

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 07.08.2012

Date of Reporting : 08.08.2012

### 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
34484	4851	39335	49.75	34427	4656	39083	50.00	821.8	113.25

\* 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	41.13	20.26		61.39	103.93	103.76	-0.17	165.15	30.03
Haryana	54.23	0.79		55.02	80.58	79.95	-0.63	134.96	15.76
Rajasthan	78.63	0.00	5.32	83.94	54.73	57.87	3.15	141.82	3.02
Delhi	32.14			32.14	73.43	65.28	-8.15	97.42	0.00
UP	75.18	14.51	1.20	90.89	101.47	101.98	0.51	192.87	59.15
Uttarakhand		13.34		13.34	14.69	16.30	1.60	29.64	2.34
HP		24.74		24.74	0.81	0.49	-0.32	25.23	0.00
J & K		15.24	0.00	15.24	17.41	13.81	-3.60	29.05	2.95
Chandigarh				0.00	6.71	5.71	-1.01	5.71	0.00
<b>Total</b>	<b>281.30</b>	<b>88.88</b>	<b>6.52</b>	<b>376.69</b>	<b>453.77</b>	<b>445.15</b>	<b>-8.61</b>	<b>821.85</b>	<b>113.25</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	STOA/PX transaction	
Punjab	7063	2055	-147	1675	6610	1270	-65	1962	45.01	
Haryana	5571	398	36	1223	5942	657	19	1357	28.97	
Rajasthan	5751	108	201	527	6198	275	322	302	8.87	
Delhi	4408	0	-204	370	3760	0	-421	256	7.80	
UP	7608	1990	-433	441	8411	2354	378	467	11.33	
Uttarakhand	1278	150	44	-15	1321	0	115	56	1.91	
HP	995	0	-109	-1001	965	0	-14	-1103	-24.31	
J&K	1549	150	32	-163	1016	100	-229	-204	-5.35	
Chandigarh	262	0	-36	24	204	0	-31	0	0.96	
<b>Total</b>	<b>34484</b>	<b>4851</b>	<b>-615</b>	<b>3081</b>	<b>34427</b>	<b>4656</b>	<b>74</b>	<b>3093</b>	<b>75.19</b>	

\* STOA figures are at sellers boundary & PX figures are at regional boundary.

### III. Regional Entities :

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
<b>A. NTPC</b>								
Singrauli STPS	2000	1704	2000	1765	41.48	1728	40.89	0.60
Rihand I STPS	1000	442	501	495	10.72	446	10.60	0.11
Rihand II STPS	1000	960	1041	1044	23.28	970	23.04	0.24
Rihand III STPS	500		0	0	0.00	0		0.00
Dadri I STPS	840	589	700	450	14.01	584	14.13	-0.11
Dadri II STPS	980	753	893	822	18.03	751	18.05	-0.02
Unchahar I TPS	420	337	408	366	8.18	341	8.09	0.09
Unchahar II TPS	420	337	419	359	8.13	339	8.09	0.04
Unchahar III TPS	210	169	210	179	4.08	170	4.05	0.03
ISTPP (Jhajjar)	1000	564	578	676	13.30	554	13.00	0.31
Dadri GPS	830	752	719	773	16.93	705	17.01	-0.08
Anta GPS	419	259	241	264	5.73	239	5.69	0.04
Auraiya GPS	663	395	265	304	6.91	288	7.48	-0.57
<b>Sub Total (A)</b>	<b>10282</b>	<b>7260</b>	<b>7975</b>	<b>7497</b>	<b>170.79</b>	<b>7116</b>	<b>170.11</b>	<b>0.68</b>
<b>B. NPC</b>								
NAPS	440	257	294	303	6.19	258	6.17	0.02
RAPS- B	440	380	417	423	8.80	367	9.12	-0.32
RAPS- C	440	420	454	464	9.85	410	10.08	-0.23
<b>Sub Total (B)</b>	<b>1320</b>	<b>1057</b>	<b>1165</b>	<b>1190</b>	<b>24.84</b>	<b>1035</b>	<b>25.37</b>	<b>-0.52</b>
<b>C. NHPC</b>								
Chamera I HPS	540	534	540	540	12.91	538	12.81	0.09
Chamera II HPS	300	300	302	302	7.21	300	7.24	-0.03
Chamera III HPS	231	231	235	231	5.51	230	5.47	0.04
Bairasuil HPS	180	182	170	170	2.32	97	2.19	0.14
Salal-HPS	690	668	668	665	16.02	668	16.03	-0.01
Tanakpur-HPS	94	94	92	94	2.20	92	2.24	-0.05
Uri-HPS	480	372	363	384	9.27	386	8.79	0.47
Dhauliganga-HPS	280	277	277	277	6.68	278	6.65	0.03
Dulhasi-HPS	390	387	400	397	9.04	377	9.01	0.03
Sewa-II HPS	120	80	85	80	1.91	80	1.91	0.00
<b>Sub Total (C)</b>	<b>3305</b>	<b>3123</b>	<b>3132</b>	<b>3140</b>	<b>73.07</b>	<b>3045</b>	<b>72.35</b>	<b>0.72</b>
<b>D.NJPC</b>								
Nathpa Jhakri	1500	1605	1622	1618	38.64	1610	38.52	0.12
<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1622</b>	<b>1618</b>	<b>38.64</b>	<b>1610</b>	<b>38.52</b>	<b>0.12</b>
<b>E. THDC</b>								
Tehri HPS	1000	970	491	511	7.96	332	8.00	-0.04
Koteshwar HPS	400	248	249	236	2.73	114	2.82	-0.09
<b>Sub Total (E)</b>	<b>1400</b>	<b>1218</b>	<b>740</b>	<b>747</b>	<b>10.69</b>	<b>445</b>	<b>10.82</b>	<b>-0.13</b>
<b>F. BBMB</b>								
Bhakra HPS	1480	850	1258	678	20.65	860	20.40	0.25
Dehar HPS	990	614	825	620	14.95	623	14.74	0.22
Pong HPS	396	220	363	245	5.35	223	5.01	0.34
<b>Sub Total (F)</b>	<b>2866</b>	<b>1684</b>	<b>2446</b>	<b>1543</b>	<b>40.95</b>	<b>1706</b>	<b>40.14</b>	<b>0.81</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	201	185	4.84	202	4.22	0.62
KWHEP HPS(IPP)	1000	0	1200	1200	28.82	1201	28.28	0.54
Malana Stg-II HPS	100	0	52	0	1.07	45	1.61	-0.53
Shree Cement TPS	300	0	295	295	7.03	293	6.76	0.27
Budhil HPS(IPP)	70	0	69	69	1.57	65		1.57
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1817</b>	<b>1749</b>	<b>43.33</b>	<b>1806</b>	<b>40.86</b>	<b>2.47</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22336</b>	<b>15946</b>	<b>18897</b>	<b>17484</b>	<b>402.31</b>	<b>16763</b>	<b>398.17</b>	<b>4.14</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	1205	1251	27.20	1133
	Guru Nanak Dev TPS(Bhatinda)	440	102	40	1.63	68
	Guru Hargobind Singh TPS(L.mbt)	920	669	129	12.30	512
	Thermal (Total)	2620	1976	1420	41.13	1714
	Total Hydro	1148	875	886	20.26	844
	<b>Total Punjab</b>	<b>3768</b>	<b>2851</b>	<b>2306</b>	<b>61.39</b>	<b>2558</b>
Haryana	Panipat TPS	1367	1132	1105	27.16	1132
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0
	Faridabad GPS (NTPC)	432	389	396	9.40	392
	RGTPP (kheadar) (IPP)	1200	329	376	8.65	360
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	0	446	9.02	376
	Thermal (Total)	4944	1850	2323	54.23	2259
	Total Hydro	62	36	30	0.79	33
	<b>Total Haryana</b>	<b>5006</b>	<b>1886</b>	<b>2353</b>	<b>55.02</b>	<b>2292</b>
Rajasthan	kota TPS	1240	1076	1078	25.41	1059
	suratgarh TPS	1500	1125	1140	26.70	1112
	Chabra TPS	500	293	214	5.52	230
	Dholpur GPS	330	144	149	3.29	137
	Ramgarh GPS	111	51	55	1.29	54
	RAPS A (NPC)	300	198	192	4.48	187
	Barsingsar (NLC)	250	113	111	2.52	105
	Giral LTPS	250	51	85	1.16	48
	Rajwest LTPS (IPP)	540	358	351	8.26	344
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Thermal (Total)	5156	3409	3375	78.63	3276
	Total Hydro	550	0	0	0.00	0
	Wind power	1843	140	290	4.76	198
	Biomass	91	18	18	0.44	18
	Solar	128	0	0	0.11	5
	Renewable/Others (Total)	2062	158	308	5.32	221
	<b>Total Rajasthan</b>	<b>7767</b>	<b>3567</b>	<b>3683</b>	<b>83.94</b>	<b>3498</b>
	UP	Anpara TPS	1630	772	690	16.10
Obra TPS		1382	458	448	10.90	454
Paricha TPS		890	442	284	8.90	371
Panki TPS		210	59	50	1.80	75
Harduaganj TPS		665	0	0	0.00	0
Tanda TPS (NTPC)		440	195	189	4.80	200
Roza TPS (IPP)		1200	824	824	19.67	820
Anpara-C (IPP)		1200	455	311	9.41	392
Bajaj Energy Pvt.Ltd(IPP) TPS		450	156	139	3.60	150
Thermal (Total)		8067	3361	2935	75.18	3133
Vishnuparyag HPS (IPP)		400	436	436	10.46	436
Other Hydro		527	126	0	4.05	169
Cogeneration		981	50	50	1.20	50
<b>Total UP</b>		<b>9975</b>	<b>3973</b>	<b>3421</b>	<b>90.89</b>	<b>3351</b>
Uttarakhand	Total Hydro	1303	572	565	13.34	556
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>572</b>	<b>565</b>	<b>13.34</b>	<b>556</b>
Delhi	Rajghat TPS	135	47	48	1.08	45
	Delhi Gas Turbine	282	164	129	4.46	186
	Pragati Gas Turbine	330	283	285	7.05	294
	Rithala GPS	108	0	38	0.19	8
	Bawana GPS	677	277	285	6.52	272
	Badarpur TPS (NTPC)	705	630	565	12.83	535
	Thermal (Total)	2237	1401	1350	32.14	1339
	<b>Total Delhi</b>	<b>2237</b>	<b>1401</b>	<b>1350</b>	<b>32.14</b>	<b>1339</b>
HP	Baspa HPS (IPP)	330	330	330	7.92	330
	Malana HPS (IPP)	86	108	107	2.51	104
	Other Hydro	589	601	593	14.31	596
	<b>Total HP</b>	<b>1005</b>	<b>1039</b>	<b>1030</b>	<b>25</b>	<b>1031</b>
J & K	Baglihar HPS (IPP)	450	440	436	10.51	438
	Other Hydro	323	185	210	4.73	197
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>625</b>	<b>646</b>	<b>15.24</b>	<b>635</b>
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>15914</b>	<b>15354</b>	<b>376.69</b>	<b>15260</b>
<b>J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))</b>			<b>2074</b>	<b>2041</b>	<b>56.14</b>	<b>2339</b>
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>36885</b>	<b>34879</b>	<b>835.14</b>	<b>34362</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	9393	8433	198.08	8253
State Control Area Hydro	5368	3273	3157	88.88	3268
<b>Total Regional Hydro</b>	<b>15731</b>	<b>12666</b>	<b>11590</b>	<b>286.96</b>	<b>11521</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	500	350	500	0	9.18	0.00	9.18
Gwalior-Agra (D/C)	84	72	394	115	4.67	0.00	4.67
Zerda-Kankroli	-170	0	0	170	0.00	0.14	-0.14
Zerda-Bhinmal	0	-101	79	179	0.00	0.14	-0.14
Malanpur-Auraiya	-159	-96	0	189	0.00	1.70	-1.70
Badod-Kota/Morak	-61	-76	0	207	0.00	1.96	-1.96
Mundra-Mohindergarh(HVDC)	596	596	597	0	10.35	0.00	10.35
<b>Sub Total WR</b>	<b>790</b>	<b>745</b>			<b>24.20</b>	<b>3.95</b>	<b>20.25</b>
Pusauli Bypass	-65	-180	37	214	0.52	1.64	-1.12
MZP- GKP (D/C)	600	642	772	0	15.75	0.00	15.75
Patna-Balia(D/C)	179	325	491	0	6.96	0.00	6.96
B'Sharif-Balia (D/C)	256	369	572	0	9.23	0.00	9.23
Barh - Balia(D/C)	217	0	255	0	2.60	0.00	2.60
Pusauli-Balia	0	0	0	0	0.00	0.00	0.00
Gayaa-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	142	165	183	0	3.35	0.00	3.35
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-45	-25	0	48	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1284</b>	<b>1296</b>			<b>38.41</b>	<b>2.52</b>	<b>35.89</b>
<b>Total IR Exch</b>	<b>2074</b>	<b>2041</b>			<b>62.60</b>	<b>6.47</b>	<b>56.14</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
24.38	3.71	28.10	-1.11	15.90	16.46	2.59	2.49	-3.26

  

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
45.93	16.99	62.93	35.89	20.25	56.14	-10.05	3.26	-6.79

**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	3.60	26.80	94.60	71.40	16.60	1.80

  

<----- 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				
50.40	6.03	49.38	5.12	49.82	0.65	0.18	50.24	49.56

**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	405	6:02	0	12:38	0.0	0.0	0.0	0.0
Gorakhpur	400	430	8:44	413	22:13	0.0	0.0	70.7	0.0
Bareilly	400	419	3:02	397	5:45	0.0	0.0	0.0	0.0
Kanpur	400	421	3:02	405	11:15	0.0	0.0	0.5	0.0
Dadri	400	414	3:01	399	19:43	0.0	0.0	0.0	0.0
Ballabgarh	400	420	3:03	402	19:43	0.0	0.0	0.0	0.0
Bawana	400	416	3:01	401	19:43	0.0	0.0	0.0	0.0
Bassi	400	431	6:05	412	9:17	0.0	0.0	56.0	0.1
Hissar	400	411	16:02	394	19:43	0.0	0.0	0.0	0.0
Moga	400	414	8:03	397	19:42	0.0	0.0	0.0	0.0
Abdullapur	400	412	3:02	396	19:43	0.0	0.0	0.0	0.0
Nalagarh	400	412	3:02	396	11:43	0.0	0.0	0.0	0.0
Kishenpur	400	412	8:03	396	19:42	0.0	0.0	0.0	0.0
Wagoora	400	409	6:04	388	19:36	0.0	3.0	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	474.64	345.61	493.18	838.00	867.06	663.01
Pong	426.72	384.05	392.32	84.61	412.73	588.94	159.79	482.86
Tehri	829.79	740.04	765.20	165.00	818.65	982.26	345.35	151.00
Koteshwar	612.50	598.50	599.80	0.45	NA	NA	159.00	133.00
Chamera-I	760.00	748.75	750.48	10.00	NA	NA	261.42	270.22
Rihand	268.22	252.98	254.02	38.60	257.04	160.70	NA	NA
RPS	352.80	343.81	349.95	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.21	NA	NA	NA	NA	NA
RSD	527.91	487.91	501.72	NA	509.17	NA	319.44	309.93

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 07.08.2012 :**

1: Rains in NCR , HP , J & K , Utranchal , West Rajasthan.

**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 : 07.08.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER