

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.11.2012

Date of Reporting : 10.11.2012

### 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
32308	3057	35366	50.25	27609	1250	28859	50.16	707.2	52.49

\* 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	54.15	8.55		62.70	29.88	29.97	0.09	92.67	2.80
Haryana	51.82	0.79		52.61	49.42	49.14	-0.28	101.75	1.29
Rajasthan	86.90	4.52	8.83	100.25	62.43	62.53	0.10	162.78	2.25
Delhi	32.49			32.49	28.22	25.33	-2.89	57.82	0.14
UP	105.92	6.02	1.68	113.62	86.79	85.93	-0.86	199.55	41.96
Uttarakhand		9.09		9.09	17.97	19.70	1.74	28.79	2.35
HP		7.61		7.61	15.46	16.47	1.01	24.08	0.00
J & K		9.27	0.00	9.27	27.02	27.01	0.00	36.28	1.70
Chandigarh				0.00	3.59	3.47	-0.12	3.47	0.00
<b>Total</b>	<b>331.28</b>	<b>45.85</b>	<b>10.51</b>	<b>387.63</b>	<b>320.78</b>	<b>319.56</b>	<b>-1.21</b>	<b>707.19</b>	<b>52.49</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	4600	600	-88	-362	3254	0	54	-716	-8.17	
Haryana	4888	362	-48	130	3814	0	22	119	2.03	
Rajasthan	6821	184	-16	716	6813	0	-47	954	20.59	
Delhi	3083	6	-131	-1310	1535	0	-97	-2265	-39.02	
UP	8401	1575	-130	-30	8848	1250	154	877	7.39	
Uttarakhand	1460	230	45	404	994	0	-10	361	8.88	
HP	1118	0	-21	86	841	0	37	249	2.67	
J&K	1747	100	-221	504	1416	0	-20	327	8.47	
Chandigarh	190	0	-17	-6	94	0	-9	-130	-0.33	
<b>Total</b>	<b>32308</b>	<b>3057</b>	<b>-627</b>	<b>130</b>	<b>27609</b>	<b>1250</b>	<b>84</b>	<b>-20</b>	<b>2.51</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	1935	2081	2068	47.79	1991	46.44	1.35
Rihand I STPS	1000	460	502	506	11.09	462	11.04	0.05
Rihand II STPS	1000	970	1041	1017	23.31	971	23.28	0.03
Rihand III STPS	500	0	0	0	0.00	0		0.00
Dadri I STPS	840	810	845	856	19.07	795	19.44	-0.37
Dadri II STPS	980	975	992	1004	22.86	952	23.40	-0.54
Unchahar I TPS	420	402	419	403	9.31	388	9.37	-0.06
Unchahar II TPS	420	405	425	374	9.24	385	9.27	-0.03
Unchahar III TPS	210	202	212	200	4.65	194	4.71	-0.06
ISTPP (Jhajjar)	1000	880	804	701	17.28	720	17.41	-0.13
Dadri GPS	830	834	480	539	13.27	553	13.61	-0.34
Anta GPS	419	409	249	267	6.25	260	6.36	-0.12
Auraiya GPS	663	656	314	326	7.49	312	8.21	-0.72
<b>Sub Total (A)</b>	<b>10282</b>	<b>8937</b>	<b>8364</b>	<b>8261</b>	<b>191.59</b>	<b>7983</b>	<b>192.54</b>	<b>-0.95</b>
<b>B. NPC</b>								
NAPS	440	276	310	318	6.65	277	6.62	0.03
RAPS- B	440	417	457	461	9.98	416	10.01	-0.03
RAPS- C	440	440	469	470	10.15	423	10.56	-0.41
<b>Sub Total (B)</b>	<b>1320</b>	<b>1133</b>	<b>1236</b>	<b>1249</b>	<b>26.79</b>	<b>1116</b>	<b>27.19</b>	<b>-0.41</b>
<b>C. NHPC</b>								
Chamera I HPS	540	545	180	0	2.32	96	2.29	0.02
Chamera II HPS	300	303	228	0	1.73	72	1.85	-0.12
Chamera III HPS	231	231	206	0	1.15	48	1.12	0.03
Bairasuil HPS	180	120	120	0	0.71	30	0.63	0.08
Salai-HPS	690	186	327	203	4.45	185	4.42	0.03
Tanakpur-HPS	94	48	58	43	1.15	48	1.16	0.00
Uri-HPS	480	138	379	70	3.03	126	3.09	-0.07
Dhauliganga-HPS	280	288	208	0	1.65	69	1.67	-0.03
Dulhasi-HPS	390	388	203	0	4.10	171	4.02	0.08
Sewa-II HPS	120	120	71	0	0.31	13	0.29	0.02
<b>Sub Total (C)</b>	<b>3305</b>	<b>2366</b>	<b>1980</b>	<b>316</b>	<b>20.58</b>	<b>858</b>	<b>20.54</b>	<b>0.04</b>
<b>D.NJPC</b>								
Nathpa Jhakri	1500	1605	1015	0	9.59	399	9.50	0.09
<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1015</b>	<b>0</b>	<b>9.59</b>	<b>399</b>	<b>9.50</b>	<b>0.09</b>
<b>E. THDC</b>								
Tehri HPS	1000	623	1055	0	4.83	201	4.75	0.08
Koteshwar HPS	400	240	80	0	0.95	40	1.05	-0.10
<b>Sub Total (E)</b>	<b>1400</b>	<b>863</b>	<b>1135</b>	<b>0</b>	<b>5.77</b>	<b>241</b>	<b>5.80</b>	<b>-0.03</b>
<b>F. BBMB</b>								
Bhakra HPS	1480	648	1153	416	16.34	681	15.56	0.78
Dehar HPS	990	186	495	145	4.50	188	4.46	0.04
Pong HPS	396	283	366	246	7.03	293	5.01	2.02
<b>Sub Total (F)</b>	<b>2866</b>	<b>1117</b>	<b>2014</b>	<b>807</b>	<b>27.87</b>	<b>1161</b>	<b>25.02</b>	<b>2.85</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	0	0	0.72	30	0.69	0.03
KWHEP HPS(IPP)	1000	0	470	0	5.40	225	5.40	0.00
Malana Stg-II HPS	100	0	35	13	0.31	13	0.28	0.02
Shree Cement TPS	300	0	282	276	6.76	282	6.76	-0.01
Budhil HPS(IPP)	70	0	10	10	0.23	10	0.42	-0.19
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>797</b>	<b>299</b>	<b>13.41</b>	<b>559</b>	<b>13.56</b>	<b>-0.15</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22336</b>	<b>16022</b>	<b>16541</b>	<b>10932</b>	<b>295.60</b>	<b>12317</b>	<b>294.15</b>	<b>1.45</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	1271	1265	28.11	1171	
	Guru Nanak Dev TPS(Bhatinda)	440	225	215	4.62	192	
	Guru Hargobind Singh TPS(L.mbt)	920	965	974	21.43	893	
	Thermal (Total)	2620	2461	2454	54.15	2256	
	Total Hydro	1148	288	268	8.55	356	
	<b>Total Punjab</b>	<b>3768</b>	<b>2749</b>	<b>2722</b>	<b>62.70</b>	<b>2612</b>	
Haryana	Panipat TPS	1367	944	888	21.93	914	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	409	283	7.99	333	
	RGTPP (khedar) (IPP)	1200	478	459	11.57	482	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	605	377	10.33	431	
	Thermal (Total)	4944	2436	2007	51.82	2159	
	Total Hydro	62	27	34	0.79	33	
	<b>Total Haryana</b>	<b>5006</b>	<b>2463</b>	<b>2041</b>	<b>52.61</b>	<b>2192</b>	
Rajasthan	kota TPS	1240	1162	1167	27.53	1147	
	suratgarh TPS	1500	1250	1172	27.98	1166	
	Chabra TPS	500	411	381	9.24	385	
	Dholpur GPS	330	146	142	3.50	146	
	Ramgarh GPS	111	72	74	1.89	79	
	RAPS A (NPC)	300	173	173	4.24	177	
	Barsingar (NLC)	250	168	173	3.92	163	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	540	365	342	8.60	358	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3747	3624	86.90	3621	
	Total Hydro	550	250	174	4.52	188	
	Wind power	2191	16	521	3.62	151	
	Biomass	91	23	23	0.55	23	
	Solar	201	3	0	0.14	6	
	Renewable/Others (Total)	2483	39	544	8.83	368	
	<b>Total Rajasthan</b>	<b>8189</b>	<b>4036</b>	<b>4342</b>	<b>100.25</b>	<b>4177</b>	
	UP	Anpara TPS	1630	1367	1078	30.00	1250
		Obra TPS	1382	375	374	8.90	371
		Paricha TPS	890	489	389	10.20	425
Panki TPS		210	126	131	3.00	125	
Harduaganj TPS		665	155	182	3.90	163	
Tanda TPS (NTPC)		440	393	399	9.74	406	
Roza TPS (IPP)		1200	1062	1067	25.98	1083	
Anpara-C (IPP)		1200	351	412	9.41	392	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	203	203	4.79	200	
Thermal (Total)		8067	4521	4235	105.92	4413	
Vishnuparyag HPS (IPP)		400	134	124	2.98	124	
Other Hydro		527	83	159	3.05	127	
Cogeneration		981	70	70	1.68	70	
<b>Total UP</b>		<b>9975</b>	<b>4808</b>	<b>4588</b>	<b>113.62</b>	<b>4610</b>	
Uttarakhand		Total Hydro	1303	455	321	9.09	379
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>455</b>	<b>321</b>	<b>9.09</b>	<b>379</b>	
Delhi	Raighat TPS	135	109	104	2.42	101	
	Delhi Gas Turbine	282	157	158	3.82	159	
	Pragati Gas Turbine	330	300	306	7.33	305	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	677	309	222	6.67	278	
	Badarpur TPS (NTPC)	705	570	490	12.25	511	
	Thermal (Total)	2237	1445	1280	32.49	1354	
	<b>Total Delhi</b>	<b>2237</b>	<b>1445</b>	<b>1280</b>	<b>32.49</b>	<b>1354</b>	
HP	Baspa HPS (IPP)	330	32	32	1.61	67	
	Malana HPS (IPP)	86	37	13	0.31	13	
	Other Hydro	589	247	209	5.69	237	
	<b>Total HP</b>	<b>1005</b>	<b>316</b>	<b>254</b>	<b>8</b>	<b>317</b>	
J & K	Baglihar HPS (IPP)	450	256	250	6.09	254	
	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>376</b>	<b>425</b>	<b>9.27</b>	<b>386</b>	
<b>Total State Control Area Generation</b>		<b>32439</b>	<b>16648</b>	<b>15973</b>	<b>387.63</b>	<b>16027</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>785</b>	<b>1736</b>	<b>35.18</b>	<b>1466</b>	
<b>Total Regional Availability(Gross)</b>		<b>54775</b>	<b>33974</b>	<b>28641</b>	<b>718.41</b>	<b>29810</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	6649	1136	70.24	2927
State Control Area Hydro	5368	1795	1635	45.85	1786
<b>Total Regional Hydro</b>	<b>15731</b>	<b>8444</b>	<b>2771</b>	<b>116.08</b>	<b>4713</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	-400	-200	0	400	0.00	6.58		-6.58	
Gwalior-Agra (D/C)	82	85	474	0	2.83	0.00	2.83		
Zerda-Kankroli	-219	-156	0	276	0.00	4.64	-4.64		
Zerda-Bhinmal	-116	-74	43	221	0.00	2.11	-2.11		
Malanpur-Auraiya	-208	-170	0	208	0.00	3.95	-3.95		
Badod-Kota/Morak	-144	-136	0	198	0.00	3.47	-3.47		
Mundra-Mohindergarh(HVDC)	742	740	745	0	17.69	0.00	17.69		
<b>Sub Total WR</b>	<b>-263</b>	<b>89</b>			<b>20.52</b>	<b>20.75</b>	<b>-0.23</b>		
Pusauli Bypass	50	50	250	0	1.69	0.00	1.69		
MZP- GKP (D/C)	244	528	584	0	10.10	0.00	10.10		
Patna-Balia(D/C)	164	197	227	0	4.11	0.00	4.11		
B'Sharif-Balia (D/C)	229	368	501	0	7.68	0.00	7.68		
Barh - Balia(D/C)	196	238	373	0	6.02	0.00	6.02		
Pusauli-Balia	-61	-32	0	138	0.00	0.47	-0.47		
Gaya-Fatehpur (765 Kv)	120	181	286	0	3.92	0.00	3.92		
Pusauli-Sahupuri	146	151	159	0	3.32	0.00	3.32		
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>1048</b>	<b>1647</b>			<b>36.83</b>	<b>1.42</b>	<b>35.41</b>		
<b>Total IR Exch</b>	<b>785</b>	<b>1736</b>			<b>57.35</b>	<b>22.17</b>	<b>35.18</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
34.02	0.89	34.91	8.01	-17.91	0.39	-0.05	2.93	-2.86

  

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
46.24	-5.10	41.14	35.41	-0.23	35.18	-10.83	4.87	-5.96

**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	0.10	0.90	92.90	92.10	44.90	7.00

  

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.39	19.02	49.50	5.43	49.99	0.18	0.13	50.37	49.83

**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	414	20:40	406	11:52	0.0	0.0	0.0	0.0
Gorakhpur	400	432	20:56	415	11:20	0.0	0.0	85.6	4.2
Bareilly	400	419	13:04	404	8:58	0.0	0.0	0.0	0.0
Kanpur	400	424	21:01	406	9:21	0.0	0.0	7.4	0.0
Dadri	400	424	21:00	410	10:46	0.0	0.0	26.5	0.0
Ballabhgarh	400	430	21:01	414	8:54	0.0	0.0	52.6	0.0
Bawana	400	427	3:00	416	12:24	0.0	0.0	60.6	0.0
Bassi	400	433	20:53	407	8:57	0.0	0.0	53.1	1.9
Hissar	400	417	21:01	403	10:49	0.0	0.0	0.0	0.0
Moga	400	424	3:05	407	18:11	0.0	0.0	13.1	0.0
Abdullapur	400	425	20:37	395	11:26	0.1	0.1	17.5	0.0
Nalagarh	400	427	3:02	413	11:07	0.0	0.0	34.5	0.0
Kishenpur	400	421	1:48	397	18:12	0.0	0.0	2.1	0.0
Wagoora	400	411	1:53	377	18:07	4.6	54.7	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	503.59	1245.57	509.44	1515.08	215.09	417.53
Pong	426.72	384.05	418.84	834.92	419.90	889.22	91.35	404.73
Tehri	829.79	740.04	824.00	1086.79	818.65	982.26	71.08	106.00
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 09.11.2012 :**

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 : 09.11.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER