

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.08.2013  
Date of Reporting : 27.08.2013

### 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
40138	2604	42742	50.05	38470	520	38990	50.27	924.9	57.73

\* 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	50.24	20.98		71.22	123.06	123.65	0.59	194.87	0.00
Haryana	69.18	0.69		69.87	74.69	78.04	3.35	147.91	0.00
Rajasthan	73.56	5.55	20.77	99.88	54.60	51.54	-3.05	151.42	0.74
Delhi	20.71			20.71	80.78	81.04	0.26	101.75	0.34
UP	104.11	4.69	1.00	109.81	124.53	127.40	2.87	237.20	54.51
Uttarakhand		22.61		22.61	11.72	11.87	0.14	34.47	0.44
HP		23.38		23.38	-0.01	-0.09	-0.08	23.29	0.00
J & K		13.61	0.00	13.61	16.71	14.43	-2.28	28.04	1.70
Chandigarh				0.00	5.87	5.97	0.11	5.97	0.00
<b>Total</b>	<b>317.81</b>	<b>91.50</b>	<b>21.77</b>	<b>431.08</b>	<b>491.95</b>	<b>493.84</b>	<b>1.89</b>	<b>924.92</b>	<b>57.73</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	8003	0	5	1607	8256	0	79	1918	42.60	
Haryana	6879	474	93	566	5899	0	51	204	8.52	
Rajasthan	6687	0	278	38	6035	0	-114	135	2.02	
Delhi	4628	0	-97	341	3687	0	-143	108	7.02	
UP	9574	1950	66	653	11379	520	248	2141	21.46	
Uttarakhand	1594	80	16	9	1317	0	-4	-124	-2.40	
HP	1053	0	-16	-1115	787	0	-17	-1292	-28.13	
J&K	1429	100	50	-284	913	0	-63	-537	-7.84	
Chandigarh	292	0	11	0	196	0	-3	-30	-0.03	
<b>Total</b>	<b>40138</b>	<b>2604</b>	<b>404</b>	<b>1817</b>	<b>38470</b>	<b>520</b>	<b>34</b>	<b>2520</b>	<b>43.22</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	2094	1691	45.76	1907	45.62	0.14
	Rihand I STPS	1000	920	1004	862	21.52	897	21.63	-0.11
	Rihand II STPS	1000	470	515	412	10.72	447	10.93	-0.22
	Rihand III STPS	500	485	514	377	10.81	450	10.99	-0.18
	Dadri I STPS	840	600	655	536	13.08	545	13.26	-0.18
	Dadri II STPS	980	975	1011	965	22.24	927	22.52	-0.27
	Unchahar I TPS	420	391	423	365	8.66	361	9.10	-0.44
	Unchahar II TPS	420	404	441	361	8.74	364	9.25	-0.51
	Unchahar III TPS	210	201	214	151	4.21	175	4.37	-0.16
	ISTPP (Jhajjar)	1500	1480	502	318	9.08	378	9.27	-0.19
	Dadri GPS	830	544	332	382	7.83	326	8.02	-0.19
	Anta GPS	419	393	227	362	6.38	266	6.42	-0.04
	Auraiya GPS	663	624	150	291	4.36	182	4.47	-0.11
	<b>Sub Total (A)</b>	<b>10782</b>	<b>9427</b>	<b>8082</b>	<b>7073</b>	<b>173.40</b>	<b>7225</b>	<b>175.84</b>	<b>-2.45</b>
B. NPC	NAPS	440	288	324	333	6.89	287	6.91	-0.02
	RAPS- B	440	398	438	441	9.51	396	9.55	-0.04
	RAPS- C	440	400	460	462	9.82	409	9.60	0.22
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1086</b>	<b>1222</b>	<b>1236</b>	<b>26.22</b>	<b>1093</b>	<b>26.06</b>	<b>0.16</b>
C. NHPC	Chamera I HPS	540	534	540	540	12.83	535	12.82	0.01
	Chamera II HPS	300	300	301	301	7.21	301	7.21	0.00
	Chamera III HPS	231	231	232	234	5.53	230	5.57	-0.04
	Bairasuil HPS	180	179	60	110	2.95	123	3.05	-0.10
	Salal-HPS	690	666	667	667	15.97	665	15.98	-0.01
	Tanakpur-HPS	94	90	93	93	2.18	91	2.13	0.06
	Uri-HPS	480	320	344	311	7.54	314	7.30	0.24
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	284	270	328	6.86	286	6.79	0.06
	Sewa-II HPS	120	119	125	125	2.97	124	2.94	0.04
	<b>Sub Total (C)</b>	<b>3305</b>	<b>2723</b>	<b>2632</b>	<b>2709</b>	<b>64.04</b>	<b>2668</b>	<b>63.78</b>	<b>0.25</b>
D. NJPC	Nathpa Jhakri	1500	1605	1622	1622	38.69	1612	38.52	0.17
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1622</b>	<b>1622</b>	<b>38.69</b>	<b>1612</b>	<b>38.52</b>	<b>0.17</b>
E. THDC	Tehri HPS	1000	1060	1068	1060	25.60	1067	25.25	0.35
	Koteshwar HPS	400	380	365	351	8.03	334	8.45	-0.42
	<b>Sub Total (E)</b>	<b>1400</b>	<b>1440</b>	<b>1433</b>	<b>1411</b>	<b>33.63</b>	<b>1401</b>	<b>33.70</b>	<b>-0.07</b>
F. BBMB	Bhakra HPS	1480	1194	1348	1095	29.30	1221	28.66	0.64
	Dehar HPS	990	608	825	560	14.94	623	14.58	0.36
	Pong HPS	396	321	372	372	7.91	330	7.70	0.21
	<b>Sub Total (F)</b>	<b>2866</b>	<b>2122</b>	<b>2545</b>	<b>2027</b>	<b>52.15</b>	<b>2173</b>	<b>50.94</b>	<b>1.21</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	222	206	3.84	160	3.67	0.17
	KWHEP HPS(IPP)	1000	0	1195	1194	28.44	1185	28.51	-0.07
	Malana Stg-II HPS	100	0	59	86	1.17	49	1.32	-0.15
	Shree Cement TPS	300	0	112	121	2.92	121	2.60	0.31
	Budhil HPS(IPP)	70	0	70	70	1.48	62	1.66	-0.18
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>1658</b>	<b>1677</b>	<b>37.84</b>	<b>1577</b>	<b>37.76</b>	<b>0.08</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22836</b>	<b>18403</b>	<b>19194</b>	<b>17755</b>	<b>425.97</b>	<b>17749</b>	<b>426.61</b>	<b>-0.64</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	1235	26.90	1121
	Guru Nanak Dev TPS(Bhatinda)	440	190	105	3.27	136
	Guru Hargobind Singh TPS(L.mbt)	920	944	766	20.08	837
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2394	2106	50.24	2093
	Total Hydro	1148	889	870	20.98	874
	<b>Total Punjab</b>	<b>3768</b>	<b>3283</b>	<b>2976</b>	<b>71.22</b>	<b>2968</b>
Haryana	Panipat TPS	1367	445	446	10.58	441
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0
	Faridabad GPS (NTPC)	432	289	295	7.23	301
	RGTPP (kheadar) (IPP)	1200	1019	1094	23.85	994
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1105	986	27.52	1147
	Thermal (Total)	4944	2858	2821	69.18	2883
	Total Hydro	62	25	27	0.69	29
	<b>Total Haryana</b>	<b>5006</b>	<b>2883</b>	<b>2848</b>	<b>69.87</b>	<b>2911</b>
	Rajasthan	kota TPS	1240	843	780	19.62
suratgarh TPS		1500	1056	926	23.18	966
Chabra TPS		500	196	195	5.00	208
Dholpur GPS		330	132	114	2.69	112
Ramgarh GPS		111	58	50	1.35	56
RAPS A (NPC)		300	180	180	3.96	165
Barsingsar (NLC)		250	74	83	1.85	77
Giral LTPS		250	35	0	0.52	22
Rajwest LTPS (IPP)		1080	527	456	11.89	496
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	0	382	3.50	146
Thermal (Total)		6956	3101	3166	73.56	3065
Total Hydro		550	156	206	5.55	231
Wind power		2191	880	887	19.71	821
Biomass		91	20	20	0.46	19
Solar		201	0	0	0.61	25
Renewable/Others (Total)		2483	900	907	20.77	866
<b>Total Rajasthan</b>		<b>9989</b>	<b>4157</b>	<b>4279</b>	<b>99.88</b>	<b>4162</b>
UP		Anpara TPS	1630	772	777	18.40
	Obra TPS	1288	317	318	8.00	333
	Paricha TPS	1140	796	810	18.10	754
	Panki TPS	210	59	63	0.50	21
	Harduaganj TPS	665	332	341	8.10	338
	Tanda TPS (NTPC)	440	390	388	9.62	401
	Roza TPS (IPP)	1200	738	734	17.76	740
	Anpara-C (IPP)	1200	818	810	19.02	792
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	203	203	4.61	192
	Thermal (Total)	8223	4425	4444	104.11	4338
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	211	211	4.69	195
	Cogeneration	981	40	40	1.00	42
	<b>Total UP</b>	<b>10131</b>	<b>4676</b>	<b>4695</b>	<b>109.81</b>	<b>4575</b>
	Uttarakhand	Total Hydro	1303	954	946	22.61
<b>Total Uttarakhand</b>		<b>1303</b>	<b>954</b>	<b>946</b>	<b>22.61</b>	<b>942</b>
Delhi	Raighat TPS	135	43	40	0.91	38
	Delhi Gas Turbine	282	102	80	2.11	88
	Pragati Gas Turbine	330	278	259	6.57	274
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	215	0	1.48	62
	Badarpur TPS (NTPC)	705	425	425	9.64	402
	Thermal (Total)	2232	1063	804	20.71	863
	<b>Total Delhi</b>	<b>2232</b>	<b>1063</b>	<b>804</b>	<b>20.71</b>	<b>863</b>
HP	Baspa HPS (IPP)	330	330	330	7.81	326
	Malana HPS (IPP)	86	72	56	1.50	63
	Other Hydro	589	587	590	14.06	586
	<b>Total HP</b>	<b>1005</b>	<b>989</b>	<b>976</b>	<b>23.38</b>	<b>974</b>
J & K	Baglihar HPS (IPP)	450	436	436	10.47	436
	Other Hydro	323	132	128	3.14	131
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>568</b>	<b>564</b>	<b>13.61</b>	<b>567</b>
<b>Total State Control Area Generation</b>		<b>34390</b>	<b>18573</b>	<b>18088</b>	<b>431.08</b>	<b>17962</b>
<b>J. Net Inter Regional Exchange</b> [Import (+ve)/Export (-ve)]			<b>3597</b>	<b>3115</b>	<b>72.85</b>	<b>3036</b>
<b>Total Regional Availability(Gross)</b>		<b>57226</b>	<b>41364</b>	<b>38958</b>	<b>929.91</b>	<b>38746</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	9708	9255	221.95	9248
State Control Area Hydro	5368	3792	3800	91.50	3813
<b>Total Regional Hydro</b>	<b>15731</b>	<b>13500</b>	<b>13055</b>	<b>313.46</b>	<b>13061</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	100	300	300	100	3.44	0.37	3.07
Gwalior-Agra (D/C)	1256	1215	1712	0	29.11	0.00	29.11
Zerda-Kankroli	-36	-187	0	277	0.00	3.51	-3.51
Zerda-Bhinmal	-67	-181	0	251	0.00	3.23	-3.23
Malanpur-Auraiya	-57	-43	0	86	0.00	0.96	-0.96
Badod-Kota/Morak	28	-86	50	120	0.00	1.03	-1.03
Mundra-Mohindergarh(HVDC)	1196	1099	1196	0	25.21	0.00	25.21
<b>Sub Total WR</b>	<b>2420</b>	<b>2117</b>			<b>57.76</b>	<b>9.11</b>	<b>48.65</b>
Pusauli Bypass	-195	-209	0	399	0.00	6.48	-6.48
MZP- GKP (D/C)	534	540	666	0	12.75	0.00	12.75
Patna-Balia(D/C)	304	317	401	0	6.62	0.00	6.62
B'Sharif-Balia (D/C)	232	226	319	0	5.02	0.00	5.02
Pusauli-Balia	38	26	68	0	0.73	0.00	0.73
Gaya-Fatehpur (765 Kv)	167	4	249	0	2.89	0.00	2.89
Pusauli-Sahupuri	132	132	178	0	3.47	0.00	3.47
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-38	0	45	0.00	0.80	-0.80
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>1177</b>	<b>998</b>			<b>31.48</b>	<b>7.28</b>	<b>24.20</b>
<b>Total IR Exch</b>	<b>3597</b>	<b>3115</b>			<b>89.24</b>	<b>16.39</b>	<b>72.85</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
27.96	3.73	31.68	-9.04	25.22	-4.46	-2.75	0.25	-0.22

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
18.44	62.64	81.09	24.20	48.65	72.85	5.76	-13.99	-8.23

**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	0.20	89.20	2.50	89.00	64.70	10.80

<----- 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)		
50.37	6.05	49.60	19.09	50.04	0.18	0.13	50.32	49.86

**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	412	07:13	400	00:37	0.0	0.0	0.0	0.0
Gorakhpur	400	425	06:40	401	02:12	1.1	1.1	7.6	0.0
Bareilly	400	416	06:30	399	02:11	0.0	0.0	0.0	0.0
Kanpur	400	416	06:30	394	14:19	0.0	0.0	0.0	0.0
Dadri	400	414	06:33	394	14:17	0.0	0.0	0.0	0.0
Ballabgarh	400	421	06:25	397	14:13	0.0	0.0	2.9	0.0
Bawana	400	415	06:05	393	14:17	0.0	0.0	0.0	0.0
Bassi	400	421	18:22	397	14:18	0.0	0.0	0.0	0.0
Hissar	400	406	06:30	385	14:17	0.0	1.5	0.0	0.0
Moga	400	407	16:41	392	14:15	0.0	0.0	0.0	0.0
Abdullapur	400	410	06:06	389	14:17	0.0	0.2	0.0	0.0
Nalagarh	400	408	19:51	390	14:17	0.0	0.0	0.0	0.0
Kishenpur	400	413	23:00	402	14:13	0.0	0.0	0.0	0.0
Wagoora	400	413	23:02	398	07:00	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	766	06:30	724	14:17	2.6	22.8	0.0	0.0
Balia	765	767	06:31	725	14:19	1.4	36.2	0.0	0.0
Moga	765	777	17:02	746	14:17	0.0	0.0	0.0	0.0
Agra	765	795	06:30	755	14:18	0.0	0.0	0.0	0.0
Bhiwani	765	788	06:30	769	02:10	0.0	0.0	0.0	0.0
Unnao	765	759	18:04	723	13:51	1.7	29.2	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	509.07	1500.16	492.61	817.99	1370.93	880.48
Pong	426.72	384.05	421.80	975.89	413.01	600.05	875.67	506.64
Tehri	829.79	740.04	819.40	998.00	818.65	982.26	478.00	559.00
Koteshwar	612.50	598.50	608.00	4.65	NA	NA	559.00	540.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	402.33	348.68
Rihand	268.22	252.98	259.32	268.30	261.52	390.05	NA	NA
RPS	352.80	343.81	352.03	NA	NA	NA	NA	38.06
Jawahar Sagar	298.70	295.78	297.48	NA	NA	NA	NA	243.27
RSD	527.91	487.91	524.27	144.00	505.63	144.00	539.86	409.77

\* NA: Not Available

**X. System Constraints:**

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

**XII. Weather Conditions For 26.08.2013 :**

1. Scattered Rain

**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.

Report for : 26.08.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER