

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 08.10.2013  
Date of Reporting : 09.10.2013

### I. Regional Availability/Demand:

Evening Peak (20:00 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
37862	2639	40501	50.20	33992	980	34972	50.12	833.3	60.17

\* 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	46.36	13.46		59.82	84.93	87.13	2.20	146.96	0.00
Haryana	66.75	0.48		67.22	62.79	64.14	1.35	131.36	1.58
Rajasthan	68.12	2.62	5.06	75.80	81.60	76.91	-4.68	152.71	0.00
Delhi	21.75			21.75	62.38	67.47	5.09	89.21	0.91
UP	116.39	4.59	1.70	122.68	95.33	95.73	0.40	218.41	55.88
Uttarakhand		15.58		15.58	13.58	18.71	5.13	34.29	0.00
HP		13.93		13.93	8.18	11.09	2.91	25.01	0.10
J & K		13.29	0.00	13.29	16.58	17.19	0.62	30.49	1.70
Chandigarh				0.00	4.47	4.85	0.38	4.85	0.00
<b>Total</b>	<b>319.37</b>	<b>63.95</b>	<b>6.76</b>	<b>390.08</b>	<b>429.83</b>	<b>443.22</b>	<b>13.39</b>	<b>833.30</b>	<b>60.17</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 (20:00 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	6756	0	-24	498	5803	0	191	805	23.12
Haryana	5839	99	-64	-426	5573	0	109	-439	-10.45
Rajasthan	6945	0	-197	1434	6346	0	-143	1520	35.48
Delhi	4199	0	144	-73	3173	0	85	-656	-7.40
UP	9566	2365	-91	501	9835	980	-26	1780	15.90
Uttarakhand	1597	75	151	199	1309	0	166	156	4.10
HP	1142	0	73	-694	869	0	153	-253	-8.29
J&K	1580	100	-40	-32	929	0	-38	-299	-2.97
Chandigarh	238	0	2	-35	155	0	3	0	-0.05
<b>Total</b>	<b>37862</b>	<b>2639</b>	<b>-46</b>	<b>1373</b>	<b>33992</b>	<b>980</b>	<b>500</b>	<b>2616</b>	<b>49.44</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	1940	2078	2082	46.70	1946	46.56	0.13	
	Rihand I STPS	1000	920	987	900	21.30	887	21.92	-0.62	
	Rihand II STPS	1000	478	510	511	11.21	467	11.31	-0.10	
	Rihand III STPS	500	455	304	342	10.68	445	10.92	-0.25	
	Dadri I STPS	840	600	650	652	14.41	601	14.40	0.01	
	Dadri II STPS	980	975	1010	964	22.50	938	22.69	-0.19	
	Unchahar I TPS	420	201	217	206	4.72	197	4.72	0.00	
	Unchahar II TPS	420	403	426	440	9.35	390	9.35	0.00	
	Unchahar III TPS	210	200	219	187	4.59	191	4.58	0.01	
	ISTPP (Jhajjar)	1500	1480	912	841	20.29	845	20.54	-0.25	
	Dadri GPS	830	802	385	393	8.98	374	9.22	-0.24	
	Anta GPS	419	401	0	0	0.00	0	0.00	0.00	
	Auraiya GPS	663	631	154	156	3.54	147	3.60	-0.07	
	<b>Sub Total (A)</b>	<b>10782</b>	<b>9485</b>	<b>7852</b>	<b>7674</b>	<b>178.25</b>	<b>7427</b>	<b>179.81</b>	<b>-1.56</b>	
	B. NPC	NAPS	440	298	334	336	7.07	294	7.15	-0.09
		RAPS- B	440	396	443	442	9.54	398	9.50	0.04
RAPS- C		440	410	471	467	9.97	416	9.84	0.13	
<b>Sub Total (B)</b>		<b>1320</b>	<b>1104</b>	<b>1248</b>	<b>1245</b>	<b>26.58</b>	<b>1108</b>	<b>26.50</b>	<b>0.09</b>	
C. NHPC	Chamera I HPS	540	538	540	0	4.31	179	4.25	0.05	
	Chamera II HPS	300	300	301	0	3.91	163	3.74	0.17	
	Chamera III HPS	231	231	208	75	2.88	120	2.55	0.33	
	Bairasuil HPS	180	145	20	10	1.18	49	1.07	0.11	
	Salal-HPS	690	428	577	300	10.61	442	10.23	0.38	
	Tanakpur-HPS	94	65	62	63	1.52	64	1.55	-0.02	
	Uri-HPS	480	170	239	122	4.17	174	4.12	0.04	
	Uri-II HPS	240	0	0	0	0.00	0	0.00	0.00	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	387	401	404	9.40	392	9.30	0.10	
	Sewa-II HPS	120	119	75	0	0.66	27	0.61	0.05	
	<b>Sub Total (C)</b>	<b>3545</b>	<b>2383</b>	<b>2423</b>	<b>974</b>	<b>38.62</b>	<b>1609</b>	<b>37.41</b>	<b>1.21</b>	
	D. NJPC	Nathpa Jhakri	1500	1605	1583	506	18.94	789	18.50	0.44
<b>Sub Total (D)</b>		<b>1500</b>	<b>1605</b>	<b>1583</b>	<b>506</b>	<b>18.94</b>	<b>789</b>	<b>18.50</b>	<b>0.44</b>	
E. THDC	Tehri HPS	1000	1060	1067	232	9.29	387	9.00	0.29	
	Koteshwar HPS	400	150	303	90	3.03	126	3.00	0.03	
	<b>Sub Total (E)</b>	<b>1400</b>	<b>1210</b>	<b>1370</b>	<b>322</b>	<b>12.32</b>	<b>513</b>	<b>12.00</b>	<b>0.32</b>	
F. BBMB	Bhakra HPS	1497	694	1205	518	17.24	718	16.65	0.59	
	Dehar HPS	990	403	660	305	10.03	418	9.68	0.35	
	Pong HPS	396	253	372	186	6.09	254	6.07	0.02	
	<b>Sub Total (F)</b>	<b>2883</b>	<b>1350</b>	<b>2237</b>	<b>1009</b>	<b>33.36</b>	<b>1390</b>	<b>32.40</b>	<b>0.96</b>	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	111	115	1.48	62	1.38	0.11	
	KWHEP HPS(IPP)	1000	0	899	250	9.54	398	9.60	-0.06	
	Malana Stg-II HPS	100	0	98	0	1.20	50	1.16	0.04	
	Shree Cement TPS	300	0	267	267	6.34	264	6.41	-0.07	
	Budhil HPS(IPP)	70	0	35	30	0.69	29	0.83	-0.14	
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1410</b>	<b>662</b>	<b>19.25</b>	<b>802</b>	<b>19.37</b>	<b>-0.12</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>23092</b>	<b>17137</b>	<b>18123</b>	<b>12392</b>	<b>327.33</b>	<b>13639</b>	<b>325.99</b>	<b>1.34</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	840	840	18.36	765
	Guru Nanak Dev TPS(Bhatinda)	440	342	342	7.22	301
	Guru Hargobind Singh TPS(L.mbt)	920	944	944	20.78	866
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2126	2126	46.36	1932
	Total Hydro	1148	484	529	13.46	561
<b>Total Punjab</b>		<b>3768</b>	<b>2610</b>	<b>2655</b>	<b>59.82</b>	<b>2493</b>
Haryana	Panipat TPS	1367	433	425	10.19	425
	DCRTPP (Yamuna nagar)	600	558	556	13.18	549
	Faridabad GPS (NTPC)	432	198	199	4.74	198
	RGTPP (khedar) (IPP)	1200	1059	979	25.60	1066
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	522	522	13.03	543
	Thermal (Total)	4944	2770	2681	66.75	2781
	Total Hydro	62	9	10	0.48	20
	<b>Total Haryana</b>	<b>5006</b>	<b>2779</b>	<b>2691</b>	<b>67.22</b>	<b>2801</b>
	Rajasthan	kota TPS	1240	931	895	21.60
suratgarh TPS		1500	1050	750	21.39	891
Chabra TPS		500	48	222	3.72	155
Dholpur GPS		330	82	83	2.01	84
Ramgarh GPS		111	65	65	1.58	66
RAPS A (NPC)		300	179	179	3.95	165
Barsingsar (NLC)		250	112	110	2.53	105
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	505	563	11.34	473
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	0	0	0.00	0
Thermal (Total)		6956	2972	2867	68.12	2838
Total Hydro		550	212	48	2.62	109
Wind power		2191	51	189	2.71	113
Biomass		91	27	27	0.66	27
Solar		201	0	0	1.70	71
Renewable/Others (Total)		2483	78	216	5.06	211
<b>Total Rajasthan</b>		<b>9989</b>	<b>3262</b>	<b>3131</b>	<b>75.80</b>	<b>3158</b>
UP		Anpara TPS	1630	1297	1278	28.00
	Obra TPS	1288	376	422	8.40	350
	Paricha TPS	1140	871	815	18.40	767
	Panki TPS	210	0	0	0.00	0
	Harduaganj TPS	665	472	477	10.10	421
	Tanda TPS (NTPC)	440	295	300	7.35	306
	Roza TPS (IPP)	1200	531	536	12.95	539
	Anpara-C (IPP)	1200	1070	746	22.00	917
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	386	404	9.20	384
	Thermal (Total)	8223	5298	4978	116.39	4850
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	153	281	4.59	191
	Cogeneration	981	70	70	1.70	71
	<b>Total UP</b>	<b>10131</b>	<b>5521</b>	<b>5329</b>	<b>122.68</b>	<b>5112</b>
Uttarakhand	Total Hydro	1303	699	643	15.58	649
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>699</b>	<b>643</b>	<b>15.58</b>	<b>649</b>
Delhi	Raighat TPS	135	57	50	1.15	48
	Delhi Gas Turbine	282	112	111	2.64	110
	Pragati Gas Turbine	330	195	182	4.51	188
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	278	251	6.01	250
	Badarpur TPS (NTPC)	705	370	355	7.44	310
	Thermal (Total)	2232	1012	949	21.75	906
<b>Total Delhi</b>	<b>2232</b>	<b>1012</b>	<b>949</b>	<b>21.75</b>	<b>906</b>	
HP	Baspa HPS (IPP)	330	126	0	3.27	136
	Malana HPS (IPP)	86	75	15	1.21	50
	Other Hydro	589	408	458	9.45	394
	<b>Total HP</b>	<b>1005</b>	<b>609</b>	<b>473</b>	<b>13.93</b>	<b>580</b>
J & K	Baglihar HPS (IPP)	450	436	434	10.47	436
	Other Hydro	323	100	128	2.83	118
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>536</b>	<b>562</b>	<b>13.29</b>	<b>554</b>
<b>Total State Control Area Generation</b>		<b>34390</b>	<b>17028</b>	<b>16433</b>	<b>390.08</b>	<b>16253</b>
<b>J. Net Inter Regional Exchange</b> [Import (+ve)/Export (-ve)]			<b>4555</b>	<b>6106</b>	<b>132.14</b>	<b>5506</b>
<b>Total Regional Availability(Gross)</b>		<b>57482</b>	<b>39706</b>	<b>34931</b>	<b>849.54</b>	<b>35397</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10620	8721	3176	115.47	4811
State Control Area Hydro	5368	2702	2546	63.95	2664
<b>Total Regional Hydro</b>	<b>15988</b>	<b>11423</b>	<b>5722</b>	<b>179.41</b>	<b>7476</b>

**V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]**

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	300	300	500	50	7.15	0.02	7.14
Gwalior-Agra (D/C)	1126	1589	1684	0	38.83	0.00	38.83
Zerda-Kankroli	88	38	140	96	0.32	0.00	0.32
Zerda-Bhinmal	132	59	202	70	1.46	0.00	1.46
Malanpur-Auraiya	-78	-38	0	110	0.00	1.25	-1.25
Badod-Kota/Morak	122	105	145	0	2.12	0.00	2.12
Mundra-Mohindergarh(HVDC)	1501	1502	1504	0	33.29	0.00	33.29
<b>Sub Total WR</b>	<b>3191</b>	<b>3555</b>			<b>83.18</b>	<b>1.27</b>	<b>81.91</b>
Pusauli Bypass	100	100	100	0	2.44	0.00	2.44
MZP- GKP (D/C)	453	855	960	0	16.93	0.00	16.93
Patna-Balia(D/C)	288	690	746	0	12.47	0.00	12.47
B'Sharif-Balia (D/C)	297	489	535	0	9.95	0.00	9.95
Pusauli-Balia	-3	47	112	7	1.07	0.00	1.07
Gaya-Fatehpur (765 Kv)	127	252	310	0	5.50	0.00	5.50
Pusauli-Sahupuri	139	154	159	0	2.73	0.00	2.73
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-37	-36	0	38	0.00	0.85	-0.85
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1364</b>	<b>2551</b>			<b>51.08</b>	<b>0.85</b>	<b>50.23</b>
<b>Total IR Exch</b>	<b>4555</b>	<b>6106</b>			<b>134.25</b>	<b>2.12</b>	<b>132.14</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
37.46	3.03	40.49	5.66	-0.69	12.59	15.32	0.54	-0.54

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
59.28	58.28	117.56	50.23	81.91	132.14	-9.06	23.63	14.57

**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	0.90	95.60	5.20	94.70	54.20	4.40

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.33	4.01	49.54	18.42	50.00	0.15	0.12	50.28	49.88

**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	408	00:00	401	14:41	0.0	0.0	0.0	0.0
Gorakhpur	400	423	06:12	406	14:49	0.0	0.0	6.1	0.0
Bareilly	400	418	17:06	396	14:49	0.0	0.0	0.0	0.0
Kanpur	400	418	05:02	404	18:42	0.0	0.0	0.0	0.0
Dadri	400	418	05:15	398	14:43	0.0	0.0	0.0	0.0
Ballabgarh	400	426	05:01	405	14:44	0.0	0.0	12.4	0.0
Bawana	400	423	05:15	401	14:45	0.0	0.0	2.7	0.0
Bassi	400	428	04:00	406	12:11	0.0	0.0	15.4	0.0
Hissar	400	416	05:01	398	11:41	0.0	0.0	0.0	0.0
Moga	400	416	05:15	396	14:49	0.0	0.0	0.0	0.0
Abdullapur	400	419	04:50	398	14:44	0.0	0.0	0.0	0.0
Nalagarh	400	422	03:53	403	12:14	0.0	0.0	6.1	0.0
Kishenpur	400	423	04:00	402	18:42	0.0	0.0	5.1	0.0
Wagoora	400	421	03:57	396	18:41	0.0	0.0	1.9	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	763	05:15	735	13:56	0.0	12.7	0.0	0.0
Balia	765	760	06:12	728	14:49	0.0	36.4	0.0	0.0
Moga	765	789	05:15	750	14:49	0.0	0.0	0.0	0.0
Agra	765	806	04:00	767	18:42	0.0	0.0	3.6	0.0
Bhiwani	765	804	05:18	762	14:48	0.0	0.0	2.0	0.0
Unnao	765	766	05:03	736	14:46	0.0	2.8	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	510.76	1590.18	504.36	1285.56	428.86	475.07
Pong	426.72	384.05	422.16	990.81	422.03	990.81	165.06	341.95
Tehri	829.79	740.04	824.80	1107.95	818.65	982.26	140.72	201.00
Koteshwar	612.50	598.50	610.75	4.95	NA	NA	201.00	201.00
Chamera-I	760.00	748.75	753.66	NA	NA	NA	126.99	116.43
Rihand	268.22	252.98	260.91	355.50	264.08	550.20	NA	NA
RPS	352.80	343.81	352.77	NA	NA	NA	195.18	364.83
Jawahar Sagar	298.70	295.78	298.19	NA	NA	NA	416.71	345.16
RSD	527.91	487.91	518.85	144.00	520.87	144.00	139.69	123.01

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 08.10.2013 :**

1. Normal Weather in NR.

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

0.00

**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 Dec, 2013 .

Report for : 08.10.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER