

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.01.2014
Date of Reporting : 12.01.2014

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
37275	1480	38755	50.08	28542	10	28552	50.21	799.5	38.65

* 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	48.20	9.95		58.15	35.28	37.92	2.64	96.06	0.00
Haryana	62.58	0.42		63.00	49.87	50.70	0.83	113.70	0.16
Rajasthan	111.46	2.74	11.48	125.68	75.85	71.84	-4.01	197.52	0.00
Delhi	22.33			22.33	46.24	43.45	-2.79	65.78	0.11
UP	114.51	1.99	15.60	132.09	92.15	90.79	-1.36	222.88	36.22
Uttarakhand		7.94		7.94	25.30	25.48	0.18	33.42	0.23
HP		4.25		4.25	20.47	20.80	0.32	25.05	0.24
J & K		6.52	0.00	6.52	32.80	34.94	2.14	41.46	1.70
Chandigarh				0.00	3.15	3.62	0.47	3.62	0.00
Total	359.07	33.80	27.08	419.96	381.09	379.52	-1.58	799.48	38.65

* 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	4757	0	-137	-776	3380	0	258	-124	-11.78	
Haryana	5571	0	-173	-334	4020	0	64	-359	-12.99	
Rajasthan	8654	0	-273	981	7046	0	66	441	30.49	
Delhi	3350	0	-8	-633	1517	0	-38	-1303	-20.03	
UP	9950	1330	-152	1083	8903	0	-59	560	13.73	
Uttarakhand	1692	40	1	612	1111	0	-7	583	14.71	
HP	1231	10	-27	370	778	10	10	430	9.40	
J&K	1875	100	142	641	1697	0	-2	677	12.70	
Chandigarh	195	0	20	0	90	0	9	-15	-0.10	
Total	37275	1480	-607	1944	28542	10	301	890	36.12	

* 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	1946	2070	2012	46.01	1917	46.41	-0.39	
	Rihand I STPS	1000	881	948	680	19.51	813	19.99	-0.48	
	Rihand II STPS	1000	933	1031	705	20.83	868	21.03	-0.20	
	Rihand III STPS	1000	263	0	413	4.63	193	6.13	-1.50	
	Dadri I STPS	840	815	624	640	15.57	649	16.04	-0.46	
	Dadri II STPS	980	985	917	723	20.65	860	21.26	-0.61	
	Unchahar I TPS	420	408	422	317	8.46	352	8.73	-0.27	
	Unchahar II TPS	420	405	440	309	8.26	344	8.46	-0.20	
	Unchahar III TPS	210	201	217	154	4.11	171	4.17	-0.06	
	ISTPP (Jhajjar)	1500	1500	625	636	14.42	601	14.68	-0.26	
	Dadri GPS	830	843	153	201	3.86	161	4.30	-0.43	
	Anta GPS	419	431	216	222	5.51	230	5.69	-0.18	
	Auraiya GPS	663	674	144	165	3.62	151	3.60	0.02	
	Sub Total (A)	11282	10286	7806.8	7176.66	175.44	7310	180.46	-5.02	
	B. NPC	NAPS	440	326	361	367	7.79	325	7.82	-0.03
		RAPS- B	440	420	464	462	10.13	422	10.08	0.05
RAPS- C		440	430	478	477	10.27	428	10.32	-0.05	
Sub Total (B)		1320	1176	1303	1306	28.19	1175	28.22	-0.03	
C. NHPC	Chamera I HPS	540	540	180	0	1.63	68	1.64	-0.01	
	Chamera II HPS	300	300	120	0	0.87	36	1.04	-0.18	
	Chamera III HPS	231	231	132	0	0.19	8	0.53	-0.34	
	Bairasuil HPS	180	0	0	0	0.00	0	0.00	0.00	
	Salal-HPS	690	125	218	115	2.83	118	3.00	-0.17	
	Tanakpur-HPS	94	10	0	23	0.25	11	0.23	0.02	
	Uri-HPS	480	99	19	13	2.38	99	2.39	-0.01	
	Uri-II HPS	180	74	102	36	1.67	70	1.80	-0.12	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	258	267	0	2.50	104	2.66	-0.16	
	Sewa-II HPS	120	119	20	0	0.45	19	0.55	-0.10	
	Sub Total (C)	3485	1755	1058	187	12.78	532	13.85	-1.08	
	D. NJPC	Nathpa Jhakri	1500	1605	912	0	7.06	294	7.74	-0.68
Sub Total (D)		1500	1605	912	0	7.06	294	7.74	-0.68	
E. THDC	Tehri HPS	1000	1020	1016	0	9.54	398	9.50	0.04	
	Koteshwar HPS	400	138	391	87	3.33	139	3.30	0.03	
	Sub Total (E)	1400	1158	1407	87	12.87	536	12.80	0.07	
F. BBMB	Bhakra HPS	1497	748	1021	512	18.06	753	17.95	0.11	
	Dehar HPS	990	117	330	0	3.05	127	2.80	0.25	
	Pong HPS	396	221	372	60	5.41	225	5.29	0.12	
	Sub Total (F)	2883	1085	1723	572	26.52	1105	26.05	0.47	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.41	17	0.40	0.02	
	KWHEP HPS(IPP)	1000	0	360	0	3.65	152	3.72	-0.07	
	Malana Stg-II HPS	100	0	0	0	0.13	5	0.12	0.01	
	Shree Cement TPS	300	0	273	184	6.15	256	6.49	-0.34	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	633	184	10.34	431	10.72	-0.39	
H. Total Regional Entities (A-G)	23532	17065	14843	9513	273.20	11383	279.85	-6.65		

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	1147	850	24.27	1011
	Guru Nanak Dev TPS(Bhatinda)	440	250	250	6.05	252
	Guru Hargobind Singh TPS(L.mbt)	920	772	671	17.88	745
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	0		0.00	0
	Talwandi Saboo	660	0		0.00	0
	Thermal (Total)	3980	2169	1771	48.20	2008
	Total Hydro	1148	448	381	9.95	415
Total Punjab	5128	2617	2152	58.15	2423	
Haryana	Panipat TPS	1367	801	768	18.53	772
	DCRTPP (Yamuna nagar)	600	519	0	7.82	326
	Faridabad GPS (NTPC)	432	154	151	3.84	160
	RGTPP (khedar) (IPP)	1200	536	504	12.57	524
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	823	744	19.82	826
	Thermal (Total)	4944	2833	2167	62.58	2608
	Total Hydro	62	20	12	0.42	17
	Total Haryana	5006	2853	2179	63.00	2625
Rajasthan	kota TPS	1240	1096	1093	26.09	1087
	suratgarh TPS	1500	1022	807	23.65	986
	Chabra TPS	750	381	384	10.10	421
	Dholpur GPS	330	108	108	2.34	97
	Ramgarh GPS	221	142	147	3.43	143
	RAPS A (NPC)	300	175	175	4.10	171
	Barsingsar (NLC)	250	211	211	4.93	205
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	445	317	9.36	390
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	1179	1066	27.47	1144
	Thermal (Total)	7976	4759	4308	111.46	4644
	Total Hydro	550	92	54	2.74	114
	Wind power	2191	277	570	10.05	419
	Biomass	91	25	25	0.59	25
	Solar	201	8	0	0.84	35
	Renewable/Others (Total)	2483	302	595	11.48	479
Total Rajasthan	11009	5153	4957	125.68	5237	
UP	Anpara TPS	1630	1280	1309	27.10	1129
	Obra TPS	1288	515	553	11.90	496
	Paricha TPS	1140	982	860	19.10	796
	Panki TPS	210	85	85	1.90	79
	Harduaganj TPS	665	495	477	10.60	442
	Tanda TPS (NTPC)	440	395	395	9.67	403
	Roza TPS (IPP)	1200	594	648	17.18	716
	Anpara-C (IPP)	1200	866	646	17.06	711
	Bajaj Energy Pvt.Ltd.(IPP) TPS	450	0	0	0.00	0
	Thermal (Total)	8223	5212	4973	114.51	4771
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	130	44	1.99	83
	Cogeneration	981	650	650	15.60	650
	Total UP	10131	5992	5667	132.09	5504
Uttarakhand	Total Hydro	1303	501	176	7.94	331
	Total Uttarakhand	1303	501	176	7.94	331
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	166	163	3.90	162
	Pragati Gas Turbine	330	322	262	7.52	313
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	420	495	10.91	455
	Thermal (Total)	2232	908	920	22.33	930
Total Delhi	2232	908	920	22.33	930	
HP	Baspa HPS (IPP)	330	0	0	0.94	39
	Malana HPS (IPP)	86	0	0	0.20	8
	Other Hydro	589	188	68	3.12	130
	Total HP	1005	188	68	4.25	177
J & K	Baglihar HPS (IPP)	450	152	148	3.57	149
	Other Hydro	323	84	116	2.95	123
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	236	264	6.52	272
Total State Control Area Generation		36770	18448	16383	419.96	17498
J. Net Inter Regional Exchange [[import (+ve)]/Export (-ve)]			5572	3807	123.49	5146
Total Regional Availability(Gross)		60303	38863	29703	816.65	34027

IV. Total Hydro Generation:

Regional Entities Hydro	10560	5460	846	63.42	2642
State Control Area Hydro	5368	1615	999	33.80	1409
Total Regional Hydro	15928	7075	1845	97.22	4051

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	150	100	500	50	4.39	0.06	4.34
Gwalior-Agra (D/C)	1361	1008	1896	0	30.68	0.00	30.68
Zerda-Kankroli	5	-218	120	246	0.00	1.02	-1.02
Zerda-Bhinmal	103	-121	260	193	1.51	0.00	1.51
Malanpur-Auraiya	-115	-110	0	144	0.00	2.32	-2.32
Badod-Kota/Morak	-26	-167	0	217	0.00	2.06	-2.06
Mundra-Mohindergarh(HVDC)	1919	1827	1920	0	44.29	0.00	44.29
Sub Total WR	3397	2319			80.88	5.46	75.42
Pusauli Bypass	400	400	400	0	9.68	0.00	9.68
MZP- GKP (D/C)	333	299	619	0	8.77	0.00	8.77
Patna-Balia(D/C)	653	474	821	0	14.48	0.00	14.48
B'Sharif-Balia (D/C)	432	137	578	0	7.39	0.00	7.39
Pusauli-Balia	-25	-90	0	110	0.00	1.29	-1.29
Gaya-Fatehpur (765 Kv)	75	107	281	32	2.98	0.00	2.98
Pusauli-Sahupuri	122	36	137	0	1.80	0.00	1.80
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)	217	155	394	0	5.11	0.00	5.11
Sub Total ER	2175	1488			50.21	2.14	48.08
Total IR Exch	5572	3807			131.09	7.60	123.49

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
35.95	0.28	36.23	22.88	2.98	3.35	2.08	-1.10	1.10

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
61.35	65.74	127.09	48.08	75.42	123.49	-13.28	9.68	-3.60

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	0.10	77.30	0.30	77.20	79.30	22.70

<----- 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	Hz	Index			
50.53	13.06	49.66	18.49	50.11	0.28	0.13	50.43	49.99

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	410	04:01	400	08:48	0.0	0.0	0.0	0.0
Gorakhpur	400	430	05:13	416	09:27	0.0	0.0	46.4	0.0
Barilly	400	423	04:00	385	08:04	0.0	0.0	6.6	0.0
Kanpur	400	417	01:23	414	00:04	0.0	0.0	0.0	0.0
Dadri	400	422	01:57	400	10:19	0.0	0.0	8.0	0.0
Ballabgarh	400	427	01:25	405	11:17	0.0	0.0	37.2	0.0
Bawana	400	423	01:38	402	10:15	0.0	0.0	28.6	0.0
Bassi	400	424	04:01	388	11:21	0.0	0.4	5.3	0.0
Hissar	400	412	01:56	390	11:18	0.0	0.0	0.0	0.0
Moga	400	414	23:46	389	11:12	0.0	0.0	0.0	0.0
Abdullapur	400	423	23:17	404	10:17	0.0	0.0	2.7	0.0
Nalagarh	400	424	23:18	403	10:19	0.0	0.0	1.7	0.0
Kishenpur	400	423	13:01	390	18:09	0.0	0.0	0.3	0.0
Wagoora	400	419	13:01	362	11:12	31.8	86.6	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	773	04:02	739	09:07	0.0	1.3	0.0	0.0
Balia	765	787	05:04	746	09:32	0.0	0.0	0.0	0.0
Moga	765	789	23:47	744	11:12	0.0	0.0	0.0	0.0
Agra	765	808	04:02	763	09:09	0.0	0.0	13.0	0.0
Bhiwani	765	801	23:47	760	11:17	0.0	0.0	0.3	0.0
Unnao	765	766	04:02	738	09:08	0.0	5.3	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	499.80	1088.42	492.53	817.99	159.00	537.27
Pong	426.72	384.05	410.72	514.41	409.55	484.26	57.26	341.50
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	41.96	43.72
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 11.01.2014 :

1. Shallow fog in Punjab ,Haryana and UP& Rains in East 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 .