

# पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.01.2013  
Date of Reporting : 15.01.2013

### 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
33471	2713	36184	50.15	27316	880	28196	50.26	731.9	61.38

\* 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	48.61	9.88		58.49	32.90	33.49	0.59	91.98	2.62
Haryana	67.39	0.49		67.87	39.52	38.10	-1.41	105.98	0.17
Rajasthan	78.71	3.96	3.83	86.50	88.48	86.37	-2.11	172.87	0.00
Delhi	30.80			30.80	37.30	32.45	-4.85	63.25	0.07
UP	102.32	3.97	18.00	124.29	74.71	78.25	3.54	202.53	52.46
Uttarakhand		6.84		6.84	22.13	21.59	-0.54	28.43	3.33
HP		4.00		4.00	19.77	19.83	0.05	23.83	1.03
J & K		7.02	0.00	7.02	29.40	32.13	2.73	39.15	1.70
Chandigarh				0.00	3.74	3.88	0.14	3.88	0.00
<b>Total</b>	<b>327.83</b>	<b>36.15</b>	<b>21.83</b>	<b>385.81</b>	<b>347.95</b>	<b>346.09</b>	<b>-1.87</b>	<b>731.90</b>	<b>61.38</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	4522	600	-37	-420	3673	0	65	140	-5.69
Haryana	5362	0	-56	-63	3176	0	-80	-374	-7.26
Rajasthan	6804	0	-536	1651	7094	0	209	1386	48.37
Delhi	3150	0	-212	-595	1406	0	-56	-1521	-23.60
UP	8939	1850	113	24	8509	880	77	-178	-4.41
Uttarakhand	1552	150	8	457	1139	0	-22	556	12.38
HP	1191	13	-61	322	738	0	-5	416	9.03
J&K	1757	100	-142	423	1483	0	26	527	9.73
Chandigarh	194	0	-40	0	98	0	15	-31	0.08
<b>Total</b>	<b>33471</b>	<b>2713</b>	<b>-963</b>	<b>1799</b>	<b>27316</b>	<b>880</b>	<b>228</b>	<b>921</b>	<b>38.63</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	1955	2088	2051	47.01	1959	46.76	0.24
	Rihand I STPS	1000	920	996	976	21.88	912	22.04	-0.16
	Rihand II STPS	1000	975	1031	1003	23.06	961	23.25	-0.18
	Rihand III STPS	500	-10	0	0	0.00	0	-0.24	0.24
	Dadri I STPS	840	810	784	628	16.93	705	18.00	-1.07
	Dadri II STPS	980	975	955	682	19.90	829	21.87	-1.97
	Unchahar I TPS	420	406	431	406	9.50	396	9.68	-0.18
	Unchahar II TPS	420	405	427	414	9.47	394	9.64	-0.17
	Unchahar III TPS	210	202	217	186	4.67	195	4.77	-0.09
	ISTPP (Jhajihar)	1500	980	607	612	16.26	677	14.45	1.81
	Dadri GPS	830	848	408	347	9.14	381	10.03	-0.89
	Anta GPS	419	424	239	200	5.70	237	6.11	-0.41
	Auraiya GPS	663	662	321	283	7.25	302	7.26	-0.01
	<b>Sub Total (A)</b>	<b>10782</b>	<b>9552</b>	<b>8504</b>	<b>7788</b>	<b>190.76</b>	<b>7948</b>	<b>193.61</b>	<b>-2.85</b>
B. NPC	NAPS	440	142	162	164	3.06	128	3.41	-0.35
	RAPS- B	440	415	463	470	10.14	423	9.96	0.18
	RAPS- C	440	407	473	377	9.09	379	9.77	-0.68
	<b>Sub Total (B)</b>	<b>1320</b>	<b>964</b>	<b>1102</b>	<b>1011</b>	<b>22.29</b>	<b>929</b>	<b>23.13</b>	<b>-0.85</b>
C. NHPC	Chamera I HPS	540	550	540	0	2.00	83	2.15	-0.15
	Chamera II HPS	300	303	0	0	0.92	38	1.02	-0.10
	Chamera III HPS	231	231	72	0	0.58	24	0.55	0.02
	Bairasuil HPS	180	182	120	0	0.47	20	0.59	-0.12
	Salal-HPS	690	129	229	130	3.02	126	3.09	-0.07
	Tanakpur-HPS	94	27	32	23	0.61	25	0.63	-0.02
	Uri-HPS	480	116	219	43	2.86	119	2.61	0.25
	Dhauliganga-HPS	280	210	122	0	0.74	31	0.89	-0.16
	Dulhasti-HPS	390	257	273	0	3.04	127	2.74	0.30
	Sewa-II HPS	120	120	109	0	0.21	9	0.27	-0.06
	<b>Sub Total (C)</b>	<b>3305</b>	<b>2123</b>	<b>1716</b>	<b>196</b>	<b>14.43</b>	<b>601</b>	<b>14.54</b>	<b>-0.11</b>
D.NJPC	Nathpa Jhakri	1500	1350	1357	0	6.33	264	6.40	-0.08
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1350</b>	<b>1357</b>	<b>0</b>	<b>6.33</b>	<b>264</b>	<b>6.40</b>	<b>-0.08</b>
E. THDC	Tehri HPS	1000	1020	1007	0	9.44	393	9.80	-0.36
	<b>Sub Total (E)</b>	<b>1400</b>	<b>1420</b>	<b>1408</b>	<b>71</b>	<b>12.82</b>	<b>534</b>	<b>13.20</b>	<b>-0.38</b>
F. BBMB	Bhakra HPS	1480	653	1106	410	15.92	663	15.67	0.25
	Dehar HPS	990	96	495	0	2.32	97	2.31	0.01
	Pong HPS	396	222	306	60	5.52	230	5.01	0.51
	<b>Sub Total (F)</b>	<b>2866</b>	<b>971</b>	<b>1907</b>	<b>470</b>	<b>23.76</b>	<b>990</b>	<b>22.99</b>	<b>0.77</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.36	15	0.35	0.01
	KWHEP HPS(IPP)	1000	0	0	0	0.00	0	0.00	0.00
	Malana Stg-II HPS	100	0	18	0	0.14	6	0.12	0.02
	Shree Cement TPS	300	0	308	131	5.03	209	6.02	-1.00
	Budhil HPS(IPP)	70	0	0	0	0.03	1	0.02	0.01
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>326</b>	<b>131</b>	<b>5.56</b>	<b>232</b>	<b>6.51</b>	<b>-0.96</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22836</b>	<b>16381</b>	<b>16320</b>	<b>9667</b>	<b>275.95</b>	<b>11498</b>	<b>280.38</b>	<b>-4.43</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	1051	23.06	961
	Guru Nanak Dev TPS(Bhatinda)	440	208	218	4.31	179
	Guru Hargobind Singh TPS(L.mbt)	920	957	964	21.24	885
	Thermal (Total)	2620	2205	2233	48.61	2025
	Total Hydro	1148	451	212	9.88	412
	<b>Total Punjab</b>	<b>3768</b>	<b>2656</b>	<b>2445</b>	<b>58.49</b>	<b>2437</b>
Haryana	Panipat TPS	1367	859	976	24.09	1004
	DCRTPP (Yamuna nagar)	600	280	282	6.64	277
	Faridabad GPS (NTPC)	432	365	284	7.37	307
	RGTPP (khedar) (IPP)	1200	955	406	18.88	787
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	583	353	10.42	434
	Thermal (Total)	4944	196	2301	67.39	2808
	Total Hydro	62	20	20	0.49	20
	<b>Total Haryana</b>	<b>5006</b>	<b>216</b>	<b>2321</b>	<b>67.87</b>	<b>2828</b>
	Rajasthan	kota TPS	1240	1085	1173	27.10
suratgarh TPS		1500	939	1079	25.04	1043
Chabra TPS		500	196	226	5.23	218
Dholpur GPS		330	142	142	3.22	134
Ramgarh GPS		111	43	45	1.10	46
RAPS A (NPC)		300	204	217	4.74	198
Barsingsar (NLC)		250	111	108	2.51	105
Giral LTPS		250	144	136	2.91	121
Rajwest LTPS (IPP)		675	349	339	6.87	286
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5291	3213	3465	78.71	3280
Total Hydro		550	120	124	3.96	165
Wind power		2191	48	65	3.12	130
Biomass		91	23	23	0.56	23
Solar		201	4	0	0.15	6
Renewable/Others (Total)		2483	71	88	3.83	160
<b>Total Rajasthan</b>		<b>8324</b>	<b>3404</b>	<b>3677</b>	<b>86.50</b>	<b>3604</b>
UP	Anpara TPS	1630	788	776	17.30	721
	Obra TPS	1382	371	374	9.10	379
	Paricha TPS	890	450	612	12.70	529
	Panki TPS	210	113	59	2.10	88
	Harduaganj TPS	665	252	239	6.10	254
	Tanda TPS (NTPC)	440	392	301	8.52	355
	Roza TPS (IPP)	1200	810	810	19.31	805
	Anpara-C (IPP)	1200	629	793	18.27	761
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	403	361	8.92	372
	Thermal (Total)	8067	4208	4325	102.32	4263
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	172	98	3.97	165
	Cogeneration	981	750	750	18.00	750
	<b>Total UP</b>	<b>9975</b>	<b>5130</b>	<b>5173</b>	<b>124.29</b>	<b>5179</b>
	Uttarakhand	Total Hydro	1303	459	308	6.84
<b>Total Uttarakhand</b>		<b>1303</b>	<b>459</b>	<b>308</b>	<b>6.84</b>	<b>285</b>
Delhi	Raighat TPS	135	55	54	1.28	54
	Delhi Gas Turbine	282	162	147	3.78	158
	Pragati Gas Turbine	330	308	262	7.30	304
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	210	189	4.82	201
	Badarpur TPS (NTPC)	705	595	565	13.62	567
	Thermal (Total)	2237	1330	1217	30.80	1284
	<b>Total Delhi</b>	<b>2237</b>	<b>1330</b>	<b>1217</b>	<b>30.80</b>	<b>1284</b>
HP	Baspa HPS (IPP)	330	0	0	1.02	43
	Malana HPS (IPP)	86	36	0	0.18	7
	Other Hydro	589	123	94	2.80	117
	<b>Total HP</b>	<b>1005</b>	<b>159</b>	<b>94</b>	<b>4</b>	<b>167</b>
J & K	Baglihar HPS (IPP)	450	152	150	3.62	151
	Other Hydro	323	120	170	3.40	142
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>272</b>	<b>320</b>	<b>7.02</b>	<b>293</b>
<b>Total State Control Area Generation</b>		<b>32574</b>	<b>13626</b>	<b>15555</b>	<b>385.81</b>	<b>16075</b>
<b>J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))</b>			<b>3122</b>	<b>3670</b>	<b>95.07</b>	<b>3961</b>
<b>Total Regional Availability(Gross)</b>		<b>55410</b>	<b>33068</b>	<b>28892</b>	<b>756.83</b>	<b>31534</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	6406	737	57.85	2410
State Control Area Hydro	5368	1653	1176	36.15	1506
<b>Total Regional Hydro</b>	<b>15731</b>	<b>8059</b>	<b>1913</b>	<b>94.00</b>	<b>3917</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	200	300	300	0	5.87	0.00	5.87
Gwalior-Agra (D/C)	513	626	914	0	15.58	0.00	15.58
Zerda-Kankroli	96	109	292	30	3.96	0.00	3.96
Zerda-Bhinmal	189	204	473	0	6.14	0.00	6.14
Malanpur-Auraiya	-143	-99	0	143	0.00	2.15	-2.15
Badod-Kota/Morak	-17	43	69	55	0.80	0.00	0.80
Mundra-Mohindergarh(HVDC)	1024	1020	1024	0	24.46	0.00	24.46
<b>Sub Total WR</b>	<b>1862</b>	<b>2203</b>			<b>56.81</b>	<b>2.15</b>	<b>54.66</b>
Pusauli Bypass	250	250	250	0	6.19	0.00	6.19
MZP- GKP (D/C)	172	304	416	0	7.63	0.00	7.63
Patna-Balia(D/C)	622	615	844	0	17.09	0.00	17.09
B'Sharif-Balia (D/C)	209	177	292	0	5.50	0.00	5.50
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-120	-115	0	150	0.00	1.22	-1.22
Gaya-Fatehpur (765 Kv)	23	150	272	0	3.67	0.00	3.67
Pusauli-Sahupuri	136	123	167	0	2.53	0.00	2.53
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-37	0	48	0.00	0.99	-0.99
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1260</b>	<b>1467</b>			<b>42.61</b>	<b>2.21</b>	<b>40.41</b>
<b>Total IR Exch</b>	<b>3122</b>	<b>3670</b>			<b>99.42</b>	<b>4.36</b>	<b>95.07</b>

**V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]**

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
34.95	0.17	35.12	-0.40	10.09	2.88	21.61	-0.45	0.51

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incld Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
37.16	56.95	94.10	40.41	54.66	95.07	3.25	-2.29	0.96

**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	0.00	0.30	85.10	84.80	63.80	14.90

<----- 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				
50.48	16.04	49.62	0.49	50.05	0.22	0.14	50.46	49.88

**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	403	20:56	0	0:18	33.8	33.8	0.0	0.0
Gorakhpur	400	429	0:00	412	8:45	0.0	0.0	59.7	0.0
Bareilly	400	422	20:58	402	8:26	0.0	0.0	1.1	0.0
Kanpur	400	420	21:45	397	11:04	0.0	0.0	0.0	0.0
Dadri	400	419	4:02	399	9:52	0.0	0.0	0.0	0.0
Ballabgarh	400	426	4:01	401	11:06	0.0	0.0	15.9	0.0
Bawana	400	424	4:06	402	9:51	0.0	0.0	7.7	0.0
Bassi	400	432	4:05	397	8:44	0.0	0.0	18.9	0.5
Hissar	400	411	4:02	391	9:53	0.0	0.0	0.0	0.0
Moga	400	412	4:00	396	10:44	0.0	0.0	0.0	0.0
Abdullapur	400	423	4:03	287	11:33	0.1	0.1	2.5	0.0
Nalagarh	400	420	20:56	403	11:01	0.0	0.0	0.0	0.0
Kishenpur	400	413	4:02	393	18:43	0.0	0.0	0.0	0.0
Wagooa	400	402	16:10	367	19:45	36.6	85.5	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 (m <sup>3</sup> /s)	Usage (m <sup>3</sup> /s)
Bhakra	513.59	445.62	492.53	817.99	500.11	1101.35	157.27	447.66
Pong	426.72	384.05	409.55	484.26	412.62	588.94	63.17	303.22
Tehri	829.79	740.04	806.80	715.00	818.65	982.26	34.69	235.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	261.18	500.10	263.38	617.70	NA	NA
RPS	352.80	343.81	348.44	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.82	NA	NA	NA	NA	NA
RSD	527.91	487.91	513.40	NA	508.48	NA	64.93	217.53

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 14.01.2013 :**

1. Light Fog in some parts of eastern UP , NCR , Haryana.

**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 : 14.01.2013

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER