

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.10.2012

Date of Reporting : 25.10.2012

### 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
29863	1230	31093	50.37	26375	680	27055	50.38	671.3	28.45

\* 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	45.12	5.98		51.11	34.19	34.84	0.65	85.94	1.80
Haryana	53.77	0.89		54.66	44.02	45.52	1.50	100.18	0.57
Rajasthan	85.90	3.06	5.78	94.74	58.98	56.84	-2.14	151.58	0.00
Delhi	22.43			22.43	31.32	27.47	-3.85	49.89	0.00
UP	108.75	7.09	2.40	118.25	91.38	84.84	-6.54	203.09	24.29
Uttarakhand		10.66		10.66	14.50	15.03	0.53	25.68	1.39
HP		8.88		8.88	10.50	10.06	-0.44	18.94	0.00
J & K		9.42	0.00	9.42	23.58	23.57	-0.01	32.99	0.40
Chandigarh				0.00	3.76	3.00	-0.75	3.00	0.00
<b>Total</b>	<b>315.97</b>	<b>45.98</b>	<b>8.18</b>	<b>370.13</b>	<b>312.21</b>	<b>301.16</b>	<b>-11.05</b>	<b>671.29</b>	<b>28.45</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	4016	150	198	123	3166	0	72	123	4.96	
Haryana	4307	0	144	142	3624	0	-178	320	5.77	
Rajasthan	5945	0	-401	447	6206	0	-30	873	19.63	
Delhi	2302	0	-134	-466	1660	0	-147	-1392	-16.49	
UP	9366	830	-39	76	8774	680	-549	1733	12.17	
Uttarakhand	1186	150	-118	140	1067	0	164	162	4.34	
HP	926	0	-116	-233	683	0	59	-14	-3.42	
J&K	1663	100	-148	143	1107	0	-63	75	2.63	
Chandigarh	153	0	-50	15	89	0	-25	0	0.39	
<b>Total</b>	<b>29863</b>	<b>1230</b>	<b>-665</b>	<b>387</b>	<b>26375</b>	<b>680</b>	<b>-697</b>	<b>1880</b>	<b>29.99</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)	Schedule Net MU	UI [OG:(+ve), UG: (-ve)]	
								UI Net MU	UI Net MU
<b>A. NTPC</b>									
Singrauli STPS	2000	1910	1839	1876	42.96	1790	43.69	-0.73	
Rihand I STPS	1000	880	870	647	19.23	801	20.08	-0.85	
Rihand II STPS	1000	970	1024	978	21.22	884	22.07	-0.84	
Rihand III STPS	500	0	0	0	0.00	0		0.00	
Dadri I STPS	840	810	615	617	13.63	568	13.75	-0.12	
Dadri II STPS	980	485	354	376	8.33	347	8.81	-0.48	
Unchahar I TPS	420	403	356	339	7.78	324	7.92	-0.14	
Unchahar II TPS	420	404	311	340	7.35	306	7.18	0.17	
Unchahar III TPS	210	202	158	157	3.64	152	3.64	0.00	
ISTPP (Jhajjar)	1000	950	277	334	7.10	296	7.90	-0.80	
Dadri GPS	830	819	463	437	10.37	432	10.45	-0.08	
Anta GPS	419	405	205	168	4.40	183	4.44	-0.05	
Auraiya GPS	663	645	316	333	6.72	280	6.90	-0.18	
<b>Sub Total (A)</b>	<b>10282</b>	<b>8883</b>	<b>6788</b>	<b>6602</b>	<b>152.71</b>	<b>6363</b>	<b>156.82</b>	<b>-4.11</b>	
<b>B. NPC</b>									
NAPS	440	273	316	311	6.66	278	6.55	0.11	
RAPS- B	440	413	460	458	9.91	413	9.91	0.00	
RAPS- C	440	440	472	472	10.13	422	10.56	-0.43	
<b>Sub Total (B)</b>	<b>1320</b>	<b>1126</b>	<b>1248</b>	<b>1241</b>	<b>26.70</b>	<b>1112</b>	<b>27.02</b>	<b>-0.33</b>	
<b>C. NHPC</b>									
Chamera I HPS	540	535	540	0	2.39	100	3.07	-0.68	
Chamera II HPS	300	303	263	0	2.23	93	2.64	-0.41	
Chamera III HPS	231	154	0	81	1.35	56	1.67	-0.32	
Bairasuil HPS	180	182	120	0	0.87	36	0.99	-0.12	
Salai-HPS	690	239	335	311	4.76	198	5.38	-0.62	
Tanakpur-HPS	94	70	77	70	1.51	63	1.66	-0.15	
Uri-HPS	480	181	194	79	4.21	175	4.48	-0.28	
Dhauliganga-HPS	280	288	70	0	1.89	79	1.96	-0.08	
Dulhasi-HPS	390	387	357	11	4.80	200	4.87	-0.06	
Sewa-II HPS	120	80	77	0	0.36	15	0.40	-0.04	
<b>Sub Total (C)</b>	<b>3305</b>	<b>2417</b>	<b>2033</b>	<b>552</b>	<b>24.36</b>	<b>1015</b>	<b>27.11</b>	<b>-2.76</b>	
<b>D.NJPC</b>									
Natpha Jhakri	1500	1605	1509	0	11.61	484	12.02	-0.41	
<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1509</b>	<b>0</b>	<b>11.61</b>	<b>484</b>	<b>12.02</b>	<b>-0.41</b>	
<b>E. THDC</b>									
Tehri HPS	1000	1050	935	0	4.15	173	4.20	-0.05	
Koteshwar HPS	400	255	242	0	1.73	72	1.84	-0.11	
<b>Sub Total (E)</b>	<b>1400</b>	<b>1305</b>	<b>1177</b>	<b>0</b>	<b>5.88</b>	<b>245</b>	<b>6.04</b>	<b>-0.16</b>	
<b>F. BBMB</b>									
Bhakra HPS	1480	355	523	309	8.77	365	8.52	0.25	
Dehar HPS	990	244	495	165	6.03	251	5.86	0.17	
Pong HPS	396	235	306	186	5.55	231	5.01	0.54	
<b>Sub Total (F)</b>	<b>2866</b>	<b>834</b>	<b>1324</b>	<b>660</b>	<b>20.35</b>	<b>848</b>	<b>19.38</b>	<b>0.97</b>	
<b>G. IPP(s)/JV(s)</b>									
ADHPL HPS(IPP)	192	0	71	0	0.91	38	0.87	0.03	
KWHEP HPS(IPP)	1000	0	756	150	5.84	243	6.00	-0.16	
Malana Stg-II HPS	100	0	18	18	0.43	18	0.39	0.04	
Shree Cement TPS	300	0	159	197	3.92	163	5.12	-1.21	
Budhil HPS(IPP)	70	0	35	10	0.36	15	0.43	-0.07	
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1039</b>	<b>375</b>	<b>11.46</b>	<b>477</b>	<b>12.82</b>	<b>-1.36</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>22336</b>	<b>16170</b>	<b>15118</b>	<b>9430</b>	<b>253.06</b>	<b>10544</b>	<b>261.22</b>	<b>-8.16</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	840	930	20.77	865	
	Guru Nanak Dev TPS(Bhatinda)	440	250	253	5.54	231	
	Guru Hargobind Singh TPS(L.mbt)	920	973	750	18.81	784	
	Thermal (Total)	2620	2063	1933	45.12	1880	
	Total Hydro	1148	247	203	5.98	249	
	<b>Total Punjab</b>	<b>3768</b>	<b>2310</b>	<b>2136</b>	<b>51.11</b>	<b>2129</b>	
Haryana	Panipat TPS	1367	993	916	23.43	976	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	171	148	4.03	168	
	RGTPP (khedar) (IPP)	1200	384	738	16.74	697	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	382	361	9.58	399	
	Thermal (Total)	4944	1930	2163	53.77	2240	
	Total Hydro	62	37	37	0.89	37	
	<b>Total Haryana</b>	<b>5006</b>	<b>1967</b>	<b>2200</b>	<b>54.66</b>	<b>2278</b>	
Rajasthan	kota TPS	1240	1056	1058	25.81	1075	
	suratgarh TPS	1500	1124	1143	27.76	1157	
	Chabra TPS	500	376	364	8.92	372	
	Dholpur GPS	330	130	138	3.22	134	
	Ramgarh GPS	111	79	79	1.99	83	
	RAPS A (NPC)	300	177	177	4.21	175	
	Barsingar (NLC)	250	207	207	4.98	207	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	540	392	365	9.01	376	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3541	3531	85.90	3579	
	Total Hydro	550	119	76	3.06	128	
	Wind power	1843	45	196	1.91	80	
	Biomass	91	27	27	0.64	27	
	Solar	128	4	0	0.17	7	
	Renewable/Others (Total)	2062	72	223	5.78	241	
	<b>Total Rajasthan</b>	<b>7767</b>	<b>3732</b>	<b>3830</b>	<b>94.74</b>	<b>3948</b>	
	UP	Anpara TPS	1630	1334	1388	29.70	1238
		Obra TPS	1382	487	518	11.00	458
		Paricha TPS	890	424	480	10.40	433
Panki TPS		210	113	95	2.30	96	
Harduaganj TPS		665	216	220	4.70	196	
Tanda TPS (NTPC)		440	444	400	9.72	405	
Roza TPS (IPP)		1200	1080	896	23.09	962	
Anpara-C (IPP)		1200	402	344	11.25	469	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	284	275	6.60	275	
Thermal (Total)		8067	4784	4616	108.75	4531	
Vishnuparyag HPS (IPP)		400	153	153	3.66	152	
Other Hydro		527	216	0	3.44	143	
Cogeneration		981	100	100	2.40	100	
<b>Total UP</b>		<b>9975</b>	<b>5253</b>	<b>4869</b>	<b>118.25</b>	<b>4775</b>	
Uttarakhand		Total Hydro	1303	524	398	10.66	444
		<b>Total Uttarakhand</b>	<b>1303</b>	<b>524</b>	<b>398</b>	<b>10.66</b>	<b>444</b>
Delhi	Raighat TPS	135	56	56	1.27	53	
	Delhi Gas Turbine	282	85	82	1.93	81	
	Pragati Gas Turbine	330	260	262	6.38	266	
	Rithala GPS	108	0	21	0.10	4	
	Bawana GPS	677	0	221	3.51	146	
	Badarpur TPS (NTPC)	705	415	420	9.24	385	
	Thermal (Total)	2237	816	1062	22.43	934	
	<b>Total Delhi</b>	<b>2237</b>	<b>816</b>	<b>1062</b>	<b>22.43</b>	<b>934</b>	
HP	Baspa HPS (IPP)	330	79	79	1.84	77	
	Malana HPS (IPP)	86	45	0	0.47	20	
	Other Hydro	589	267	245	6.57	274	
	<b>Total HP</b>	<b>1005</b>	<b>391</b>	<b>324</b>	<b>9</b>	<b>370</b>	
J & K	Baglihar HPS (IPP)	450	294	232	5.87	245	
	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>9.42</b>	<b>392</b>	
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>15427</b>	<b>15226</b>	<b>370.13</b>	<b>15270</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1293</b>	<b>2709</b>	<b>58.33</b>	<b>2430</b>	
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>31838</b>	<b>27365</b>	<b>681.52</b>	<b>28244</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	6888	1380	69.38	2891
State Control Area Hydro	5368	1968	1445	45.98	1764
<b>Total Regional Hydro</b>	<b>15731</b>	<b>8856</b>	<b>2825</b>	<b>115.36</b>	<b>4655</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	-300	-100	0	400	0.00	3.62	-3.62
Gwalior-Agra (D/C)	-203	119	535	318	3.47	0.00	3.47
Zerda-Kankroli	-281	-176	35	374	0.00	3.82	-3.82
Zerda-Bhinmal	-203	-79	179	332	0.00	1.40	-1.40
Malanpur-Auraiya	-202	-150	0	211	0.00	3.16	-3.16
Badod-Kota/Morak	-69	0	52	214	0.00	1.02	-1.02
Mundra-Mohindergarh(HVDC)	925	922	927	0	22.16	0.00	22.16
<b>Sub Total WR</b>	<b>-333</b>	<b>536</b>			<b>25.63</b>	<b>13.02</b>	<b>12.61</b>
Pusauli Bypass	-100	150	150	100	1.52	1.36	0.16
MZP- GKP (D/C)	580	644	740	0	15.87	0.00	15.87
Patna-Balia(D/C)	255	302	369	0	7.11	0.00	7.11
B'Sharif-Balia (D/C)	193	365	365	0	5.49	0.00	5.49
Barh - Balia(D/C)	308	364	393	0	8.08	0.00	8.08
Pusauli-Balia	75	0	125	0	0.81	0.00	0.81
Gaya-Fatehpur (765 Kv)	185	220	307	0	5.62	0.00	5.62
Pusauli-Sahupuri	170	162	170	0	3.59	0.00	3.59
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-34	0	46	0.00	1.00	-1.00
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1626</b>	<b>2173</b>			<b>48.08</b>	<b>2.36</b>	<b>45.72</b>
<b>Total IR Exch</b>	<b>1293</b>	<b>2709</b>			<b>73.71</b>	<b>15.38</b>	<b>58.33</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
31.50	1.13	32.63	4.40	1.46	8.48	3.44	5.93	-5.87
<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
51.45	11.74	63.20	45.72	12.61	58.33	-5.74	0.87	-4.87

**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	62.90	62.90	92.50	37.10
<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.53	17.08	49.78	18.09	50.16	0.42	0.12	50.53	50.09

**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	4:01	404	18:57	0.0	0.0	0.0	0.0
Gorakhpur	400	433	15:14	416	23:49	0.0	0.0	78.7	5.0
Bareilly	400	425	17:09	409	7:48	0.0	0.0	7.5	0.0
Kanpur	400	427	4:03	409	7:47	0.0	0.0	15.8	0.0
Dadri	400	427	21:15	414	8:26	0.0	0.0	45.7	0.0
Ballabhgarh	400	432	4:03	416	8:31	0.0	0.0	74.9	2.8
Bawana	400	431	21:20	416	10:54	0.0	0.0	73.5	0.1
Bassi	400	435	4:05	411	8:26	0.0	0.0	67.5	7.3
Hissar	400	421	21:20	404	10:29	0.0	0.0	1.5	0.0
Moga	400	423	16:02	408	7:47	0.0	0.0	12.3	0.0
Abdullapur	400	428	21:18	412	18:39	0.0	0.0	40.8	0.0
Nalagarh	400	430	16:04	417	5:26	0.0	0.0	79.8	0.0
Kishenpur	400	419	0:52	396	18:43	0.0	0.0	0.0	0.0
Wagoora	400	412	4:03	377	18:42	2.2	25.6	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 24.10.2012 :**

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 : 24.10.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER