

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.10.2012

Date of Reporting : 12.10.2012

### 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
33916	4536	38452	49.95	31116	1862	32978	50.00	766.6	73.45

\* 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	56.22	13.19		69.41	52.57	53.89	1.32	123.30	12.66
Haryana	58.61	0.86		59.47	58.91	57.90	-1.01	117.37	1.77
Rajasthan	91.56	0.20	2.48	94.24	60.49	62.20	1.71	156.44	2.14
Delhi	31.01			31.01	46.50	43.75	-2.74	74.77	0.00
UP	99.10	10.54	2.40	112.04	94.82	95.06	0.24	207.10	54.77
Uttarakhand		15.30		15.30	13.27	14.87	1.60	30.17	0.10
HP		11.67		11.67	11.43	10.74	-0.68	22.42	0.31
J & K		9.87	0.00	9.87	18.86	21.02	2.16	30.89	1.70
Chandigarh				0.00	4.34	4.15	-0.19	4.15	0.00
<b>Total</b>	<b>336.50</b>	<b>61.63</b>	<b>4.88</b>	<b>403.01</b>	<b>361.18</b>	<b>363.59</b>	<b>2.41</b>	<b>766.60</b>	<b>73.45</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	5551	1642	-122	326	5045	0	98	318	7.68	
Haryana	5055	286	-131	384	4591	0	-120	347	8.27	
Rajasthan	6586	0	-1	859	6524	0	106	787	18.87	
Delhi	3744	0	-156	-315	2481	0	-173	-354	-9.75	
UP	8536	2493	-62	118	9242	1862	252	769	14.18	
Uttarakhand	1590	0	280	107	1090	0	-30	162	3.85	
HP	1075	14	-153	-538	749	0	-79	-6	-4.70	
J&K	1565	100	57	-114	1261	0	115	-89	-2.29	
Chandigarh	215	0	-19	-5	134	0	-2	0	0.31	
<b>Total</b>	<b>33916</b>	<b>4536</b>	<b>-307</b>	<b>821</b>	<b>31116</b>	<b>1862</b>	<b>167</b>	<b>1934</b>	<b>36.43</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	1397	1342	1554	33.55	1398	33.52	0.03	
Rihand I STPS	1000	935	1031	1010	22.50	937	22.38	0.11	
Rihand II STPS	1000	970	1040	1031	23.40	975	23.26	0.14	
Rihand III STPS	500	0	0	0	0.00	0		0.00	
Dadri I STPS	840	806	871	845	17.82	742	18.02	-0.21	
Dadri II STPS	980	485	511	503	11.04	460	11.15	-0.11	
Unchahar I TPS	420	404	437	374	9.25	385	9.64	-0.39	
Unchahar II TPS	420	402	441	363	9.27	386	9.57	-0.29	
Unchahar III TPS	210	201	201	184	4.63	193	4.77	-0.15	
ISTPP (Jhajhar)	1000	950	820	755	17.52	730	17.95	-0.44	
Dadri GPS	830	804	571	581	13.55	565	13.80	-0.25	
Anta GPS	419	395	253	257	5.84	243	5.82	0.02	
Auraiya GPS	663	479	363	389	8.53	356	8.57	-0.04	
<b>Sub Total (A)</b>	<b>10282</b>	<b>8228</b>	<b>7881</b>	<b>7846</b>	<b>176.88</b>	<b>7370</b>	<b>178.45</b>	<b>-1.57</b>	
<b>B. NPC</b>									
NAPS	440	269	303	312	6.49	271	6.46	0.04	
RAPS- B	440	409	448	450	9.80	408	9.82	-0.02	
RAPS- C	440	430	470	468	10.20	425	10.32	-0.12	
<b>Sub Total (B)</b>	<b>1320</b>	<b>1108</b>	<b>1221</b>	<b>1230</b>	<b>26.49</b>	<b>1104</b>	<b>26.59</b>	<b>-0.10</b>	
<b>C. NHPC</b>									
Chamera I HPS	540	535	540	0	3.63	151	3.63	0.00	
Chamera II HPS	300	300	247	0	2.77	115	2.81	-0.04	
Chamera III HPS	231	231	155	0	2.06	86	2.07	-0.01	
Bairasuil HPS	180	182	182	10	1.16	48	1.11	0.05	
Salai-HPS	690	238	338	149	5.32	222	5.71	-0.39	
Tanakpur-HPS	94	87	89	89	2.13	89	2.09	0.04	
Uri-HPS	480	215	323	203	5.27	220	5.37	-0.10	
Dhauliganga-HPS	280	280	206	10	2.70	113	2.62	0.08	
Dulhasi-HPS	390	339	383	266	6.63	276	6.68	-0.05	
Sewa-II HPS	120	80	82	0	0.69	29	0.60	0.09	
<b>Sub Total (C)</b>	<b>3305</b>	<b>2487</b>	<b>2545</b>	<b>727</b>	<b>32.35</b>	<b>1348</b>	<b>32.70</b>	<b>-0.34</b>	
<b>D.NJPC</b>									
Natpha Jhakri	1500	1605	1263	255	13.02	543	13.03	-0.01	
<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1263</b>	<b>255</b>	<b>13.02</b>	<b>543</b>	<b>13.03</b>	<b>-0.01</b>	
<b>E. THDC</b>									
Tehri HPS	1000	1050	955	0	6.33	264	6.00	0.33	
Koteswar HPS	400	285	286	0	2.03	85	2.00	0.03	
<b>Sub Total (E)</b>	<b>1400</b>	<b>1335</b>	<b>1241</b>	<b>0</b>	<b>8.36</b>	<b>348</b>	<b>8.00</b>	<b>0.36</b>	
<b>F. BBMB</b>									
Bhakra HPS	1480	725	1100	570	17.83	743	17.41	0.42	
Dehar HPS	990	322	495	280	7.83	326	7.73	0.10	
Pong HPS	396	230	306	186	5.68	237	5.01	0.67	
<b>Sub Total (F)</b>	<b>2866</b>	<b>1278</b>	<b>1901</b>	<b>1036</b>	<b>31.34</b>	<b>1306</b>	<b>30.14</b>	<b>1.20</b>	
<b>G. IPP(s)/JV(s)</b>									
ADHPL HPS(IPP)	192	0	88	45	1.10	46	1.07	0.03	
KWHEP HPS(IPP)	1000	0	360	450	7.23	301	7.26	-0.03	
Malana Stg-II HPS	100	0	25	25	0.58	24	0.48	0.10	
Shree Cement TPS	300	0	123	125	3.38	141	3.69	-0.30	
Budhil HPS(IPP)	70	0	60	33	0.53	22	0.50	0.04	
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>656</b>	<b>678</b>	<b>12.83</b>	<b>534</b>	<b>12.99</b>	<b>-0.16</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>22336</b>	<b>16041</b>	<b>16708</b>	<b>11772</b>	<b>301.28</b>	<b>12553</b>	<b>301.90</b>	<b>-0.62</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	1268	1260	28.21	1175	
	Guru Nanak Dev TPS(Bhatinda)	440	310	308	6.61	275	
	Guru Hargobind Singh TPS(L.mbt)	920	962	970	21.40	892	
	Thermal (Total)	2620	2540	2538	56.22	2342	
	Total Hydro	1148	578	435	13.19	550	
	<b>Total Punjab</b>	<b>3768</b>	<b>3118</b>	<b>2973</b>	<b>69.41</b>	<b>2892</b>	
Haryana	Panipat TPS	1367	1101	1148	27.51	1146	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	359	388	9.03	376	
	RGTPP (kheadar) (IPP)	1200	543	523	12.94	539	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	367	354	9.13	380	
	Thermal (Total)	4944	2370	2413	58.61	2442	
	Total Hydro	62	34	33	0.86	36	
	<b>Total Haryana</b>	<b>5006</b>	<b>2404</b>	<b>2446</b>	<b>59.47</b>	<b>2478</b>	
Rajasthan	kota TPS	1240	1157	1160	27.57	1149	
	suratgarh TPS	1500	1354	1304	31.49	1312	
	Chabra TPS	500	442	373	9.58	399	
	Dholpur GPS	330	192	144	3.45	144	
	Ramgarh GPS	111	74	77	1.99	83	
	RAPS A (NPC)	300	177	177	4.19	175	
	Barsingar (NLC)	250	207	207	4.91	205	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	540	365	365	8.40	350	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3968	3807	91.56	3815	
	Total Hydro	550	0	0	0.20	8	
	Wind power	1843	0	104	1.32	55	
	Biomass	91	30	30	0.72	30	
	Solar	128	0	0	0.24	10	
	Renewable/Others (Total)	2062	30	134	2.48	103	
	<b>Total Rajasthan</b>	<b>7767</b>	<b>3998</b>	<b>3941</b>	<b>94.24</b>	<b>3927</b>	
	UP	Anpara TPS	1630	955	933	23.70	988
		Obra TPS	1382	475	478	11.60	483
		Paricha TPS	890	398	509	10.90	454
Panki TPS		210	140	86	3.00	125	
Harduaganj TPS		665	220	213	5.00	208	
Tanda TPS (NTPC)		440	398	396	9.73	406	
Roza TPS (IPP)		1200	824	801	19.62	818	
Anpara-C (IPP)		1200	406	447	10.37	432	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	184	231	5.17	216	
Thermal (Total)		8067	4000	4094	99.10	4129	
Vishnuparyag HPS (IPP)		400	214	218	5.07	211	
Other Hydro		527	267	0	5.47	228	
Cogeneration		981	100	100	2.40	100	
<b>Total UP</b>		<b>9975</b>	<b>4581</b>	<b>4412</b>	<b>112.04</b>	<b>4457</b>	
Uttarakhand		Total Hydro	1303	625	643	15.30	638
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>625</b>	<b>643</b>	<b>15.30</b>	<b>638</b>	
Delhi	Raighat TPS	135	97	99	2.33	97	
	Delhi Gas Turbine	282	75	76	1.91	80	
	Pragati Gas Turbine	330	298	268	7.03	293	
	Rithala GPS	108	21	20	0.51	21	
	Bawana GPS	677	268	223	5.92	247	
	Badarpur TPS (NTPC)	705	680	580	13.32	555	
	Thermal (Total)	2237	1439	1266	31.01	1292	
	<b>Total Delhi</b>	<b>2237</b>	<b>1439</b>	<b>1266</b>	<b>31.01</b>	<b>1292</b>	
HP	Baspa HPS (IPP)	330	166	75	2.36	98	
	Malana HPS (IPP)	86	35	35	0.58	24	
	Other Hydro	589	368	363	8.74	364	
	<b>Total HP</b>	<b>1005</b>	<b>569</b>	<b>473</b>	<b>12</b>	<b>486</b>	
J & K	Baglihar HPS (IPP)	450	296	292	6.88	287	
	Other Hydro	323	102	210	2.99	125	
	Gas/Diesel/Others	183	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>956</b>	<b>398</b>	<b>502</b>	<b>9.87</b>	<b>411</b>	
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>17132</b>	<b>16656</b>	<b>403.01</b>	<b>16581</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1707</b>	<b>4235</b>	<b>84.60</b>	<b>3525</b>	
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>35547</b>	<b>32663</b>	<b>788.89</b>	<b>32659</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	7423	2538	93.99	3916
State Control Area Hydro	5368	2471	2086	61.63	2357
<b>Total Regional Hydro</b>	<b>15731</b>	<b>9894</b>	<b>4624</b>	<b>155.62</b>	<b>6273</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	200	200	200	0	4.38	0.00	4.38		
Gwalior-Agra (D/C)	0	647	760	0	11.28	0.00	11.28		
Zerda-Kankroli	-149	26	30	163	0.00	1.27	-1.27		
Zerda-Bhinmal	-67	130	200	154	0.98	0.00	0.98		
Malanpur-Auraiya	-147	-78	0	197	0.00	2.36	-2.36		
Badod-Kota/Morak	-96	10	36	96	0.00	0.63	-0.63		
Mundra-Mohindergarh(HVDC)	636	578	637	0	14.72	0.00	14.72		
<b>Sub Total WR</b>	<b>377</b>	<b>1513</b>			<b>31.36</b>	<b>4.26</b>	<b>27.10</b>		
Pusauli Bypass	50	50	50	0	1.27	0.00	1.27		
MZP- GKP (D/C)	500	1066	1152	0	20.42	0.00	20.42		
Patna-Balia(D/C)	0	316	336	0	7.35	0.00	7.35		
B'Sharif-Balia (D/C)	263	461	500	0	9.66	0.00	9.66		
Barh - Balia(D/C)	263	378	687	0	9.39	0.00	9.39		
Pusauli-Balia	-17	40	71	17	0.74	0.00	0.74		
Gaya-Fatehpur (765 Kv)	138	287	365	0	6.06	0.00	6.06		
Pusauli-Sahupuri	175	160	184	0	3.58	0.00	3.58		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-42	-36	0	48	0.00	0.97	-0.97		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
<b>Sub Total ER</b>	<b>1330</b>	<b>2722</b>			<b>58.47</b>	<b>0.97</b>	<b>57.50</b>		
<b>Total IR Exch</b>	<b>1707</b>	<b>4235</b>			<b>89.83</b>	<b>5.23</b>	<b>84.60</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
29.85	2.30	32.16	3.37	4.05	7.32	8.96	8.30	-8.27
<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
51.14	20.37	71.52	57.50	27.10	84.60	6.35	6.73	13.08

**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	2.70	96.70	94.00	44.20	3.30
Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum		Hz			MAX (Hz)	MIN (Hz)
50.36	18.02	49.50	18.12	49.97	0.14	0.20	50.27	49.87

**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	413	21:33	405	11:26	0.0	0.0	0.0	0.0
Gorakhpur	400	433	21:55	408	1:34	0.0	0.0	52.2	4.5
Bareilly	400	422	21:04	393	11:11	0.0	0.0	1.5	0.0
Kanpur	400	419	21:31	399	11:26	0.0	0.0	0.0	0.0
Dadri	400	418	21:31	399	11:09	0.0	0.0	0.0	0.0
Ballabhgarh	400	424	21:32	403	11:24	0.0	0.0	11.5	0.0
Bawana	400	421	3:06	404	11:09	0.0	0.0	3.1	0.0
Bassi	400	428	21:32	411	18:43	0.0	0.0	14.1	0.0
Hissar	400	413	21:32	394	11:05	0.0	0.0	0.0	0.0
Moga	400	419	3:50	398	11:07	0.0	0.0	0.0	0.0
Abdullapur	400	420	3:48	244	9:53	0.1	0.1	0.0	0.0
Nalagarh	400	423	3:49	403	11:15	0.0	0.0	10.7	0.0
Kishenpur	400	424	3:39	397	19:11	0.0	0.0	7.8	0.0
Wagoora	400	424	3:49	385	19:10	0.0	2.8	7.2	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	504.01	1272.20	510.52	1575.10	337.88	494.78
Pong	426.72	384.05	421.81	975.89	422.69	1020.81	126.66	320.43
Tehri	829.79	740.04	824.80	1100.00	818.65	982.26	118.00	137.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	130.77	99.96
Rihand	268.22	252.98	264.05	548.10	265.51	650.20	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	106.75
RSD	527.91	487.91	520.63	NA	522.92	NA	108.93	163.95

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 11.10.2012 :**

1: Normal weather in NR.

**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 : 11.10.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER