

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 10.02.2012  
Date of Reporting : 11.02.2012

### 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
32859	2591	35450	49.86	26873	650	27523	50.03	728.4	55.90

\* 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)	Consumption (Net MU)	Shortages * (MU)
	Thermal	Hydro	Renewable/others \$	Total					
Punjab	48.88	12.08		60.96	38.62	44.17	5.54	105.13	2.82
Haryana	54.29	0.54		54.83	23.93	38.95	15.03	93.78	14.13
Rajasthan	88.33	5.34	7.28	100.95	49.58	59.56	9.98	160.51	3.92
Delhi	27.31			27.31	43.91	36.62	-7.29	63.94	0.17
UP	93.45	6.63	14.40	114.49	85.63	97.02	11.39	211.50	31.34
Uttarakhand		9.81		9.81	18.99	20.32	1.34	30.13	1.25
HP		4.05		4.05	19.43	19.92	0.49	23.97	0.38
J & K		4.98	0.00	4.98	25.21	30.80	5.59	35.77	1.90
Chandigarh				0.00	3.52	3.66	0.14	3.66	0.00
<b>Total</b>	<b>312.26</b>	<b>43.43</b>	<b>21.68</b>	<b>377.37</b>	<b>308.81</b>	<b>351.01</b>	<b>42.20</b>	<b>728.39</b>	<b>55.90</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	
Punjab	4799	150	447	-287	4199	0	317	-401	-6.62
Haryana	4401	1039	979	-127	3429	0	275	-127	-3.05
Rajasthan	6628	0	23	-3	6321	0	779	197	6.76
Delhi	3306	2	-231	-164	1435	0	11	-436	-5.81
UP	9430	1150	465	265	8156	650	466	265	6.36
Uttarakhand	1404	150	-13	395	1070	0	40	395	9.48
HP	1101	0	-281	63	777	0	132	323	6.06
J&K	1594	100	82	248	1386	0	226	255	5.68
Chandigarh	196	0	-20	0	99	0	11	-41	-0.33
<b>Total</b>	<b>32859</b>	<b>2591</b>	<b>1451</b>	<b>391</b>	<b>26873</b>	<b>650</b>	<b>2258</b>	<b>430</b>	<b>18.54</b>

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

### III. Regional Entities :

Entity	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
A. NTPC	Singrauli STPS	2000	1765	1899	1881	42.85	1786	42.10	0.76
	Rihand I STPS	1000	920	993	1000	22.09	921	21.87	0.22
	Rihand II STPS	1000	977	1042	974	23.50	979	23.17	0.32
	Dadri I STPS	840	798	856	612	17.63	735	17.68	-0.05
	Dadri II STPS	980	976	1029	740	21.63	901	21.88	-0.25
	Unchahar I TPS	440	406	442	417	9.61	401	9.58	0.03
	Unchahar II TPS	440	403	442	404	9.55	398	9.38	0.17
	Unchahar III TPS	210	202	221	195	4.73	197	4.69	0.04
	ISTPP (Jhajjar)	1000	0	0	0	0.00	0	0.00	0.00
	Dadri GPS	830	846	764	525	16.13	672	16.19	-0.06
	Anta GPS	419	429	384	228	7.95	331	7.68	0.26
	Auraiya GPS	663	635	462	400	10.22	426	10.31	-0.09
	<b>Sub Total (A)</b>	<b>9822</b>	<b>8358</b>	<b>8534</b>	<b>7376</b>	<b>185.88</b>	<b>7745</b>	<b>184.53</b>	<b>1.35</b>
B. NPC	NAPS	440	137	156	161	3.56	148	3.28	0.27
	RAPS- B	440	405	450	452	9.74	406	9.72	0.01
	RAPS- C	440	420	473	475	10.35	431	10.08	0.27
	<b>Sub Total (B)</b>	<b>1320</b>	<b>962</b>	<b>1079</b>	<b>1088</b>	<b>23.64</b>	<b>985</b>	<b>23.08</b>	<b>0.56</b>
C. NHPC	Chamera I HPS	540	534	540	0	2.62	109	2.71	-0.08
	Chamera II HPS	300	297	242	0	1.25	52	1.27	-0.02
	Bairasuil HPS	180	120	120	0	0.80	33	0.79	0.01
	Salal-HPS	690	147	230	100	3.24	135	3.18	0.06
	Tanakpur-HPS	94	27	31	22	0.59	25	0.57	0.02
	Uri-HPS	480	210	237	209	4.76	198	4.88	-0.12
	Dhauliganga-HPS	280	210	211	0	0.88	36	0.88	0.00
	Dulhasti-HPS	390	259	270	0	2.52	105	2.54	-0.01
	Sewa-II HPS	120	113	53	0	1.08	45	1.13	-0.04
	<b>Sub Total (C)</b>	<b>3074</b>	<b>1917</b>	<b>1934</b>	<b>331</b>	<b>17.74</b>	<b>739</b>	<b>17.93</b>	<b>-0.19</b>
D. NJPC	Nathpa Jhakri	1500	956	1331	0	6.33	264	6.47	-0.14
	<b>Sub Total (D)</b>	<b>1500</b>	<b>956</b>	<b>1331</b>	<b>0</b>	<b>6.33</b>	<b>264</b>	<b>6.47</b>	<b>-0.14</b>
E. THDC	Tehri HPS	1000	828	916	0	8.02	334	8.00	0.02
	Koteshwar HPS	200	138	102	98	3.34	139	2.40	0.94
	<b>Sub Total (E)</b>	<b>1200</b>	<b>966</b>	<b>1018</b>	<b>98</b>	<b>11.36</b>	<b>473</b>	<b>10.40</b>	<b>0.96</b>
F. BBMB	Bhakra HPS	1480	763	993	547	18.73	780	18.32	0.41
	Dehar HPS	990	122	495	0	3.18	133	2.93	0.26
	Pong HPS	396	184	306	126	4.59	191	4.41	0.18
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1069</b>	<b>1794</b>	<b>673</b>	<b>26.50</b>	<b>1104</b>	<b>25.65</b>	<b>0.85</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.26	11	0.25	0.01
	KWHEP HPS(IPP)	1000	0	464	0	3.47	145	3.48	-0.01
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	146	146	3.48	145	3.52	-0.04
	<b>Sub Total (G)</b>	<b>1442</b>	<b>0</b>	<b>610</b>	<b>146</b>	<b>7.21</b>	<b>300</b>	<b>7.25</b>	<b>-0.04</b>
<b>H. Total Regional Entities (A-G)</b>	<b>21225</b>	<b>14227</b>	<b>16300</b>	<b>9712</b>	<b>278.65</b>	<b>11611</b>	<b>275.31</b>	<b>3.34</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	1040	1045	23.24	968
	Guru Nanak Dev TPS(Bhatinda)	440	218	215	4.67	194
	Guru Hargobind Singh TPS(L.mbt)	920	954	967	20.98	874
	Thermal (Total)	2620	2212	2227	48.88	2037
	Total Hydro	1148	381	264	12.08	503
	<b>Total Punjab</b>	<b>3768</b>	<b>2593</b>	<b>2491</b>	<b>60.96</b>	<b>2540</b>
Haryana	Panipat TPS	1360	612	533	14.02	584
	DCRTPP (Yamuna nagar)	600	273	268	6.58	274
	Faridabad GPS (NTPC)	432	429	450	10.60	442
	RGTPP (kheldar) (IPP)	1200	833	979	23.08	962
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	660	0	0	0.00	0
	Thermal (Total)	4277	2147	2230	54.29	2262
	Total Hydro	62	22	21	0.54	23
	<b>Total Haryana</b>	<b>4339</b>	<b>2169</b>	<b>2251</b>	<b>54.83</b>	<b>2285</b>
	Rajasthan	kota TPS	1240	1171	1173	27.73
suratgarh TPS		1500	1332	1161	30.63	1276
Chabra TPS		500	205	215	3.57	149
Dholpur GPS		330	226	226	5.47	228
Ramgarh GPS		113	38	38	0.95	40
RAPS A (NPC)		300	189	191	4.72	197
Barsingsar (NLC)		250	188	168	5.14	214
Giral LTPS (IPP)		250	60	30	1.50	63
Rajwest LTPS (IPP)		540	345	345	8.62	359
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5158	3754	3547	88.33	3681
Total Hydro		550	211	148	5.34	223
Wind power		1294	74	11	0.87	36
Biomass		71	45	45	1.07	45
Solar		50	0	0	0.00	0
Renewable/Others (Total)		1365	119	56	7.28	303
<b>Total Rajasthan</b>		<b>7073</b>	<b>4084</b>	<b>3751</b>	<b>100.95</b>	<b>4206</b>
UP		Anpara TPS	1630	1385	1387	32.30
	Obra TPS	1442	589	601	14.20	592
	Paricha TPS	640	230	232	5.60	233
	Panki TPS	210	131	149	3.50	146
	Harduaganj TPS	415	266	226	6.10	254
	Tanda TPS (NTPC)	440	405	316	9.48	395
	Roza TPS (IPP)	900	536	400	11.89	495
	Anpara-C (IPP)	1200	396	401	9.46	394
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	41	41	0.93	39
	Thermal (Total)	7057	3979	3753	93.45	3894
	Vishnuparyag HPS (IPP)	400	74	69	1.75	73
	Other Hydro	527	268	0	4.89	204
	Cogeneration	951	600	600	14.40	600
	<b>Total UP</b>	<b>8935</b>	<b>4921</b>	<b>4422</b>	<b>114.49</b>	<b>4697</b>
	Uttarakhand	Total Hydro	1303	521	343	9.81
<b>Total Uttarakhand</b>		<b>1303</b>	<b>521</b>	<b>343</b>	<b>9.81</b>	<b>409</b>
Delhi	Rajghat TPS	135	108	105	2.46	103
	Delhi Gas Turbine	282	79	77	1.86	78
	Pragati Gas Turbine	330	313	264	7.29	304
	Rithala GPS	108	19	19	0.31	13
	Bawana GPS	440	152	50	4.95	206
	Badarpur TPS (NTPC)	705	485	425	10.44	435
	Thermal (Total)	2000	1156	1048	27.31	1138
	<b>Total Delhi</b>	<b>2000</b>	<b>1156</b>	<b>1048</b>	<b>27.31</b>	<b>1138</b>
HP	Baspa HPS (IPP)	330	0	0	1.07	45
	Malana HPS (IPP)	101	0	0	0.12	5
	Other Hydro	571	151	53	2.86	119
	<b>Total HP</b>	<b>1002</b>	<b>151</b>	<b>53</b>	<b>4</b>	<b>169</b>
J & K	Baglihar HPS (IPP)	450	150	148	3.60	150
	Other Hydro	323	27	125	1.38	57
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>177</b>	<b>273</b>	<b>4.98</b>	<b>207</b>
<b>Total State Control Area Generation</b>		<b>29376</b>	<b>15772</b>	<b>14632</b>	<b>377.37</b>	<b>15651</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>2469</b>	<b>3610</b>	<b>85.98</b>	<b>3583</b>
<b>Total Regional Availability(Gross)</b>		<b>50601</b>	<b>34541</b>	<b>27954</b>	<b>742.01</b>	<b>30844</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10083	6687	1248	69.13	2880
State Control Area Hydro	5365	1731	1102	41.68	1737
<b>Total Regional Hydro</b>	<b>15447</b>	<b>8418</b>	<b>2350</b>	<b>110.81</b>	<b>4617</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	400	300	400	0	7.36	0.00	7.36
Gwalior-Agra (D/C)	549	1232	1332	0	25.85	0.00	25.85
Zerda-Kankroli	-7	95	158	45	2.18	0.00	2.18
Zerda-Bhinmal	92	212	378	4	4.96	0.00	4.96
Malanpur-Auraiya	-151	-35	0	151	0.00	0.47	-0.47
Badod-Kota/Morak	41	73	80	0	1.41	0.00	1.41
<b>Sub Total WR</b>	<b>924</b>	<b>1877</b>			<b>41.76</b>	<b>0.47</b>	<b>41.30</b>
Pusauli Bypass	150	33	278	54	2.32	0.17	2.15
MZP- GKP (D/C)	460	720	804	0	16.10	0.00	16.10
Patna-Balia(D/C)	380	319	644	0	10.18	0.00	10.18
B'Sharif-Balia (D/C)	166	254	325	0	6.06	0.00	6.06
Barh - balia(D/C)	259	340	414	0	7.97	0.00	7.97
Pusauli-Sahupuri	160	99	167	0	2.99	0.00	2.99
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-32	0	48	0.00	0.76	-0.76
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1545</b>	<b>1733</b>			<b>45.62</b>	<b>0.93</b>	<b>44.69</b>
<b>Total IR Exch</b>	<b>2469</b>	<b>3610</b>			<b>87.38</b>	<b>1.40</b>	<b>85.98</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
23.86	0.21	24.07	10.47	10.53	-0.28	9.79	2.81	-2.81

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
37.07	15.28	52.34	44.69	41.30	85.98	7.62	26.02	33.64

**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	5.00	29.30	94.30	70.00	17.60	0.70

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.29	17.03	49.30	11.22	49.81	0.69	0.19	50.27	49.57

**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	405	03:38	394	16:29	0.0	0.0	0.0	0.0
Gorakhpur	400	430	07:03	405	16:53	0.0	0.0	48.0	0.0
Bareilly	400	417	03:34	392	08:37	0.0	0.0	0.0	0.0
Kanpur	400	414	19:02	395	16:26	0.0	0.0	0.0	0.0
Dadri	400	418	03:36	391	15:48	0.0	0.0	0.0	0.0
Ballabgarh	400	421	04:01	392	15:47	0.0	0.0	0.6	0.0
Bawana	400	421	03:37	394	15:48	0.0	0.0	0.8	0.0
Bassi	400	421	05:47	390	12:05	0.0	0.0	0.3	0.0
Hissar	400	414	20:34	387	15:47	0.0	1.0	0.0	0.0
Moga	400	427	05:04	392	14:10	0.0	0.0	9.4	0.0
Abdullapur	400	421	03:37	394	15:48	0.0	0.0	0.7	0.0
Nalagarh	400	427	05:02	400	12:04	0.0	0.0	13.5	0.0
Kishenpur	400	421	05:02	379	14:16	0.0	10.8	3.7	0.0
Wagoora	400	407	05:03	372	14:10	12.4	67.7	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	493.29	838.00	496.88	971.87	195.16	558.15
Pong	426.72	384.05	410.37	504.32	413.82	633.63	78.30	293.15
Tehri	829.79	740.04	793.65	513.63	818.65	982.26	51.03	203.00
Koteshwar	612.50	598.50	609.80	4.44	NZ	NA	203.00	221.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	60.29	71.73
Rihand	268.22	252.98	262.34	439.10	256.70	132.50	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	501.19	NA	504.15	NA	71.70	218.95

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 10.02.2012 :**

Cold & Normal weather.

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

1. ICT-1(315 MVA) at Deepalpur has been charged(first time) at 21.10 hrs.

**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 : 10.02.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER