

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 25.10.2011  
Date of Reporting : 26.10.2011

### 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
31662	2194	33856	50.00	26974	1054	28028	50.02	691.7	47.32

\* 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	51.82	10.86		62.68	40.06	41.32	1.27	104.00	5.40
Haryana	50.04	1.23		51.27	38.48	49.76	11.28	101.02	7.01
Rajasthan	88.95	3.45	4.95	97.34	30.90	33.85	2.95	131.19	10.90
Delhi	23.28			23.28	52.83	45.02	-7.81	68.30	0.00
UP	84.13	8.80	1.20	94.12	112.49	110.98	-1.51	205.10	20.54
Uttarakhand		13.10		13.10	11.11	13.62	2.50	26.72	1.67
HP		9.15		9.15	12.21	12.12	-0.09	21.27	0.00
J & K		9.79	0.00	9.79	18.50	20.75	2.25	30.54	1.80
Chandigarh				0.00	4.22	3.61	-0.61	3.61	0.00
<b>Total</b>	<b>298.22</b>	<b>56.37</b>	<b>6.15</b>	<b>360.73</b>	<b>320.79</b>	<b>331.01</b>	<b>10.22</b>	<b>691.74</b>	<b>47.32</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	4720	350	87	-285	4105	0	147	-205	-4.40
Haryana	4740	550	544	305	3861	0	383	87	2.75
Rajasthan	5734	184	202	-169	5084	404	-141	-169	-4.06
Delhi	3361	0	-273	75	2083	0	-63	117	1.05
UP	8990	950	69	743	8926	650	252	843	18.62
Uttarakhand	1341	160	107	49	1030	0	165	49	1.18
HP	1036	0	-61	-622	738	0	24	30	-2.06
J&K	1552	0	116	-29	1042	0	62	21	-1.14
Chandigarh	188	0	-66	18	105	0	-6	18	0.43
<b>Total</b>	<b>31662</b>	<b>2194</b>	<b>725</b>	<b>85</b>	<b>26974</b>	<b>1054</b>	<b>823</b>	<b>791</b>	<b>12.36</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	1778	2020	1808	43.22	1801	42.67	0.55
	Rihand I STPS	1000	960	1049	1047	23.24	968	23.04	0.20
	Rihand II STPS	1000	970	1036	1038	23.47	978	23.28	0.19
	Dadri I STPS	840	678	832	607	16.31	679	16.26	0.05
	Dadri II STPS	980	808	959	680	19.37	807	19.36	0.01
	Unchahar I TPS	440	375	420	390	9.08	378	8.99	0.09
	Unchahar II TPS	440	385	432	416	9.26	386	9.24	0.03
	Unchahar III TPS	210	193	224	214	4.66	194	4.63	0.02
	ISTPP (Jhajihar)	500	470	503	459	11.09	462	11.22	-0.13
	Dadri GPS	830	804	728	648	17.11	713	17.53	-0.42
	Anta GPS	419	390	389	262	8.00	333	7.92	0.08
	Auraiya GPS	663	618	574	531	13.38	558	13.55	-0.17
	<b>Sub Total (A)</b>	<b>9322</b>	<b>8428</b>	<b>9166</b>	<b>8100</b>	<b>198.19</b>	<b>8258</b>	<b>197.69</b>	<b>0.49</b>
	B. NPC	NAPS	440	195	234	232	4.70	196	4.68
RAPS- B		440	409	446	450	9.78	408	9.82	-0.04
RAPS- C		440	420	476	475	10.24	427	10.08	0.16
<b>Sub Total (B)</b>		<b>1320</b>	<b>1024</b>	<b>1156</b>	<b>1157</b>	<b>24.72</b>	<b>1030</b>	<b>24.58</b>	<b>0.14</b>
C. NHPC		Chamera I HPS	540	534	540	0	2.37	99	2.54
	Chamera II HPS	300	297	297	51	2.54	106	2.54	0.00
	Bairasuil HPS	180	179	179	0	0.95	40	0.98	-0.03
	Salal-HPS	690	213	230	212	4.91	205	5.10	-0.19
	Tanakpur-HPS	94	60	70	63	1.58	66	1.56	0.02
	Uri-HPS	480	190	212	208	4.57	190	4.77	-0.20
	Dhauliganga-HPS	280	277	278	0	2.25	94	2.32	-0.07
	Dulhasti-HPS	390	387	404	0	5.81	242	6.24	-0.43
	Sewa-II HPS	120	119	103	0	0.49	20	0.53	-0.04
	<b>Sub Total (C)</b>	<b>3074</b>	<b>2254</b>	<b>2313</b>	<b>534</b>	<b>25.46</b>	<b>1061</b>	<b>26.57</b>	<b>-1.11</b>
D.NJPC	Nathpa Jhakri	1500	1600	1584	0	13.65	569	14.00	-0.35
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1600</b>	<b>1584</b>	<b>0</b>	<b>13.65</b>	<b>569</b>	<b>14.00</b>	<b>-0.35</b>
E. THDC	Tehri HPS	1000	1050	1049	0	10.01	417	10.00	0.00
	Koteshwar HPS	100	81	188	92	2.77	115	0.60	2.17
	<b>Sub Total (E)</b>	<b>1100</b>	<b>1131</b>	<b>1237</b>	<b>92</b>	<b>12.77</b>	<b>532</b>	<b>10.60</b>	<b>2.17</b>
F. BBMB	Bhakra HPS	1480	539	1080	390	13.36	557	12.93	0.43
	Dehar HPS	990	263	495	165	6.23	260	6.32	-0.09
	Pong HPS	396	280	306	306	6.94	289	6.71	0.23
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1082</b>	<b>1881</b>	<b>861</b>	<b>26.53</b>	<b>1105</b>	<b>25.96</b>	<b>0.57</b>
	G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	63	0	0.64	27	0.69
KWHEP HPS(IPP)		1000	0	700	220	7.38	307	7.46	-0.09
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	1.22	-1.22
<b>Sub Total (G)</b>		<b>1442</b>	<b>0</b>	<b>763</b>	<b>220</b>	<b>8.01</b>	<b>334</b>	<b>9.37</b>	<b>-1.36</b>
<b>H. Total Regional Entities (A-G)</b>	<b>20625</b>	<b>15519</b>	<b>18100</b>	<b>10964</b>	<b>309.33</b>	<b>12889</b>	<b>308.78</b>	<b>0.55</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	23.52	980
	Guru Nanak Dev TPS(Bhatinda)	440	297.00	297.00	6.82	284
	Guru Hargobind Singh TPS(L.mbt)	920	963.00	971.00	21.48	895
	Thermal (Total)	2620	2310.00	2318.00	51.82	2159
	Total Hydro	1148	326.00	284.00	10.86	452
	<b>Total Punjab</b>	<b>3768</b>	<b>2636</b>	<b>2602</b>	<b>62.68</b>	<b>2612</b>
Haryana	Panipat TPS	1360	1148.00	1134.00	27.20	1133
	DCRTPP (Yamuna nagar)	600	0.00	240.00	2.19	91
	Faridabad GPS (NTPC)	432	391.00	297.00	9.06	377
	RGTPP (khedar) (IPP)	1200	449.00	439.00	11.59	483
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0
	Thermal (Total)	3617	1988.00	2110.00	50.04	2085
	Total Hydro	62	47.00	47.00	1.23	51
	<b>Total Haryana</b>	<b>3679</b>	<b>2035</b>	<b>2157</b>	<b>51.27</b>	<b>2136</b>
Rajasthan	kota TPS	1240	1175.00	1171.00	27.72	1155
	suratgarh TPS	1500	1172.00	1160.00	27.19	1133
	Chabra TPS	500	413.00	407.00	10.24	427
	Dholpur GPS	330	280.00	287.00	6.83	285
	Ramgarh GPS	113	65.00	65.00	1.62	68
	RAPS A (NPC)	300	173.00	174.00	4.32	180
	Barsingsar (NLC)	250	128.00	135.00	3.18	133
	Giral LTPS (IPP)	250	83.00	95.00	2.19	91
	Rajwest LTPS (IPP)	135	221.00	235.00	5.65	236
	VSLP LTPS (IPP)	135	0.00	0.00	0.00	0
	Thermal (Total)	4753	3710.00	3729.00	88.95	3706
	Total Hydro	550	151.00	159.00	3.45	144
	Wind power	1294	93.00	242.00	4.36	182
	Biomass	71	24.00	24.00	0.58	24
	Renewable/Others (Total)	1365	117	266	4.95	206
	<b>Total Rajasthan</b>	<b>6668</b>	<b>3978</b>	<b>4154</b>	<b>97.34</b>	<b>4056</b>
	UP	Anpara TPS	1630	1401	1378	33.70
Obra TPS		1442	597	619	14.30	596
Paricha TPS		640	368	367	8.70	363
Panki TPS		210	50	0	0.40	17
Harduaganj TPS		375	237	179	5.00	208
Tanda TPS (NTPC)		440	391	395	9.57	399
Roza TPS (IPP)		600	284	266	6.67	278
Anpara-C (IPP)		600	271	270	5.79	241
Thermal (Total)		5937	3599	3474	84.13	3505
Vishnuparyag HPS (IPP)		400	193	189	4.47	186
Other Hydro		527	250	0	4.33	180
Cogeneration		951	50	50	1.20	50
<b>Total UP</b>		<b>7815</b>	<b>4092</b>	<b>3713</b>	<b>94.12</b>	<b>3736</b>
Uttarakhand		Total Hydro	1303	317	522	13.10
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>317</b>	<b>522</b>	<b>13.10</b>	<b>546</b>
Delhi	Rajghat TPS	135	104	100	2.43	101
	Delhi Gas Turbine	282	176	112	3.48	145
	Pragati Gas Turbine	330	301	310	7.31	305
	Rithala GPS	108	24	29	0.59	25
	Bawana GPS	440	175	30	2.84	118
	Badarpur TPS (NTPC)	705	320	310	6.64	277
	Thermal (Total)	2000	1100	889	23.28	970
	<b>Total Delhi</b>	<b>2000</b>	<b>1100</b>	<b>889</b>	<b>23.28</b>	<b>970</b>
HP	Baspa HPS (IPP)	330	95	29	2.20	92
	Malana HPS (IPP)	101	2	0	0.46	19
	Other Hydro	571	349	224	6.49	270
	<b>Total HP</b>	<b>1002</b>	<b>446</b>	<b>253</b>	<b>9</b>	<b>381</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>14988</b>	<b>14704</b>	<b>360.73</b>	<b>14844</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>877</b>	<b>2450</b>	<b>43.04</b>	<b>1793</b>
<b>Total Regional Availability(Gross)</b>		<b>47816</b>	<b>33965</b>	<b>28118</b>	<b>713.10</b>	<b>29526</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	9983	7778	1707	86.43	3601
State Control Area Hydro	5365	1921	1679	51.90	2163
<b>Total Regional Hydro</b>	<b>15347</b>	<b>9699</b>	<b>3386</b>	<b>138.33</b>	<b>5764</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	-200	-300	100	500	0.12	5.68	-5.55
Gwalior-Agra (D/C)	493	973	1170	0	19.60	0.00	19.60
Zerda-Kankroli	-78	-102	0	214	0.00	2.14	-2.14
Zerda-Bhinmal	-29	-50	99	167	0.00	0.64	-0.64
Malanpur-Auraiya	-145	-36	0	159	0.00	1.63	-1.63
Badod-Kota/Morak	-50	-91	0	105	0.00	1.74	-1.74
<b>Sub Total WR</b>	<b>-9</b>	<b>394</b>			<b>19.72</b>	<b>11.82</b>	<b>7.90</b>
Pusauli Bypass	-172	95	95	298	0.41	3.68	-3.27
MZP- GKP (D/C)	426	958	958	0	17.11	0.00	17.11
Patna-Balia(D/C)	168	475	503	0	7.87	0.00	7.87
B'Sharif-Balia (D/C)	142	423	488	0	7.79	0.00	7.79
Barh - balia(D/C)	193	0	416	0	3.31	0.00	3.31
Pusauli-Sahupuri	161	144	185	0	3.22	0.00	3.22
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-39	0	40	0.00	0.88	-0.88
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>886</b>	<b>2056</b>			<b>39.71</b>	<b>4.56</b>	<b>35.14</b>
<b>Total IR Exch</b>	<b>877</b>	<b>2450</b>			<b>59.42</b>	<b>16.39</b>	<b>43.04</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
20.24	1.67	21.91	2.27	11.51	-3.03	0.10	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
21.15	5.94	27.09	35.14	7.90	43.04	13.99	1.96	15.95

**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	0.20	2.10	19.90	96.20	78.40	16.00	1.70

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				
50.51	16.05	49.01	18.12	49.84	0.17	0.54	50.29	49.64

**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	411	07:07	400	12:49	0.0	0.0	0.0	0.0
Gorakhpur	400	433	17:06	407	19:43	0.0	0.0	34.0	1.2
Bareilly	400	422	17:06	397	18:11	0.0	0.0	0.2	0.0
Kanpur	400	415	17:03	397	18:10	0.0	0.0	0.0	0.0
Dadri	400	414	02:49	396	12:13	0.0	0.0	0.0	0.0
Ballabgarh	400	417	06:03	397	12:14	0.0	0.0	0.0	0.0
Bawana	400	418	06:04	398	12:16	0.0	0.0	0.0	0.0
Bassi	400	425	02:11	401	08:12	0.0	0.0	8.2	0.0
Hissar	400	411	02:46	389	12:16	0.0	0.2	0.0	0.0
Moga	400	420	02:20	396	12:16	0.0	0.0	0.0	0.0
Abdullapur	400	421	06:04	397	12:12	0.0	0.0	0.1	0.0
Nalagarh	400	430	02:46	403	12:16	0.0	0.0	22.0	0.0
Kishenpur	400	424	02:39	394	18:57	0.0	0.0	8.6	0.0
Wagoora	400	401	13:03	371	19:01	22.3	49.0	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 (m³/s)	Usage (m³/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 25.10.2011 :**

Normal weather

**XII. Synchronisation of new generating units :**

1. Koteswar (THDC) # 2 COD wef 00.00 hrs/ 26.10.2010.

**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 : 25.10.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER