b>	<b>869</b>	<b>2589</b>			<b>63.76</b>	<b>21.34</b>	<b>42.43</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
35.33	1.10	36.43	-2.10	-1.25	2.43	1.15	-0.14	0.22
<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
36.63	12.69	49.32	32.25	10.17	42.43	-4.38	-2.51	-6.89

**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	0.00	78.75	78.75	90.42	21.25
Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum		Hz			MAX	MIN
Freq	Time	Freq	Time				(Hz)	(Hz)
50.60	4.06	49.81	7.13	50.19	0.53	0.11	50.49	49.92

**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	408	4:05	398	12:49	0.0	0.0	0.0	0.0
Gorakhpur	400	428	6:47	414	10:48	0.0	0.0	40.9	0.0
Bareilly	400	422	21:50	402	7:14	0.0	0.0	1.4	0.0
Kanpur	400	420	4:02	401	7:19	0.0	0.0	0.0	0.0
Dadri	400	425	4:03	406	12:33	0.0	0.0	16.5	0.0
Ballabgarh	400	431	4:07	408	9:52	0.0	0.0	44.2	0.0
Bawana	400	428	3:04	409	12:36	0.0	0.0	31.1	0.0
Bassi	400	432	4:02	401	7:19	0.0	0.0	54.4	2.5
Hissar	400	418	4:05	399	15:46	0.0	0.0	0.0	0.0
Moga	400	426	3:05	397	15:46	0.0	0.0	20.9	0.0
Abdullapur	400	423	6:21	407	14:29	0.0	0.0	18.7	0.0
Nalagarh	400	430	3:01	408	12:26	0.0	0.0	40.1	0.0
Kishenpur	400	422	3:02	396	18:13	0.0	0.0	6.0	0.0
Wagoora	400	413	3:08	377	18:27	1.1	35.5	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	503.99	1258.87	510.28	1560.04	269.32	228.83
Pong	426.72	384.05	420.70	916.71	421.95	975.89	69.12	355.55
Tehri	829.79	740.04	824.86	1100.00	818.65	982.26	89.50	102.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	62.34	66.80
Rihand	268.22	252.98	263.65	522.00	265.24	630.80	NA	NA
RPS	352.80	343.81	352.49	NA	NA	NA	NA	102.11
Jawahar Sagar	298.70	295.78	297.21	NA	NA	NA	NA	132.81
RSD	527.91	487.91	520.65	NA	521.69	NA	71.19	83.79

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 25.10.2012 :**

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 : 25.10.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER