

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.12.2011
Date of Reporting : 25.12.2011

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
30443	4263	34705	49.58	25326	1100	26426	49.96	663.1	85.00

* 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	44.37	11.90		56.27	26.95	34.40	7.46	90.67	7.53
Haryana	52.13	0.52		52.65	25.47	30.53	5.06	83.18	19.78
Rajasthan	73.46	4.99	11.69	90.14	49.22	58.45	9.23	148.59	6.50
Delhi	24.69			24.69	40.73	35.38	-5.36	60.07	0.99
UP	78.88	7.06	15.60	101.54	76.74	86.95	10.21	188.49	44.92
Uttarakhand		10.50		10.50	16.83	18.72	1.89	29.22	1.69
HP		5.18		5.18	16.24	18.61	2.37	23.79	1.70
J & K		5.50	0.00	5.50	23.09	30.08	6.99	35.58	1.90
Chandigarh				0.00	3.30	3.55	0.25	3.55	0.00
Total	273.53	45.65	27.29	346.47	278.57	316.67	38.10	663.14	85.00

* 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	4288	600	-81	-403	3354	450	194	-901	-11.18	
Haryana	3677	1409	94	-56	3309	0	77	-70	-1.61	
Rajasthan	6679	44	839	431	6091	0	629	546	14.72	
Delhi	3179	10	-179	-122	1415	0	-452	-553	-5.72	
UP	8150	2020	61	167	7667	650	519	167	4.01	
Uttarakhand	1368	80	-2	332	1075	0	24	332	7.97	
HP	1204	0	-161	8	783	0	177	237	3.70	
J&K	1694	100	11	216	1532	0	397	254	5.92	
Chandigarh	204	0	0	0	100	0	11	-30	-0.24	
Total	30443	4263	582	574	25326	1100	1577	-18	17.56	

* 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	1498	1348	1860	35.96	1499	35.96	0.01
	Rihand I STPS	1000	873	972	923	21.17	882	20.96	0.22
	Rihand II STPS	1000	977	1041	1042	23.67	986	23.45	0.22
	Dadri I STPS	840	793	860	648	18.47	770	18.02	0.45
	Dadri II STPS	980	967	1026	1009	23.27	970	22.97	0.30
	Unchahar I TPS	440	313	396	329	7.57	316	7.50	0.07
	Unchahar II TPS	440	313	419	330	7.57	315	7.50	0.07
	Unchahar III TPS	210	156	209	163	3.78	158	3.75	0.03
	ISTPP (Jhajjar)	1000	475	507	473	10.72	447	10.49	0.24
	Dadri GPS	830	843	825	628	18.30	762	18.40	-0.10
	Anta GPS	419	278	275	249	6.53	272	6.21	0.31
	Auraiya GPS	663	654	617	478	13.99	583	13.83	0.15
	Sub Total (A)	9822	8140	8495	8132	191.01	7959	189.04	1.97
B. NPC	NAPS	440	220	251	152	5.30	221	5.28	0.02
	RAPS- B	440	420	465	465	10.18	424	10.08	0.10
	RAPS- C	440	420	474	475	10.22	426	10.08	0.14
	Sub Total (B)	1320	1060	1190	1092	25.70	1071	25.44	0.26
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	179	0	1.10	46	1.00	0.10
	Bairasuil HPS	180	179	120	0	0.42	18	0.48	-0.06
	Salal-HPS	690	116	250	100	2.80	117	2.78	0.02
	Tanakpur-HPS	94	29	37	15	0.72	30	0.66	0.06
	Uri-HPS	480	115	209	45	2.92	122	2.76	0.15
	Dhauliganga-HPS	280	210	136	0	0.97	40	0.97	0.00
	Dulhasti-HPS	390	275	408	0	2.81	117	2.59	0.21
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	3074	1221	1339	160	11.73	489	11.25	0.49
D. NJPC	Nathpa Jhakri	1500	1133	1353	0	7.54	314	6.79	0.76
	Sub Total (D)	1500	1133	1353	0	7.54	314	6.79	0.76
E. THDC	Tehri HPS	1000	1030	753	0	5.13	214	5.00	0.13
	Koteshwar HPS	200	119	102	0	2.04	85	2.00	0.04
	Sub Total (E)	1200	1149	855	0	7.17	299	7.00	0.17
F. BBMB	Bhakra HPS	1480	650	944	521	15.93	664	15.59	0.34
	Dehar HPS	990	128	495	0	3.11	130	3.06	0.05
	Pong HPS	396	144	306	60	3.54	148	3.45	0.09
	Sub Total (F)	2866	921	1745	581	22.58	941	22.11	0.47
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.26	11	0.24	0.01
	KWHEP HPS(IPP)	1000	0	125	0	3.90	162	3.72	0.18
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	141	137	3.32	138	2.87	0.46
	Sub Total (G)	1442	0	266	137	7.48	312	6.83	0.65
H. Total Regional Entities (A-G)		21225	13624	15243	10102	273.21	11384	268.45	4.76

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	1200	1190	24.83	1034	
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.61	192	
	Guru Hargobind Singh TPS(L.mbt)	920	732	647	14.94	622	
	Thermal (Total)	2620	2147	2052	44.37	1849	
	Total Hydro	1148	639	111	11.90	496	
	Total Punjab	3768	2786	2163	56.27	2345	
Haryana	Panipat TPS	1360	1013	1036	24.51	1021	
	DCRTPP (Yamuna nagar)	600	271	272	6.61	276	
	Faridabad GPS (NTPC)	432	434	445	10.50	437	
	RGTPP (khedar) (IPP)	1200	415	462	10.51	438	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Thermal (Total)	3617	2133	2215	52.13	2172	
	Total Hydro	62	24	27	0.52	22	
		Total Haryana	3679	2157	2242	52.65	2194
Rajasthan	kota TPS	1240	1177	1179	27.60	1150	
	suratgarh TPS	1500	838	697	17.34	722	
	Chabra TPS	500	190	226	4.60	192	
	Dholpur GPS	330	222	245	5.29	221	
	Ramgarh GPS	113	65	65	1.71	71	
	RAPS A (NPC)	300	179	181	1.13	47	
	Barsingsar (NLC)	250	58	78	1.65	69	
	Giral LTPS (IPP)	250	103	105	2.63	110	
	Rajwest LTPS (IPP)	540	450	370	11.51	480	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5158	3282	3146	73.46	3061	
	Total Hydro	550	162	179	4.99	208	
	Wind power	1294	210	192	5.51	229	
	Biomass	71	49	49	1.03	43	
	Solar	50	0	0	0.17	7	
	Renewable/Others (Total)	1365	259	241	11.69	487	
		Total Rajasthan	7073	3703	3566	90.14	3756
	UP	Anpara TPS	1630	1374	1309	31.80	1325
Obra TPS		1442	467	469	11.20	467	
Paricha TPS		640	204	213	5.00	208	
Panki TPS		210	153	141	3.80	158	
Harduaganj TPS		415	218	165	4.40	183	
Tanda TPS (NTPC)		440	400	405	9.64	402	
Roza TPS (IPP)		600	427	473	11.30	471	
Anpara-C (IPP)		1200	0	0	0.00	0	
Bajaj Energy Pvt.Ltd(IPP) TPS		180	78	80	1.74	72	
Thermal (Total)		6757	3321	3255	78.88	3287	
Vishnuparyag HPS (IPP)		400	94	89	2.19	91	
Other Hydro		527	209	0	4.87	203	
Cogeneration		951	650	650	15.60	650	
		Total UP	8635	4274	3994	101.54	4139
Uttarakhand		Total Hydro	1303	471	396	10.50	438
	Total Uttarakhand	1303	471	396	10.50	438	
Delhi	Rajghat TPS	135	86	92	1.93	81	
	Delhi Gas Turbine	282	241	154	4.78	199	
	Praagati Gas Turbine	330	315	289	7.48	312	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	480	465	10.50	437	
	Thermal (Total)	2000	1122	1000	24.69	1029	
	Total Delhi	2000	1122	1000	24.69	1029	
HP	Baspa HPS (IPP)	330	0	0	1.32	55	
	Malana HPS (IPP)	101	0	0	0.27	11	
	Other Hydro	571	224	94	3.60	150	
	Total HP	1002	224	94	5	216	
J & K	Baglihar HPS (IPP)	450	262	132	3.96	165	
	Other Hydro	323	54	100	1.54	64	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	316	232	5.50	229
Total State Control Area Generation		28416	15053	13687	346.47	14345	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1030	2267	51.00	2125	
Total Regional Availability(Gross)		49641	31326	26056	670.69	27854	

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5558	878	56.50	2354
State Control Area Hydro	5365	2045	1039	43.46	1811
Total Regional Hydro	15447	7603	1917	99.96	4165

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	300	-100	300	100	3.72	0.59	3.13
Gwalior-Agra (D/C)	162	809	927	0	15.60	0.00	15.60
Zerda-Kankroli	-116	68	70	134	0.00	0.70	-0.70
Zerda-Bhinmal	-27	129	178	112	0.97	0.00	0.97
Malanpur-Auraiya	-164	-89	0	184	0.00	3.15	-3.15
Badod-Kota/Morak	-94	-61	0	127	0.00	1.53	-1.53
Sub Total WR	61	756			20.29	5.96	14.32
Pusauli Bypass	24	0	221	117	1.43	0.57	0.87
MZP- GKP (D/C)	374	546	836	0	13.46	0.00	13.46
Patna-Balia(D/C)	279	517	600	0	11.55	0.00	11.55
B'Sharif-Balia (D/C)	200	382	424	0	9.01	0.00	9.01
Barh - balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	122	100	161	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	0.69	-0.69
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	969	1511			37.94	1.26	36.68
Total IR Exch	1030	2267			58.23	7.22	51.00

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
17.05	0.44	17.50	13.84	5.67	-1.39	1.77	2.90	-2.90

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
32.85	-0.33	32.53	36.68	14.32	51.00	3.83	14.65	18.48

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	2.80	30.00	61.00	69.90	38.90	2.40	0.10

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.26	6.04	49.10	9.26	49.61	1.93	0.21	50.06	49.27

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	407	00:58	398	14:35	0.0	0.0	0.0	0.0
Gorakhpur	400	434	18:17	410	08:15	0.0	0.0	50.5	2.2
Bareilly	400	421	19:42	399	08:15	0.0	0.0	0.2	0.0
Kanpur	400	416	00:59	399	08:12	0.0	0.0	0.0	0.0
Dadri	400	419	01:01	396	11:15	0.0	0.0	0.0	0.0
Ballabgarh	400	421	01:05	398	11:13	0.0	0.0	4.8	0.0
Bawana	400	421	01:00	398	11:16	0.0	0.0	0.7	0.0
Bassi	400	420	00:16	395	23:17	0.0	0.0	0.0	0.0
Hissar	400	412	19:42	393	10:49	0.0	0.0	0.0	0.0
Moga	400	419	01:02	397	10:51	0.0	0.0	0.0	0.0
Abdullapur	400	421	01:02	402	08:12	0.0	0.0	0.9	0.0
Nalagarh	400	427	16:04	406	10:50	0.0	0.0	18.1	0.0
Kishenpur	400	407	00:57	382	11:10	0.0	5.6	0.0	0.0
Wagoora	400	392	14:03	360	10:51	71.6	99.9	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	503.41	1245.57	504.63	1298.95	180.09	438.20
Pong	426.72	384.05	414.47	656.23	417.65	781.19	40.66	212.72
Tehri	829.79	740.04	810.95	822.28	818.65	982.26	69.48	119.00
Koteshwar	612.50	598.50	610.90	4.95	NA	NA	119.00	135.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	0.00
Rihand	268.22	252.98	262.66	526.00	257.40	NA	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	511.93	NA	514.60	NA	66.54	344.08

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 24.12.2011 :

1. Light fog in some parts of UP.

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 : 24.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER