

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.01.2014  
Date of Reporting : 30.01.2014

### 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
36517	1180	37697	49.97	27549	0	27549	50.10	770.6	33.23

\* 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	52.83	8.45		61.28	30.78	30.11	-0.67	91.39	0.00
Haryana	61.68	0.45		62.13	41.57	41.17	-0.39	103.31	0.09
Rajasthan	112.92	0.13	2.05	115.11	68.65	68.12	-0.53	183.23	0.00
Delhi	19.21			19.21	44.55	43.90	-0.65	63.11	0.19
UP	120.20	1.93	16.80	138.93	90.89	87.17	-3.71	226.10	29.82
Uttarakhand		7.02		7.02	23.64	26.25	2.61	33.26	0.76
HP		4.63		4.63	19.72	20.54	0.83	25.17	0.67
J & K		5.81	0.00	5.81	33.70	35.51	1.81	41.32	1.70
Chandigarh				0.00	3.11	3.74	0.63	3.74	0.00
<b>Total</b>	<b>366.83</b>	<b>28.42</b>	<b>18.85</b>	<b>414.11</b>	<b>356.59</b>	<b>356.51</b>	<b>-0.09</b>	<b>770.62</b>	<b>33.23</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	4641	0	-103	-417	2969	0	-74	-49	-7.85	
Haryana	5471	0	-276	-517	3583	0	92	-830	-14.42	
Rajasthan	7779	0	-135	270	6792	0	109	618	23.27	
Delhi	3293	0	85	-717	1457	0	52	-1546	-23.52	
UP	10446	980	223	972	9028	0	-134	586	13.71	
Uttarakhand	1717	40	82	552	1117	0	79	544	13.29	
HP	1169	60	-24	374	804	0	20	407	9.00	
J&K	1800	100	65	574	1710	0	35	683	13.59	
Chandigarh	202	0	17	0	89	0	6	-10	-0.06	
<b>Total</b>	<b>36517</b>	<b>1180</b>	<b>-66</b>	<b>1090</b>	<b>27549</b>	<b>0</b>	<b>185</b>	<b>404</b>	<b>27.01</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	1940	2062	1956	45.75	1906	45.61	0.14
	Rihand I STPS	1000	945	1024	763	21.66	903	21.43	0.23
	Rihand II STPS	1000	985	1041	848	22.71	946	22.51	0.20
	Rihand III STPS	1000	-3	0	0	-0.13	-5	-0.06	-0.07
	Dadri I STPS	840	815	878	630	17.99	750	18.31	-0.33
	Dadri II STPS	980	985	1033	719	21.79	908	22.12	-0.33
	Unchahar I TPS	420	406	440	360	8.94	372	8.96	-0.02
	Unchahar II TPS	420	405	443	309	8.33	347	8.24	0.09
	Unchahar III TPS	210	202	213	153	4.21	175	4.19	0.02
	ISTPP (Jhajjar)	1500	1500	831	631	14.85	619	15.06	-0.21
	Dadri GPS	830	849	276	358	7.63	318	7.73	-0.10
	Anta GPS	419	431	241	229	5.59	233	5.72	-0.14
	Auraiya GPS	663	679	152	165	3.77	157	3.82	-0.05
	<b>Sub Total (A)</b>	<b>11282</b>	<b>10138</b>	<b>8634.4</b>	<b>7121.21</b>	<b>183.08</b>	<b>7629</b>	<b>183.66</b>	<b>-0.57</b>
B. NPC	NAPS	440	296	336	338	7.17	299	7.10	0.06
	RAPS- B	440	421	462	464	10.08	420	10.10	-0.02
	RAPS- C	440	430	473	475	10.23	426	10.32	-0.09
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1147</b>	<b>1271</b>	<b>1277</b>	<b>27.48</b>	<b>1145</b>	<b>27.53</b>	<b>-0.05</b>
C. NHPC	Chamera I HPS	540	541	270	0	1.74	73	1.70	0.04
	Chamera II HPS	300	200	201	0	1.03	43	0.96	0.07
	Chamera III HPS	231	0	0	0	0.00	0	0.00	0.00
	Bairasuil HPS	180	122	120	0	0.64	26	0.46	0.18
	Salal-HPS	690	140	200	115	3.17	132	3.00	0.17
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00
	Uri-HPS	480	135	311	59	3.21	134	3.49	-0.27
	Uri-II HPS	180	81	122	60	1.92	80	1.95	-0.03
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	361	275	137	2.78	116	2.43	0.36
	Sewa-II HPS	120	119	124	0	0.81	34	0.78	0.03
	<b>Sub Total (C)</b>	<b>3485</b>	<b>1699</b>	<b>1623</b>	<b>371</b>	<b>15.30</b>	<b>637</b>	<b>14.75</b>	<b>0.54</b>
	D. NJPC	Nathpa Jhakri	1500	1350	1090	0	6.32	263	6.70
<b>Sub Total (D)</b>		<b>1500</b>	<b>1350</b>	<b>1090</b>	<b>0</b>	<b>6.32</b>	<b>263</b>	<b>6.70</b>	<b>-0.38</b>
E. THDC	Tehri HPS	1000	960	966	0	7.64	318	7.50	0.14
	Koteshwar HPS	400	117	302	90	2.90	121	2.80	0.10
	<b>Sub Total (E)</b>	<b>1400</b>	<b>1077</b>	<b>1268</b>	<b>90</b>	<b>10.53</b>	<b>439</b>	<b>10.30</b>	<b>0.23</b>
F. BBMB	Bhakra HPS	1497	661	996	665	16.03	668	15.86	0.17
	Dehar HPS	990	121	165	140	3.11	130	2.91	0.21
	Pong HPS	396	211	306	60	5.30	221	5.06	0.24
	<b>Sub Total (F)</b>	<b>2883</b>	<b>992</b>	<b>1467</b>	<b>865</b>	<b>24.44</b>	<b>1018</b>	<b>23.82</b>	<b>0.62</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.33	14	0.32	0.01
	KWHEP HPS(IPP)	1000	0	365	0	3.34	139	3.36	-0.02
	Malana Stg-II HPS	100	0	0	0	0.12	5	0.11	0.01
	Shree Cement TPS	300	0	232	239	6.02	251	6.28	-0.27
	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>597</b>	<b>239</b>	<b>9.80</b>	<b>408</b>	<b>10.07</b>	<b>-0.27</b>
<b>H. Total Regional Entities (A-G)</b>	<b>23532</b>	<b>16403</b>	<b>15951</b>	<b>9963</b>	<b>276.96</b>	<b>11540</b>	<b>276.83</b>	<b>0.13</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	830	790	17.86	744
	Guru Nanak Dev TPS(Bhatinda)	440	80	80	1.75	73
	Guru Hargobind Singh TPS(L.mbt)	920	671	669	16.18	674
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	710	710	17.04	710
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	2291	2249	52.83	2201
	Total Hydro	1148	412	269	8.45	352
<b>Total Punjab</b>	<b>5128</b>	<b>2703</b>	<b>2518</b>	<b>61.28</b>	<b>2553</b>	
Haryana	Panipat TPS	1367	662	624	14.60	608
	DCRTPP (Yamuna nagar)	600	554	506	12.19	508
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP)	1200	579	514	12.41	517
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1226	774	22.48	937
	Thermal (Total)	4944	3021	2418	61.68	2570
	Total Hydro	62	15	17	0.45	19
<b>Total Haryana</b>	<b>5006</b>	<b>3036</b>	<b>2435</b>	<b>62.13</b>	<b>2589</b>	
Rajasthan	kota TPS	1240	1157	1086	27.33	1139
	suratgarh TPS	1500	1051	1011	25.37	1057
	Chabra TPS	750	456	382	10.59	441
	Dholpur GPS	330	104	104	2.51	104
	Ramgarh GPS	221	101	91	2.43	101
	RAPS A (NPC)	300	175	175	4.17	174
	Barsingsar (NLC)	250	106	216	3.62	151
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	479	382	10.93	455
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	1125	1172	25.97	1082
	Thermal (Total)	7976	4754	4619	112.92	4705
	Total Hydro	550	0	0	0.13	6
	Wind power	2191	49	26	0.97	40
	Biomass	91	23	23	0.56	23
	Solar	201	5	0	0.53	22
Renewable/Others (Total)	2483	72	49	2.05	86	
<b>Total Rajasthan</b>	<b>11009</b>	<b>4826</b>	<b>4668</b>	<b>115.11</b>	<b>4796</b>	
UP	Anpara TPS	1630	1596	1598	34.20	1425
	Obra TPS	1288	404	409	9.30	388
	Paricha TPS	1140	512	701	14.00	583
	Panki TPS	210	70	100	1.70	71
	Harduaganj TPS	665	458	489	9.70	404
	Tanda TPS (NTPC)	440	396	399	9.66	402
	Roza TPS (IPP)	1200	1134	782	23.62	984
	Anpara-C (IPP)	1200	540	441	12.53	522
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	200	196	5.50	229
	Thermal (Total)	8223	5310	5115	120.20	5008
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	82	75	1.93	80
	Cogeneration	981	700	700	16.80	700
	<b>Total UP</b>	<b>10131</b>	<b>6092</b>	<b>5890</b>	<b>138.93</b>	<b>5789</b>
Uttarakhand	Total Hydro	1303	456	130	7.02	292
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>456</b>	<b>130</b>	<b>7.02</b>	<b>292</b>
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	164	162	3.79	158
	Pragati Gas Turbine	330	318	269	7.31	305
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	410	335	8.10	338
	Thermal (Total)	2232	892	766	19.21	800
<b>Total Delhi</b>	<b>2232</b>	<b>892</b>	<b>766</b>	<b>19.21</b>	<b>800</b>	
HP	Baspa HPS (IPP)	330	0	0	1.15	48
	Malana HPS (IPP)	86	0	0	0.18	8
	Other Hydro	589	180	63	3.30	138
	<b>Total HP</b>	<b>1005</b>	<b>180</b>	<b>63</b>	<b>4.63</b>	<b>193</b>
J & K	Baglihar HPS (IPP)	450	148	118	3.22	134
	Other Hydro	323	92	128	2.59	108
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>240</b>	<b>246</b>	<b>5.81</b>	<b>242</b>
<b>Total State Control Area Generation</b>		<b>36770</b>	<b>18425</b>	<b>16716</b>	<b>414.11</b>	<b>17255</b>
<b>J. Net Inter Regional Exchange</b> [Import (+ve)/Export (-ve)]			<b>5712</b>	<b>2792</b>	<b>93.51</b>	<b>3896</b>
<b>Total Regional Availability(Gross)</b>		<b>60303</b>	<b>40088</b>	<b>29471</b>	<b>784.58</b>	<b>32691</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10560	5813	1326	60.38	2516
State Control Area Hydro	5368	1385	800	28.42	1184
<b>Total Regional Hydro</b>	<b>15928</b>	<b>7198</b>	<b>2126</b>	<b>88.80</b>	<b>3700</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	300	-400	400	500	4.47	2.84	1.63
Gwalior-Agra (D/C)	1496	970	1520	0	30.21	0.00	30.21
Zerda-Kankroli	28	-285	47	323	0.00	2.63	-2.63
Zerda-Bhinmal	131	-140	198	201	0.53	0.00	0.53
Malanpur-Auraiya	-57	-50	0	84	0.00	10.50	-10.50
Badod-Kota/Morak	20	-120	27	152	0.00	7.88	-7.88
Mundra-Mohindergarh(HVDC)	1917	1451	1917	0	40.60	0.00	40.60
<b>Sub Total WR</b>	<b>3835</b>	<b>1426</b>			<b>75.80</b>	<b>23.85</b>	<b>51.95</b>
Pusauli Bypass	324	378	457	0	8.26	0.00	8.26
MZP- GKP (D/C)	269	195	316	0	5.15	0.00	5.15
Patna-Balia(D/C)	641	468	690	0	13.32	0.00	13.32
B'Sharif-Balia (D/C)	217	124	291	0	3.73	0.00	3.73
Pusauli-Balia	-27	-9	0	53	0.00	0.50	-0.50
Gaya-Fatehpur (765 Kv)	41	-36	153	83	1.03	0.00	1.03
Pusauli-Sahupuri	186	105	196	0	4.74	0.00	4.74
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-26	0	35	0.00	0.61	-0.61
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	261	167	402	0	6.44	0.00	6.44
<b>Sub Total ER</b>	<b>1877</b>	<b>1366</b>			<b>42.67</b>	<b>1.11</b>	<b>41.56</b>
<b>Total IR Exch</b>	<b>5712</b>	<b>2792</b>			<b>118.47</b>	<b>24.96</b>	<b>93.51</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
30.92	0.23	31.15	16.56	3.59	-1.21	3.04	0.06	-0.06

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
46.56	55.12	101.68	41.56	51.95	93.51	-5.00	-3.16	-8.16

**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	0.60	97.20	5.80	96.60	44.30	2.80

<----- 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				
50.34	18.03	49.61	7.49	49.98	0.13	0.11	50.26	49.83

**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	413	03:02	401	18:37	0.0	0.0	0.0	0.0
Gorakhpur	400	423	04:11	405	18:54	0.0	0.0	14.3	0.0
Barailly	400	424	03:26	405	09:19	0.0	0.0	19.2	0.0
Kanpur	400	420	03:03	401	09:19	0.0	0.0	0.0	0.0
Dadri	400	426	23:55	406	18:37	0.0	0.0	9.5	0.0
Ballabgarh	400	434	03:02	411	06:26	0.0	0.0	49.2	15.4
Bawana	400	430	03:03	410	06:34	0.0	0.0	36.4	0.0
Bassi	400	426	04:00	397	09:26	0.0	0.0	22.4	0.0
Hissar	400	418	23:59	396	11:07	0.0	0.0	0.0	0.0
Moga	400	420	23:59	391	11:46	0.0	0.0	0.0	0.0
Abdullapur	400	426	03:02	400	18:37	0.0	0.0	24.6	0.0
Nalagarh	400	430	23:10	406	11:07	0.0	0.0	37.3	0.0
Kishenpur	400	415	23:59	391	18:22	0.0	0.0	0.0	0.0
Wagoora	400	401	13:01	366	18:22	17.1	84.9	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	775	21:26	737	06:32	0.0	0.7	0.0	0.0
Balia	765	765	23:16	735	18:45	0.0	2.9	0.0	0.0
Moga	765	798	23:59	742	18:36	0.0	0.0	0.0	0.0
Agra	765	815	03:03	772	06:26	0.0	0.0	51.8	0.0
Bhiwani	765	809	23:10	770	18:30	0.0	0.0	10.8	0.0
Unnao	765	766	04:00	735	10:11	0.0	19.2	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	496.82	971.87	489.10	709.72	163.33	373.30
Pong	426.72	384.05	408.74	454.47	407.17	407.15	79.57	319.61
Tehri	829.79	740.04	802.10	646.42	818.65	982.26	64.60	169.00
Koteshwar	612.50	598.50	610.59	4.95	609.40	4.21	169.00	171.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	47.83	46.95
Rihand	268.22	252.98	260.21	316.40	260.48	331.50	NA	NA
RPS	352.80	343.81	509.53	NA	512.19	NA	130.09	NA
Jawahar Sagar	298.70	295.78	297.94	NA	NA	NA	NA	NA
RSD	527.91	487.91	509.44	14.40	512.12	14.40	73.26	109.61

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 29.01.2014 :**

1.Dense fog in NR.

**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 : 29.01.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER