

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.01.2012  
Date of Reporting : 15.01.2012

### 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
31692	2642	34334	50.00	24839	650	25489	50.08	692.8	44.05

\* 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	53.42	9.53		62.94	30.60	30.74	0.14	93.68	1.80
Haryana	57.17	0.63		57.80	25.58	41.01	15.43	98.81	6.88
Rajasthan	89.23	4.19	10.62	104.04	54.98	55.07	0.08	159.10	0.74
Delhi	30.93			30.93	39.47	31.68	-7.79	62.60	0.16
UP	83.90	6.14	15.60	105.63	82.41	79.08	-3.33	184.72	32.07
Uttarakhand		7.46		7.46	19.71	23.32	3.61	30.78	0.16
HP		4.08		4.08	20.41	19.15	-1.27	23.23	0.36
J & K		5.60	0.00	5.60	24.71	30.78	6.08	36.39	1.90
Chandigarh				0.00	3.47	3.53	0.06	3.53	0.00
<b>Total</b>	<b>314.64</b>	<b>37.63</b>	<b>26.22</b>	<b>378.48</b>	<b>301.34</b>	<b>314.35</b>	<b>13.01</b>	<b>692.84</b>	<b>44.05</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	4345	600	51	-333	3058	0	25	-581	-8.01
Haryana	4766	557	953	-201	3297	0	152	-201	-4.49
Rajasthan	6544	0	-349	180	6450	0	514	305	8.16
Delhi	3144	5	-505	-25	1528	0	-67	-340	-3.13
UP	8452	1380	16	265	7529	650	187	265	6.36
Uttarakhand	1517	0	138	430	754	0	-229	430	10.32
HP	1111	0	-403	24	756	0	5	405	6.65
J&K	1617	100	-29	301	1373	0	278	296	6.59
Chandigarh	197	0	-20	0	94	0	3	-30	-0.24
<b>Total</b>	<b>31692</b>	<b>2642</b>	<b>-148</b>	<b>640</b>	<b>24839</b>	<b>650</b>	<b>869</b>	<b>548</b>	<b>22.22</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)	Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1750	1889	1750	41.57	1732	41.23	0.34
	Rihand I STPS	1000	720	828	666	17.18	716	16.85	0.33
	Rihand II STPS	1000	977	1039	802	22.98	958	22.70	0.28
	Dadri I STPS	840	614	675	605	14.36	598	14.27	0.09
	Dadri II STPS	980	736	945	683	17.22	717	17.59	-0.37
	Unchahar I TPS	440	378	433	363	8.67	361	8.79	-0.12
	Unchahar II TPS	440	395	430	323	9.20	383	8.98	0.22
	Unchahar III TPS	210	200	221	165	4.63	193	4.59	0.04
	ISTPP (Jhajjar)	1000	475	357	353	9.40	392	9.48	-0.08
	Dadri GPS	830	846	553	525	15.68	653	15.77	-0.09
	Anta GPS	419	433	139	293	7.74	323	7.51	0.23
	Auraiya GPS	663	661	373	328	9.97	415	10.07	-0.11
	<b>Sub Total (A)</b>	<b>9822</b>	<b>8185</b>	<b>7882</b>	<b>6856</b>	<b>178.61</b>	<b>7442</b>	<b>177.83</b>	<b>0.78</b>
	B. NPC	NAPS	440	242	274	284	5.82	242	5.81
RAPS- B		440	426	471	475	10.24	427	10.22	0.02
RAPS- C		440	420	471	470	10.15	423	10.08	0.07
<b>Sub Total (B)</b>		<b>1320</b>	<b>1088</b>	<b>1216</b>	<b>1229</b>	<b>26.21</b>	<b>1092</b>	<b>26.11</b>	<b>0.10</b>
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	123	0	1.01	42	1.20	-0.19
	Bairasuil HPS	180	179	120	0	0.40	17	0.47	-0.07
	Salal-HPS	690	128	302	67	3.15	131	2.96	0.20
	Tanakpur-HPS	94	30	31	22	0.68	28	0.70	-0.02
	Uri-HPS	480	107	205	45	2.45	102	2.17	0.28
	Dhauliganga-HPS	280	210	69	0	0.89	37	0.93	-0.04
	Dulhasti-HPS	390	388	411	0	2.31	96	2.18	0.13
	Sewa-II HPS	120	119	59	0	0.32	13	0.35	-0.03
	<b>Sub Total (C)</b>	<b>3074</b>	<b>1457</b>	<b>1320</b>	<b>134</b>	<b>11.21</b>	<b>467</b>	<b>10.97</b>	<b>0.24</b>
D. NJPC	Nathpa Jhakri	1500	1133	1289	0	6.42	267	6.63	-0.21
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1133</b>	<b>1289</b>	<b>0</b>	<b>6.42</b>	<b>267</b>	<b>6.63</b>	<b>-0.21</b>
E. THDC	Tehri HPS	1000	1000	900	0	8.42	351	8.50	-0.08
	Koteshwar HPS	200	119	200	0	2.93	122	2.95	-0.02
	<b>Sub Total (E)</b>	<b>1200</b>	<b>1119</b>	<b>1100</b>	<b>0</b>	<b>11.36</b>	<b>473</b>	<b>11.45</b>	<b>-0.09</b>
F. BBMB	Bhakra HPS	1480	696	944	571	17.15	715	16.71	0.44
	Dehar HPS	990	135	495	0	3.36	140	3.23	0.13
	Pong HPS	396	130	306	60	3.28	137	3.13	0.15
	<b>Sub Total (F)</b>	<b>2866</b>	<b>961</b>	<b>1745</b>	<b>631</b>	<b>23.79</b>	<b>991</b>	<b>23.07</b>	<b>0.72</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.31	13	0.29	0.02
	KWHEP HPS(IPP)	1000	0	250	0	3.11	130	3.48	-0.37
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	150	190	4.36	182	4.69	-0.33
	<b>Sub Total (G)</b>	<b>1442</b>	<b>0</b>	<b>400</b>	<b>190</b>	<b>7.77</b>	<b>324</b>	<b>8.46</b>	<b>-0.69</b>
<b>H. Total Regional Entities (A-G)</b>	<b>21225</b>	<b>13944</b>	<b>14952</b>	<b>9040</b>	<b>265.37</b>	<b>11057</b>	<b>264.52</b>	<b>0.85</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	1260	1110	27.85	1160
	Guru Nanak Dev TPS(Bhatinda)	440	216	213	4.59	191
	Guru Hargobind Singh TPS(L.mbt)	920	955	827	20.98	874
	Thermal (Total)	2620	2431	2150	53.42	2226
	Total Hydro	1148	356	252	9.53	397
	<b>Total Punjab</b>	<b>3768</b>	<b>2787</b>	<b>2402</b>	<b>62.94</b>	<b>2623</b>
Haryana	Panipat TPS	1360	830	1028	22.22	926
	DCRTPP (Yamuna nagar)	600	274	268	6.60	275
	Faridabad GPS (NTPC)	432	425	354	10.08	420
	RGTPP (kheldar) (IPP)	1200	788	524	18.27	761
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Thermal (Total)	3617	2317	2174	57.17	2382
	Total Hydro	62	22	21	0.63	26
	<b>Total Haryana</b>	<b>3679</b>	<b>2339</b>	<b>2195</b>	<b>57.80</b>	<b>2408</b>
Rajasthan	kota TPS	1240	1168	1170	27.62	1151
	suratgarh TPS	1500	1140	1123	26.81	1117
	Chabra TPS	500	389	410	9.30	388
	Dholpur GPS	330	227	228	5.46	227
	Ramgarh GPS	113	52	58	1.47	61
	RAPS A (NPC)	300	178	172	4.48	187
	Barsingsar (NLC)	250	142	180	4.68	195
	Giral LTPS (IPP)	250	69	34	1.37	57
	Rajwest LTPS (IPP)	540	343	320	8.04	335
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Thermal (Total)	5158	3708	3695	89.23	3718
	Total Hydro	550	162	136	4.19	175
	Wind power	1294	310	204	5.61	234
	Biomass	71	34	34	0.82	34
	Solar	50	0	0	0.00	0
	Renewable/Others (Total)	1365	344	238	10.62	442
	<b>Total Rajasthan</b>	<b>7073</b>	<b>4214</b>	<b>4069</b>	<b>104.04</b>	<b>4335</b>
	UP	Anpara TPS	1630	1336	1346	28.40
Obra TPS		1442	633	534	13.10	546
Paricha TPS		640	210	220	4.60	192
Panki TPS		210	115	145	2.90	121
Harduaganj TPS		415	42	44	0.90	38
Tanda TPS (NTPC)		440	400	400	9.80	408
Roza TPS (IPP)		900	450	445	10.60	442
Anpara-C (IPP)		1200	495	495	11.95	498
Bajaj Energy Pvt.Ltd(IPP) TPS		180	59	113	1.65	69
Thermal (Total)		7057	3740	3742	83.90	3496
Vishnuparyag HPS (IPP)		400	84	79	1.95	81
Other Hydro		527	243	42	4.19	175
Cogeneration		951	650	650	15.60	650
<b>Total UP</b>		<b>8935</b>	<b>4717</b>	<b>4513</b>	<b>105.63</b>	<b>4320</b>
Uttarakhand		Total Hydro	1303	417	247	7.46
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>417</b>	<b>247</b>	<b>7.46</b>	<b>311</b>
Delhi	Rajghat TPS	135	54	51	1.40	58
	Delhi Gas Turbine	282	240	156	5.16	215
	Pragati Gas Turbine	330	302	263	7.38	307
	Rithala GPS	108	19	33	0.38	16
	Bawana GPS	440	134	34	3.42	143
	Badarpur TPS (NTPC)	705	580	550	13.19	550
	Thermal (Total)	2000	1329	1120	30.93	1289
	<b>Total Delhi</b>	<b>2000</b>	<b>1329</b>	<b>1120</b>	<b>30.93</b>	<b>1289</b>
HP	Baspa HPS (IPP)	330	0	0	1.03	43
	Malana HPS (IPP)	101	0	0	0.21	9
	Other Hydro	571	157	71	2.85	119
	<b>Total HP</b>	<b>1002</b>	<b>157</b>	<b>71</b>	<b>4</b>	<b>170</b>
J & K	Baglihar HPS (IPP)	450	296	143	4.23	176
	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>323</b>	<b>268</b>	<b>5.60</b>	<b>233</b>
<b>Total State Control Area Generation</b>		<b>28716</b>	<b>16283</b>	<b>14885</b>	<b>378.48</b>	<b>15689</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1921</b>	<b>2427</b>	<b>65.78</b>	<b>2741</b>
<b>Total Regional Availability(Gross)</b>		<b>49941</b>	<b>33156</b>	<b>26352</b>	<b>709.64</b>	<b>29487</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10083	5854	955	60.55	2523
State Control Area Hydro	5365	1680	1037	35.69	1487
<b>Total Regional Hydro</b>	<b>15447</b>	<b>7534</b>	<b>1992</b>	<b>96.24</b>	<b>4010</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	0	300	300	500	2.19	0.45	1.74
Gwalior-Agra (D/C)	562	742	1340	0	21.45	0.00	21.45
Zerda-Kankroli	-19	-63	165	94	0.76	0.00	0.76
Zerda-Bhinmal	65	53	90	0	3.14	0.00	3.14
Malanpur-Auraiya	-97	-66	0	97	0.00	0.86	-0.86
Badod-Kota/Morak	-7	3	20	39	0.32	0.00	0.32
<b>Sub Total WR</b>	<b>504</b>	<b>969</b>			<b>27.85</b>	<b>1.31</b>	<b>26.54</b>
Pusauli Bypass	87	116	230	130	2.82	0.04	2.78
MZP- GKP (D/C)	690	380	880	0	15.39	0.00	15.39
Patna-Balia(D/C)	548	309	560	0	10.79	0.00	10.79
B'Sharif-Balia (D/C)	0	286	485	0	2.66	0.00	2.66
Barh - balia(D/C)	0	328	472	0	5.75	0.00	5.75
Pusauli-Sahupuri	122	71	163	0	2.70	0.00	2.70
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-32	0	48	0.00	0.82	-0.82
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1417</b>	<b>1458</b>			<b>40.11</b>	<b>0.86</b>	<b>39.24</b>
<b>Total IR Exch</b>	<b>1921</b>	<b>2427</b>			<b>67.96</b>	<b>2.18</b>	<b>65.78</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
21.37	0.36	21.73	11.56	12.79	1.15	18.02	2.77	-2.77

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
37.21	21.98	59.19	39.24	26.54	65.78	2.03	4.56	6.59

**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	2.40	20.80	95.40	74.00	26.20	2.20

<----- 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					
50.47	18.02	49.32	10.16	49.86	0.53	0.19	50.32	49.65

**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	408	02:08	388	05:41	0.0	0.1	0.0	0.0
Gorakhpur	400	433	17:03	215	17:09	0.0	0.0	68.6	1.5
Bareilly	400	421	02:01	409	00:11	0.0	0.0	10.8	0.0
Kanpur	400	418	17:04	383	05:42	0.0	2.1	0.0	0.0
Dadri	400	416	02:01	393	11:13	0.0	0.0	0.0	0.0
Ballabgarh	400	422	02:08	394	11:11	0.0	0.0	8.5	0.0
Bawana	400	422	02:03	396	11:13	0.0	0.0	11.6	0.0
Bassi	400	422	17:06	391	11:13	0.0	0.0	1.0	0.0
Hissar	400	413	21:45	389	11:13	0.0	0.1	0.0	0.0
Moga	400	422	22:58	399	11:11	0.0	0.0	1.6	0.0
Abdullapur	400	422	21:45	246	16:44	0.1	0.1	0.9	0.0
Nalagarh	400	426	20:00	403	11:13	0.0	0.0	27.2	0.0
Kishenpur	400	415	04:14	392	10:36	0.0	0.0	0.0	0.0
Wagoora	400	393	02:00	368	16:44	53.5	85.7	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	499.92	1086.42	502.69	1205.87	167.86	481.64
Pong	426.72	384.05	412.55	588.94	416.08	718.14	69.57	219.31
Tehri	829.79	740.04	806.50	724.19	818.65	982.26	52.25	203.00
Koteshwar	612.50	598.50	608.50	3.76	NA	NA	170.00	162.00
Chamera-I	760.00	748.75	751.07	NA	750.49	NA	53.66	NA
Rihand	268.22	252.98	263.44	508.00	257.04	159.40	NA	NA
RPS	352.80	343.81	349.83	NA	348.47	NA	NA	157.92
Jawahar Sagar	298.70	295.78	297.55	NA	297.85	NA	NA	200.14
RSD	527.91	487.91	508.14	NA	511.12	NA	14.72	235.74

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 14.01.2012 :**

1. Normal & Cold weather

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

**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 : 14.01.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER