

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.08.2012

Date of Reporting : 21.08.2012

### 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
33829	5562	39390	49.79	34915	3115	38029	49.94	814.9	103.37

\* 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	49.51	10.87		60.38	108.03	110.77	2.74	171.15	27.06
Haryana	65.33	0.67		66.00	58.02	56.62	-1.40	122.62	18.49
Rajasthan	69.81	1.86	8.66	80.33	40.74	44.44	3.69	124.76	10.00
Delhi	27.11			27.11	68.99	62.72	-6.27	89.83	0.26
UP	80.38	15.59	1.20	97.17	134.30	129.78	-4.51	226.95	38.58
Uttarakhand		12.99		12.99	14.05	13.85	-0.19	26.84	3.13
HP		24.89		24.89	-4.05	-5.64	-1.59	19.25	4.16
J & K		15.28	0.00	15.28	15.68	13.41	-2.28	28.69	1.70
Chandigarh				0.00	5.87	4.83	-1.04	4.83	0.00
<b>Total</b>	<b>292.15</b>	<b>82.14</b>	<b>9.86</b>	<b>384.15</b>	<b>441.62</b>	<b>430.78</b>	<b>-10.85</b>	<b>814.93</b>	<b>103.37</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	6971	1525	-178	1741	7399	1050	243	2132	50.41	
Haryana	4832	987	-123	769	5337	862	48	1113	16.79	
Rajasthan	5335	533	73	345	5383	129	357	-136	-2.04	
Delhi	4054	0	-40	229	3758	0	-207	414	6.21	
UP	9017	1831	-290	1014	10167	969	-352	1587	40.37	
Uttarakhand	1124	230	-87	-34	1045	105	-8	29	1.56	
HP	751	355	5	-828	802	0	-208	-1186	-22.84	
J&K	1506	100	186	-291	852	0	-368	-184	-6.05	
Chandigarh	239	0	-29	7	172	0	-55	-10	0.53	
<b>Total</b>	<b>33829</b>	<b>5562</b>	<b>-482</b>	<b>2952</b>	<b>34915</b>	<b>3115</b>	<b>-549</b>	<b>3759</b>	<b>84.93</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	1915	2076	2060	46.17	1924	45.96	0.21
Rihand I STPS	1000	355	483	382	8.58	357	8.51	0.07
Rihand II STPS	1000	781	970	809	18.91	788	18.75	0.16
Rihand III STPS	500		0	0	0.00	0		0.00
Dadri I STPS	840	587	860	599	14.08	587	14.08	0.00
Dadri II STPS	980	695	956	698	16.72	697	16.67	0.05
Unchahar I TPS	420	352	392	419	8.38	349	8.44	-0.06
Unchahar II TPS	420	383	420	416	9.25	385	9.19	0.06
Unchahar III TPS	210	192	211	212	4.62	193	4.61	0.02
ISTPP (Jhajihar)	1000	470	388	504	10.44	435	10.47	-0.03
Dadri GPS	830	700	700	557	14.57	607	14.85	-0.28
Anta GPS	419	261	242	220	5.65	235	5.64	0.01
Auraiya GPS	663	609	611	454	12.11	504	12.95	-0.84
<b>Sub Total (A)</b>	<b>10282</b>	<b>7299</b>	<b>8309</b>	<b>7330</b>	<b>169.48</b>	<b>7062</b>	<b>170.11</b>	<b>-0.63</b>
<b>B. NPC</b>								
NAPS	440	256	295	300	6.26	261	6.14	0.12
RAPS- B	440	382	420	424	9.10	379	9.17	-0.07
RAPS- C	440	410	447	452	9.55	398	9.84	-0.29
<b>Sub Total (B)</b>	<b>1320</b>	<b>1048</b>	<b>1162</b>	<b>1176</b>	<b>24.91</b>	<b>1038</b>	<b>25.15</b>	<b>-0.24</b>
<b>C. NHPC</b>								
Chamera I HPS	540	534	540	540	12.91	538	12.82	0.09
Chamera II HPS	300	300	0	300	2.91	121	3.32	-0.41
Chamera III HPS	231	120	0	230	2.97	124	2.94	0.02
Bairasuil HPS	180	146	182	182	2.98	124	2.82	0.15
Salai-HPS	690	660	660	663	15.77	657	15.42	0.35
Tanakpur-HPS	94	94	94	95	2.22	92	2.24	-0.03
Uri-HPS	480	383	398	400	9.54	398	9.40	0.14
Dhauliganga-HPS	280	277	277	277	6.74	281	6.63	0.10
Duihasti-HPS	390	387	404	377	9.21	384	9.08	0.12
Sewa-II HPS	120	80	0	36	0.66	28	0.59	0.07
<b>Sub Total (C)</b>	<b>3305</b>	<b>2980</b>	<b>2555</b>	<b>3100</b>	<b>65.89</b>	<b>2746</b>	<b>65.27</b>	<b>0.62</b>
<b>D.NJPC</b>								
Natpha Jhakri	1500	836	0	1621	17.34	722	17.38	-0.04
<b>Sub Total (D)</b>	<b>1500</b>	<b>836</b>	<b>0</b>	<b>1621</b>	<b>17.34</b>	<b>722</b>	<b>17.38</b>	<b>-0.04</b>
<b>E. THDC</b>								
Tehri HPS	1000	975	882	884	16.16	673	16.00	0.16
Koteshwar HPS	400	300	302	234	4.63	193	4.60	0.03
<b>Sub Total (E)</b>	<b>1400</b>	<b>1275</b>	<b>1184</b>	<b>1118</b>	<b>20.79</b>	<b>866</b>	<b>20.60</b>	<b>0.19</b>
<b>F. BBMB</b>								
Bhakra HPS	1480	778	1228	384	19.31	805	18.67	0.64
Dehar HPS	990	612	660	640	15.48	645	14.69	0.80
Pong HPS	396	73	240	0	1.98	83	5.01	-3.03
<b>Sub Total (F)</b>	<b>2866</b>	<b>1463</b>	<b>2128</b>	<b>1024</b>	<b>36.77</b>	<b>1532</b>	<b>38.36</b>	<b>-1.59</b>
<b>G. IPP(s)/JV(s)</b>								
ADHPL HPS(IPP)	192	0	230	177	4.71	196	4.13	0.57
KWHEP HPS(IPP)	1000	0	0	1200	12.56	523	17.12	-4.57
Malana Stg-II HPS	100	0	108	102	2.44	102	2.20	0.24
Shree Cement TPS	300	0	147	147	3.45	144	3.82	-0.37
Budhil HPS(IPP)	70		69	69	1.65	69		1.65
<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>554</b>	<b>1695</b>	<b>24.80</b>	<b>1033</b>	<b>27.27</b>	<b>-2.47</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22336</b>	<b>14901</b>	<b>15892</b>	<b>17064</b>	<b>359.98</b>	<b>14999</b>	<b>364.14</b>	<b>-4.16</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	1246	1232	27.27	1136	
	Guru Nanak Dev TPS(Bhatinda)	440	203	203	4.35	181	
	Guru Hargobind Singh TPS(L.mbt)	920	710	942	17.89	745	
	Thermal (Total)	2620	2159	2377	49.51	2063	
	Total Hydro	1148	559	222	10.87	453	
	<b>Total Punjab</b>	<b>3768</b>	<b>2718</b>	<b>2599</b>	<b>60.38</b>	<b>2516</b>	
Haryana	Panipat TPS	1367	1088	1097	26.27	1095	
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0	
	Faridabad GPS (NTPC)	432	122	120	2.88	120	
	RGTPP (khedar) (IPP)	1200	1103	1088	26.87	1120	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	354	372	9.31	388	
	Thermal (Total)	4944	2667	2677	65.33	2722	
	Total Hydro	62	19	19	0.67	28	
	<b>Total Haryana</b>	<b>5006</b>	<b>2686</b>	<b>2696</b>	<b>66.00</b>	<b>2750</b>	
Rajasthan	kota TPS	1240	878	879	20.69	862	
	suratgarh TPS	1500	858	879	20.84	868	
	Chabra TPS	500	414	421	10.05	419	
	Dholpur GPS	330	146	143	3.30	138	
	Ramgarh GPS	111	71	67	1.69	71	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingar (NLC)	250	113	112	1.64	68	
	Giral LTPS	250	51	28	1.11	46	
	Rajwest LTPS (IPP)	540	473	474	10.48	437	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5156	3004	3003	69.81	2909	
	Total Hydro	550	90	79	1.86	78	
	Wind power	1843	328	288	6.24	260	
	Biomass	91	17	17	0.40	17	
	Solar	128	0	0	0.16	7	
	Renewable/Others (Total)	2062	345	305	8.66	361	
	<b>Total Rajasthan</b>	<b>7767</b>	<b>3439</b>	<b>3387</b>	<b>80.33</b>	<b>3347</b>	
	UP	Anpara TPS	1630	1175	1222	25.20	1050
		Obra TPS	1382	534	538	11.60	483
		Paricha TPS	890	602	607	13.00	542
Panki TPS		210	115	120	2.50	104	
Harduaganj TPS		665	30	0	0.30	13	
Tanda TPS (NTPC)		440	192	192	4.81	200	
Roza TPS (IPP)		1200	827	824	19.76	823	
Anpara-C (IPP)		1200	0	0	0.00	0	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	188	98	3.21	134	
Thermal (Total)		8067	3663	3601	80.38	3349	
Vishnuparyag HPS (IPP)		400	436	436	10.27	428	
Other Hydro		527	258	0	5.31	221	
Cogeneration		981	50	50	1.20	50	
<b>Total UP</b>		<b>9975</b>	<b>4407</b>	<b>4087</b>	<b>97.17</b>	<b>3621</b>	
Uttarakhand		Total Hydro	1303	694	430	12.99	541
		<b>Total Uttarakhand</b>	<b>1303</b>	<b>694</b>	<b>430</b>	<b>12.99</b>	<b>541</b>
Delhi	Raighat TPS	135	46	50	1.31	55	
	Delhi Gas Turbine	282	149	147	3.66	152	
	Pragati Gas Turbine	330	99	96	2.41	100	
	Rithala GPS	108	21	0	0.04	2	
	Bawana GPS	677	287	229	6.45	269	
	Badarpur TPS (NTPC)	705	590	565	13.25	552	
	Thermal (Total)	2237	1192	1087	27.11	1130	
	<b>Total Delhi</b>	<b>2237</b>	<b>1192</b>	<b>1087</b>	<b>27.11</b>	<b>1130</b>	
HP	Baspa HPS (IPP)	330	330	330	7.91	330	
	Malana HPS (IPP)	86	108	108	2.55	106	
	Other Hydro	589	617	627	14.43	601	
	<b>Total HP</b>	<b>1005</b>	<b>1055</b>	<b>1065</b>	<b>25</b>	<b>1037</b>	
J & K	Baglihar HPS (IPP)	450	442	440	10.55	440	
	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>627</b>	<b>650</b>	<b>15.28</b>	<b>637</b>	
<b>Total State Control Area Generation</b>		<b>32017</b>	<b>16818</b>	<b>16001</b>	<b>384.15</b>	<b>15578</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>3133</b>	<b>3450</b>	<b>84.84</b>	<b>3535</b>	
<b>Total Regional Availability(Gross)</b>		<b>54353</b>	<b>35843</b>	<b>36515</b>	<b>828.97</b>	<b>34112</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	6205	8342	160.49	6687
State Control Area Hydro	5368	3302	2465	82.14	2995
<b>Total Regional Hydro</b>	<b>15731</b>	<b>9507</b>	<b>10807</b>	<b>242.63</b>	<b>9681</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	Import	Export	
Vindhychal B/B	500	400	500	0	11.49	0.00	11.49		
Gwalior-Agra (D/C)	548	586	981	0	15.96	0.00	15.96		
Zerda-Kankroli	-33	-162	35	259	0.00	3.15	-3.15		
Zerda-Bhinmal	-6	-54	76	147	0.00	0.74	-0.74		
Malanpur-Auraiya	-110	-81	0	151	0.00	2.07	-2.07		
Badod-Kota/Morak	56	53	62	0	1.46	0.00	1.46		
Mundra-Mohindergarh(HVDC)	0	0	557	0	2.37	0.00	2.37		
<b>Sub Total WR</b>	<b>955</b>	<b>742</b>			<b>31.29</b>	<b>5.95</b>	<b>25.34</b>		
Pusauli Bypass	200	300	300	0	5.90	0.00	5.90		
MZP- GKP (D/C)	870	910	1182	0	21.58	0.00	21.58		
Patna-Balia(D/C)	0	474	508	0	5.69	0.00	5.69		
B'Sharif-Balia (D/C)	440	430	656	0	10.05	0.00	10.05		
Barh - Balia(D/C)	482	289	742	0	9.40	0.00	9.40		
Pusauli-Balia	-86	-16	0	102	0.00	0.95	-0.95		
Gaya-Fatehpur (765 Kv)	175	184	357	0	5.23	0.00	5.23		
Pusauli-Sahupuri	143	162	171	0	3.65	0.00	3.65		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-46	-25	0	47	0.00	1.04	-1.04		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
<b>Sub Total ER</b>	<b>2178</b>	<b>2708</b>			<b>61.49</b>	<b>1.99</b>	<b>59.51</b>		
<b>Total IR Exch</b>	<b>3133</b>	<b>3450</b>			<b>92.78</b>	<b>7.93</b>	<b>84.84</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
34.43	3.71	38.14	16.98	28.33	7.60	6.50	2.50	-2.47
<b>Total IR Schedule (MU)</b>			<b>Total IR Actual (MU)</b>			<b>Net IR UI (MU)</b>		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
65.22	31.24	96.46	59.51	25.34	84.84	-5.71	-5.91	-11.62

**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	0.60	1.20	9.20	27.70	90.40	71.90	13.40	0.40
Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum		Hz			MAX (Hz)	MIN (Hz)
50.24	15.05	48.82	10.44	49.79	0.87	0.21	50.19	49.12

**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	9:34	397	19:48	0.0	0.0	0.0	0.0
Gorakhpur	400	431	14:47	396	0:29	0.0	0.0	26.4	0.5
Bareilly	400	416	13:35	384	10:47	0.0	0.5	0.0	0.0
Kanpur	400	418	13:32	394	10:51	0.0	0.0	0.0	0.0
Dadri	400	410	14:02	398	0:10	0.0	0.0	0.0	0.0
Ballabgarh	400	419	14:00	392	10:49	0.0	0.0	0.0	0.0
Bawana	400	414	13:56	395	10:54	0.0	0.0	0.0	0.0
Bassi	400	430	2:40	402	10:49	0.0	0.0	47.4	0.0
Hissar	400	413	13:56	393	10:43	0.0	0.0	0.0	0.0
Moga	400	420	13:57	400	10:43	0.0	0.0	0.0	0.0
Abdullapur	400	421	11:28	403	9:08	0.0	0.0	0.1	0.0
Nalagarh	400	421	13:56	395	9:11	0.0	0.0	0.4	0.0
Kishenpur	400	418	13:59	400	7:11	0.0	0.0	0.0	0.0
Wagoora	400	412	13:59	385	7:14	0.0	10.9	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	490.03	738.95	508.16	1455.60	1501.70	610.31
Pong	426.72	384.05	409.31	94.27	422.92	1035.89	3955.94	129.75
Tehri	829.79	740.04	815.70	922.25	818.65	982.26	720.77	365.00
Koteshwar	612.50	598.50	599.90	0.46	NA	NA	385.00	367.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	534.27	349.55
Rihand	268.22	252.98	NA	NA	263.07	484.00	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	509.95	NA	518.59	NA	412.38	244.09

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 20.08.2012 :**

1: Partial rains in NR.

**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 :**

1. Generation loss at NJPC(1600MW), Karcham WHEP(1200MW), Chamera-2(300MW) and Chamera-3(230MW) due to high silt level.

Report for : 20.08.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER