

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 28.12.2011

Date of Reporting : 29.12.2011

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
32002	2927	34929	49.82	26399	1355	27754	50.01	699.9	61.07

* 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	52.13	10.44		62.57	30.27	33.01	2.74	95.58	6.38
Haryana	54.33	0.57		54.90	26.94	40.16	13.21	95.06	12.05
Rajasthan	84.19	5.64	14.14	103.97	50.98	57.00	6.02	160.97	0.99
Delhi	31.01			31.01	37.64	34.70	-2.94	65.71	0.20
UP	94.63	6.21	15.60	116.44	80.07	74.46	-5.61	190.90	36.91
Uttarakhand		9.56		9.56	16.86	19.51	2.65	29.07	1.54
HP		4.23		4.23	18.35	19.66	1.32	23.89	1.10
J & K		4.73	0.00	4.73	23.76	30.45	6.69	35.18	1.90
Chandigarh				0.00	3.40	3.50	0.10	3.50	0.00
Total	316.29	41.39	29.74	387.42	288.27	312.44	24.17	699.85	61.07

* 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	STOA/PX transaction
Punjab	4771	0	24	-403	3548	600	273	-901	-11.18	
Haryana	4213	1209	573	-68	3617	0	330	-70	-1.67	
Rajasthan	6805	51	308	421	6381	0	254	546	14.66	
Delhi	3262	2	-42	-122	1473	0	-580	-398	-4.87	
UP	8350	1565	-428	167	7936	755	112	167	4.01	
Uttarakhand	1555	0	251	277	1062	0	100	332	7.34	
HP	1207	0	-53	8	790	0	49	237	3.70	
J&K	1642	100	30	252	1495	0	354	254	6.10	
Chandigarh	197	0	-14	0	97	0	6	-30	-0.24	
Total	32002	2927	649	533	26399	1355	898	137	17.84	

* 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	1863	1854	42.20	1758	41.64	0.56
	Rihand I STPS	1000	878	980	928	21.25	885	21.08	0.18
	Rihand II STPS	1000	977	1043	1042	23.63	985	23.45	0.19
	Dadri I STPS	840	585	636	482	13.43	560	13.47	-0.04
	Dadri II STPS	980	967	1026	792	22.35	931	22.43	-0.08
	Unchahar I TPS	440	379	417	408	9.14	381	9.05	0.10
	Unchahar II TPS	440	379	421	409	9.09	379	8.98	0.10
	Unchahar III TPS	210	189	211	205	4.54	189	4.48	0.06
	ISTPP (Jhajjar)	1000	439	400	419	9.80	409	10.05	-0.24
	Dadri GPS	830	841	811	594	17.93	747	18.11	-0.18
	Anta GPS	419	276	244	216	6.23	260	5.98	0.25
	Auraiya GPS	663	654	598	411	13.44	560	13.44	0.00
	Sub Total (A)	9822	8299	8650	7760	193.04	8043	192.15	0.89
B. NPC	NAPS	440	219	246	263	5.22	217	5.26	-0.04
	RAPS- B	440	420	468	468	10.19	425	10.08	0.11
	RAPS- C	440	420	473	477	10.25	427	10.08	0.17
	Sub Total (B)	1320	1059	1187	1208	25.66	1069	25.42	0.24
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	152	0	1.13	47	1.12	0.01
	Bairasuil HPS	180	179	100	0	0.48	20	0.49	-0.01
	Salal-HPS	690	108	301	31	2.38	99	2.58	-0.20
	Tanakpur-HPS	94	32	39	23	0.73	30	0.72	0.01
	Uri-HPS	480	116	214	43	2.73	114	2.59	0.14
	Dhauliganga-HPS	280	210	138	0	1.00	42	1.03	-0.04
	Dulhasti-HPS	390	388	272	0	2.45	102	2.51	-0.06
	Sewa-II HPS	120	79	79	0	0.51	21	0.47	0.04
	Sub Total (C)	3074	1409	1295	97	11.41	475	11.52	-0.11
D. NJPC	Nathpa Jhakri	1500	1069	957	0	7.38	307	7.34	0.04
	Sub Total (D)	1500	1069	957	0	7.38	307	7.34	0.04
E. THDC	Tehri HPS	1000	1030	749	0	5.01	209	5.00	0.01
	Koteswar HPS	200	119	194	0	2.07	86	2.00	0.07
	Sub Total (E)	1200	1149	943	0	7.08	295	7.00	0.08
F. BBMB	Bhakra HPS	1480	666	944	522	16.62	693	15.97	0.65
	Dehar HPS	990	123	330	0	3.27	136	2.95	0.32
	Pong HPS	396	183	306	126	4.71	196	4.40	0.31
	Sub Total (F)	2866	972	1580	648	24.60	1025	23.32	1.28
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.29	12	0.19	0.10
	KWHEP HPS(IPP)	1000	0	225	0	3.95	164	3.48	0.47
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	142	121	3.32	138	2.85	0.47
	Sub Total (G)	1442	0	367	121	7.55	315	6.52	1.03
H. Total Regional Entities (A-G)		21225	13956	14979	9834	276.71	11530	273.26	3.45

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	1050	25.97	1082	
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.61	192	
	Guru Hargobind Singh TPS(L.mbt)	920	961	967	21.55	898	
	Thermal (Total)	2620	2436	2232	52.13	2172	
	Total Hydro	1148	579	210	10.44	435	
	Total Punjab	3768	3015	2442	62.57	2607	
Haryana	Panipat TPS	1360	1021	1022	24.71	1029	
	DCRTPP (Yamuna nagar)	600	274	273	6.59	275	
	Faridabad GPS (NTPC)	432	426	445	10.30	429	
	RGTPP (khedar) (IPP)	1200	509	464	12.73	530	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Thermal (Total)	3617	2230	2204	54.33	2264	
	Total Hydro	62	22	23	0.57	24	
		Total Haryana	3679	2252	2227	54.90	2288
Rajasthan	kota TPS	1240	1180	1179	27.67	1153	
	suratgarh TPS	1500	1151	1155	27.21	1134	
	Chabra TPS	500	225	226	5.12	213	
	Dholpur GPS	330	229	229	5.45	227	
	Ramgarh GPS	113	40	46	1.21	50	
	RAPS A (NPC)	300	180	183	4.48	187	
	Barsingar (NLC)	250	70	62	1.48	62	
	Giral LTPS (IPP)	250	55	0	0.92	38	
	Rajwest LTPS (IPP)	540	460	440	10.66	444	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5158	3590	3520	84.19	3508	
	Total Hydro	550	233	180	5.64	235	
	Wind power	1294	265	476	7.31	305	
	Biomass	71	47	47	1.01	42	
	Solar	50	0	0	0.17	7	
	Renewable/Others (Total)	1365	312	523	14.14	589	
		Total Rajasthan	7073	4135	4223	103.97	4332
UP	Anpara TPS	1630	1605	1575	34.20	1425	
	Obra TPS	1442	675	677	14.50	604	
	Paricha TPS	640	229	234	5.00	208	
	Panki TPS	210	175	170	3.50	146	
	Harduaganj TPS	415	305	293	6.20	258	
	Tanda TPS (NTPC)	440	290	403	9.20	383	
	Roza TPS (IPP)	900	506	509	12.20	508	
	Anpara-C (IPP)	1200	330	243	7.33	306	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	80	100	2.50	104	
	Thermal (Total)	7057	4195	4204	94.63	3943	
	Vishnuparyag HPS (IPP)	400	90	89	2.15	90	
	Other Hydro	527	230	41	4.06	169	
	Cogeneration	951	650	650	15.60	650	
		Total UP	8935	5165	4984	116.44	4762
	Uttarakhand	Total Hydro	1303	468	327	9.56	398
Total Uttarakhand		1303	468	327	9.56	398	
Delhi	Rajghat TPS	135	49	48	1.30	54	
	Delhi Gas Turbine	282	198	153	5.01	209	
	Praagati Gas Turbine	330	313	315	7.77	324	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	440	200	50	4.78	199	
	Badarpur TPS (NTPC)	705	675	405	12.15	506	
	Thermal (Total)	2000	1435	1103	31.01	1292	
	Total Delhi	2000	1435	1103	31.01	1292	
HP	Baspa HPS (IPP)	330	0	0	1.07	45	
	Malana HPS (IPP)	101	0	0	0.20	8	
	Other Hydro	571	184	82	2.96	123	
	Total HP	1002	184	82	4	176	
J & K	Baglihar HPS (IPP)	450	152	132	3.19	133	
	Other Hydro	323	54	78	1.54	64	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	206	210	4.73	197
Total State Control Area Generation		28716	16860	15598	387.42	16053	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1944	1836	49.87	2078	
Total Regional Availability(Gross)		49941	33783	27268	713.99	29660	

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5142	866	58.01	2417
State Control Area Hydro	5365	1922	1073	39.24	1635
Total Regional Hydro	15447	7064	1939	97.25	4052

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	200	500	0	8.23	0.00	8.23
Gwalior-Agra (D/C)	296	582	787	0	12.33	0.00	12.33
Zerda-Kankroli	-126	-95	30	306	0.00	2.32	-2.32
Zerda-Bhinmal	-64	-3	221	219	0.00	0.06	-0.06
Malanpur-Auraiya	-220	-129	0	220	0.00	3.64	-3.64
Badod-Kota/Morak	-111	-75	0	161	0.00	2.05	-2.05
Sub Total WR	275	480			20.55	8.07	12.48
Pusauli Bypass	300	150	300	0	5.67	0.00	5.67
MZP- GKP (D/C)	530	438	586	0	10.41	0.00	10.41
Patna-Balia(D/C)	261	479	574	0	8.00	0.00	8.00
B'Sharif-Balia (D/C)	160	252	689	0	7.35	0.00	7.35
Barh - balia(D/C)	312	0	346	0	3.98	0.00	3.98
Pusauli-Sahupuri	136	71	155	0	2.67	0.00	2.67
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-34	0	48	0.00	0.69	-0.69
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1669	1356			38.08	0.69	37.39
Total IR Exch	1944	1836			58.63	8.77	49.87

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
14.45	0.34	14.79	14.03	6.48	2.95	1.13	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
34.53	2.87	37.40	37.39	12.48	49.87	2.86	9.61	12.47

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	0.21	3.58	37.75	95.62	61.45	23.68	0.80

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					
50.37	6.05	49.11	11.48	49.86	0.59	0.15	50.25	49.54

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	400	01:59	393	14:33	0.0	0.0	0.0	0.0
Gorakhpur	400	432	19:57	407	10:32	0.0	0.0	36.1	1.9
Bareilly	400	420	21:57	394	11:47	0.0	0.0	0.0	0.0
Kanpur	400	416	21:55	395	10:32	0.0	0.0	0.0	0.0
Dadri	400	415	04:03	395	15:41	0.0	0.0	0.0	0.0
Ballabgarh	400	419	04:05	396	15:41	0.0	0.0	0.0	0.0
Bawana	400	419	04:05	397	10:32	0.0	0.0	0.0	0.0
Bassi	400	419	21:40	390	06:44	0.0	0.0	0.0	0.0
Hissar	400	411	20:44	390	15:45	0.0	0.0	0.0	0.0
Moga	400	416	04:02	398	10:32	0.0	0.0	0.0	0.0
Abdullapur	400	419	04:03	287	08:36	0.0	0.0	0.0	0.0
Nalagarh	400	423	06:03	404	10:32	0.0	0.0	7.5	0.0
Kishenpur	400	408	04:04	385	15:42	0.0	9.0	0.0	0.0
Wagooora	400	383	04:00	362	10:22	83.2	100.0	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 ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	502.90	1219.07	504.18	1272.20	173.55	451.91
Pong	426.72	384.05	414.21	644.91	417.26	768.49	42.33	246.55
Tehri	829.79	740.04	810.50	812.00	818.65	982.26	69.65	115.00
Koteshwar	612.50	598.50	608.30	3.76	NA	NA	115.00	137.00
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 28.12.2011 :

1. Cold & Dry Weather in NR.

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 : 28.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER