

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.01.2012  
Date of Reporting : 21.01.2012

### 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
32198	2919	35117	49.84	24651	650	25301	50.16	693.1	48.80

\* 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	44.39	9.42		53.81	30.18	31.13	0.95	84.94	4.86
Haryana	65.60	0.69		66.29	24.54	27.84	3.30	94.13	4.50
Rajasthan	90.46	4.22	8.79	103.47	48.25	58.17	9.92	161.64	4.95
Delhi	29.40			29.40	41.25	39.59	-1.66	68.98	0.43
UP	89.44	5.52	15.60	110.56	85.96	80.55	-5.40	191.11	32.17
Uttarakhand		7.45		7.45	20.26	23.29	3.04	30.74	0.00
HP		4.27		4.27	20.77	19.08	-1.69	23.34	0.00
J & K		4.96	0.00	4.96	25.36	29.56	4.21	34.52	1.90
Chandigarh				0.00	3.59	3.73	0.14	3.73	0.00
<b>Total</b>	<b>319.28</b>	<b>36.52</b>	<b>24.39</b>	<b>380.20</b>	<b>300.15</b>	<b>312.95</b>	<b>12.80</b>	<b>693.14</b>	<b>48.80</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 (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	4403	600	134	-333	2845	0	-108	-481	-7.41
Haryana	4764	574	602	-201	3272	0	-35	-201	-4.49
Rajasthan	7071	217	614	160	6515	0	541	285	8.28
Delhi	3527	38	64	-25	1554	0	-69	-340	-3.13
UP	8003	1390	-1026	265	7291	650	-167	265	6.36
Uttarakhand	1591	0	156	450	1071	0	63	450	10.80
HP	1113	0	-318	-38	711	0	-24	405	6.30
J&K	1523	100	-123	301	1298	0	187	296	6.59
Chandigarh	203	0	-12	0	94	0	-4	-30	-0.24
<b>Total</b>	<b>32198</b>	<b>2919</b>	<b>91</b>	<b>577</b>	<b>24651</b>	<b>650</b>	<b>384</b>	<b>648</b>	<b>23.07</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	1760	1890	1894	42.67	1778	42.24	0.43
	Rihand I STPS	1000	800	881	659	19.23	801	18.72	0.50
	Rihand II STPS	1000	977	1045	918	23.22	968	23.01	0.21
	Dadri I STPS	840	793	860	637	17.73	739	17.68	0.05
	Dadri II STPS	980	944	1010	823	21.20	883	22.42	-1.22
	Unchahar I TPS	440	385	415	365	8.95	373	8.87	0.08
	Unchahar II TPS	440	384	423	315	8.77	366	8.59	0.18
	Unchahar III TPS	210	192	209	154	4.36	181	4.29	0.06
	ISTPP (Jhajjar)	1000	475	490	504	10.75	448	10.77	-0.02
	Dadri GPS	830	846	727	522	16.17	674	16.57	-0.40
	Anta GPS	419	433	314	268	7.91	330	7.70	0.21
	Auraiya GPS	663	661	326	304	7.35	306	8.00	-0.65
	<b>Sub Total (A)</b>	<b>9822</b>	<b>8650</b>	<b>8590</b>	<b>7363</b>	<b>188.31</b>	<b>7846</b>	<b>188.86</b>	<b>-0.55</b>
	B. NPC	NAPS	440	139	141	144	2.85	119	3.33
RAPS- B		440	425	472	474	10.20	425	10.20	0.00
RAPS- C		440	420	469	472	10.12	422	10.08	0.04
<b>Sub Total (B)</b>		<b>1320</b>	<b>984</b>	<b>1082</b>	<b>1090</b>	<b>23.17</b>	<b>965</b>	<b>23.61</b>	<b>-0.44</b>
C. NHPC	Chamera I HPS	540	356	180	0	1.97	82	1.98	-0.01
	Chamera II HPS	300	297	276	0	1.23	51	1.23	0.00
	Bairasuil HPS	180	179	179	0	0.63	26	0.62	0.01
	Salal-HPS	690	146	313	204	3.95	165	3.16	0.79
	Tanakpur-HPS	94	30	30	25	0.66	28	0.68	-0.02
	Uri-HPS	480	115	237	51	2.89	121	2.72	0.17
	Dhauliganga-HPS	280	210	137	0	1.00	42	0.98	0.02
	Dulhasti-HPS	390	388	269	0	2.60	109	1.85	0.75
	Sewa-II HPS	120	119	122	0	0.94	39	0.92	0.02
	<b>Sub Total (C)</b>	<b>3074</b>	<b>1839</b>	<b>1743</b>	<b>280</b>	<b>15.87</b>	<b>661</b>	<b>14.14</b>	<b>1.73</b>
D. NJPC	Nathpa Jhakri	1500	1069	1360	0	6.89	287	6.85	0.04
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1069</b>	<b>1360</b>	<b>0</b>	<b>6.89</b>	<b>287</b>	<b>6.85</b>	<b>0.04</b>
E. THDC	Tehri HPS	1000	1000	993	0	8.43	351	8.50	-0.07
	Koteshwar HPS	200	119	202	0	2.81	117	2.80	0.01
	<b>Sub Total (E)</b>	<b>1200</b>	<b>1119</b>	<b>1195</b>	<b>0</b>	<b>11.24</b>	<b>468</b>	<b>11.30</b>	<b>-0.06</b>
F. BBMB	Bhakra HPS	1480	679	945	572	16.73	697	16.31	0.42
	Dehar HPS	990	135	495	0	3.39	141	3.24	0.15
	Pong HPS	396	116	246	0	2.96	123	2.79	0.17
	<b>Sub Total (F)</b>	<b>2866</b>	<b>931</b>	<b>1686</b>	<b>572</b>	<b>23.08</b>	<b>962</b>	<b>22.33</b>	<b>0.75</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.30	12	0.28	0.02
	KWHEP HPS(IPP)	1000	0	220	0	3.89	162	3.84	0.05
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	146	143	3.45	144	3.45	0.00
	<b>Sub Total (G)</b>	<b>1442</b>	<b>0</b>	<b>366</b>	<b>143</b>	<b>7.64</b>	<b>318</b>	<b>7.56</b>	<b>0.07</b>
<b>H. Total Regional Entities (A-G)</b>	<b>21225</b>	<b>14590</b>	<b>16022</b>	<b>9448</b>	<b>276.19</b>	<b>11508</b>	<b>274.66</b>	<b>1.54</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	840	740	18.60	775	
	Guru Nanak Dev TPS(Bhatinda)	440	216	216	4.66	194	
	Guru Hargobind Singh TPS(L.mbt)	920	964	853	21.12	880	
	Thermal (Total)	2620	2020	1809	44.39	1850	
	Total Hydro	1148	512	184	9.42	393	
	<b>Total Punjab</b>	<b>3768</b>	<b>2532</b>	<b>1993</b>	<b>53.81</b>	<b>2242</b>	
Haryana	Panipat TPS	1360	977	962	23.55	981	
	DCRTPP (Yamuna nagar)	600	270	268	6.57	274	
	Faridabad GPS (NTPC)	432	439	285	9.38	391	
	RGTPP (khedar) (IPP)	1200	1080	979	26.10	1087	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	660	0	0	0.00	0	
	Thermal (Total)	4277	2766	2494	65.60	2733	
	Total Hydro	62	16	23	0.69	29	
	<b>Total Haryana</b>	<b>4339</b>	<b>2782</b>	<b>2517</b>	<b>66.29</b>	<b>2762</b>	
	Rajasthan	kota TPS	1240	982	987	23.10	962
suratgarh TPS		1500	1392	1345	32.40	1350	
Chabra TPS		500	374	437	9.02	376	
Dholpur GPS		330	230	235	5.48	228	
Ramgarh GPS		113	39	42	1.07	44	
RAPS A (NPC)		300	182	183	4.56	190	
Barsingsar (NLC)		250	156	150	4.33	180	
Giral LTPS (IPP)		250	90	90	1.23	51	
Rajwest LTPS (IPP)		540	375	360	9.29	387	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5158	3820	3829	90.46	3769	
Total Hydro		550	144	168	4.22	176	
Wind power		1294	98	209	3.64	152	
Biomass		71	39	39	0.94	39	
Solar		50	0	0	0.00	0	
Renewable/Others (Total)		1365	137	248	8.79	366	
<b>Total Rajasthan</b>		<b>7073</b>	<b>4101</b>	<b>4245</b>	<b>103.47</b>	<b>4311</b>	
UP		Anpara TPS	1630	1414	1337	32.70	1363
		Obra TPS	1442	446	452	10.70	446
		Paricha TPS	640	203	193	4.70	196
	Panki TPS	210	180	153	4.10	171	
	Harduaganj TPS	415	266	267	6.30	263	
	Tanda TPS (NTPC)	440	404	360	9.65	402	
	Roza TPS (IPP)	900	446	396	10.50	438	
	Anpara-C (IPP)	1200	365	253	7.35	306	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	100	164	3.44	143	
	Thermal (Total)	7057	3824	3575	89.44	3727	
	Vishnuparyag HPS (IPP)	400	79	79	1.87	78	
	Other Hydro	527	263	0	3.65	152	
	Cogeneration	951	650	650	15.60	650	
	<b>Total UP</b>	<b>8935</b>	<b>4816</b>	<b>4304</b>	<b>110.56</b>	<b>4529</b>	
	Uttarakhand	Total Hydro	1303	431	228	7.45	310
<b>Total Uttarakhand</b>		<b>1303</b>	<b>431</b>	<b>228</b>	<b>7.45</b>	<b>310</b>	
Delhi	Rajghat TPS	135	56	56	1.33	55	
	Delhi Gas Turbine	282	201	113	4.02	168	
	Pragati Gas Turbine	330	317	272	7.41	309	
	Rithala GPS	108	19	33	0.39	16	
	Bawana GPS	440	0	21	2.03	85	
	Badarpur TPS (NTPC)	705	680	560	14.22	593	
	Thermal (Total)	2000	1273	1168	29.40	1225	
	<b>Total Delhi</b>	<b>2000</b>	<b>1273</b>	<b>1168</b>	<b>29.40</b>	<b>1225</b>	
HP	Baspa HPS (IPP)	330	0	0	1.00	42	
	Malana HPS (IPP)	101	0	0	0.20	8	
	Other Hydro	571	142	68	3.06	128	
	<b>Total HP</b>	<b>1002</b>	<b>142</b>	<b>68</b>	<b>4</b>	<b>178</b>	
J & K	Baglihar HPS (IPP)	450	150	148	3.58	149	
	Other Hydro	323	27	125	1.38	57	
	Gas/Diesel/Others	183	0	0	0.00	0	
	<b>Total J &amp; K</b>	<b>956</b>	<b>177</b>	<b>273</b>	<b>4.96</b>	<b>206</b>	
<b>Total State Control Area Generation</b>		<b>29376</b>	<b>16254</b>	<b>14796</b>	<b>380.20</b>	<b>15763</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1459</b>	<b>1373</b>	<b>60.19</b>	<b>2508</b>	
<b>Total Regional Availability(Gross)</b>		<b>50601</b>	<b>33735</b>	<b>25617</b>	<b>716.58</b>	<b>29779</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10083	6350	995	64.72	2696
State Control Area Hydro	5365	1685	944	34.65	1444
<b>Total Regional Hydro</b>	<b>15447</b>	<b>8035</b>	<b>1939</b>	<b>99.36</b>	<b>4140</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	-300	100	400	300	1.77	2.26	-0.48
Gwalior-Agra (D/C)	510	675	1252	0	20.78	0.00	20.78
Zerda-Kankroli	-50	-83	231	83	1.77	0.00	1.77
Zerda-Bhinmal	35	25	371	0	3.85	0.00	3.85
Malanpur-Auraiya	-49	-73	80	0	0.00	0.39	-0.39
Badod-Kota/Morak	6	-28	102	36	0.24	0.00	0.24
<b>Sub Total WR</b>	<b>152</b>	<b>616</b>			<b>28.41</b>	<b>2.64</b>	<b>25.76</b>
Pusauli Bypass	49	-76	160	76	1.68	0.27	1.41
MZP- GKP (D/C)	347	330	728	0	11.88	0.00	11.88
Patna-Balia(D/C)	265	254	533	0	8.72	0.00	8.72
B'Sharif-Balia (D/C)	258	163	401	0	6.02	0.00	6.02
Barh - balia(D/C)	293	0	654	0	4.24	0.00	4.24
Pusauli-Sahupuri	125	118	186	0	2.98	0.00	2.98
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-32	0	48	0.00	0.82	-0.82
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1307</b>	<b>757</b>			<b>35.52</b>	<b>1.09</b>	<b>34.43</b>
<b>Total IR Exch</b>	<b>1459</b>	<b>1373</b>			<b>63.92</b>	<b>3.73</b>	<b>60.19</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
26.90	0.32	27.21	11.05	14.14	-2.43	5.23	2.77	-2.77

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
38.61	8.11	46.72	34.43	25.76	60.19	-4.18	17.65	13.47

**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	0.10	4.80	31.50	94.50	67.80	14.50	0.70

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.29	5.06	49.18	6.59	49.80	0.71	0.18	50.28	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	410	02:35	397	16:37	0.0	0.0	0.0	0.0
Gorakhpur	400	427	13:23	408	06:13	0.0	0.0	30.3	0.0
Bareilly	400	422	02:08	396	11:18	0.0	0.0	0.7	0.0
Kanpur	400	419	02:13	395	10:30	0.0	0.0	0.0	0.0
Dadri	400	421	04:04	394	10:29	0.0	0.0	0.2	0.0
Ballabgarh	400	424	02:08	395	10:30	0.0	0.0	11.7	0.0
Bawana	400	425	02:08	397	10:27	0.0	0.0	15.7	0.0
Bassi	400	422	22:55	392	10:30	0.0	0.0	0.6	0.0
Hissar	400	415	04:04	388	16:26	0.0	1.2	0.0	0.0
Moga	400	424	04:04	397	16:27	0.0	0.0	5.7	0.0
Abdullapur	400	422	02:08	400	10:25	0.0	0.0	4.3	0.0
Nalagarh	400	429	02:08	407	16:20	0.0	0.0	31.1	0.0
Kishenpur	400	416	04:02	385	16:22	0.0	2.4	0.0	0.0
Wagoora	400	402	04:02	362	16:21	33.3	70.3	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	498.57	1041.47	501.40	1153.36	198.33	476.74
Pong	426.72	384.05	412.31	577.87	415.55	693.24	94.04	182.53
Tehri	829.79	740.04	803.05	665.65	818.65	982.26	68.98	216.00
Koteshwar	612.50	598.50	607.10	3.32	NA	NA	204.00	187.00
Chamera-I	760.00	748.75	754.55	NA	753.15	1.20	59.83	28.65
Rihand	268.22	252.98	263.14	490.00	256.76	147.70	NA	NA
RPS	352.80	343.81	349.83	NA	348.47	NA	NA	157.92
Jawahar Sagar	298.70	295.78	297.55	NA	297.85	NA	NA	200.14
RSD	527.91	487.91	506.17	NA	509.57	NA	14.72	235.74

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 20.01.2012 :**

1. fog IN Some part of Punjab, Haryana , NCR , UP, Uttaranchal.

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

**XIII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :**

1. Anpara - Unnao line test chage upto 200 KM from Anpara end on 765 KV at 17.44 hrs & taken out at 17.55 hrs/20.01.2012.

**XIV. Tripping of lines in pooling stations :**

**XV. Complete generation loss in a generating station :**

Report for : 20.01.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER