

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.10.2011  
Date of Reporting : 27.10.2011

### I. Regional Availability/Demand:

Evening Peak (19:00 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
31233	579	31812	50.00	27432	1092	28524	50.02	677.1	22.89

\* Half hourly (two 15 minutes block--one block each before and after the designated time) average frequency

### II. A. State's Load Energy 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	51.17	9.82		61.00	40.08	44.84	4.76	105.84	5.40
Haryana	45.62	1.20		46.82	39.78	53.23	13.45	100.05	0.54
Rajasthan	84.29	2.56	5.34	92.19	32.80	34.95	2.15	127.14	4.90
Delhi	20.96			20.96	45.98	35.60	-10.38	56.56	0.00
UP	85.17	9.21	1.20	95.58	116.88	116.02	-0.86	211.60	9.75
Uttarakhand		13.10		13.10	11.99	10.47	-1.52	23.57	1.09
HP		9.01		9.01	10.07	7.40	-2.67	16.41	0.00
J & K		9.79	0.00	9.79	21.75	23.00	1.25	32.79	1.20
Chandigarh				0.00	3.71	3.12	-0.59	3.12	0.00
<b>Total</b>	<b>287.21</b>	<b>54.68</b>	<b>6.54</b>	<b>348.43</b>	<b>323.04</b>	<b>328.62</b>	<b>5.59</b>	<b>677.06</b>	<b>22.89</b>

\* Shortage furnished by the respective constituent.

### II. B. State's Demand Met in MWs:

State	Evening Peak (19:00 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	4221	300	-549	-285	4028	0	139	-205	-5.60
Haryana	4677	119	336	104	3743	0	550	87	1.94
Rajasthan	5273	0	-191	-170	5261	442	88	-170	-4.08
Delhi	3046	0	-329	75	2068	0	-157	117	0.78
UP	10324	0	1203	743	9389	650	287	843	18.62
Uttarakhand	1193	160	-36	50	999	0	77	50	1.20
HP	808	0	-155	-622	662	0	76	30	-2.06
J&K	1523	0	-61	72	1179	0	119	21	1.47
Chandigarh	168	0	-27	18	103	0	-9	18	0.43
<b>Total</b>	<b>31233</b>	<b>579</b>	<b>191</b>	<b>-15</b>	<b>27432</b>	<b>1092</b>	<b>1170</b>	<b>791</b>	<b>12.69</b>

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

### III. Regional Entities :

A. NTPC	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
	Singrauli STPS	2000	1870	2015	2007	43.77	1824	44.88	-1.11
	Rihand I STPS	1000	960	1038	1048	23.06	961	23.00	0.06
	Rihand II STPS	1000	970	1033	1034	23.31	971	23.20	0.11
	Dadri I STPS	840	767	810	634	14.52	605	14.86	-0.34
	Dadri II STPS	980	917	923	765	18.40	767	18.63	-0.24
	Unchahar I TPS	440	385	416	414	9.00	375	9.19	-0.20
	Unchahar II TPS	440	385	412	421	8.98	374	9.13	-0.15
	Unchahar III TPS	210	193	217	210	4.54	189	4.59	-0.05
	ISTPP (Jhajihar)	500	470	484	493	11.08	462	11.18	-0.10
	Dadri GPS	830	805	739	636	14.88	620	15.04	-0.15
	Anta GPS	419	389	339	269	7.11	296	7.04	0.07
	Auraiya GPS	663	619	558	469	11.43	476	11.40	0.04
	<b>Sub Total (A)</b>	<b>9322</b>	<b>8730</b>	<b>8984</b>	<b>8400</b>	<b>190.07</b>	<b>7920</b>	<b>192.14</b>	<b>-2.07</b>
B. NPC	NAPS	440	195	232	235	4.76	198	4.68	0.08
	RAPS- B	440	407	454	456	9.77	407	9.77	0.00
	RAPS- C	440	420	479	475	10.20	425	10.08	0.12
	<b>Sub Total (B)</b>	<b>1320</b>	<b>1022</b>	<b>1165</b>	<b>1166</b>	<b>24.73</b>	<b>1030</b>	<b>24.53</b>	<b>0.20</b>
C. NHPC	Chamera I HPS	540	534	540	0	4.15	173	4.19	-0.04
	Chamera II HPS	300	297	211	21	2.13	89	2.52	-0.39
	Bairasuil HPS	180	179	179	0	0.77	32	0.95	-0.17
	Salal-HPS	690	225	321	217	4.82	201	5.40	-0.58
	Tanakpur-HPS	94	63	70	68	1.53	64	1.56	-0.02
	Uri-HPS	480	214	145	84	3.80	158	4.92	-1.12
	Dhauliganga-HPS	280	277	279	0	2.13	89	2.42	-0.29
	Dulhasti-HPS	390	388	303	0	5.42	226	6.60	-1.18
	Sewa-II HPS	120	119	100	0	0.58	24	0.62	-0.04
	<b>Sub Total (C)</b>	<b>3074</b>	<b>2295</b>	<b>2148</b>	<b>390</b>	<b>25.33</b>	<b>1055</b>	<b>29.17</b>	<b>-3.84</b>
D. NJPC	Nathpa Jhakri	1500	1600	1583	0	12.88	537	13.54	-0.66
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1583</b>	<b>0</b>	<b>12.88</b>	<b>537</b>	<b>13.54</b>	<b>-0.66</b>
E. THDC	Tehri HPS	1000	1050	1050	0	9.86	411	10.00	-0.14
	Koteshwar HPS	100	187	187	91	3.51	146	3.60	-0.09
	<b>Sub Total (E)</b>	<b>1100</b>	<b>1237</b>	<b>1237</b>	<b>91</b>	<b>13.37</b>	<b>557</b>	<b>13.60</b>	<b>-0.23</b>
F. BBMB	Bhakra HPS	1480	525	1080	393	13.19	550	12.59	0.60
	Dehar HPS	990	233	495	155	5.69	237	5.60	0.09
	Pong HPS	396	288	306	306	7.16	298	6.90	0.26
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1046</b>	<b>1881</b>	<b>854</b>	<b>26.04</b>	<b>1085</b>	<b>25.09</b>	<b>0.95</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.63	26	0.69	-0.07
	KWHEP HPS(IPP)	1000	0	655	212	7.02	293	7.21	-0.19
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	0	0	0.00	0	2.44	-2.44
	<b>Sub Total (G)</b>	<b>1442</b>	<b>0</b>	<b>655.42</b>	<b>212</b>	<b>7.65</b>	<b>319</b>	<b>10.34</b>	<b>-2.69</b>
<b>H. Total Regional Entities (A-G)</b>		<b>20625</b>	<b>15930</b>	<b>17653</b>	<b>11113</b>	<b>300.06</b>	<b>12503</b>	<b>308.41</b>	<b>-8.34</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	1050.00	1050.00	23.48	978
	Guru Nanak Dev TPS(Bhatinda)	440	297.00	297.00	6.27	261
	Guru Hargobind Singh TPS(L.mbt)	920	967.00	954.00	21.43	893
	Thermal (Total)	2620	2314.00	2301.00	51.17	2132
	Total Hydro	1148	323.00	281.00	9.82	409
<b>Total Punjab</b>	<b>3768</b>	<b>2637</b>	<b>2582</b>	<b>61.00</b>	<b>2542</b>	
Haryana	Panipat TPS	1360	987.00	958.00	23.66	986
	DCRTPP (Yamuna nagar)	600	0.00	0.00	0.00	0
	Faridabad GPS (NTPC)	432	390.00	400.00	9.85	410
	RGTPP (khedar) (IPP)	1200	469.00	435.00	12.10	504
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0
	Thermal (Total)	3617	1846.00	1793.00	45.62	1901
	Total Hydro	62	38.00	48.00	1.20	50
	<b>Total Haryana</b>	<b>3679</b>	<b>1884</b>	<b>1841</b>	<b>46.82</b>	<b>1951</b>
Rajasthan	kota TPS	1240	1166.00	1170.00	27.05	1127
	suratgarh TPS	1500	1116.00	1149.00	26.43	1101
	Chabra TPS	500	401.00	413.00	9.85	410
	Dholpur GPS	330	286.00	280.00	6.79	283
	Ramgarh GPS	113	65.00	65.00	1.64	68
	RAPS A (NPC)	300	174.00	173.00	4.32	180
	Barsingsar (NLC)	250	77.00	128.00	2.18	91
	Giral LTPS (IPP)	250	0.00	83.00	0.36	15
	Rajwest LTPS (IPP)	135	241.00	247.00	5.67	236
	VSLP LTPS (IPP)	135	0.00	0.00	0.00	0
	Thermal (Total)	4753	3526.00	3708.00	84.29	3512
	Total Hydro	550	123.00	126.00	2.56	107
	Wind power	1294	231.00	217.00	4.80	200
	Biomass	71	21.00	21.00	0.55	23
	Renewable/Others (Total)	1365	252	238	5.34	223
	<b>Total Rajasthan</b>	<b>6668</b>	<b>3901</b>	<b>4072</b>	<b>92.19</b>	<b>3841</b>
	UP	Anpara TPS	1630	1393	1349	32.40
Obra TPS		1442	619	599	14.50	604
Paricha TPS		640	377	366	8.70	363
Panki TPS		210	131	122	3.30	138
Harduaganj TPS		375	32	197	4.00	167
Tanda TPS (NTPC)		440	353	394	9.30	388
Roza TPS (IPP)		600	279	276	6.68	278
Anpara-C (IPP)		600	261	247	6.29	262
Thermal (Total)		5937	3445	3550	85.17	3549
Vishnuparyag HPS (IPP)		400	188	183	4.38	182
Other Hydro		527	292	0	4.83	201
Cogeneration		951	50	50	1.20	50
<b>Total UP</b>		<b>7815</b>	<b>3975</b>	<b>3783</b>	<b>95.58</b>	<b>3800</b>
Uttarakhand	Total Hydro	1303	591	533	13.10	546
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>591</b>	<b>533</b>	<b>13.10</b>	<b>546</b>
Delhi	Rajghat TPS	135	100	107	2.46	102
	Delhi Gas Turbine	282	171	154	3.87	161
	Pragati Gas Turbine	330	304	310	7.30	304
	Rithala GPS	108	28	29	0.63	26
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	295	395	6.71	280
	Thermal (Total)	2000	898	995	20.96	873
	<b>Total Delhi</b>	<b>2000</b>	<b>898</b>	<b>995</b>	<b>20.96</b>	<b>873</b>
HP	Baspa HPS (IPP)	330	192	105	2.18	91
	Malana HPS (IPP)	101	4	0	0.47	19
	Other Hydro	571	285	224	6.36	265
	<b>Total HP</b>	<b>1002</b>	<b>481</b>	<b>329</b>	<b>9</b>	<b>375</b>
J & K	Baglihar HPS (IPP)	450	254	253	6.09	254
	Other Hydro	323	130	161	3.70	154
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>384</b>	<b>414</b>	<b>9.79</b>	<b>408</b>
<b>Total State Control Area Generation</b>		<b>27191</b>	<b>14751</b>	<b>14549</b>	<b>348.43</b>	<b>14336</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1772</b>	<b>2625</b>	<b>52.03</b>	<b>2168</b>
<b>Total Regional Availability(Gross)</b>		<b>47816</b>	<b>34176</b>	<b>28287</b>	<b>700.53</b>	<b>29006</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	9983	7504	1547	85.26	3553
State Control Area Hydro	5365	2232	1731	50.30	2096
<b>Total Regional Hydro</b>	<b>15347</b>	<b>9736</b>	<b>3278</b>	<b>135.56</b>	<b>5649</b>

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

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	-500	-100	0	500	0.00	5.23	-5.23
Gwalior-Agra (D/C)	916	897	1315	0	22.35	0.00	22.35
Zerda-Kankroli	13	-55	138	141	0.00	0.67	-0.67
Zerda-Bhinmal	37	15	231	120	0.92	0.00	0.92
Malanpur-Auraiya	-49	-40	41	72	0.00	1.03	-1.03
Badod-Kota/Morak	-22	-34	0	80	0.00	0.92	-0.92
<b>Sub Total WR</b>	<b>395</b>	<b>683</b>			<b>23.27</b>	<b>7.85</b>	<b>15.42</b>
Pusauli Bypass	-96	7	36	164	0.12	1.14	-1.02
MZP- GKP (D/C)	770	808	858	0	16.60	0.00	16.60
Patna-Balia(D/C)	264	229	336	0	5.23	0.00	5.23
B'Sharif-Balia (D/C)	300	273	323	0	6.14	0.00	6.14
Barh - balia(D/C)	0	504	504	0	6.41	0.00	6.41
Pusauli-Sahupuri	171	160	173	0	3.64	0.00	3.64
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-39	0	40	0.00	0.40	-0.40
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1377</b>	<b>1942</b>			<b>38.15</b>	<b>1.54</b>	<b>36.61</b>
<b>Total IR Exch</b>	<b>1772</b>	<b>2625</b>			<b>61.42</b>	<b>9.39</b>	<b>52.03</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
18.82	1.60	20.43	0.37	11.83	0.38	2.64	0.00	0.00

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
21.17	8.63	29.80	36.61	15.42	52.03	15.44	6.79	22.23

**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	1.10	6.40	90.00	84.70	38.70	8.90

<----- 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				
50.63	16.08	49.27	18.12	49.96	0.36	0.19	50.53	49.62

**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	412	16:06	397	18:08	0.0	0.0	0.0	0.0
Gorakhpur	400	434	15:11	397	18:57	0.0	0.0	33.5	6.0
Bareilly	400	427	16:11	392	18:09	0.0	0.0	4.4	0.0
Kanpur	400	419	16:08	396	18:11	0.0	0.0	0.0	0.0
Dadri	400	417	16:07	398	18:12	0.0	0.0	0.0	0.0
Ballabgarh	400	422	16:09	401	18:13	0.0	0.0	0.4	0.0
Bawana	400	420	16:07	401	18:10	0.0	0.0	0.0	0.0
Bassi	400	429	16:04	400	09:24	0.0	0.0	22.3	0.0
Hissar	400	412	03:01	392	09:25	0.0	0.0	0.0	0.0
Moga	400	420	03:03	391	09:25	0.0	0.0	0.0	0.0
Abdullapur	400	421	03:01	401	19:02	0.0	0.0	0.6	0.0
Nalagarh	400	429	03:03	410	09:11	0.0	0.0	39.4	0.0
Kishenpur	400	421	03:46	392	09:22	0.0	0.0	0.2	0.0
Wagoora	400	408	03:44	373	20:23	17.4	55.6	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	510.25	1560.04	512.05	1650.57	290.93	346.03
Pong	426.72	384.05	421.85	975.89	423.34	1051.02	75.12	327.85
Tehri	829.79	740.04	818.30	968.26	NA	NA	107.41	222.00
Koteshwar	612.50	598.50	607.60	3.54	NA	NA	222.00	159.00
Chamera-I	760.00	748.75	753.08	NA	751.84	NA	99.87	75.24
Rihand	268.22	252.98	NA	NA	258.04	208.70	NA	NA
RPS	352.80	343.81	350.56	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.55	NA	NA	NA	NA	NA
RSD	527.91	487.91	521.82	NA	521.99	NA	126.58	230.24

**IX. System Constraints:**

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

**XI. Weather Conditions For 26.10.2011 :**

Normal weather

**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 : 26.10.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER