

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.01.2014
Date of Reporting : 10.01.2014

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
36552	2324	38876	49.96	28279	53	28332	50.10	791.3	43.01

* 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	50.83	10.13		60.97	28.84	29.10	0.26	90.06	0.00
Haryana	45.49	0.40		45.89	60.48	61.49	1.01	107.38	3.41
Rajasthan	116.52	4.09	10.85	131.46	65.50	66.14	0.63	197.59	0.00
Delhi	18.43			18.43	48.85	48.95	0.10	67.38	0.90
UP	124.23	3.17	15.60	143.00	89.07	86.13	-2.94	229.13	34.92
Uttarakhand		8.12		8.12	21.60	24.61	3.01	32.73	1.66
HP		4.56		4.56	20.84	21.06	0.23	25.63	0.42
J & K		5.63	0.00	5.63	31.74	32.12	0.38	37.75	1.70
Chandigarh				0.00	3.15	3.66	0.51	3.66	0.00
Total	355.50	36.11	26.45	418.06	370.07	373.25	3.19	791.31	43.01

* 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	STOA/PX transaction	
Punjab	4644	0	62	-1031	3152	0	48	-22	-14.01	
Haryana	5161	752	128	-314	3670	38	232	-350	-11.27	
Rajasthan	8909	0	-163	696	7119	0	-225	273	22.90	
Delhi	3525	7	0	-564	1498	0	-97	-1141	-19.82	
UP	9476	1425	-444	1135	9417	15	-193	588	16.37	
Uttarakhand	1735	40	238	592	1057	0	57	460	11.55	
HP	1279	0	13	393	795	0	-10	425	9.59	
J&K	1619	100	-157	641	1477	0	-119	580	11.94	
Chandigarh	204	0	15	0	95	0	-1	-15	-0.08	
Total	36552	2324	-308	1548	28279	53	-308	798	27.18	

* 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	
										UI (OG: (+ve), UG: (-ve))
A. NTPC	Singrauli STPS	2000	986	1057	1076	23.08	962	23.67	-0.59	
	Rihand I STPS	1000	881	1017	820	20.94	873	20.31	0.63	
	Rihand II STPS	1000	933	1049	782	22.21	925	21.60	0.61	
	Rihand III STPS	1000	465	495	487	11.13	464	10.96	0.17	
	Dadri I STPS	840	815	875	634	17.83	743	17.92	-0.09	
	Dadri II STPS	980	985	1024	710	21.59	899	21.70	-0.11	
	Unchahar I TPS	420	407	443	330	9.22	384	9.21	0.00	
	Unchahar II TPS	420	398	432	308	8.77	366	8.75	0.03	
	Unchahar III TPS	210	201	223	153	4.42	184	4.43	-0.01	
	ISTPP (Jhajjar)	1500	1500	1046	633	20.88	870	21.27	-0.39	
	Dadri GPS	830	843	413	431	9.40	392	10.26	-0.86	
	Anta GPS	419	430	249	260	6.44	268	6.54	-0.10	
	Auraiya GPS	663	674	330	334	7.77	324	7.78	-0.01	
	Sub Total (A)	11282	9518	8653	6958	183.68	7653	184.40	-0.73	
	B. NPC	NAPS	440	324	363	367	7.82	326	7.78	0.05
		RAPS- B	440	269	229	230	5.18	216	6.46	-1.28
RAPS- C		440	430	477	474	10.25	427	10.32	-0.07	
Sub Total (B)		1320	1023	1069	1071	23.25	969	24.56	-1.31	
C. NHPC	Chamera I HPS	540	540	360	0	1.67	70	1.65	0.02	
	Chamera II HPS	300	300	203	0	1.13	47	1.02	0.10	
	Chamera III HPS	231	231	110	0	0.53	22	0.50	0.03	
	Bairasuil HPS	180	0	0	0	0.00	0	0.00	0.00	
	Salal-HPS	690	110	195	115	2.88	120	2.64	0.24	
	Tanakpur-HPS	94	24	24	22	0.58	24	0.58	0.00	
	Uri-HPS	480	85	221	42	2.73	114	2.27	0.46	
	Uri-II HPS	180	60	123	36	1.45	60	1.43	0.02	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	258	268	0	2.57	107	2.51	0.06	
	Sewa-II HPS	120	119	125	0	0.63	26	0.58	0.06	
	Sub Total (C)	3485	1727	1629	215	14.17	590	13.18	0.99	
D. NJPC	Nathpa Jhakri	1500	1350	759	0	7.02	293	6.80	0.22	
	Sub Total (D)	1500	1350	759	0	7.02	293	6.80	0.22	
E. THDC	Tehri HPS	1000	1025	1025	0	8.75	364	8.70	0.05	
	Koteswar HPS	400	125	297	0	3.06	127	3.00	0.06	
	Sub Total (E)	1400	1150	1322	0	11.80	492	11.70	0.10	
F. BBMB	Bhakra HPS	1497	734	1011	511	17.90	746	17.61	0.29	
	Dehar HPS	990	109	330	0	2.77	115	2.63	0.15	
	Pong HPS	396	218	372	60	5.46	228	5.23	0.23	
	Sub Total (F)	2883	1061	1713	571	26.13	1089	25.47	0.66	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.37	16	0.36	0.01	
	KWHEP HPS(IPP)	1000	0	362	0	3.66	152	3.60	0.06	
	Malana Stg-II HPS	100	0	0	0	0.13	5	0.12	0.01	
	Shree Cement TPS	300	0	145	144	3.55	148	3.60	-0.04	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	507	144	7.71	321	7.67	0.04	
H. Total Regional Entities (A-G)	23532	15829	15652	8959	273.76	11407	273.78	-0.02		

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	1240	1000	24.80	1033
	Guru Nanak Dev TPS(Bhatinda)	440	340	250	6.05	252
	Guru Hargobind Singh TPS(L.mbt)	920	963	829	19.98	833
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	0		0.00	0
	Talwandi Saboo	660	0		0.00	0
	Thermal (Total)	3980	2543	2079	50.83	2118
	Total Punjab	5128	3010	2468	60.97	2540
Haryana	Panipat TPS	1367	659	625	15.69	654
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0
	Faridabad GPS (NTPC)	432	205	158	4.60	192
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1234	744	25.20	1050
	Thermal (Total)	4944	2098	1527	45.49	1895
	Total Haryana	5006	2112	1543	45.89	1912
Rajasthan	kota TPS	1240	1153	1099	27.28	1137
	suratgarh TPS	1500	1084	1023	25.46	1061
	Chabra TPS	750	317	383	8.72	363
	Dholpur GPS	330	108	108	2.52	105
	Ramgarh GPS	221	125	133	3.49	145
	RAPS A (NPC)	300	175	175	4.08	170
	Barsingsar (NLC)	250	209	211	4.94	206
	Giral LTPS	250	0	66	0.38	16
	Rajwest LTPS (IPP)	1080	472	417	10.78	449
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	1214	1204	28.86	1202
	Thermal (Total)	7976	4857	4819	116.52	4855
	Total Hydro	550	264	54	4.09	171
	Wind power	2191	229	624	10.06	419
	Biomass	91	21	21	0.51	21
	Solar	201	0	0	0.29	12
Renewable/Others (Total)	2483	250	645	10.85	452	
Total Rajasthan	11009	5371	5518	131.46	5477	
UP	Anpara TPS	1630	1370	1504	31.90	1329
	Obra TPS	1288	385	364	8.30	346
	Paricha TPS	1140	895	982	19.90	829
	Panki TPS	210	75	80	1.70	71
	Harduaganj TPS	665	491	488	10.70	446
	Tanda TPS (NTPC)	440	392	297	8.37	349
	Roza TPS (IPP)	1200	594	810	18.39	766
	Anpara-C (IPP)	1200	1068	1075	24.98	1041
	Bajaj Energy Pvt.Ltd.(IPP) TPS	450	0	0	0.00	0
	Thermal (Total)	8223	5270	5600	124.23	5176
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	149	137	3.17	132
	Cogeneration	981	650	650	15.60	650
	Total UP	10131	6069	6387	143.00	5959
Uttarakhand	Total Hydro	1303	467	284	8.12	338
	Total Uttarakhand	1303	467	284	8.12	338
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	163	163	3.89	162
	Pragati Gas Turbine	330	156	162	3.78	157
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	460	375	10.76	448
	Thermal (Total)	2232	779	700	18.43	768
Total Delhi	2232	779	700	18.43	768	
HP	Baspa HPS (IPP)	330	0	0	1.17	49
	Malana HPS (IPP)	86	0	0	0.19	8
	Other Hydro	589	189	63	3.21	134
	Total HP	1005	189	63	4.56	190
J & K	Baglihar HPS (IPP)	450	150	120	3.19	133
	Other Hydro	323	84	116	2.44	102
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	234	236	5.63	235
Total State Control Area Generation		36770	18231	17199	418.06	17419
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5035	3789	109.79	4575
Total Regional Availability(Gross)		60303	38918	29947	801.61	33400

IV. Total Hydro Generation:

Regional Entities Hydro	10560	5785	786	63.28	2637
State Control Area Hydro	5368	1784	1179	36.11	1505
Total Regional Hydro	15928	7569	1965	99.39	4141

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	500	300	500	0	9.99	0.00	9.99
Gwalior-Agra (D/C)	1578	1178	1724	0	31.89	0.00	31.89
Zerda-Kankroli	54	-268	110	304	0.00	1.32	-1.32
Zerda-Bhinmal	145	-163	247	253	0.88	0.00	0.88
Malanpur-Auraiya	-104	-92	0	153	0.00	2.60	-2.60
Badod-Kota/Morak	8	-185	22	210	0.00	2.17	-2.17
Mundra-Mohindergarh(HVDC)	1824	1639	1919	0	43.70	0.00	43.70
Sub Total WR	4005	2409			86.45	6.08	80.37
Pusauli Bypass	100	100	100	0	2.45	0.00	2.45
MZP- GKP (D/C)	219	338	397	0	3.95	0.00	3.95
Patna-Balia(D/C)	468	506	644	0	12.89	0.00	12.89
B'Sharif-Balia (D/C)	181	178	309	0	5.31	0.00	5.31
Pusauli-Balia	36	-60	0	64	0.00	1.05	-1.05
Gaya-Fatehpur (765 Kv)	-46	45	180	108	1.23	0.00	1.23
Pusauli-Sahupuri	0	181	187	0	0.45	0.00	0.45
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	0	37	0.00	0.85	-0.85
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	104	122	404	0	5.04	0.00	5.04
Sub Total ER	1030	1380			31.32	1.90	29.43
Total IR Exch	5035	3789			117.77	7.98	109.79

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
33.00	0.26	33.25	21.72	4.00	0.56	-0.97	0.07	-0.07

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
55.60	66.43	122.03	29.43	80.37	109.79	-26.17	13.94	-12.23

VI. Frequency Profile <----- % of Time Frequency ----->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	2.20	98.70	11.00	96.50	31.60	1.30

<----- 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				
50.24	20.57	49.55	9.13	49.94	0.19	0.12	50.25	49.81

VII. Voltage profile 400 kV

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	400	00:10	0.0	0.0	0.0	0.0
Gorakhpur	400	425	05:17	411	10:45	0.0	0.0	15.2	0.0
Barailly	400	423	04:31	380	00:59	0.0	0.1	6.8	0.0
Kanpur	400	421	03:39	401	11:14	0.0	0.0	0.8	0.0
Dadri	400	427	04:29	402	11:17	0.0	0.0	22.6	0.0
Ballabgarh	400	428	23:57	406	11:19	0.0	0.0	22.0	0.0
Bawana	400	430	04:29	403	11:17	0.0	0.0	34.3	0.0
Bassi	400	421	03:35	388	06:53	0.0	0.6	1.9	0.0
Hissar	400	421	04:30	389	11:43	0.0	0.0	0.6	0.0
Moga	400	419	01:59	391	16:14	0.0	0.0	0.0	0.0
Abdullapur	400	424	03:35	402	16:20	0.0	0.0	11.6	0.0
Nalagarh	400	426	03:01	400	16:14	0.0	0.0	23.6	0.0
Kishenpur	400	422	02:56	390	16:12	0.0	0.0	4.5	0.0
Wagoora	400	412	04:18	362	18:09	33.9	47.1	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	774	23:23	738	06:29	0.0	4.1	0.0	0.0
Balia	765	760	04:34	730	14:51	0.0	44.7	0.0	0.0
Moga	765	798	04:31	746	16:14	0.0	0.0	0.0	0.0
Agra	765	808	23:23	762	11:17	0.0	0.0	15.2	0.0
Bhiwani	765	812	04:34	760	11:39	0.0	0.0	17.1	0.0
Unnao	765	773	04:32	740	14:49	0.0	1.3	0.0	0.0

IX. 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 ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	500.94	1127.29	493.67	858.11	146.34	510.69
Pong	426.72	384.05	411.36	544.90	410.16	504.32	56.04	356.34
Tehri	829.79	740.04	810.20	804.00	818.65	982.26	63.37	227.00
Koteshwar	612.50	598.50	608.86	4.03	NA	NA	227.00	198.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	48.18	46.43
Rihand	268.22	252.98	260.63	340.20	261.43	385.10	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	511.04	14.40	514.74	14.40	60.77	117.91

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 09.01.2014 :

1. Shallow fog in Punjab ,Haryana and UP.

XIII. Synchronisation of new generating units :

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

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.
Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood
Vishnuprayag and Dhauliganga expected by Mar, 2014 .