

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.01.2014  
Date of Reporting : 16.01.2014

### 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
37097	1530	38627	50.12	28234	305	28539	50.15	803.8	42.18

\* 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	48.79	10.17		58.96	33.84	34.65	0.82	93.61	0.19
Haryana	49.81	0.38		50.20	57.45	58.29	0.84	108.49	0.38
Rajasthan	111.74	4.60	5.88	122.22	74.66	71.12	-3.54	193.34	0.00
Delhi	23.58			23.58	45.33	44.01	-1.32	67.59	0.02
UP	126.24	2.88	15.60	144.72	93.73	91.71	-2.02	236.43	39.43
Uttarakhand		8.17		8.17	25.87	26.57	0.70	34.75	0.23
HP		4.52		4.52	20.44	20.04	-0.40	24.56	0.24
J & K		5.63	0.00	5.63	32.79	35.41	2.62	41.04	1.70
Chandigarh				0.00	3.25	3.99	0.74	3.99	0.00
<b>Total</b>	<b>360.16</b>	<b>36.34</b>	<b>21.48</b>	<b>417.98</b>	<b>387.35</b>	<b>385.79</b>	<b>-1.55</b>	<b>803.78</b>	<b>42.18</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	4807	0	-60	-972	3022	0	177	-5	-9.28	
Haryana	5499	35	66	-316	3676	0	26	-335	-11.54	
Rajasthan	8291	0	-277	642	6933	0	-223	204	29.75	
Delhi	3494	0	-20	-617	1456	0	-12	-1182	-21.34	
UP	10104	1345	-77	1121	9488	295	18	596	14.60	
Uttarakhand	1689	40	-101	662	1191	0	45	603	14.99	
HP	1194	10	-69	338	728	10	-9	431	9.60	
J&K	1811	100	4	643	1649	0	89	634	12.60	
Chandigarh	208	0	17	0	92	0	4	0	0.00	
<b>Total</b>	<b>37097</b>	<b>1530</b>	<b>-517</b>	<b>1500</b>	<b>28234</b>	<b>305</b>	<b>114</b>	<b>945</b>	<b>39.39</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	
										UI (OG:(+ve), UG: (-ve))
A. NTPC	Singrauli STPS	2000	1946	2083	1895	46.10	1921	45.65	0.46	
	Rihand I STPS	1000	880	956	652	19.82	826	19.63	0.18	
	Rihand II STPS	1000	933	1049	640	20.66	861	20.89	-0.22	
	Rihand III STPS	1000	464	524	357	10.88	453	10.46	0.42	
	Dadri I STPS	840	815	855	490	17.56	732	17.87	-0.30	
	Dadri II STPS	980	985	957	722	20.99	875	21.44	-0.45	
	Unchahar I TPS	420	408	360	318	8.72	363	8.87	-0.14	
	Unchahar II TPS	420	405	396	308	8.59	358	8.69	-0.10	
	Unchahar III TPS	210	202	193	154	4.31	180	4.36	-0.05	
	ISTPP (Jhajjar)	1500	1500	795	624	17.64	735	18.06	-0.42	
	Dadri GPS	830	850	391	163	6.76	282	6.86	-0.10	
	Anta GPS	419	344	226	247	5.89	246	5.91	-0.02	
	Auraiya GPS	663	676	150	161	3.73	156	3.84	-0.11	
	<b>Sub Total (A)</b>	<b>11282</b>	<b>10407</b>	<b>8935</b>	<b>6731</b>	<b>191.66</b>	<b>7986</b>	<b>192.52</b>	<b>-0.86</b>	
	B. NPC	NAPS	440	325	366	369	7.84	327	7.80	0.04
		RAPS- B	440	420	464	464	10.10	421	10.08	0.02
		RAPS- C	440	430	474	471	10.25	427	10.32	-0.07
<b>Sub Total (B)</b>		<b>1320</b>	<b>1175</b>	<b>1304</b>	<b>1304</b>	<b>28.19</b>	<b>1175</b>	<b>28.20</b>	<b>-0.01</b>	
C. NHPC	Chamera I HPS	540	540	360	0	1.63	68	1.61	0.03	
	Chamera II HPS	300	200	201	0	1.07	45	1.10	-0.04	
	Chamera III HPS	231	231	223	0	0.59	25	0.59	0.00	
	Bairasuil HPS	180	0	0	0	0.00	0	0.00	0.00	
	Salal-HPS	690	110	230	100	2.47	103	2.64	-0.17	
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00	
	Uri-HPS	480	85	211	20	2.27	94	2.25	0.01	
	Uri-II HPS	180	63	124	36	1.48	62	1.51	-0.03	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	258	270	0	2.48	103	2.67	-0.19	
	Sewa-II HPS	120	119	122	0	0.41	17	0.41	-0.01	
	<b>Sub Total (C)</b>	<b>3485</b>	<b>1606</b>	<b>1741</b>	<b>156</b>	<b>12.39</b>	<b>516</b>	<b>12.78</b>	<b>-0.39</b>	
	D.NJPC	Nathpa Jhakri	1500	1605	986	0	7.42	309	7.03	0.39
<b>Sub Total (D)</b>		<b>1500</b>	<b>1605</b>	<b>986</b>	<b>0</b>	<b>7.42</b>	<b>309</b>	<b>7.03</b>	<b>0.39</b>	
E. THDC	Tehri HPS	1000	1000	750	0	8.09	337	8.00	0.09	
	Koteshwar HPS	400	121	299	91	2.96	123	2.90	0.06	
	<b>Sub Total (E)</b>	<b>1400</b>	<b>1121</b>	<b>1049</b>	<b>91</b>	<b>11.05</b>	<b>460</b>	<b>10.90</b>	<b>0.15</b>	
F. BBMB	Bhakra HPS	1497	730	1176	386	17.49	729	17.52	-0.03	
	Dehar HPS	990	117	330	0	3.03	126	2.80	0.23	
	Pong HPS	396	240	372	60	5.98	249	5.75	0.23	
	<b>Sub Total (F)</b>	<b>2883</b>	<b>1086</b>	<b>1878</b>	<b>446</b>	<b>26.50</b>	<b>1104</b>	<b>26.07</b>	<b>0.43</b>	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.41	17	0.39	0.01	
	KWHEP HPS(IPP)	1000	0	360	0	3.87	161	3.84	0.03	
	Malana Stg-II HPS	100	0	0	0	0.13	5	0.12	0.01	
	Shree Cement TPS	300	0	271	140	5.88	245	5.92	-0.05	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>631</b>	<b>140</b>	<b>10.29</b>	<b>429</b>	<b>10.28</b>	<b>0.01</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>23532</b>	<b>17001</b>	<b>16524</b>	<b>8868</b>	<b>287.49</b>	<b>11979</b>	<b>287.78</b>	<b>-0.28</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	1220	1020	25.48	1062
	Guru Nanak Dev TPS(Bhatinda)	440	342	250	6.46	269
	Guru Hargobind Singh TPS(L.mbt)	920	922	481	16.86	702
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	0	0	0.00	0
	Talwandi Saboo	660	0		0.00	0
	Thermal (Total)	3980	2484	1751	48.79	2033
	<b>Total Punjab</b>	<b>5128</b>	<b>2955</b>	<b>2122</b>	<b>58.96</b>	<b>2457</b>
Haryana	Panipat TPS	1367	472	444	10.71	446
	DCRTPP (Yamuna nagar)	600	557	507	12.59	524
	Faridabad GPS (NTPC)	432	0	156	0.90	37
	RGTPP (khedar) (IPP)	1200	586	507	12.89	537
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	561	372	12.74	531
	Thermal (Total)	4944	2176	1986	49.81	2076
	<b>Total Haryana</b>	<b>5006</b>	<b>2187</b>	<b>2003</b>	<b>50.20</b>	<b>2092</b>
Rajasthan	kota TPS	1240	1125	1090	26.76	1115
	suratgarh TPS	1500	835	1016	24.21	1009
	Chabra TPS	750	421	394	10.49	437
	Dholpur GPS	330	107	104	2.53	105
	Ramgarh GPS	221	133	139	3.36	140
	RAPS A (NPC)	300	175	175	4.11	171
	Barsingsar (NLC)	250	107	107	2.29	96
	Giral LTPS	250	0	45	0.61	25
	Rajwest LTPS (IPP)	1080	472	389	10.72	447
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	1077	1207	26.65	1111
	Thermal (Total)	7976	4452	4666	111.74	4656
	Total Hydro	550	183	52	4.60	192
	Wind power	2191	187	280	4.87	203
	Biomass	91	22	22	0.52	22
	Solar	201	5	0	0.49	21
	Renewable/Others (Total)	2483	209	302	5.88	245
<b>Total Rajasthan</b>	<b>11009</b>	<b>4844</b>	<b>5020</b>	<b>122.22</b>	<b>5092</b>	
UP	Anpara TPS	1630	1373	1320	28.80	1200
	Obra TPS	1288	569	551	12.10	504
	Paricha TPS	1140	981	981	21.10	879
	Panki TPS	210	90	90	1.80	75
	Harduaganj TPS	665	489	251	9.50	396
	Tanda TPS (NTPC)	440	401	403	9.76	407
	Roza TPS (IPP)	1200	652	810	18.66	778
	Anpara-C (IPP)	1200	879	963	24.52	1022
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	0	0	0.00	0
	Thermal (Total)	8223	5434	5369	126.24	5260
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	109	89	2.88	120
	Cogeneration	981	650	650	15.60	650
	<b>Total UP</b>	<b>10131</b>	<b>6193</b>	<b>6108</b>	<b>144.72</b>	<b>6030</b>
Uttarakhand	Total Hydro	1303	515	171	8.17	341
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>515</b>	<b>171</b>	<b>8.17</b>	<b>341</b>
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	160	156	3.82	159
	Pragati Gas Turbine	330	325	272	7.49	312
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	585	515	12.27	511
	Thermal (Total)	2232	1070	943	23.58	982
<b>Total Delhi</b>	<b>2232</b>	<b>1070</b>	<b>943</b>	<b>23.58</b>	<b>982</b>	
HP	Baspa HPS (IPP)	330	0	29	1.15	48
	Malana HPS (IPP)	86	0	0	0.21	9
	Other Hydro	589	145	48	3.17	132
	<b>Total HP</b>	<b>1005</b>	<b>145</b>	<b>77</b>	<b>4.52</b>	<b>188</b>
J & K	Baglihar HPS (IPP)	450	152	120	3.09	129
	Other Hydro	323	85	128	2.54	106
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>237</b>	<b>248</b>	<b>5.63</b>	<b>234</b>
<b>Total State Control Area Generation</b>		<b>36770</b>	<b>18146</b>	<b>16692</b>	<b>417.98</b>	<b>17416</b>
<b>J. Net Inter Regional Exchange</b> [[import (+ve)]/Export (-ve)]			<b>4874</b>	<b>4560</b>	<b>119.05</b>	<b>4961</b>
<b>Total Regional Availability(Gross)</b>		<b>60303</b>	<b>39544</b>	<b>30120</b>	<b>824.53</b>	<b>34355</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10560	6014	693	61.77	2574
State Control Area Hydro	5368	1671	1025	36.34	1514
<b>Total Regional Hydro</b>	<b>15928</b>	<b>7685</b>	<b>1718</b>	<b>98.11</b>	<b>4088</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	250	500	300	8.09	0.46	7.63
Gwalior-Agra (D/C)	1555	1723	1956	0	38.38	0.00	38.38
Zerda-Kankroli	-76	-115	97	233	0.00	1.10	-1.10
Zerda-Bhinmal	20	-19	251	108	1.66	0.00	1.66
Malanpur-Auraiya	-101	-62	0	144	0.00	2.33	-2.33
Badod-Kota/Morak	-11	-85	17	149	0.00	1.50	-1.50
Mundra-Mohindergarh(HVDC)	1916	1454	1920	0	41.12	0.00	41.12
<b>Sub Total WR</b>	<b>3703</b>	<b>3146</b>			<b>89.25</b>	<b>5.39</b>	<b>83.86</b>
Pusaui Bypass	400	400	400	0	9.66	0.00	9.66
MZP- GKP (D/C)	177	260	350	0	5.56	0.00	5.56
Patna-Balia(D/C)	274	404	485	0	7.84	0.00	7.84
B'Sharif-Balia (D/C)	173	173	606	0	6.76	0.00	6.76
Pusaui-Balia	-95	-88	33	110	0.00	1.36	-1.36
Gaya-Fatehpur (765 Kv)	5	32	168	56	0.89	0.00	0.89
Pusaui-Sahupuri	179	172	199	0	4.18	0.00	4.18
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	0	37	0.00	0.85	-0.85
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	90	91	252	7	2.52	0.00	2.52
<b>Sub Total ER</b>	<b>1171</b>	<b>1414</b>			<b>37.40</b>	<b>2.21</b>	<b>35.19</b>
<b>Total IR Exch</b>	<b>4874</b>	<b>4560</b>			<b>126.65</b>	<b>7.60</b>	<b>119.05</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
32.73	0.32	33.05	23.95	3.87	-0.60	7.16	-1.47	1.47

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
54.94	68.19	123.13	35.19	83.86	119.05	-19.75	15.67	-4.08

**VI. Frequency Profile <----- % of Time Frequency ----->**

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.00	91.70	0.90	91.70	62.30	8.30

<----- 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				
50.35	0.00	49.73	6.46	50.04	0.14	0.11	50.34	49.93

**VII. Voltage profile 400 kV**

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	411	01:58	399	07:23	0.0	0.0	0.0	0.0
Gorakhpur	400	425	00:36	407	08:59	0.0	0.0	23.2	0.0
Barailly	400	424	23:35	400	11:18	0.0	0.0	5.7	0.0
Kanpur	400	420	00:00	396	09:05	0.0	0.0	0.0	0.0
Dadri	400	426	05:02	398	09:05	0.0	0.0	24.1	0.0
Ballabgarh	400	432	05:02	400	09:04	0.0	0.0	42.1	3.3
Bawana	400	429	03:01	401	09:06	0.0	0.0	39.8	0.0
Bassi	400	431	05:02	392	07:35	0.0	0.0	25.7	0.1
Hissar	400	418	05:02	387	07:43	0.0	4.8	0.0	0.0
Moga	400	417	05:02	384	09:06	0.0	5.3	0.0	0.0
Abdullapur	400	423	22:56	396	07:39	0.0	0.0	2.8	0.0
Nalagarh	400	425	03:02	401	07:46	0.0	0.0	19.3	0.0
Kishenpur	400	413	05:02	390	09:05	0.0	0.0	0.0	0.0
Wagoora	400	399	11:02	370	20:08	22.6	87.1	0.0	0.0

**VIII. Voltage profile 765 kV**

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	777	01:22	730	09:07	0.0	21.6	0.0	0.0
Balia	765	763	01:22	724	15:45	4.0	37.0	0.0	0.0
Moga	765	795	05:02	727	09:06	0.3	8.4	0.0	0.0
Agra	765	815	00:05	756	09:08	0.0	0.0	29.1	0.0
Bhiwani	765	787	16:05	771	15:46	0.0	0.0	0.0	0.0
Unnao	765	771	00:04	733	09:06	0.0	25.0	0.0	0.0

**IX. 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	499.09	1053.16	491.85	798.09	178.26	525.14
Pong	426.72	384.05	410.33	504.32	409.17	464.36	56.07	352.97
Tehri	829.79	740.04	806.80	740.00	818.65	982.26	44.51	219.00
Koteshwar	612.50	598.50	610.22	4.95	609.40	4.21	219.00	221.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	260.42	328.10	261.00	360.60	NA	NA
RPS	352.80	343.81	348.92	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.58	NA	NA	NA	NA	NA
RSD	527.91	487.91	510.34	14.40	512.95	14.40	50.74	115.53

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 15.01.2014 :**

1.Dense fog in Haryana,Delhi & western Uttar pradesh.

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

**XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :**

**XV. Tripping of lines in pooling stations :**

**XVI. Complete generation loss in a generating station :**

Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.  
Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood  
Vishnuprayag and Dhauliganga expected by Mar, 2014 .

Report for : 15.01.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER