

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पब्लिसिटी की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 12.07.2013  
Date of Reporting : 13.07.2013

### 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
39905	2563	42468	50.10	38467	1433	39900	50.06	933.5	43.99

\* 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	49.62	14.20		63.82	125.23	124.57	-0.65	188.39	8.50
Haryana	47.53	0.61		48.14	117.02	117.16	0.15	165.30	0.04
Rajasthan	81.97	0.30	5.56	87.83	61.92	58.89	-3.03	146.72	0.00
Delhi	23.65			23.65	76.22	74.22	-2.00	97.87	0.88
UP	117.02	3.95	1.20	122.17	124.15	118.37	-5.77	240.54	30.10
Uttarakhand		13.34		13.34	20.01	20.12	0.11	33.45	2.77
HP		23.51		23.51	1.17	1.23	0.06	24.74	0.00
J & K		13.77	0.00	13.77	19.51	16.89	-2.62	30.66	1.70
Chandigarh				0.00	5.86	5.86	-0.01	5.86	0.00
<b>Total</b>	<b>319.79</b>	<b>69.67</b>	<b>6.76</b>	<b>396.22</b>	<b>551.07</b>	<b>537.32</b>	<b>-13.76</b>	<b>933.53</b>	<b>43.99</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 (Net MU)	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction	
Punjab	8449	400	67	1819	7472	0	-153	1866	44.37	
Haryana	7199	0	-135	1662	6882	0	253	1082	34.29	
Rajasthan	6045	0	-319	41	5997	0	-8	39	0.45	
Delhi	4202	8	156	-30	3844	63	-216	-340	-0.46	
UP	9760	1900	-274	832	10540	1220	-98	1437	21.79	
Uttarakhand	1508	155	41	392	1263	150	-36	262	7.62	
HP	946	0	0	-1112	907	0	-1	-1206	-26.28	
J&K	1531	100	-133	-5	1358	0	-11	-154	-6.87	
Chandigarh	265	0	-9	0	204	0	-12	-15	-0.06	
<b>Total</b>	<b>39905</b>	<b>2563</b>	<b>-606</b>	<b>3600</b>	<b>38467</b>	<b>1433</b>	<b>-283</b>	<b>2972</b>	<b>74.86</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	1935	2083	2086	46.26	1928	46.44	-0.18
	Rihand I STPS	1000	474	479	522	11.03	460	11.27	-0.24
	Rihand II STPS	1000	967	963	1048	22.46	936	22.91	-0.45
	Rihand III STPS	500	480	506	512	11.10	463	11.32	-0.22
	Dadri I STPS	840	810	876	624	16.08	670	16.55	-0.47
	Dadri II STPS	980	970	912	875	19.74	822	20.82	-1.09
	Unchahar I TPS	420	396	354	350	8.66	361	8.86	-0.20
	Unchahar II TPS	420	403	312	311	8.36	348	8.44	-0.08
	Unchahar III TPS	210	201	152	153	4.07	170	4.16	-0.09
	ISTPP (Jhajhar)	1500	1410	790	642	15.26	636	15.88	-0.62
	Dadri GPS	830	783	389	391	9.13	381	9.51	-0.37
	Anta GPS	419	263	255	258	6.07	253	6.31	-0.24
	Auraiya GPS	663	611	302	309	7.12	297	7.10	0.02
	<b>Sub Total (A)</b>	<b>10782</b>	<b>9702</b>	<b>8373</b>	<b>8081</b>	<b>185.35</b>	<b>7723</b>	<b>189.58</b>	<b>-4.23</b>
B. NPC	NAPS	440	153	179	183	3.74	156	3.67	0.07
	RAPS- B	440	389	430	435	9.29	387	9.34	-0.05
	RAPS- C	440	210	232	235	4.93	205	5.04	-0.11
	<b>Sub Total (B)</b>	<b>1320</b>	<b>752</b>	<b>841</b>	<b>853</b>	<b>17.96</b>	<b>748</b>	<b>18.05</b>	<b>-0.09</b>
C. NHPC	Chamera I HPS	540	540	540	540	12.94	539	12.96	-0.02
	Chamera II HPS	300	300	303	304	7.14	298	7.20	-0.05
	Chamera III HPS	231	231	232	232	5.53	230	5.51	0.01
	Bairasuil HPS	180	179	180	30	1.72	72	1.83	-0.10
	Salal-HPS	690	656	659	656	15.75	656	15.75	0.00
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00
	Uri-HPS	480	450	445	454	10.75	448	10.72	0.03
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasi-HPS	390	387	405	405	9.33	389	9.36	-0.04
	Sewa-II HPS	120	119	40	40	1.08	45	1.07	0.01
<b>Sub Total (C)</b>	<b>3305</b>	<b>2862</b>	<b>2804</b>	<b>2661</b>	<b>64.24</b>	<b>2677</b>	<b>64.39</b>	<b>-0.15</b>	
D. NJPC	Natpaa Jhakri	1500	1605	1622	1620	38.68	1612	38.43	0.25
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1622</b>	<b>1620</b>	<b>38.68</b>	<b>1612</b>	<b>38.43</b>	<b>0.25</b>
E. THDC	Tehri HPS	1000	870	880	853	20.91	871	20.80	0.11
	<b>Sub Total (E)</b>	<b>1400</b>	<b>1246</b>	<b>1262</b>	<b>1124</b>	<b>28.91</b>	<b>1205</b>	<b>28.80</b>	<b>0.11</b>
F. BBMB	Bhakra HPS	1480	1347	1358	1359	32.71	1363	32.33	0.38
	Dehar HPS	990	612	825	620	15.03	626	14.68	0.35
	Pong HPS	396	181	312	132	4.50	188	4.33	0.17
	<b>Sub Total (F)</b>	<b>2866</b>	<b>2139</b>	<b>2495</b>	<b>2111</b>	<b>52.24</b>	<b>2177</b>	<b>51.34</b>	<b>0.90</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	229	133	4.19	174	4.13	0.06
	KWHEP HPS(IPP)	1000	0	1198	1200	28.25	1177	28.52	-0.27
	Malana Stg-II HPS	100	0	112	112	2.63	110	2.39	0.24
	Shree Cement TPS	300	0	238	144	4.88	203	4.96	-0.08
	Budhil HPS(IPP)	70	0	70	70	1.65	69	1.63	0.01
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1847</b>	<b>1659</b>	<b>41.59</b>	<b>1733</b>	<b>41.63</b>	<b>-0.05</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22836</b>	<b>18307</b>	<b>19244</b>	<b>18109</b>	<b>428.97</b>	<b>17874</b>	<b>432.22</b>	<b>-3.25</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	27.10	1129	
	Guru Nanak Dev TPS(Bhatinda)	440	102	103	2.14	89	
	Guru Hargobind Singh TPS(L.mbt)	920	940	844	20.39	849	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2302	2057	49.62	2068	
	Total Hydro	1148	846	450	14.20	592	
	<b>Total Punjab</b>	<b>3768</b>	<b>3148</b>	<b>2507</b>	<b>63.82</b>	<b>2659</b>	
Haryana	Panipat TPS	1367	396	416	9.82	409	
	DCRTPP (Yamuna nagar)	600	275	0	4.59	191	
	Faridabad GPS (NTPC)	432	308	386	8.73	364	
	RGTPP (khedar) (IPP)	1200	418	530	12.19	508	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	557	557	12.19	508	
	Thermal (Total)	4944	1954	1889	47.53	1980	
	Total Hydro	62	22	21	0.61	25	
		<b>Total Haryana</b>	<b>5006</b>	<b>1976</b>	<b>1910</b>	<b>48.14</b>	<b>2006</b>
	Rajasthan	kota TPS	1240	987	1049	24.69	1029
suratgarh TPS		1500	954	1024	23.86	994	
Chabra TPS		500	188	182	4.67	195	
Dholpur GPS		330	131	131	2.78	116	
Ramgarh GPS		111	45	31	1.15	48	
RAPS A (NPC)		300	176	176	4.24	177	
Barsingar (NLC)		250	76	86	1.90	79	
Giral LTPS		250	137	135	2.97	124	
Rajwest LTPS (IPP)		1080	556	677	15.70	654	
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	3250	3491	61.97	3415	
Total Hydro		550	0	0	0.30	12	
Wind power		2191	743	184	3.92	164	
Biomass		91	20	20	0.47	20	
Solar		201	0	0	1.17	49	
Renewable/Others (Total)		2483	763	204	5.56	232	
		<b>Total Rajasthan</b>	<b>9989</b>	<b>4013</b>	<b>3695</b>	<b>87.83</b>	<b>3659</b>
UP		Anpara TPS	1630	1318	1322	28.30	1179
	Obra TPS	1288	500	463	10.50	438	
	Paricha TPS	1140	513	639	12.60	525	
	Panki TPS	210	75	75	1.80	75	
	Harduaganj TPS	665	315	161	4.40	183	
	Tanda TPS (NTPC)	440	396	393	9.66	403	
	Roza TPS (IPP)	1200	999	896	22.62	943	
	Anpara-C (IPP)	1200	806	772	18.97	791	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	405	365	8.16	340	
	Thermal (Total)	8223	5327	5086	117.02	4876	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	146	149	3.95	165	
	Cogeneration	981	50	50	1.20	50	
		<b>Total UP</b>	<b>10131</b>	<b>5523</b>	<b>5285</b>	<b>122.17</b>	<b>5090</b>
	Uttarakhand	Total Hydro	1303	556	531	13.34	556
<b>Total Uttarakhand</b>		<b>1303</b>	<b>556</b>	<b>531</b>	<b>13.34</b>	<b>556</b>	
Delhi	Rajghat TPS	135	19	0	0.11	4	
	Delhi Gas Turbine	282	72	148	2.90	121	
	Pragati Gas Turbine	330	293	268	7.00	292	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	255	3.94	164	
	Badarpur TPS (NTPC)	705	475	445	9.71	405	
	Thermal (Total)	2232	859	1116	23.65	986	
		<b>Total Delhi</b>	<b>2232</b>	<b>859</b>	<b>1116</b>	<b>23.65</b>	<b>986</b>
HP	Baspa HPS (IPP)	330	305	305	7.52	313	
	Malana HPS (IPP)	86	90	72	2.13	89	
	Other Hydro	589	578	592	13.86	577	
		<b>Total HP</b>	<b>1005</b>	<b>973</b>	<b>969</b>	<b>23.51</b>	<b>980</b>
J & K	Baglihar HPS (IPP)	450	436	436	10.47	436	
	Other Hydro	323	130	140	3.30	137	
	Gas/Diesel/Others	183	0	0	0.00	0	
		<b>Total J &amp; K</b>	<b>956</b>	<b>566</b>	<b>576</b>	<b>13.77</b>	<b>574</b>
<b>Total State Control Area Generation</b>		<b>34390</b>	<b>17614</b>	<b>16589</b>	<b>396.22</b>	<b>16509</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>5913</b>	<b>4779</b>	<b>116.39</b>	<b>4850</b>	
<b>Total Regional Availability(Gross)</b>		<b>57226</b>	<b>42771</b>	<b>39477</b>	<b>941.58</b>	<b>39232</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	9722	8961	219.14	9131
State Control Area Hydro	5368	3109	2696	69.67	2903
<b>Total Regional Hydro</b>	<b>15731</b>	<b>12831</b>	<b>11657</b>	<b>288.81</b>	<b>12034</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	400	500	100	5.74	0.29	5.45
Gwalior-Agra (D/C)	1774	1356	1774	0	31.50	0.00	31.50
Zerda-Kankroli	204	40	245	117	1.03	0.00	1.03
Zerda-Bhinmal	200	55	287	84	1.77	0.00	1.77
Malanpur-Auraiya	-39	-49	0	119	0.00	1.23	-1.23
Badod-Kota/Morak	66	13	125	0	0.70	0.00	0.70
Mundra-Mohindergarh(HVDC)	1452	1448	1452	0	32.87	0.00	32.87
<b>Sub Total WR</b>	<b>3957</b>	<b>3263</b>			<b>73.60</b>	<b>1.52</b>	<b>72.08</b>
Pusauli Bypass	-194	-270	0	297	0.00	5.16	-5.16
MZP- GKP (D/C)	712	680	960	0	18.14	0.00	18.14
Patna-Balia(D/C)	569	438	663	0	12.03	0.00	12.03
B'Sharif-Balia (D/C)	305	254	477	0	7.73	0.00	7.73
Pusauli-Balia	-32	-33	50	55	0.00	0.59	-0.59
Gaya-Fatehpur (765 Kv)	143	71	144	161	1.25	0.00	1.25
Pusauli-Sahupuri	136	109	165	0	3.45	0.00	3.45
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	45	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	355	307	470	0	8.35	0.00	8.35
<b>Sub Total ER</b>	<b>1956</b>	<b>1516</b>			<b>50.95</b>	<b>6.64</b>	<b>44.31</b>
<b>Total IR Exch</b>	<b>5913</b>	<b>4779</b>			<b>124.55</b>	<b>8.16</b>	<b>116.39</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
40.63	3.75	44.38	2.17	39.86	-0.45	-2.83	2.33	-2.33

  

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
48.43	89.07	137.50	44.31	72.08	116.39	-4.12	-16.99	-21.11

**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	83.00	0.60	83.00	78.30	17.00

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					
50.43	13.05	49.72	14.50	50.09	0.20	0.11	50.43	49.92

**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	407	07:52	397	22:33	0.0	0.0	0.0	0.0
Gorakhpur	400	417	18:07	400	14:11	0.0	0.0	0.0	0.0
Bareilly	400	420	07:51	392	14:52	0.0	0.0	0.0	0.0
Kanpur	400	422	07:52	399	15:48	0.0	0.0	1.8	0.0
Dadri	400	416	07:55	396	14:48	0.0	0.0	0.0	0.0
Ballabgarh	400	425	07:54	401	14:49	0.0	0.0	12.5	0.0
Bawana	400	420	07:55	400	14:49	0.0	0.0	0.0	0.0
Bassi	400	428	03:59	403	14:48	0.0	0.0	15.7	0.0
Hissar	400	409	07:55	387	14:50	0.0	1.3	0.0	0.0
Moga	400	415	07:52	397	14:52	0.0	0.0	0.0	0.0
Abdullapur	400	413	06:04	397	14:48	0.0	0.0	0.0	0.0
Nalagarh	400	408	04:00	390	14:54	0.0	0.0	0.0	0.0
Kishenpur	400	417	06:03	405	13:21	0.0	0.0	0.0	0.0
Wagoora	400	416	06:02	393	20:56	0.0	0.0	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	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Balia	765	763	07:56	720	21:26	7.5	41.1	0.0	0.0
Moga	765	797	07:53	764	20:18	0.0	0.0	0.0	0.0
Agra	765	814	07:57	757	14:51	0.0	0.0	12.2	0.0
Bhiwani	765	801	07:57	759	20:13	0.0	0.0	0.1	0.0
Unnao	765	773	07:52	735	15:48	0.0	18.0	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	497.61	1006.54	467.45	230.40	1407.40	1051.41
Pong	426.72	384.05	408.89	454.47	398.20	179.94	421.10	294.78
Tehri	829.79	740.04	788.45	425.58	818.65	982.26	804.66	546.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	249.34	350.50
Rihand	268.22	252.98	254.42	65.50	254.17	44.30	325.13	NA
RPS	352.80	343.81	349.00	NA	NA	NA	NA	54.71
Jawahar Sagar	298.70	295.78	298.12	NA	NA	NA	NA	7.36
RSD	527.91	487.91	512.12	144.00	499.33	124.80	363.98	461.48

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 12.07.2013 :**

1. Normal Weather.

**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 :**

1. Dhauliganga (280 MW) closed down till 30.09.2013 due to flooding of power house.
2. Vishnuprayg( UPPCL) ( 400 MW ) Closed due to High Silt level in river water.
3. MANERI BHALI(280MW)/Utrakhand closed down due to flush flooding.

Report for : 12.07.2013

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER