

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 31.12.2011

Date of Reporting : 01.01.2012

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
30365	3504	33870	49.81	26011	650	26661	50.09	688.2	53.52

* 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	51.40	8.75		60.15	32.84	31.38	-1.46	91.53	5.00
Haryana	52.52	0.57		53.09	27.04	40.78	13.75	93.87	9.98
Rajasthan	83.08	5.11	10.96	99.15	51.42	63.19	11.77	162.34	1.17
Delhi	31.67			31.67	37.91	31.24	-6.68	62.90	0.14
UP	85.23	5.69	15.60	106.52	83.41	77.87	-5.54	184.39	34.61
Uttarakhand		9.56		9.56	17.43	20.65	3.22	30.21	0.00
HP		4.02		4.02	18.54	19.52	0.98	23.54	0.73
J & K		4.43	0.00	4.43	23.63	31.67	8.03	36.09	1.90
Chandigarh				0.00	3.46	3.36	-0.09	3.36	0.00
Total	303.90	38.12	26.56	368.58	295.69	319.66	23.97	688.24	53.52

* 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	Day Energy MU
Punjab	4231	600	-144	-403	3198	0	-179	-901	-11.18	
Haryana	3752	1370	221	-68	3613	0	445	-68	-1.63	
Rajasthan	6763	89	612	421	6367	0	720	546	14.66	
Delhi	3173	0	-285	-253	1464	0	-334	-529	-8.01	
UP	7831	1345	-411	267	7915	650	250	267	6.41	
Uttarakhand	1535	0	100	308	1064	0	137	308	7.38	
HP	1153	0	-190	8	783	0	85	237	3.70	
J&K	1735	100	138	252	1512	0	380	247	5.97	
Chandigarh	192	0	-28	0	95	0	7	-30	-0.24	
Total	30365	3504	13	533	26011	650	1512	78	17.07	

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
	Singrauli STPS	2000	1774	2053	1846	43.29	1804	42.59	0.71
	Rihand I STPS	1000	878	979	923	21.27	886	21.08	0.20
	Rihand II STPS	1000	977	1046	1038	23.60	983	23.45	0.15
	Dadri I STPS	840	688	860	635	16.24	677	16.45	-0.22
	Dadri II STPS	980	867	1022	503	20.59	858	20.74	-0.16
	Unchahar I TPS	440	379	439	359	9.11	380	9.03	0.09
	Unchahar II TPS	440	378	440	346	9.01	376	8.96	0.05
	Unchahar III TPS	210	189	219	195	4.54	189	4.50	0.04
	ISTPP (Jhajjar)	1000	475	362	478	9.78	407	9.81	-0.03
	Dadri GPS	830	837	741	678	17.45	727	17.68	-0.23
	Anta GPS	419	430	335	274	8.55	356	8.33	0.21
	Auraiya GPS	663	483	418	387	10.30	429	10.24	0.05
	Sub Total (A)	9822	8356	8914	7622	193.73	8072	192.86	0.87
B. NPC	NAPS	440	221	255	266	5.40	225	5.30	0.10
	RAPS- B	440	423	464	472	10.16	423	10.15	0.00
	RAPS- C	440	420	470	476	10.26	427	10.08	0.17
	Sub Total (B)	1320	1064	1189	1214	25.81	1075	25.54	0.27
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	170	0	1.09	45	1.14	-0.06
	Bairasuil HPS	180	179	0	0	0.43	18	0.44	-0.01
	Salal-HPS	690	104	190	35	2.50	104	2.50	0.00
	Tanakpur-HPS	94	31	32	26	0.70	29	0.72	-0.02
	Uri-HPS	480	109	210	45	2.47	103	2.56	-0.09
	Dhauliganga-HPS	280	210	208	0	1.04	43	1.00	0.03
	Dulhasti-HPS	390	388	239	0	2.45	102	2.45	-0.01
	Sewa-II HPS	120	40	40	0	0.34	14	0.33	0.01
	Sub Total (C)	3074	1358	1089	106	11.01	459	11.14	-0.14
D. NJPC	Nathpa Jhakri	1500	1069	760	0	7.64	319	7.68	-0.04
	Sub Total (D)	1500	1069	760	0	7.64	319	7.68	-0.04
E. THDC	Tehri HPS	1000	1030	1002	0	6.53	272	6.50	0.03
	Koteshwar HPS	200	119	207	0	2.19	91	2.20	-0.01
	Sub Total (E)	1200	1149	1209	0	8.72	364	8.70	0.02
F. BBMB	Bhakra HPS	1480	693	944	552	17.06	711	16.63	0.43
	Dehar HPS	990	127	330	0	3.08	128	3.05	0.03
	Pong HPS	396	229	306	126	5.83	243	5.49	0.34
	Sub Total (F)	2866	1048	1580	678	25.97	1082	25.16	0.81
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.36	15	0.34	0.01
	KWHEP HPS(IPP)	1000	0	410	0	3.73	156	4.20	-0.47
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	135	118	3.61	151	2.93	0.68
	Sub Total (G)	1442	0	545	118	7.70	321	7.48	0.22
H. Total Regional Entities (A-G)		21225	14043	15286	9738	280.58	11691	278.56	2.03

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	1050	1266	25.37	1057	
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.66	194	
	Guru Hargobind Singh TPS(L.mbt)	920	961	962	21.37	890	
	Thermal (Total)	2620	2226	2443	51.40	2142	
	Total Hydro	1148	376	245	8.75	364	
	Total Punjab	3768	2602	2688	60.15	2506	
Haryana	Panipat TPS	1360	1010	921	23.72	988	
	DCRTPP (Yamuna nagar)	600	270	270	6.59	274	
	Faridabad GPS (NTPC)	432	424	438	10.55	440	
	RGTPP (khedar) (IPP)	1200	347	510	11.67	486	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Thermal (Total)	3617	2051	2139	52.52	2189	
	Total Hydro	62	20	23	0.57	24	
		Total Haryana	3679	2071	2162	53.09	2212
Rajasthan	kota TPS	1240	1173	984	27.11	1130	
	suratgarh TPS	1500	1158	1154	27.36	1140	
	Chabra TPS	500	229	233	7.83	326	
	Dholpur GPS	330	227	227	5.48	228	
	Ramgarh GPS	113	65	72	1.19	50	
	RAPS A (NPC)	300	174	184	4.48	187	
	Barsingar (NLC)	250	0	75	0.28	11	
	Giral LTPS (IPP)	250	47	45	1.07	44	
	Rajwest LTPS (IPP)	540	465	465	8.29	345	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5158	3538	3439	83.08	3462	
	Total Hydro	550	154	180	5.11	213	
	Wind power	1294	164	219	4.67	194	
	Biomass	71	55	55	1.18	49	
	Solar	50	0	0	0.00	0	
	Renewable/Others (Total)	1365	219	274	10.96	457	
		Total Rajasthan	7073	3911	3893	99.15	4131
UP	Anpara TPS	1630	1087	1572	31.10	1296	
	Obra TPS	1442	665	651	14.30	596	
	Paricha TPS	640	228	229	4.80	200	
	Panki TPS	210	80	80	1.70	71	
	Harduaganj TPS	415	44	48	0.90	38	
	Tanda TPS (NTPC)	440	296	294	7.30	304	
	Roza TPS (IPP)	900	506	504	12.40	517	
	Anpara-C (IPP)	1200	416	429	10.05	419	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	113	118	2.68	112	
	Thermal (Total)	7057	3435	3925	85.23	3551	
	Vishnuparyag HPS (IPP)	400	89	89	2.11	88	
	Other Hydro	527	160	0	3.58	149	
	Cogeneration	951	650	650	15.60	650	
		Total UP	8935	4334	4664	106.52	4351
	Uttarakhand	Total Hydro	1303	554	290	9.56	398
Total Uttarakhand		1303	554	290	9.56	398	
Delhi	Rajghat TPS	135	94	94	2.43	101	
	Delhi Gas Turbine	282	192	157	4.74	197	
	Praagati Gas Turbine	330	306	320	7.51	313	
	Rithala GPS	108	19	33	0.54	23	
	Bawana GPS	440	200	17	1.72	72	
	Badarpur TPS (NTPC)	705	690	585	14.73	614	
	Thermal (Total)	2000	1501	1371	31.67	1319	
	Total Delhi	2000	1501	1371	31.67	1319	
HP	Baspa HPS (IPP)	330	0	0	1.02	42	
	Malana HPS (IPP)	101	1	0	0.23	9	
	Other Hydro	571	173	51	2.78	116	
	Total HP	1002	174	51	4	168	
J & K	Baglihar HPS (IPP)	450	150	132	3.19	133	
	Other Hydro	323	54	86	1.24	51	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	204	218	4.43	184
Total State Control Area Generation		28716	15351	15337	368.58	15270	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2128	2416	63.43	2643	
Total Regional Availability(Gross)		49941	32765	27491	712.59	29603	

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5183	902	61.05	2544
State Control Area Hydro	5365	1642	1007	36.02	1501
Total Regional Hydro	15447	6825	1909	97.06	4044

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	-200	0	200	0.00	4.18	-4.18
Gwalior-Agra (D/C)	704	846	1312	0	21.57	0.00	21.57
Zerda-Kankroli	16	103	213	27	2.51	0.00	2.51
Zerda-Bhinmal	48	194	333	40	4.38	0.00	4.38
Malanpur-Auraiya	-66	-85	0	85	0.00	1.08	-1.08
Badod-Kota/Morak	9	20	47	17	0.51	0.00	0.51
Sub Total WR	611	878			28.98	5.26	23.72
Pusauli Bypass	100	300	300	0	4.65	0.00	4.65
MZP- GKP (D/C)	339	436	930	0	13.13	0.00	13.13
Patna-Balia(D/C)	270	270	459	0	7.83	0.00	7.83
B'Sharif-Balia (D/C)	410	178	505	0	6.56	0.00	6.56
Barh - balia(D/C)	290	320	422	0	5.87	0.00	5.87
Pusauli-Sahupuri	138	68	179	0	2.52	0.00	2.52
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-34	0	48	0.00	0.84	-0.84
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1517	1538			40.55	0.84	39.71
Total IR Exch	2128	2416			69.52	6.10	63.43

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
16.64	0.43	17.07	10.86	8.07	2.56	5.55	2.76	-2.76

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
33.25	6.67	39.92	39.71	23.72	63.43	6.46	17.05	23.51

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	6.80	29.60	92.20	69.40	16.10	1.00

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					
50.42	16.04	49.26	9.11	49.80	0.77	0.19	50.22	49.58

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	404	17:05	397	00:02	0.0	0.0	0.0	0.0
Gorakhpur	400	431	17:32	404	09:13	0.0	0.0	20.4	0.1
Bareilly	400	421	04:05	397	11:20	0.0	0.0	0.3	0.0
Kanpur	400	414	03:11	396	12:09	0.0	0.0	0.0	0.0
Dadri	400	418	04:04	397	11:13	0.0	0.0	0.0	0.0
Ballabgarh	400	422	04:05	398	11:13	0.0	0.0	0.8	0.0
Bawana	400	421	04:04	398	11:13	0.0	0.0	0.3	0.0
Bassi	400	421	04:01	392	08:37	0.0	0.0	0.1	0.0
Hissar	400	410	20:54	392	10:20	0.0	0.0	0.0	0.0
Moga	400	420	03:08	397	10:08	0.0	0.0	0.0	0.0
Abdullapur	400	422	04:04	400	11:14	0.0	0.0	2.0	0.0
Nalagarh	400	425	03:25	403	11:07	0.0	0.0	16.4	0.0
Kishenpur	400	415	05:03	388	11:16	0.0	0.9	0.0	0.0
Wagoora	400	394	03:39	359	11:16	67.6	85.8	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	502.56	1205.87	503.90	1258.87	171.09	454.48
Pong	426.72	384.05	414.00	633.63	417.00	755.83	39.33	270.77
Tehri	829.79	740.04	810.10	802.26	818.65	982.26	69.30	160.00
Koteshwar	612.50	598.50	607.90	3.64	NA	NA	160.00	133.00
Chamera-I	760.00	748.75	746.99	NA	746.91	NA	43.58	0.00
Rihand	268.22	252.98	263.62	520.00	257.34	172.40	NA	NA
RPS	352.80	343.81	350.18	NA	NA	NA	NA	276.09
Jawahar Sagar	298.70	295.78	297.88	NA	NA	NA	NA	22.85
RSD	527.91	487.91	511.06	NA	514.09	NA	66.54	257.57

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 31.12.2011 :

1. Partial Fog in Haryana , Punjab & Light Fog in rest of NCR / NR.

XII. Synchronisation of new generating units :

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

1: ICT-II (315 MVA) at Neemrana S/S first time test charged at 22:41 hrs of dt. 31.12.2011.

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 31.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER