

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 07.10.2011  
Date of Reporting : 08.10.2011

### 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
29893	4393	34286	49.42	27161	2893	30054	49.74	682.1	86.77

\* Half hourly (two 15 minutes block--one block each before and after the designated time) average frequency

### II. A. State's Load Energy 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)	Consumption (Net MU)	Shortages * (MU)
	Thermal	Hydro	Renewable/others	Total					
Punjab	50.71	15.69		66.40	65.65	64.53	-1.13	130.92	7.30
Haryana	44.20	1.16		45.36	38.05	47.26	9.21	92.61	22.23
Rajasthan	72.32	1.05	4.13	77.50	30.70	34.39	3.69	111.89	4.62
Delhi	26.45			26.45	50.04	47.84	-2.20	74.30	3.11
UP	64.44	15.11	1.20	80.76	88.76	110.08	21.32	190.84	47.05
Uttarakhand		17.86		17.86	8.95	9.18	0.23	27.04	1.59
HP		14.39		14.39	8.75	7.05	-1.70	21.44	0.07
J & K		14.26	0.00	14.26	13.32	14.16	0.84	28.42	0.80
Chandigarh				0.00	4.85	4.68	-0.17	4.68	0.00
<b>Total</b>	<b>258.13</b>	<b>79.52</b>	<b>5.33</b>	<b>342.98</b>	<b>309.07</b>	<b>339.17</b>	<b>30.09</b>	<b>682.14</b>	<b>86.77</b>

\* Shortage furnished by the respective constituent.

### 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	
Punjab	6093	300	66	770	5135	200	-140	770	18.26
Haryana	3720	1717	86	176	3805	808	498	176	3.76
Rajasthan	4502	106	100	-118	4566	0	235	-118	-2.82
Delhi	3797	40	235	-80	2579	0	-317	61	-1.01
UP	7858	2040	1017	399	8504	1885	1413	499	11.57
Uttarakhand	1303	140	223	-49	887	0	6	0	-0.29
HP	954	50	-17	-438	658	0	-250	-3	-2.51
J&K	1418	0	158	-253	877	0	-136	-253	-6.07
Chandigarh	248	0	20	18	150	0	-10	18	0.43
<b>Total</b>	<b>29893</b>	<b>4393</b>	<b>1888</b>	<b>426</b>	<b>27161</b>	<b>2893</b>	<b>1299</b>	<b>1151</b>	<b>21.32</b>

\* STOA figures are at sellers boundary & PX figures are at regional boundary.

### III. Regional Entities :

A. NTPC	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 Net MU
	Singrauli STPS	2000	922	1256	832	21.27	886	22.14	-0.87
	Rihand I STPS	1000	553	507	911	12.90	537	13.28	-0.38
	Rihand II STPS	1000	436	518	463	10.56	440	10.46	0.10
	Dadri I STPS	840	612	838	608	15.99	666	14.69	1.30
	Dadri II STPS	980	726	973	689	17.88	745	17.41	0.47
	Unchahar I TPS	440	286	315	325	6.92	288	6.86	0.06
	Unchahar II TPS	440	140	155	156	3.39	141	3.36	0.03
	Unchahar III TPS	210	140	155	158	3.39	141	3.36	0.03
	ISTPP (Jhajihar)	500	231	294	158	5.46	228	5.50	-0.04
	Dadri GPS	830	772	763	803	18.31	763	18.52	-0.21
	Anta GPS	419	384	381	391	9.26	386	9.23	0.03
	Auraiya GPS	663	602	604	632	14.50	604	14.44	0.05
	<b>Sub Total (A)</b>	<b>9322</b>	<b>5803</b>	<b>6759</b>	<b>6126</b>	<b>139.83</b>	<b>5826</b>	<b>139.24</b>	<b>0.59</b>
B. NPC	NAPS	440	187	220	223	4.53	189	4.49	0.04
	RAPS- B	440	402	441	447	9.59	400	9.65	-0.06
	RAPS- C	440	440	465	477	10.12	422	10.56	-0.44
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1029</b>	<b>1126</b>	<b>1147</b>	<b>24.24</b>	<b>1010</b>	<b>24.70</b>	<b>-0.46</b>
C. NHPC	Chamera I HPS	540	534	540	0	6.19	258	5.89	0.30
	Chamera II HPS	300	297	201	42	3.89	162	3.78	0.10
	Bairasuil HPS	180	120	120	50	1.32	55	1.29	0.02
	Salal-HPS	690	369	443	378	8.91	371	8.86	0.05
	Tanakpur-HPS	94	86	95	95	2.29	95	2.24	0.04
	Uri-HPS	480	233	263	240	5.75	240	5.96	-0.21
	Dhauliganga-HPS	280	277	278	0	3.99	166	3.76	0.24
	Dulhasti-HPS	390	387	417	351	9.61	400	9.17	0.44
	Sewa-II HPS	120	119	121	0	0.84	35	0.82	0.03
	<b>Sub Total (C)</b>	<b>3074</b>	<b>2421</b>	<b>2478</b>	<b>1156</b>	<b>42.78</b>	<b>1783</b>	<b>41.76</b>	<b>1.02</b>
D. NJPC	Nathpa Jhakri	1500	1600	1615	345	22.00	916	21.50	0.49
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1615</b>	<b>345</b>	<b>22.00</b>	<b>916</b>	<b>21.50</b>	<b>0.49</b>
E. THDC	Tehri HPS	1000	1050	1057	0	11.47	478	11.00	0.47
	Koteshwar HPS	100	87	90	90	2.12	88	2.09	0.04
	<b>Sub Total (E)</b>	<b>1100</b>	<b>1137</b>	<b>1147</b>	<b>90</b>	<b>13.59</b>	<b>566</b>	<b>13.09</b>	<b>0.51</b>
F. BBMB	Bhakra HPS	1480	1078	1256	990	26.46	1103	25.87	0.59
	Dehar HPS	990	386	660	420	9.37	390	9.27	0.11
	Pong HPS	396	234	306	180	6.08	253	5.62	0.46
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1698</b>	<b>2222</b>	<b>1590</b>	<b>41.91</b>	<b>1746</b>	<b>40.75</b>	<b>1.16</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	40	41	0.97	40	0.92	0.04
	KWHEP HPS(IPP)	1000	0	700	300	11.78	491	11.28	0.50
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	120	0	1.52	63	0.00	1.52
	<b>Sub Total (G)</b>	<b>1442</b>	<b>0</b>	<b>860</b>	<b>341</b>	<b>14.26</b>	<b>594</b>	<b>12.20</b>	<b>2.06</b>
<b>H. Total Regional Entities (A-G)</b>		<b>20625</b>	<b>13688</b>	<b>16207</b>	<b>10795</b>	<b>298.61</b>	<b>12442</b>	<b>293.24</b>	<b>5.37</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	1050.00	1050.00	23.37	974	
	Guru Nanak Dev TPS(Bhatinda)	440	292.00	295.00	6.13	256	
	Guru Hargobind Singh TPS(L.mbt)	920	954.00	954.00	21.21	884	
	Thermal (Total)	2620	2296.00	2299.00	50.71	2113	
	Total Hydro	1148	868.00	385.00	15.69	654	
	<b>Total Punjab</b>	<b>3768</b>	<b>3164</b>	<b>2684</b>	<b>66.40</b>	<b>2767</b>	
Haryana	Panipat TPS	1360	1161.00	1158.00	27.85	1161	
	DCRTPP (Yamuna nagar)	600	248.00	269.00	5.95	248	
	Faridabad GPS (NTPC)	432	394.00	408.00	9.63	401	
	RGTPP (khedar) (IPP)	1200	0.00	0.00	0.76	32	
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0	
	Thermal (Total)	3617	1803.00	1835.00	44.20	1841	
	Total Hydro	62	47.00	44.00	1.16	48	
	<b>Total Haryana</b>	<b>3679</b>	<b>1850</b>	<b>1879</b>	<b>45.36</b>	<b>1890</b>	
	Rajasthan	kota TPS	1240	1058.00	1061.00	25.21	1050
suratgarh TPS		1500	1168.00	1165.00	27.02	1126	
Chabra TPS		500	0.00	405.00	8.05	335	
Dholpur GPS		330	183.00	132.00	3.95	165	
Ramgarh GPS		113	62.00	62.00	1.60	67	
RAPS A (NPC)		300	177.00	183.00	4.31	180	
Barsingsar (NLC)		250	0.00	0.00	0.00	0	
Giral LTPS (IPP)		250	107.00	85.00	2.19	91	
Rajwst LTPS (IPP)		135	0.00	0.00	0.00	0	
VSLP LTPS (IPP)		135	0.00	0.00	0.00	0	
Thermal (Total)		4753	2755.00	3093.00	72.32	3013	
Total Hydro		550	51.00	0.00	1.05	44	
Wind power		1294	75.00	144.00	3.53	147	
Biomass		71	25.00	25.00	0.59	25	
Renewable/Others (Total)		1365	100	169	4.13	172	
<b>Total Rajasthan</b>		<b>6668</b>	<b>2906</b>	<b>3262</b>	<b>77.50</b>	<b>3229</b>	
UP		Anpara TPS	1630	1232	1148	29.00	1208
		Obra TPS	1442	388	435	9.40	392
		Paricha TPS	640	302	361	7.80	325
	Panki TPS	210	50	54	1.20	50	
	Harduaganj TPS	375	40	43	1.00	42	
	Tanda TPS (NTPC)	440	369	366	9.28	387	
	Roza TPS (IPP)	600	284	284	6.76	282	
	Anpara-C (IPP)	600	0	0	0.00	0	
	Thermal (Total)	5937	2665	2691	64.44	2685	
	Vishnuparyag HPS (IPP)	400	387	401	9.19	383	
	Other Hydro	527	221	0	5.93	247	
	Cogeneration	951	50	50	1.20	50	
	<b>Total UP</b>	<b>7815</b>	<b>3323</b>	<b>3142</b>	<b>80.76</b>	<b>2982</b>	
	Uttarakhand	Total Hydro	1303	704	592	17.86	744
<b>Total Uttarakhand</b>		<b>1303</b>	<b>704</b>	<b>592</b>	<b>17.86</b>	<b>744</b>	
Delhi	Rajghat TPS	135	103	99	2.45	102	
	Delhi Gas Turbine	282	155	161	3.82	159	
	Pragati Gas Turbine	330	289	305	7.15	298	
	Rithala GPS	108	26	29	0.33	14	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	620	560	12.71	529	
	Thermal (Total)	2000	1193	1154	26.45	1102	
	<b>Total Delhi</b>	<b>2000</b>	<b>1193</b>	<b>1154</b>	<b>26.45</b>	<b>1102</b>	
HP	Baspa HPS (IPP)	330	154	154	4.29	179	
	Malana HPS (IPP)	101	65	50	0.81	34	
	Other Hydro	571	402	378	9.29	387	
	<b>Total HP</b>	<b>1002</b>	<b>621</b>	<b>582</b>	<b>14</b>	<b>600</b>	
J & K	Baglihar HPS (IPP)	450	442	437	10.56	440	
	Other Hydro	323	130	161	3.70	154	
	Gas/Diesel/Others	183	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>956</b>	<b>572</b>	<b>598</b>	<b>14.26</b>	<b>594</b>	
<b>Total State Control Area Generation</b>		<b>27191</b>	<b>14333</b>	<b>13893</b>	<b>342.98</b>	<b>13908</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1516</b>	<b>3125</b>	<b>56.65</b>	<b>2360</b>	
<b>Total Regional Availability(Gross)</b>		<b>47816</b>	<b>32056</b>	<b>27813</b>	<b>698.24</b>	<b>28710</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	9983	8322	3522	134.54	5606
State Control Area Hydro	5365	3084	2201	70.34	2931
<b>Total Regional Hydro</b>	<b>15347</b>	<b>11406</b>	<b>5723</b>	<b>204.88</b>	<b>8537</b>

**VI(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	100	100	100	0	2.45	0.00	2.45
Gwalior-Agra (D/C)	518	945	1221	0	18.47	0.00	18.47
Zerda-Kankroli	-142	13	93	250	0.00	2.16	-2.16
Zerda-Bhinmal	53	102	263	163	0.31	0.00	0.31
Malanpur-Auraiya	-89	-32	0	120	0.00	1.35	-1.35
Badod-Kota/Morak	0	0	0	0	0.00	0.00	0.00
<b>Sub Total WR</b>	<b>440</b>	<b>1128</b>			<b>21.22</b>	<b>3.51</b>	<b>17.71</b>
Pusauli Bypass	-8	329	353	10	3.85	0.00	3.85
MZP- GKP (D/C)	684	1080	1100	0	20.20	0.00	20.20
Patna-Balia(D/C)	305	149	552	0	9.05	0.00	9.05
B'Sharif-Balia (D/C)	0	371	395	0	4.99	0.00	4.99
Barh - balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	127	107	136	0	2.25	0.00	2.25
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-39	0	40	0.00	1.40	-1.40
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1076</b>	<b>1997</b>			<b>40.34</b>	<b>1.40</b>	<b>38.94</b>
<b>Total IR Exch</b>	<b>1516</b>	<b>3125</b>			<b>61.56</b>	<b>4.91</b>	<b>56.65</b>

**VI(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
18.21	2.60	20.81	3.68	18.51	-7.58	-8.61	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
16.91	6.71	23.62	38.94	17.71	56.65	22.03	11.00	33.03

**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
0.94	11.30	22.60	50.10	79.70	49.90	20.30	0.80

<----- 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				
50.08	6.03	48.67	21.23	49.43	4.11	0.30	49.96	48.85

**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	425	16:43	414	00:29	0.0	0.0	18.1	0.0
Gorakhpur	400	433	16:45	408	03:44	0.0	0.0	46.2	5.7
Bareilly	400	423	16:40	397	12:48	0.0	0.0	1.7	0.0
Kanpur	400	422	16:45	405	05:33	0.0	0.0	1.4	0.0
Dadri	400	414	01:29	403	10:14	0.0	0.0	0.0	0.0
Ballabgarh	400	419	16:45	404	14:30	0.0	0.0	0.0	0.0
Bawana	400	417	16:46	404	12:46	0.0	0.0	0.0	0.0
Bassi	400	427	16:43	407	21:21	0.0	0.0	18.1	0.0
Hissar	400	411	01:31	396	10:13	0.0	0.0	0.0	0.0
Moga	400	419	02:02	401	14:29	0.0	0.0	0.0	0.0
Abdullapur	400	416	02:07	400	19:15	0.0	0.0	0.0	0.0
Nalagarh	400	425	02:01	404	14:30	0.0	0.0	20.7	0.0
Kishenpur	400	420	02:01	399	18:56	0.0	0.0	0.0	0.0
Wagoora	400	414	02:51	380	18:58	0.0	24.0	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	511.17	1605.30	512.17	1650.87	465.44	785.06
Pong	426.72	384.05	422.97	1035.89	424.50	1114.45	136.86	330.04
Tehri	829.79	740.04	819.55	992.00	NA	NA	193.09	254.00
Koteshwar	612.50	598.50	608.00	4.21	NA	NA	254.00	141.00
Chamera-I	760.00	748.75	753.50	NA	NA	NA	154.57	167.77
Rihand	268.22	252.98	NA	NA	258.10	206.60	NA	NA
RPS	352.80	343.81	350.11	NA	349.08	NA	NA	NA
Jawahar Sagar	298.70	295.78	233.22	NA	297.88	NA	NA	NA
RSD	527.91	487.91	522.92	NA	523.40	NA	155.74	254.99

**IX. System Constraints:**

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

**XI. Weather Conditions For 07.10.2011 :**  
Normal weather

**XII. Synchronisation of new generating units :**

**XIII. Synchronisation of new 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 : 07.10.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER