

# पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पॉवरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



## उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 25.01.2013  
Date of Reporting : 26.01.2013

### 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
33370	3124	36493	49.79	27546	665	28211	50.12	724.3	69.38

\* 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)	UI [OD:(+ve), UD: (-ve)]	
	Thermal	Hydro	Renewable/others \$	Total				Consumption (Net MU)	Shortages * (MU)
Punjab	46.48	8.44		54.91	37.35	37.96	0.60	92.87	2.87
Haryana	61.16	0.56		61.71	28.86	28.39	-0.47	90.10	1.09
Rajasthan	89.01	2.77	6.21	97.98	73.68	75.41	1.73	173.39	5.77
Delhi	29.74			29.74	31.33	30.22	-1.11	59.96	1.20
UP	109.39	6.12	19.20	134.71	73.00	75.09	2.09	209.80	53.87
Uttarakhand		6.91		6.91	23.23	23.95	0.72	30.86	2.55
HP		4.30		4.30	18.79	19.52	0.73	23.83	0.33
J & K		6.56	0.00	6.56	30.47	33.18	2.71	39.74	1.70
Chandigarh				0.00	3.34	3.75	0.41	3.75	0.00
<b>Total</b>	<b>335.77</b>	<b>35.65</b>	<b>25.41</b>	<b>396.83</b>	<b>320.05</b>	<b>327.48</b>	<b>7.42</b>	<b>724.31</b>	<b>69.38</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	4808	600	21	-387	3227	0	90	262	-0.48
Haryana	4604	76	17	-322	3015	0	-160	-478	-11.00
Rajasthan	7460	70	125	1014	6977	0	52	1018	31.38
Delhi	3220	0	-39	-773	1478	0	-23	-1758	-27.16
UP	8680	2188	-215	804	9220	665	316	-155	-0.07
Uttarakhand	1575	80	-14	532	1166	0	11	579	13.29
HP	1087	10	-42	257	759	0	16	395	8.22
J&K	1729	100	-132	410	1612	0	30	488	9.69
Chandigarh	207	0	-12	0	91	0	6	-31	-0.26
<b>Total</b>	<b>33370</b>	<b>3124</b>	<b>-292</b>	<b>1534</b>	<b>27546</b>	<b>665</b>	<b>339</b>	<b>319</b>	<b>23.61</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	1955	2100	2098	47.26	1969	46.93	0.33
	Rihand I STPS	1000	925	1003	943	22.12	922	22.12	0.00
	Rihand II STPS	1000	844	1043	1027	20.12	838	20.17	-0.05
	Rihand III STPS	500	332	478	284	8.26	344	7.92	0.34
	Dadri I STPS	840	810	870	664	17.88	745	18.08	-0.20
	Dadri II STPS	980	506	490	473	11.42	476	12.05	-0.63
	Unchahar I TPS	420	402	445	392	9.39	391	9.50	-0.11
	Unchahar II TPS	420	405	440	429	9.33	389	9.37	-0.04
	Unchahar III TPS	210	202	218	167	4.61	192	4.66	-0.04
	ISTPP (Jhajihar)	1500	980	471	386	10.02	417	10.52	-0.50
	Dadri GPS	830	848	325	363	8.55	356	8.59	-0.04
	Anta GPS	419	426	0	0	0.00	0	0.00	0.00
	Auraiya GPS	663	680	289	277	6.95	290	6.68	0.27
	<b>Sub Total (A)</b>	<b>10782</b>	<b>9315</b>	<b>8172</b>	<b>7503</b>	<b>175.91</b>	<b>7329</b>	<b>176.58</b>	<b>-0.68</b>
B. NPC	NAPS	440	143	166	165	3.42	142	3.43	-0.02
	RAPS- B	440	426	466	460	10.29	429	10.22	0.07
	RAPS- C	440	426	476	475	10.63	443	10.22	0.40
	<b>Sub Total (B)</b>	<b>1320</b>	<b>995</b>	<b>1108</b>	<b>1100</b>	<b>24.34</b>	<b>1014</b>	<b>23.88</b>	<b>0.46</b>
C. NHPC	Chamera I HPS	540	550	540	0	2.50	104	2.34	0.16
	Chamera II HPS	300	202	177	0	1.23	51	1.14	0.09
	Chamera III HPS	231	154	80	0	0.67	28	0.60	0.07
	Bairasuil HPS	180	182	10	0	0.47	20	0.47	0.00
	Salal-HPS	690	126	217	30	2.70	112	2.98	-0.28
	Tanakpur-HPS	94	31	32	28	0.69	29	0.72	-0.02
	Uri-HPS	480	205	229	206	4.67	194	4.89	-0.23
	Dhauliganga-HPS	280	284	216	0	0.77	32	0.67	0.10
	Dulhasti-HPS	390	0	0	0	0.00	0	0.00	0.00
	Sewa-II HPS	120	120	71	0	0.47	19	0.30	0.16
<b>Sub Total (C)</b>	<b>3305</b>	<b>1853</b>	<b>1572</b>	<b>264</b>	<b>14.16</b>	<b>590</b>	<b>14.11</b>	<b>0.05</b>	
D.NJPC	Nathpa Jhakri	1500	1605	1249	0	6.02	251	5.71	0.31
	<b>Sub Total (D)</b>	<b>1500</b>	<b>1605</b>	<b>1249</b>	<b>0</b>	<b>6.02</b>	<b>251</b>	<b>5.71</b>	<b>0.31</b>
E. THDC	Tehri HPS	1000	960	955	0	9.34	389	9.20	0.14
	Koteshwar HPS	400	400	402	86	3.63	151	3.55	0.08
<b>Sub Total (E)</b>	<b>1400</b>	<b>1360</b>	<b>1357</b>	<b>86</b>	<b>12.97</b>	<b>541</b>	<b>12.75</b>	<b>0.22</b>	
F. BBMB	Bhakra HPS	1480	600	1106	418	14.62	609	14.40	0.22
	Dehar HPS	990	119	495	0	3.05	127	2.87	0.19
	Pong HPS	396	211	306	66	5.34	223	5.01	0.33
	<b>Sub Total (F)</b>	<b>2866</b>	<b>931</b>	<b>1907</b>	<b>484</b>	<b>23.01</b>	<b>959</b>	<b>22.27</b>	<b>0.74</b>
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.37	15	0.36	0.01
	KWHEP HPS(IPP)	1000	0	0	0	0.00	0	0.00	0.00
	Malana Stg-II HPS	100	0	35	0	0.14	6	0.12	0.02
	Shree Cement TPS	300	0	144	77	3.04	126	4.86	-1.82
	Budhil HPS(IPP)	70	0	6	0	0.05	2	0.00	0.05
	<b>Sub Total (G)</b>	<b>1662</b>	<b>0</b>	<b>185</b>	<b>77</b>	<b>3.59</b>	<b>150</b>	<b>5.34</b>	<b>-1.75</b>
<b>H. Total Regional Entities (A-G)</b>	<b>22836</b>	<b>16058</b>	<b>15550</b>	<b>9514</b>	<b>260.00</b>	<b>10833</b>	<b>260.64</b>	<b>-0.64</b>	

I. State Entities	Station	Effective Installed Capacity (MW)	Peak MW	Off Peak MW	Energy(MU)	Average(Sent out MW)
<b>Punjab</b>	Guru Gobind Singh TPS (Ropar)	1260	1262	1060	26.97	1124
	Guru Nanak Dev TPS(Bhatinda)	440	218	295	5.56	232
	Guru Hargobind Singh TPS(L.mbt)	920	605	527	13.94	581
	Thermal (Total)	2620	2085	1882	46.48	1937
	Total Hydro	1148	434	200	8.44	352
	<b>Total Punjab</b>	<b>3768</b>	<b>2519</b>	<b>2082</b>	<b>54.91</b>	<b>2288</b>
<b>Haryana</b>	Panipat TPS	1367	625	575	14.74	614
	DCRTPP (Yamuna nagar)	600	282	210	5.45	227
	Faridabad GPS (NTPC)	432	272	273	6.48	270
	RGTPP (khedar) (IPP)	1200	955	971	24.12	1005
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	584	352	10.38	432
	Thermal (Total)	4944	2718	2381	61.16	2548
	Total Hydro	62	22	22	0.56	23
	<b>Total Haryana</b>	<b>5006</b>	<b>2740</b>	<b>2403</b>	<b>61.71</b>	<b>2571</b>
	<b>Rajasthan</b>	kota TPS	1240	1150	1151	27.96
suratgarh TPS		1500	1040	1099	26.11	1088
Chabra TPS		500	455	457	10.84	452
Dholpur GPS		330	0	0	0.62	26
Ramgarh GPS		111	42	33	0.90	37
RAPS A (NPC)		300	197	197	4.88	203
Barsingsar (NLC)		250	136	217	5.17	215
Giral LTPS		250	84	150	1.24	52
Rajwst LTPS (IPP)		675	480	475	11.28	470
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5291	3584	3779	89.01	3709
Total Hydro		550	265	82	2.77	115
Wind power		2191	34	390	5.41	225
Biomass		91	26	26	0.62	26
Solar		201	4	0	0.18	7
Renewable/Others (Total)		2483	60	416	6.21	259
<b>Total Rajasthan</b>		<b>8324</b>	<b>3909</b>	<b>4277</b>	<b>97.98</b>	<b>4083</b>
<b>UP</b>	Anpara TPS	1630	1247	1128	28.50	1188
	Obra TPS	1382	480	468	11.70	488
	Paricha TPS	890	641	632	14.80	617
	Panki TPS	210	63	122	2.10	88
	Harduaganj TPS	665	40	36	0.80	33
	Tanda TPS (NTPC)	440	404	404	9.85	410
	Roza TPS (IPP)	1200	851	796	19.92	830
	Anpara-C (IPP)	1200	540	490	12.14	506
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	405	331	9.58	399
	Thermal (Total)	8067	4671	4407	109.39	4558
	Vishnuparyag HPS (IPP)	400	71	75	1.74	72
	Other Hydro	527	199	197	4.38	183
	Cogeneration	981	800	800	19.20	800
	<b>Total UP</b>	<b>9975</b>	<b>5741</b>	<b>5479</b>	<b>134.71</b>	<b>5541</b>
<b>Uttarakhand</b>	Total Hydro	1303	414	232	6.91	288
	<b>Total Uttarakhand</b>	<b>1303</b>	<b>414</b>	<b>232</b>	<b>6.91</b>	<b>288</b>
<b>Delhi</b>	Raighat TPS	135	109	110	2.35	98
	Delhi Gas Turbine	282	118	157	3.48	145
	Pragati Gas Turbine	330	311	324	7.51	313
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	223	221	5.10	212
	Badarpur TPS (NTPC)	705	690	490	11.30	471
	Thermal (Total)	2237	1451	1302	29.74	1239
<b>Total Delhi</b>	<b>2237</b>	<b>1451</b>	<b>1302</b>	<b>29.74</b>	<b>1239</b>	
<b>HP</b>	Baspa HPS (IPP)	330	0	0	1.02	43
	Malana HPS (IPP)	86	32	0	0.17	7
	Other Hydro	589	158	78	3.11	130
	<b>Total HP</b>	<b>1005</b>	<b>190</b>	<b>78</b>	<b>4</b>	<b>179</b>
<b>J &amp; K</b>	Baglihar HPS (IPP)	450	132	132	3.16	132
	Other Hydro	323	120	170	3.40	142
	Gas/Diesel/Others	183	0	0	0.00	0
	<b>Total J &amp; K</b>	<b>956</b>	<b>252</b>	<b>302</b>	<b>6.56</b>	<b>273</b>
<b>Total State Control Area Generation</b>		<b>32574</b>	<b>17216</b>	<b>16155</b>	<b>396.83</b>	<b>16462</b>
<b>J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]</b>			<b>2903</b>	<b>2900</b>	<b>89.72</b>	<b>3738</b>
<b>Total Regional Availability(Gross)</b>		<b>55410</b>	<b>35669</b>	<b>28569</b>	<b>746.55</b>	<b>31034</b>

#### IV. Total Hydro Generation:

Regional Entities Hydro	10364	6120	834	56.67	2361
State Control Area Hydro	5368	1776	1113	35.65	1413
<b>Total Regional Hydro</b>	<b>15731</b>	<b>7896</b>	<b>1947</b>	<b>92.33</b>	<b>3775</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	100	100	500	0	6.31	0.00	6.31
Gwalior-Agra (D/C)	256	398	826	0	13.11	0.00	13.11
Zerda-Kankroli	34	-8	198	33	1.79	0.00	1.79
Zerda-Bhinmal	121	61	316	0	3.97	0.00	3.97
Malanpur-Auraiya	-171	-92	0	171	0.00	1.97	-1.97
Badod-Kota/Morak	-80	-98	64	98	0.00	1.80	-1.80
Mundra-Mohindergarh(HVDC)	1216	1117	1222	0	28.69	0.00	28.69
<b>Sub Total WR</b>	<b>1476</b>	<b>1478</b>			<b>53.87</b>	<b>3.77</b>	<b>50.10</b>
Pusauli Bypass	250	250	250	0	6.01	0.00	6.01
MZP- GKP (D/C)	208	220	442	0	7.12	0.00	7.12
Patna-Balia(D/C)	601	639	753	0	17.14	0.00	17.14
B'Sharif-Balia (D/C)	196	211	273	0	5.50	0.00	5.50
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-47	-66	0	87	0.00	1.24	-1.24
Gaya-Fatehpur (765 Kv)	120	72	208	0	3.26	0.00	3.26
Pusauli-Sahupuri	131	133	160	0	2.91	0.00	2.91
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-37	0	48	0.00	1.09	-1.09
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
<b>Sub Total ER</b>	<b>1427</b>	<b>1422</b>			<b>41.94</b>	<b>2.33</b>	<b>39.62</b>
<b>Total IR Exch</b>	<b>2903</b>	<b>2900</b>			<b>95.82</b>	<b>6.10</b>	<b>89.72</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
34.57	0.14	34.71	-3.44	5.89	2.00	15.32	-3.35	3.46

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incld Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
29.91	51.76	81.68	39.62	50.10	89.72	9.71	-1.66	8.05

**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	0.70	12.00	92.60	81.30	38.30	6.70

<----- 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	49.46	20.20	49.93	0.39	0.18	50.43	49.65

**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	405	4:03	395	21:03	0.0	0.0	0.0	0.0
Gorakhpur	400	433	4:06	414	21:09	0.0	0.0	78.4	4.8
Bareilly	400	424	4:05	404	18:41	0.0	0.0	4.5	0.0
Kanpur	400	421	4:04	399	21:06	0.0	0.0	0.2	0.0
Dadri	400	420	4:02	403	10:09	0.0	0.0	0.0	0.0
Ballabgarh	400	427	4:03	407	10:09	0.0	0.0	19.8	0.0
Bawana	400	425	4:03	407	18:36	0.0	0.0	19.4	0.0
Bassi	400	428	4:03	394	10:09	0.0	0.0	9.2	0.0
Hissar	400	413	4:04	395	10:56	0.0	0.0	0.0	0.0
Moga	400	415	21:20	395	16:46	0.0	0.0	0.0	0.0
Abdullapur	400	427	1:21	410	18:22	0.0	0.0	39.3	0.0
Nalagarh	400	428	4:05	406	11:23	0.0	0.0	25.4	0.0
Kishenpur	400	412	21:51	384	18:25	0.0	7.5	0.0	0.0
Wagoora	400	395	21:51	358	18:51	56.6	95.8	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	489.73	729.18	497.66	1006.54	146.82	404.93
Pong	426.72	384.05	407.60	416.46	411.97	566.84	91.58	351.02
Tehri	829.79	740.04	799.15	592.30	818.65	982.26	35.80	229.00
Koteswar	612.50	598.50	610.65	4.95	NA	NA	228.60	241.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	52.20	68.03
Rihand	268.22	252.98	260.54	500.10	263.07	617.70	NA	NA
RPS	352.80	343.81	348.28	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.61	NA	NA	NA	NA	NA
RSD	527.91	487.91	512.19	NA	505.56	NA	52.09	85.21

\* NA: Not Available

**IX. System Constraints:**

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

**XI. Weather Conditions For 25.01.2013 :**

1.Shallow fog is reported in some parts of East UP.

**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 : 25.01.2013

पारी प्रभाती अभियंता / SHIFT CHARGE ENGINEER