

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 30.12.2011

Date of Reporting : 31.12.2011

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
31555	3462	35017	49.74	25424	650	26074	50.12	682.4	63.98

* 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	53.59	8.11		61.70	30.57	28.38	-2.20	90.08	5.22
Haryana	47.66	0.56		48.22	27.12	41.75	14.63	89.97	16.21
Rajasthan	87.41	4.80	11.69	103.90	50.82	53.45	2.64	157.35	1.04
Delhi	30.97			30.97	33.96	32.48	-1.48	63.45	1.36
UP	92.57	6.18	15.60	114.35	80.66	73.73	-6.93	188.07	37.22
Uttarakhand		9.36		9.36	17.52	21.46	3.94	30.81	0.00
HP		4.38		4.38	18.60	19.87	1.26	24.25	1.03
J & K		4.43	0.00	4.43	23.73	30.51	6.79	34.94	1.90
Chandigarh				0.00	3.42	3.51	0.09	3.51	0.00
Total	312.20	37.81	27.29	377.31	286.38	305.13	18.74	682.43	63.98

* 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	4510	600	73	-403	2935	0	-59	-901	-11.18
Haryana	4062	1300	705	-68	3506	0	406	-68	-1.63
Rajasthan	6612	107	273	421	6264	0	-5	546	14.66
Delhi	3316	2	-108	-253	1453	0	-277	-529	-8.02
UP	8291	1345	-531	167	8048	650	153	167	4.01
Uttarakhand	1601	0	168	308	1044	0	135	308	7.39
HP	1200	8	-106	8	785	0	58	237	3.70
J&K	1766	100	126	252	1298	0	152	247	5.97
Chandigarh	198	0	-15	0	91	0	-1	-30	-0.24
Total	31555	3462	585	433	25424	650	562	-22	14.67

* 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	1735	1853	1860	41.83	1743	41.64	0.19
	Rihand I STPS	1000	878	976	932	21.28	887	21.08	0.21
	Rihand II STPS	1000	977	1041	1038	23.63	984	23.45	0.18
	Dadri I STPS	840	585	643	461	13.18	549	13.14	0.04
	Dadri II STPS	980	875	1021	770	19.39	808	19.86	-0.47
	Unchahar I TPS	440	379	393	354	8.98	374	8.95	0.03
	Unchahar II TPS	440	378	418	332	8.92	372	8.83	0.10
	Unchahar III TPS	210	189	209	171	4.47	186	4.43	0.04
	ISTPP (Jhajjar)	1000	475	499	462	10.89	454	10.87	0.02
	Dadri GPS	830	834	817	644	17.93	747	17.92	0.01
	Anta GPS	419	335	249	335	7.43	310	7.03	0.40
	Auraiya GPS	663	655	603	412	13.40	558	13.36	0.04
	Sub Total (A)	9822	8296	8722	7771	191.33	7972	190.54	0.78
B. NPC	NAPS	440	221	252	253	5.16	215	5.30	-0.14
	RAPS- B	440	424	462	471	10.16	423	10.18	-0.02
	RAPS- C	440	420	475	475	10.81	451	10.08	0.73
	Sub Total (B)	1320	1065	1189	1199	26.13	1089	25.56	0.57
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	163	0	1.27	53	1.20	0.07
	Bairasuil HPS	180	179	60	0	0.45	19	0.45	0.00
	Salal-HPS	690	99	300	30	2.64	110	2.32	0.32
	Tanakpur-HPS	94	28	32	0	0.70	29	0.72	-0.02
	Uri-HPS	480	110	214	42	2.67	111	2.73	-0.06
	Dhauliganga-HPS	280	210	138	0	1.03	43	0.96	0.07
	Dulhasti-HPS	390	388	288	0	2.68	112	2.50	0.18
	Sewa-II HPS	120	79	41	0	0.42	18	0.35	0.08
	Sub Total (C)	3074	1390	1236	72	11.87	495	11.24	0.63
D. NJPC	Nathpa Jhakri	1500	1125	812	0	7.53	314	7.82	-0.29
	Sub Total (D)	1500	1125	812	0	7.53	314	7.82	-0.29
E. THDC	Tehri HPS	1000	1030	1002	0	6.52	272	6.50	0.02
	Koteshwar HPS	200	119	100	0	2.16	90	2.10	0.06
	Sub Total (E)	1200	1149	1102	0	8.68	362	8.60	0.08
F. BBMB	Bhakra HPS	1480	666	944	522	16.44	685	15.97	0.47
	Dehar HPS	990	123	330	0	3.27	136	2.95	0.32
	Pong HPS	396	207	306	66	5.34	223	4.97	0.37
	Sub Total (F)	2866	996	1580	588	25.05	1044	23.90	1.15
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.28	12	0.27	0.02
	KWHEP HPS(IPP)	1000	0	410	0	3.79	158	4.08	-0.29
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	134	109	3.60	150	2.94	0.66
	Sub Total (G)	1442	0	544	109	7.67	320	7.29	0.39
H. Total Regional Entities (A-G)		21225	14020	15185	9739	278.26	11594	274.94	3.32

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	1080	28.02	1168	
	Guru Nanak Dev TPS(Bhatinda)	440	216	215	4.62	192	
	Guru Hargobind Singh TPS(L.mbt)	920	967	821	20.95	873	
	Thermal (Total)	2620	2443	2116	53.59	2233	
	Total Hydro	1148	247	197	8.11	338	
	Total Punjab	3768	2690	2313	61.70	2571	
Haryana	Panipat TPS	1360	844	1003	22.30	929	
	DCRTPP (Yamuna nagar)	600	273	273	6.58	274	
	Faridabad GPS (NTPC)	432	427	441	10.55	440	
	RGTPP (khedar) (IPP)	1200	394	313	8.22	343	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Thermal (Total)	3617	1938	2030	47.66	1986	
	Total Hydro	62	22	25	0.56	23	
		Total Haryana	3679	1960	2055	48.22	2009
Rajasthan	kota TPS	1240	1164	1182	27.11	1130	
	suratgarh TPS	1500	1157	1149	27.36	1140	
	Chabra TPS	500	358	381	7.83	326	
	Dholpur GPS	330	227	225	5.48	228	
	Ramgarh GPS	113	53	44	1.19	50	
	RAPS A (NPC)	300	179	183	4.48	187	
	Barsingar (NLC)	250	95	112	2.39	100	
	Giral LTPS (IPP)	250	45	75	1.13	47	
	Rajwest LTPS (IPP)	540	465	465	10.43	435	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5158	3743	3816	87.41	3642	
	Total Hydro	550	159	137	4.80	200	
	Wind power	1294	142	414	6.02	251	
	Biomass	71	42	42	0.88	37	
	Solar	50	0	0	0.00	0	
	Renewable/Others (Total)	1365	184	456	11.69	487	
		Total Rajasthan	7073	4086	4409	103.90	4329
UP	Anpara TPS	1630	1576	1602	33.70	1404	
	Obra TPS	1442	652	675	14.10	588	
	Paricha TPS	640	228	237	4.70	196	
	Panki TPS	210	125	160	3.00	125	
	Harduaganj TPS	415	306	308	6.00	250	
	Tanda TPS (NTPC)	440	284	284	6.96	290	
	Roza TPS (IPP)	900	504	504	12.40	517	
	Anpara-C (IPP)	1200	412	396	8.99	375	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	118	119	2.71	113	
	Thermal (Total)	7057	4205	4285	92.57	3857	
	Vishnuparyag HPS (IPP)	400	89	89	2.09	87	
	Other Hydro	527	199	41	4.09	171	
	Cogeneration	951	650	650	15.60	650	
		Total UP	8935	5143	5065	114.35	4678
	Uttarakhand	Total Hydro	1303	554	261	9.36	390
Total Uttarakhand		1303	554	261	9.36	390	
Delhi	Rajghat TPS	135	94	91	2.44	102	
	Delhi Gas Turbine	282	241	158	5.21	217	
	Praagati Gas Turbine	330	300	264	6.80	283	
	Rithala GPS	108	19	33	0.54	23	
	Bawana GPS	440	200	17	1.72	72	
	Badarpur TPS (NTPC)	705	680	570	14.26	594	
	Thermal (Total)	2000	1534	1298	30.97	1291	
	Total Delhi	2000	1534	1298	30.97	1291	
HP	Baspa HPS (IPP)	330	0	0	1.17	49	
	Malana HPS (IPP)	101	0	0	0.24	10	
	Other Hydro	571	176	66	2.97	124	
		Total HP	1002	176	66	4	183
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	16347	15685	377.31	15634	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1695	1916	46.68	1945	
Total Regional Availability(Gross)		49941	33227	27340	702.24	29173	

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5274	769	60.80	2534
State Control Area Hydro	5365	1561	945	35.73	1489
Total Regional Hydro	15447	6835	1714	96.53	4022

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	-400	0	100	400	0.10	1.55	-1.45
Gwalior-Agra (D/C)	784	846	1176	0	19.16	0.00	19.16
Zerda-Kankroli	40	-20	239	202	0.49	0.00	0.49
Zerda-Bhinmal	-103	29	398	140	2.35	0.00	2.35
Malanpur-Auraiya	-136	-69	0	172	0.00	2.42	-2.42
Badod-Kota/Morak	-28	-83	49	79	0.00	7.71	-7.71
Sub Total WR	157	703			22.10	11.68	10.42
Pusauli Bypass	50	300	300	0	6.74	0.00	6.74
MZP- GKP (D/C)	520	349	610	0	10.79	0.00	10.79
Patna-Balia(D/C)	290	298	361	0	7.00	0.00	7.00
B'Sharif-Balia (D/C)	228	224	304	0	5.35	0.00	5.35
Barh - balia(D/C)	348	0	432	0	4.71	0.00	4.71
Pusauli-Sahupuri	132	76	153	0	2.49	0.00	2.49
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	1538	1213			37.09	0.84	36.25
Total IR Exch	1695	1916			59.19	12.52	46.68

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
16.29	0.43	16.71	10.86	5.67	0.40	5.59	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
30.73	3.26	33.99	36.25	10.42	46.68	5.52	7.16	12.68

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	1.40	15.50	42.80	82.10	54.80	17.80	2.40

←----- 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					
50.39	5.05	49.05	20.06	49.75	1.24	0.25	50.25	0.00

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	403	02:58	396	18:48	0.0	0.0	0.0	0.0
Gorakhpur	400	425	05:05	394	19:18	0.0	0.0	10.0	0.0
Bareilly	400	421	05:04	395	14:31	0.0	0.0	0.2	0.0
Kanpur	400	415	04:05	397	14:29	0.0	0.0	0.0	0.0
Dadri	400	416	04:06	394	14:29	0.0	0.0	0.0	0.0
Ballabgarh	400	422	05:04	395	14:31	0.0	0.0	0.5	0.0
Bawana	400	421	05:03	397	14:29	0.0	0.0	0.4	0.0
Bassi	400	422	05:05	396	14:31	0.0	0.0	0.5	0.0
Hissar	400	413	05:04	391	14:31	0.0	0.0	0.0	0.0
Moga	400	421	05:05	396	11:06	0.0	0.0	0.0	0.0
Abdullapur	400	422	05:03	297	02:47	0.1	0.1	1.8	0.0
Nalagarh	400	425	20:39	401	10:59	0.0	0.0	13.1	0.0
Kishenpur	400	414	03:03	387	11:04	0.0	1.3	0.0	0.0
Wagoora	400	394	05:08	362	10:59	68.5	87.3	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 30.12.2011 :

1. Dens Fog in NCR / Haryana & Light Fog in rest of NR.

XII. Synchronisation of new generating units :

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

1: 400kV Lucknow (PG) - Lucknow (PG new) ckt-1 & Bays 765/400kV s/s first time test charged at 17.58 hrs of dt. 30.12.2011.

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 30.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER