

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.01.2012  
Date of Reporting : 30.01.2012

### 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
31942	2559	34501	50.09	25432	650	26082	50.22	704.7	43.69

\* 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	51.26	9.89		61.15	32.32	30.33	-1.99	91.48	1.80
Haryana	48.08	0.55		48.63	25.89	48.04	22.15	96.67	7.90
Rajasthan	89.59	5.06	13.10	107.75	54.13	56.87	2.74	164.62	0.82
Delhi	25.36			25.36	38.04	33.60	-4.44	58.96	0.10
UP	91.98	5.60	15.60	113.18	82.84	88.68	5.84	201.86	31.11
Uttarakhand		10.47		10.47	20.09	19.74	-0.34	30.21	0.00
HP		3.89		3.89	19.81	18.33	-1.49	22.21	0.07
J & K		4.50	0.00	4.50	24.89	30.80	5.91	35.30	1.90
Chandigarh				0.00	3.51	3.38	-0.13	3.38	0.00
<b>Total</b>	<b>306.26</b>	<b>39.95</b>	<b>28.70</b>	<b>374.92</b>	<b>301.53</b>	<b>329.77</b>	<b>28.25</b>	<b>704.69</b>	<b>43.69</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	4064	600	-437	-333	3161	0	248	-481	-7.41
Haryana	5040	268	1123	-203	3439	0	417	-203	-4.54
Rajasthan	6674	0	-98	160	6406	0	48	285	9.38
Delhi	3023	0	-9	-25	1435	0	73	-340	-3.13
UP	9047	1590	238	265	7712	650	79	265	6.36
Uttarakhand	1530	0	-40	450	1079	0	-35	450	10.80
HP	1023	2	-404	24	730	0	-2	405	7.25
J&K	1359	100	-193	307	1377	0	287	302	6.74
Chandigarh	182	0	-32	0	93	0	1	-30	-0.24
<b>Total</b>	<b>31942</b>	<b>2559</b>	<b>148</b>	<b>644</b>	<b>25432</b>	<b>650</b>	<b>1115</b>	<b>652</b>	<b>25.22</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)	UI [OG:(+ve), UG: (-ve)]	
								Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1760	1882	1718	41.55	1731	41.26	0.28
	Rihand I STPS	1000	812	879	734	18.76	782	18.68	0.08
	Rihand II STPS	1000	977	1037	440	22.63	943	22.45	0.18
	Dadri I STPS	840	796	651	604	16.18	674	16.34	-0.16
	Dadri II STPS	980	976	895	785	20.30	846	22.89	-2.59
	Unchahar I TPS	440	405	438	366	9.37	390	9.40	-0.03
	Unchahar II TPS	440	404	440	324	9.08	378	9.10	-0.02
	Unchahar III TPS	210	202	219	167	4.59	191	4.61	-0.01
	ISTPP (Jhajjar)	1000	475	362	508	9.97	415	10.16	-0.19
	Dadri GPS	830	846	720	534	15.28	637	15.38	-0.10
	Anta GPS	419	426	323	266	7.46	311	7.31	0.15
	Auraiya GPS	663	662	479	319	10.04	418	9.95	0.09
	<b>Sub Total (A)</b>	<b>9822</b>	<b>8741</b>	<b>8325</b>	<b>6765</b>	<b>185.20</b>	<b>7717</b>	<b>187.53</b>	<b>-2.33</b>
B. NPC	NAPS	440	134	160	160	3.33	139	3.22	0.11
	RAPS- B	440	406	448	450	9.70	404	9.74	-0.05
	RAPS- C	440	420	471	473	10.20	425	10.08	0.12
	<b>Sub Total (B)</b>	<b>1320</b>	<b>960</b>	<b>1079</b>	<b>1083</b>	<b>23.22</b>	<b>967</b>	<b>23.04</b>	<b>0.18</b>
C. NHPC	Chamera I HPS	540	357	360	0	1.90	79	1.89	0.01
	Chamera II HPS	300	297	238	0	1.01	42	1.13	-0.12
	Bairasuil HPS	180	179	120	0	0.56	23	0.55	0.01
	Salal-HPS	690	120	112	33	2.58	108	2.70	-0.12
	Tanakpur-HPS	94	28	31	20	0.59	24	0.60	-0.02
	Uri-HPS	480	127	240	42	2.86	119	2.91	-0.05
	Dhauliganga-HPS	280	277	144	0	0.74	31	0.82	-0.08
	Dulhasti-HPS	390	388	342	0	2.38	99	2.13	0.25
	Sewa-II HPS	120	119	67	0	0.63	26	0.66	-0.03
	<b>Sub Total (C)</b>	<b>3074</b>	<b>1891</b>	<b>1654</b>	<b>95</b>	<b>13.25</b>	<b>552</b>	<b>13.39</b>	<b>-0.14</b>
D. NJPC	Nathpa Jhakri	1500	956	1333	0	5.18	216	5.53	-0.36
	<b>Sub Total (D)</b>	<b>1500</b>	<b>956</b>	<b>1333</b>	<b>0</b>	<b>5.18</b>	<b>216</b>	<b>5.53</b>	<b>-0.36</b>
E. THDC	Tehri HPS	1000	950	950	0	8.81	367	8.75	0.06
	Koteshwar HPS	200	119	102	0	2.54	106	2.20	0.34
	<b>Sub Total (E)</b>	<b>1200</b>	<b>1069</b>	<b>1052</b>	<b>0</b>	<b>11.35</b>	<b>473</b>	<b>10.95</b>	<b>0.39</b>
F. BBMB	Bhakra HPS	1480	762	1102	571	18.86	786	18.29	0.57
	Dehar HPS	990	121	495	0	2.92	122	2.90	0.02
	Pong HPS	396	192	306	60	4.87	203	4.62	0.25
	<b>Sub Total (F)</b>	<b>2866</b>	<b>1075</b>	<b>1903</b>	<b>631</b>	<b>26.65</b>	<b>1110</b>	<b>25.80</b>	<b>0.85</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.25	10	0.23	0.01
	KWHEP HPS(IPP)	1000	0	478	0	2.39	100	2.40	-0.01
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	137	144	3.40	142	3.44	-0.03
	<b>Sub Total (G)</b>	<b>1442</b>	<b>0</b>	<b>615</b>	<b>144</b>	<b>6.04</b>	<b>252</b>	<b>6.07</b>	<b>-0.03</b>
<b>H. Total Regional Entities (A-G)</b>	<b>21225</b>	<b>14692</b>	<b>15961</b>	<b>8718</b>	<b>270.88</b>	<b>11287</b>	<b>272.31</b>	<b>-1.44</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	970	26.04	1085	
	Guru Nanak Dev TPS(Bhatinda)	440	218	202	4.58	191	
	Guru Hargobind Singh TPS(L.mbt)	920	956	944	20.64	860	
	Thermal (Total)	2620	2434	2116	51.26	2136	
	Total Hydro	1148	304	226	9.89	412	
	<b>Total Punjab</b>	<b>3768</b>	<b>2738</b>	<b>2342</b>	<b>61.15</b>	<b>2548</b>	
Haryana	Panipat TPS	1360	1027	1032	24.81	1034	
	DCRTPP (Yamuna nagar)	600	279	278	6.56	273	
	Faridabad GPS (NTPC)	432	427	219	7.00	292	
	RGTPP (kheldar) (IPP)	1200	720	532	9.71	405	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	660	0	0	0.00	0	
	Thermal (Total)	4277	2453	2061	48.08	2003	
	Total Hydro	62	22	16	0.55	23	
	<b>Total Haryana</b>	<b>4339</b>	<b>2475</b>	<b>2077</b>	<b>48.63</b>	<b>2026</b>	
	Rajasthan	kota TPS	1240	1176	1145	27.47	1145
suratgarh TPS		1500	1372	1308	32.45	1352	
Chabra TPS		500	189	188	4.45	186	
Dholpur GPS		330	227	227	5.45	227	
Ramgarh GPS		113	44	45	1.12	47	
RAPS A (NPC)		300	0	194	1.34	56	
Barsingsar (NLC)		250	160	160	4.44	185	
Giral LTPS (IPP)		250	50	40	1.27	53	
Rajwest LTPS (IPP)		540	465	465	11.60	483	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5158	3683	3772	89.59	3733	
Total Hydro		550	205	153	5.06	211	
Wind power		1294	204	410	6.94	289	
Biomass		71	46	46	1.11	46	
Solar		50	0	0	0.00	0	
Renewable/Others (Total)		1365	250	456	13.10	546	
<b>Total Rajasthan</b>		<b>7073</b>	<b>4138</b>	<b>4381</b>	<b>107.75</b>	<b>4490</b>	
UP		Anpara TPS	1630	1493	1499	33.20	1383
		Obra TPS	1442	545	656	12.90	538
		Paricha TPS	640	223	226	4.80	200
	Panki TPS	210	203	160	4.00	167	
	Harduaganj TPS	415	263	236	4.90	204	
	Tanda TPS (NTPC)	440	398	400	9.82	409	
	Roza TPS (IPP)	900	351	378	9.64	401	
	Anpara-C (IPP)	1200	293	299	6.86	286	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	231	271	5.86	244	
	Thermal (Total)	7057	4000	4125	91.98	3833	
	Vishnuparyag HPS (IPP)	400	74	74	1.76	73	
	Other Hydro	527	199	0	3.84	160	
	Cogeneration	951	650	650	15.60	650	
	<b>Total UP</b>	<b>8935</b>	<b>4923</b>	<b>4849</b>	<b>113.18</b>	<b>4643</b>	
	Uttarakhand	Total Hydro	1303	583	354	10.47	436
<b>Total Uttarakhand</b>		<b>1303</b>	<b>583</b>	<b>354</b>	<b>10.47</b>	<b>436</b>	
Delhi	Rajghat TPS	135	98	97	2.70	113	
	Delhi Gas Turbine	282	74	72	1.88	78	
	Pragati Gas Turbine	330	312	264	7.45	310	
	Rithala GPS	108	19	19	0.39	16	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	560	555	12.94	539	
	Thermal (Total)	2000	1063	1007	25.36	1056	
	<b>Total Delhi</b>	<b>2000</b>	<b>1063</b>	<b>1007</b>	<b>25.36</b>	<b>1056</b>	
HP	Baspa HPS (IPP)	330	0	0	1.05	44	
	Malana HPS (IPP)	101	21	0	0.18	7	
	Other Hydro	571	142	51	2.66	111	
	<b>Total HP</b>	<b>1002</b>	<b>163</b>	<b>51</b>	<b>4</b>	<b>162</b>	
J & K	Baglihar HPS (IPP)	450	130	130	3.12	130	
	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>157</b>	<b>255</b>	<b>4.50</b>	<b>187</b>	
<b>Total State Control Area Generation</b>		<b>29376</b>	<b>16240</b>	<b>15316</b>	<b>374.92</b>	<b>15548</b>	
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>1618</b>	<b>2020</b>	<b>70.09</b>	<b>2920</b>	
<b>Total Regional Availability(Gross)</b>		<b>50601</b>	<b>33819</b>	<b>26054</b>	<b>715.88</b>	<b>29755</b>	

#### IV. Total Hydro Generation:

Regional Entities Hydro	10083	6557	870	62.46	2602
State Control Area Hydro	5365	1633	1055	38.20	1592
<b>Total Regional Hydro</b>	<b>15447</b>	<b>8190</b>	<b>1925</b>	<b>100.66</b>	<b>4194</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	0	0	200	100	2.26	0.08	2.19
Gwalior-Agra (D/C)	667	826	1358	0	23.30	0.00	23.30
Zerda-Kankroli	-11	-98	197	125	0.57	0.00	0.57
Zerda-Bhinmal	41	-46	333	84	2.24	0.00	2.24
Malanpur-Auraiya	-108	-55	0	108	0.00	0.92	-0.92
Badod-Kota/Morak	46	-22	99	26	1.24	0.00	1.24
<b>Sub Total WR</b>	<b>635</b>	<b>605</b>			<b>29.62</b>	<b>1.00</b>	<b>28.62</b>
Pusauli Bypass	-78	73	295	78	3.33	0.09	3.24
MZP- GKP (D/C)	312	360	814	0	12.09	0.00	12.09
Patna-Balia(D/C)	229	305	467	0	8.15	0.00	8.15
B'Sharif-Balia (D/C)	174	262	455	0	7.18	0.00	7.18
Barh - balia(D/C)	256	328	476	0	8.68	0.00	8.68
Pusauli-Sahupuri	120	119	172	0	2.79	0.00	2.79
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-32	0	48	0.00	0.67	-0.67
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>983</b>	<b>1415</b>			<b>42.22</b>	<b>0.76</b>	<b>41.46</b>
<b>Total IR Exch</b>	<b>1618</b>	<b>2020</b>			<b>71.84</b>	<b>1.75</b>	<b>70.09</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
21.25	0.23	21.49	11.07	16.01	1.84	6.17	2.90	-2.90

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
37.30	11.33	48.62	41.46	28.62	70.09	4.17	17.30	21.46

**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	0.60	12.00	94.00	82.60	32.00	5.40

<----- 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					
50.53	5.05	49.35	8.53	49.91	0.41	0.18	50.38	49.61

**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	409	02:59	397	08:33	0.0	0.0	0.0	0.0
Gorakhpur	400	434	21:51	408	12:15	0.0	0.0	56.1	1.9
Bareilly	400	425	02:58	393	10:13	0.0	0.0	14.8	0.0
Kanpur	400	422	03:56	394	10:16	0.0	0.0	3.7	0.0
Dadri	400	420	03:56	393	10:17	0.0	0.0	0.0	0.0
Ballabgarh	400	424	02:58	395	12:16	0.0	0.0	14.5	0.0
Bawana	400	423	03:00	393	12:18	0.0	0.0	10.0	0.0
Bassi	400	424	21:40	388	12:13	0.0	0.6	4.9	0.0
Hissar	400	416	05:04	386	12:19	0.0	1.1	0.0	0.0
Moga	400	424	02:25	401	12:13	0.0	0.0	20.7	0.0
Abdullapur	400	424	05:02	402	12:20	0.2	0.2	11.2	0.0
Nalagarh	400	427	01:48	405	12:19	0.0	0.0	46.5	0.0
Kishenpur	400	424	05:02	399	20:05	0.0	0.0	0.9	0.0
Wagoora	400	408	18:01	378	20:05	0.9	41.7	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	496.82	971.87	499.75	1088.42	171.12	522.56
Pong	426.72	384.05	411.72	555.85	415.08	680.86	72.89	283.90
Tehri	829.79	740.04	799.25	592.30	818.65	982.26	52.09	187.00
Koteshwar	612.50	598.50	670.65	3.54	NA	NA	187.00	225.00
Chamera-I	760.00	748.75	754.00	NA	NA	NA	49.95	32.36
Rihand	268.22	252.98	263.04	482.00	256.70	145.10	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	505.10	NA	508.37	NA	89.99	206.49

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 29.01.2012 :**

Normal weather.

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

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

1. ICT - I at Fatehpur ( 765/400KV ) first time Test charged at 13.02 hrs / 29.01.2012.
2. 500 MVA - ICT - II at Lucknow (PGCIL) First time test charged at 16.22 hrs/29.01.2012.

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

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

Report for : 29.01.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER