

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

**Power Supply Position in Northern Region for 18.01.2012**  
Date of Reporting : 19.01.2012

### I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
31472	3984	35456	49.74	24358	650	25008	50.07	688.9	54.97

\* 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	44.80	10.21		55.01	31.11	33.76	2.65	88.77
Haryana	64.22	0.72		64.93	22.89	28.38	5.49	93.31	6.43
Rajasthan	86.80	3.21	4.79	94.80	51.59	59.32	7.73	154.12	9.93
Delhi	29.85			29.85	38.89	35.65	-3.24	65.49	0.08
UP	89.60	7.07	15.60	112.27	87.39	81.70	-5.69	193.97	34.76
Uttarakhand		8.30		8.30	19.99	23.33	3.33	31.62	0.00
HP		4.51		4.51	20.46	19.38	-1.08	23.90	0.00
J & K		4.35	0.00	4.35	25.61	29.53	3.92	33.88	1.90
Chandigarh				0.00	3.59	3.84	0.25	3.84	0.00
<b>Total</b>	<b>315.26</b>	<b>38.37</b>	<b>20.39</b>	<b>374.02</b>	<b>301.53</b>	<b>314.88</b>	<b>13.36</b>	<b>688.90</b>	<b>54.97</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 transactio	Demand Met	Shortage	UI	STOA/PX transactio	
	Punjab	4478	600	122	-333	2933	0	-54	-481
Haryana	4412	651	749	-204	3055	0	-85	-204	-4.54
Rajasthan	6908	1003	731	160	6451	0	445	285	8.28
Delhi	3438	39	-315	-25	1455	0	-7	-340	-3.13
UP	7768	1590	-871	265	7288	650	-383	265	6.36
Uttarakhand	1597	0	105	450	1080	0	183	450	10.80
HP	1104	2	-382	-38	725	0	23	405	6.30
J&K	1556	100	-77	307	1274	0	147	302	6.75
Chandigarh	211	0	0	0	97	0	-3	-30	-0.24
<b>Total</b>	<b>31472</b>	<b>3984</b>	<b>62</b>	<b>582</b>	<b>24358</b>	<b>650</b>	<b>266</b>	<b>652</b>	<b>23.17</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)	UI [OG:(+ve), UG: (-ve)]		
								Schedule Net MU	UI Net MU	
A. NTPC	Singrauli STPS	2000	1760	1888	1692	41.38	1724	39.99	1.39	
	Rihand I STPS	1000	791	881	729	18.74	781	18.19	0.55	
	Rihand II STPS	1000	977	1045	865	22.88	953	22.33	0.55	
	Dadri I STPS	840	793	858	634	17.50	729	17.48	0.02	
	Dadri II STPS	980	950	1028	711	21.52	897	21.57	-0.05	
	Unchahar I TPS	440	402	439	328	9.21	384	9.13	0.08	
	Unchahar II TPS	440	402	441	333	9.20	383	8.86	0.33	
	Unchahar III TPS	210	201	221	156	4.58	191	4.48	0.09	
	ISTPP (Jhajjhar)	1000	475	508	423	10.89	454	10.77	0.11	
	Dadri GPS	830	846	745	491	14.24	593	15.77	-1.53	
	Anta GPS	419	433	324	231	6.93	289	6.83	0.11	
	Auraiya GPS	663	659	328	283	7.54	314	7.65	-0.11	
	<b>Sub Total (A)</b>	<b>9822</b>	<b>8690</b>	<b>8706</b>	<b>6876</b>	<b>184.61</b>	<b>7692</b>	<b>183.05</b>	<b>1.56</b>	
	B. NPC	NAPS	440	240	277	280	5.83	243	5.76	0.07
		RAPS- B	440	424	468	471	10.11	421	10.18	-0.07
RAPS- C		440	420	459	472	10.08	420	10.08	0.00	
<b>Sub Total (B)</b>		<b>1320</b>	<b>1084</b>	<b>1204</b>	<b>1223</b>	<b>26.01</b>	<b>1084</b>	<b>26.02</b>	<b>-0.01</b>	
C. NHPC	Chamera I HPS	540	356	180	0	1.26	53	1.27	-0.01	
	Chamera II HPS	300	297	279	0	1.42	59	1.24	0.18	
	Bairasuil HPS	180	179	179	0	0.70	29	0.63	0.06	
	Salal-HPS	690	137	205	108	3.33	139	3.25	0.08	
	Tanakpur-HPS	94	31	32	25	0.70	29	0.69	0.01	
	Uri-HPS	480	99	211	17	2.46	103	2.03	0.43	
	Dhauliganga-HPS	280	210	207	0	1.02	42	1.01	0.01	
	Dulhasti-HPS	390	388	244	0	2.53	105	1.93	0.60	
	Sewa-II HPS	120	119	105	0	1.45	60	1.45	0.00	
	<b>Sub Total (C)</b>	<b>3074</b>	<b>1816</b>	<b>1642</b>	<b>150</b>	<b>14.85</b>	<b>619</b>	<b>13.50</b>	<b>1.35</b>	
D. NJPC	Nathpa Jhakri	1500	1069	1361	0	6.70	279	6.65	0.04	
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1069</b>	<b>1361</b>	<b>0</b>	<b>6.70</b>	<b>279</b>	<b>6.65</b>	<b>0.04</b>	
E. THDC	Tehri HPS	1000	1000	1000	0	8.55	356	8.50	0.05	
	Koteshwar HPS	200	119	202	0	2.84	118	2.80	0.04	
	<b>Sub Total (E)</b>	<b>1200</b>	<b>1119</b>	<b>1202</b>	<b>0</b>	<b>11.39</b>	<b>474</b>	<b>11.30</b>	<b>0.09</b>	
F. BBMB	Bhakra HPS	1480	648	945	572	16.05	669	15.55	0.50	
	Dehar HPS	990	146	495	0	3.98	166	3.51	0.47	
	Pong HPS	396	135	306	60	3.47	145	3.25	0.23	
	<b>Sub Total (F)</b>	<b>2866</b>	<b>929</b>	<b>1746</b>	<b>632</b>	<b>23.50</b>	<b>979</b>	<b>22.30</b>	<b>1.20</b>	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.24	10	0.27	-0.02	
	KWHEP HPS(IPP)	1000	0	225	0	3.54	148	3.20	0.34	
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00	
	Shree Cement TPS	150	0	60	123	1.31	54	4.55	-3.25	
	<b>Sub Total (G)</b>	<b>1442</b>	<b>0</b>	<b>285</b>	<b>123</b>	<b>5.09</b>	<b>212</b>	<b>8.02</b>	<b>-2.93</b>	
<b>H. Total Regional Entities (A-G)</b>	<b>21225</b>	<b>14706</b>	<b>16146</b>	<b>9004</b>	<b>272.14</b>	<b>11339</b>	<b>270.84</b>	<b>1.31</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	840	18.85	785	
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.59	191	
	Guru Hargobind Singh TPS(L.mbt)	920	966	960	21.36	890	
	Thermal (Total)	2620	2021	2015	44.80	1867	
	Total Hydro	1148	544	196	10.21	426	
	<b>Total Punjab</b>	<b>3768</b>	<b>2565</b>	<b>2211</b>	<b>55.01</b>	<b>2292</b>	
Haryana	Panipat TPS	1360	943	1036	23.03	960	
	DCRTPP (Yamuna nagar)	600	273	274	6.60	275	
	Faridabad GPS (NTPC)	432	441	320	9.47	394	
	RGTPP (khedar) (IPP)	1200	512	985	25.11	1046	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	660	0	0	0.00	0	
	Thermal (Total)	4277	2169	2615	64.22	2676	
	Total Hydro	62	29	20	0.72	30	
	<b>Total Haryana</b>	<b>4339</b>	<b>2198</b>	<b>2635</b>	<b>64.93</b>	<b>2706</b>	
	Rajasthan	kota TPS	1240	985	133	23.49	979
suratgarh TPS		1500	1153	1276	28.44	1185	
Chabra TPS		500	450	374	10.28	428	
Dholpur GPS		330	213	235	5.47	228	
Ramgarh GPS		113	0	35	0.35	15	
RAPS A (NPC)		300	183	183	4.55	190	
Barsingsar (NLC)		250	170	152	4.08	170	
Giral LTPS (IPP)		250	100	79	2.00	83	
Rajwest LTPS (IPP)		540	325	341	8.14	339	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5158	3579	2808	86.80	3617	
Total Hydro		550	136	81	3.21	134	
Wind power		1294	27	4	0.67	28	
Biomass		71	38	38	0.91	38	
Solar		50	0	0	0.00	0	
Renewable/Others (Total)		1365	65	42	4.79	200	
<b>Total Rajasthan</b>		<b>7073</b>	<b>3780</b>	<b>2931</b>	<b>94.80</b>	<b>3950</b>	
UP		Anpara TPS	1630	1363	1380	32.60	1358
		Obra TPS	1442	583	572	13.90	579
	Paricha TPS	640	229	162	4.30	179	
	Panki TPS	210	113	113	3.00	125	
	Harduaganj TPS	415	106	157	3.80	158	
	Tanda TPS (NTPC)	440	399	390	10.89	454	
	Roza TPS (IPP)	900	410	445	16.60	692	
	Anpara-C (IPP)	1200	0	0	0.00	0	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	193	138	4.51	188	
	Thermal (Total)	7057	3396	3357	89.60	3733	
	Vishnuparyag HPS (IPP)	400	84	79	1.94	81	
	Other Hydro	527	253	0	5.13	214	
	Cogeneration	951	650	650	15.60	650	
	<b>Total UP</b>	<b>8935</b>	<b>4383</b>	<b>4086</b>	<b>112.27</b>	<b>4597</b>	
	Uttarakhand	Total Hydro	1303	454	242	8.30	346
		<b>Total Uttarakhand</b>	<b>1303</b>	<b>454</b>	<b>242</b>	<b>8.30</b>	<b>346</b>
Delhi	Rajghat TPS	135	53	53	1.27	53	
	Delhi Gas Turbine	282	190	79	3.24	135	
	Pragati Gas Turbine	330	318	262	7.33	306	
	Rithala GPS	108	19	33	0.36	15	
	Bawana GPS	440	143	0	3.42	143	
	Badarpur TPS (NTPC)	705	610	580	14.23	593	
	Thermal (Total)	2000	1333	1139	29.85	1244	
	<b>Total Delhi</b>	<b>2000</b>	<b>1333</b>	<b>1139</b>	<b>29.85</b>	<b>1244</b>	
HP	Baspa HPS (IPP)	330	0	0	1.01	42	
	Malana HPS (IPP)	101	0	0	0.21	9	
	Other Hydro	571	158	64	3.30	137	
	<b>Total HP</b>	<b>1002</b>	<b>158</b>	<b>64</b>	<b>5</b>	<b>188</b>	
J & K	Baglihar HPS (IPP)	450	128	124	2.98	124	
	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>155</b>	<b>249</b>	<b>4.35</b>	<b>181</b>	
<b>Total State Control Area Generation</b>		<b>29376</b>	<b>15026</b>	<b>13557</b>	<b>374.02</b>	<b>15503</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1519</b>	<b>2083</b>	<b>63.84</b>	<b>2660</b>	
<b>Total Regional Availability(Gross)</b>		<b>50601</b>	<b>32691</b>	<b>24644</b>	<b>710.00</b>	<b>29503</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10083	6236	905	61.53	2564
State Control Area Hydro	5365	1729	852	36.44	1518
<b>Total Regional Hydro</b>	<b>15447</b>	<b>7965</b>	<b>1757</b>	<b>97.96</b>	<b>4082</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	0	400	0	2.32	0.00	2.32
Gwalior-Agra (D/C)	220	739	1166	0	19.97	0.00	19.97
Zerda-Kankroli	0	15	295	8	1.00	0.00	1.00
Zerda-Bhinmal	-51	110	381	86	4.22	0.00	4.22
Malanpur-Auraiya	-164	-59	178	0	0.00	1.78	-1.78
Badod-Kota/Morak	-16	-1	87	26	0.16	0.00	0.16
<b>Sub Total WR</b>	<b>289</b>	<b>804</b>			<b>27.67</b>	<b>1.78</b>	<b>25.89</b>
Pusauli Bypass	-75	158	37	259	0.25	2.95	-2.70
MZP- GKP (D/C)	456	316	800	0	13.37	0.00	13.37
Patna-Balia(D/C)	255	490	720	0	12.02	0.00	12.02
B'Sharif-Balia (D/C)	208	216	773	0	8.67	0.00	8.67
Barh - balia(D/C)	281	0	397	0	4.61	0.00	4.61
Pusauli-Sahupuri	135	131	167	0	2.81	0.00	2.81
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>1230</b>	<b>1279</b>			<b>41.72</b>	<b>3.77</b>	<b>37.95</b>
<b>Total IR Exch</b>	<b>1519</b>	<b>2083</b>			<b>69.39</b>	<b>5.55</b>	<b>63.84</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
26.15	0.18	26.33	11.16	14.71	-0.99	7.97	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
39.27	12.59	51.86	37.95	25.89	63.84	-1.32	13.30	11.98

**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	0.40	6.50	35.30	93.10	64.30	10.14	0.40

<----- 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					
50.32	13.02	49.10	22.04	49.77	0.87	0.18	50.17	49.56

**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	413	03:17	397	16:07	0.0	0.0	0.0	0.0
Gorakhpur	400	429	23:01	405	08:16	0.0	0.0	37.0	0.0
Bareilly	400	424	02:57	393	11:49	0.0	0.0	17.2	0.0
Kanpur	400	421	02:07	396	10:07	0.0	0.0	0.7	0.0
Dadri	400	422	01:05	396	12:06	0.0	0.0	1.9	0.0
Ballabgarh	400	428	02:03	398	12:06	0.0	0.0	23.3	0.0
Bawana	400	428	02:57	400	12:04	0.0	0.0	24.9	0.0
Bassi	400	426	04:04	398	16:11	0.0	0.0	12.7	0.0
Hissar	400	417	04:00	393	12:08	0.0	0.0	0.0	0.0
Moga	400	428	23:48	397	14:04	0.0	0.0	25.5	0.0
Abdullapur	400	425	04:03	401	12:05	0.0	0.0	19.4	0.0
Nalagarh	400	430	03:58	408	10:09	0.0	0.0	32.3	0.0
Kishenpur	400	423	23:55	390	14:31	0.0	0.0	2.5	0.0
Wagoora	400	400	03:59	372	12:02	14.7	54.2	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	498.91	1053.16	501.76	1166.44	204.50	455.53
Pong	426.72	384.05	412.37	577.87	415.63	705.67	249.95	215.92
Tehri	829.79	740.04	803.50	685.04	818.65	982.26	69.44	205.00
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	263.44	508.00	257.04	159.40	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	508.14	NA	511.12	NA	14.72	235.74

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 18.01.2012 :**

1.Light fog.

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

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

1.FSC on 400kv Tehri-Meerut 1&2 was successfully taken into service on 17-01.2012 at 20:55 hrs & on 18-01-2012 at 13:12 hrs at Meerut end.

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

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

Report for : 18.01.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER