

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 16.12.2011
Date of Reporting : 17.12.2011

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
30227	4084	34311	49.66	25021	650	25671	50.15	673.3	56.22

* 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	49.32	12.26		61.59	25.03	23.59	-1.43	85.18	5.33
Haryana	57.34	0.58		57.92	26.61	34.01	7.41	91.93	13.58
Rajasthan	87.46	4.94	7.66	100.06	51.13	58.00	6.86	158.05	1.49
Delhi	22.46			22.46	37.44	35.91	-1.53	58.37	0.90
UP	89.26	6.66	15.60	111.53	75.97	80.85	4.88	192.37	32.57
Uttarakhand		8.47		8.47	17.27	17.84	0.57	26.31	0.15
HP		5.18		5.18	16.39	18.27	1.88	23.46	0.31
J & K		5.50	0.00	5.50	22.80	28.54	5.74	34.04	1.90
Chandigarh				0.00	3.40	3.56	0.16	3.56	0.00
Total	305.84	43.60	23.26	372.70	276.04	300.57	24.53	673.27	56.22

* 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	4085	600	-135	-403	3043	0	47	-901	-11.18	
Haryana	3986	1268	213	-56	3682	0	262	-70	-1.61	
Rajasthan	6513	458	337	431	6463	0	665	546	14.72	
Delhi	3101	59	-86	-277	1316	0	-94	-678	-9.47	
UP	8151	1550	-195	167	7248	650	-192	167	4.01	
Uttarakhand	1382	50	120	332	989	0	17	332	7.97	
HP	1150	0	-111	-7	758	0	138	237	3.52	
J&K	1674	100	64	160	1435	0	314	225	5.10	
Chandigarh	185	0	-1	0	87	0	-5	-30	-0.24	
Total	30227	4084	206	347	25021	650	1152	-171	12.82	

* 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	Off Peak MW	Energy	Average	Schedule	UI
				(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS	2000	1597	1335	1845	40.31	1680	38.33	1.98
	Rihand I STPS	1000	634	453	870	15.43	643	15.23	0.20
	Rihand II STPS	1000	977	1047	1035	23.74	989	23.45	0.29
	Dadri I STPS	840	592	646	455	13.51	563	13.58	-0.07
	Dadri II STPS	980	967	1034	730	22.31	930	22.61	-0.30
	Unchahar I TPS	440	375	424	363	8.98	374	8.96	0.02
	Unchahar II TPS	440	374	440	372	8.98	374	8.92	0.06
	Unchahar III TPS	210	187	220	194	4.50	187	4.47	0.03
	ISTPP (Jhajjar)	1000	475	510	504	11.21	467	11.28	-0.07
	Dadri GPS	830	832	836	545	17.30	721	17.28	0.02
	Anta GPS	419	275	275	230	6.05	252	5.89	0.16
	Auraiya GPS	663	651	650	411	13.43	560	13.31	0.13
	Sub Total (A)	9822	7937	7870	7554	185.75	7740	183.30	2.45
	B. NPC	NAPS	440	218	257	258	5.31	221	5.23
RAPS- B		440	420	466	464	10.06	419	10.08	-0.02
RAPS- C		440	420	471	474	10.17	424	10.08	0.09
Sub Total (B)		1320	1058	1194	1196	25.53	1064	25.39	0.14
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	224	0	1.21	50	1.29	-0.08
	Bairasuil HPS	180	179	120	0	0.48	20	0.48	0.00
	Salal-HPS	690	123	230	95	2.93	122	2.94	-0.01
	Tanakpur-HPS	94	32	36	28	0.76	32	0.77	-0.01
	Uri-HPS	480	128	228	21	3.15	131	3.24	-0.09
	Dhauliganga-HPS	280	210	212	0	1.14	47	1.23	-0.09
	Dulhasti-HPS	390	388	400	0	3.11	130	3.09	0.02
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	3074	1357	1450	144	12.78	533	13.04	-0.26
D. NJPC	Nathpa Jhakri	1500	1013	1354	0	7.68	320	7.55	0.13
	Sub Total (D)	1500	1013	1354	0	7.68	320	7.55	0.13
E. THDC	Tehri HPS	1000	1040	753	0	6.40	267	6.50	-0.10
	Koteswar HPS	200	119	186	0	2.17	90	2.10	0.06
	Sub Total (E)	1200	1159	939	0	8.56	357	8.60	-0.04
F. BBMB	Bhakra HPS	1480	664	946	500	16.62	693	15.94	0.68
	Dehar HPS	990	136	495	0	3.64	152	3.27	0.37
	Pong HPS	396	256	366	126	6.45	269	6.14	0.31
	Sub Total (F)	2866	1056	1807	626	26.71	1113	25.35	1.36
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	1	0	0.35	15	0.34	0.02
	KWHEP HPS(IPP)	1000	0	270	0	4.16	173	4.14	0.02
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	84	142	2.83	118	2.85	-0.02
Sub Total (G)	1442	0	355	142	7.33	306	7.32	0.01	
H. Total Regional Entities (A-G)	21225	13579	14969	9662	274.35	11431	270.55	3.80	

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	1050	23.41	976
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.59	191
	Guru Hargobind Singh TPS(L.mbt)	920	951	956	21.32	888
	Thermal (Total)	2620	2216	2221	49.32	2055
	Total Hydro	1148	425	268	12.26	511
	Total Punjab	3768	2641	2489	61.59	2566
Haryana	Panipat TPS	1360	1095	1107	26.62	1109
	DCRTPP (Yamuna nagar)	600	275	273	6.59	274
	Faridabad GPS (NTPC)	432	440	461	10.37	432
	RGTPP (khedar) (IPP)	1200	525	525	13.77	574
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Thermal (Total)	3617	2335	2366	57.34	2389
	Total Hydro	62	22	22	0.58	24
	Total Haryana	3679	2357	2388	57.92	2413
Rajasthan	kota TPS	1240	1163	1168	27.62	1151
	suratgarh TPS	1500	1122	1133	27.16	1132
	Chabra TPS	500	425	375	9.41	392
	Dholpur GPS	330	228	254	5.55	231
	Ramgarh GPS	113	65	65	1.67	70
	RAPS A (NPC)	300	178	183	4.45	185
	Barsingar (NLC)	250	80	28	1.79	75
	Giral LTPS (IPP)	250	53	53	1.14	48
	Rajwest LTPS (IPP)	540	348	365	8.66	361
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Thermal (Total)	5158	3662	3624	87.46	3644
	Total Hydro	550	224	138	4.94	206
	Wind power	1294	77	0	1.42	59
	Biomass	71	47	47	1.12	47
	Solar	50	0	0	0.17	7
	Renewable/Others (Total)	1365	124	47	7.66	319
	Total Rajasthan	7073	4010	3809	100.06	4169
UP	Anpara TPS	1630	1353	1391	31.80	1325
	Obra TPS	1442	567	504	12.80	533
	Paricha TPS	640	339	282	8.10	338
	Panki TPS	210	89	197	3.00	125
	Harduaganj TPS	415	0	0	0.00	0
	Tanda TPS (NTPC)	440	399	403	9.81	409
	Roza TPS (IPP)	600	522	450	11.40	475
	Anpara-C (IPP)	1200	419	424	9.85	410
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	78	117	2.51	105
	Thermal (Total)	6757	3766	3768	89.26	3719
	Vishnuparyag HPS (IPP)	400	108	104	3.50	146
	Other Hydro	527	164	32	3.17	132
	Cogeneration	951	650	650	15.60	650
	Total UP	8635	4688	4554	111.53	4501
	Uttarakhand	Total Hydro	1303	398	307	8.47
Total Uttarakhand		1303	398	307	8.47	353
Delhi	Rajghat TPS	135	47	49	1.06	44
	Delhi Gas Turbine	282	239	152	4.93	205
	Praagati Gas Turbine	330	312	292	7.48	312
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	496	310	8.99	375
	Thermal (Total)	2000	1094	803	22.46	936
Total Delhi	2000	1094	803	22.46	936	
HP	Baspa HPS (IPP)	330	0	0	1.32	55
	Malana HPS (IPP)	101	45	0	0.27	11
	Other Hydro	571	220	92	3.60	150
	Total HP	1002	265	92	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	15769	14674	372.70	15384
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			751	1053	37.02	1542
Total Regional Availability(Gross)		49641	31489	25389	684.07	28357

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5905	912	63.07	2628
State Control Area Hydro	5365	1814	1091	40.11	1671
Total Regional Hydro	15447	7719	2003	103.18	4299

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	Import	Export	
	Vindhychal B/B	-100	-250	0	300	0.00	5.03	-5.03	
Gwalior-Agra (D/C)	391	548	1100	0	16.64	0.00	16.64		
Zerda-Kankroli	-166	-49	89	166	0.00	0.64	-0.64		
Zerda-Bhinmal	-87	49	221	124	1.78	0.00	1.78		
Malanpur-Auraiya	-164	-122	0	-164	0.00	2.50	-2.50		
Badod-Kota/Morak	-91	-83	29	108	0.00	1.20	-1.20		
Sub Total WR	-217	93			18.42	9.37	9.05		
Pusauli Bypass	300	300	300	0	7.24	0.00	7.24		
MZP- GKP (D/C)	221	248	670	0	6.70	0.00	6.70		
Patna-Balia(D/C)	297	252	436	0	7.71	0.00	7.71		
B'Sharif-Balia (D/C)	68	148	306	0	4.54	0.00	4.54		
Barh - balia(D/C)	0	0	290	0	0.52	0.00	0.52		
Pusauli-Sahupuri	112	46	165	0	2.13	0.00	2.13		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-30	-34	0	48	0.00	0.87	-0.87		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sub Total ER	968	960			28.84	0.87	27.97		
Total IR Exch	751	1053			47.26	10.24	37.02		

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
17.30	0.54	17.84	9.34	4.83	-4.13	3.16	2.82	-2.82

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
25.88	-0.37	25.51	27.97	9.05	37.02	2.09	9.42	11.51

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	0.30	11.20	38.90	86.90	59.20	16.60	1.90

←----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.32	4.03	49.15	18.47	49.77	1.01	0.22	50.26	49.35

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	413	21:56	401	11:46	0.0	0.0	0.0	0.0
Gorakhpur	400	435	18:35	106	13:35	2.4	2.4	65.5	2.5
Bareilly	400	425	04:06	403	06:46	0.0	0.0	11.0	0.0
Kanpur	400	420	22:15	404	06:46	0.0	0.0	0.0	0.0
Dadri	400	420	04:00	400	14:19	0.0	0.0	0.0	0.0
Ballabgarh	400	423	04:01	402	14:17	0.0	0.0	4.8	0.0
Bawana	400	423	03:05	402	14:17	0.0	0.0	7.7	0.0
Bassi	400	423	04:03	394	08:26	0.0	0.0	1.2	0.0
Hissar	400	413	04:03	390	14:19	0.0	0.0	0.0	0.0
Moga	400	420	02:54	395	10:03	0.0	0.0	0.0	0.0
Abdullapur	400	416	19:57	402	12:15	0.0	0.0	0.0	0.0
Nalagarh	400	426	02:56	406	09:58	0.0	0.0	25.9	0.0
Kishenpur	400	412	03:06	385	14:19	0.0	14.3	0.0	0.0
Wagoora	400	391	03:06	358	14:18	77.5	99.2	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	504.72	1298.95	506.16	1367.40	192.72	455.90
Pong	426.72	384.05	415.28	680.86	418.36	821.34	47.88	390.12
Tehri	829.79	740.04	812.88	862.27	818.65	982.26	70.08	146.00
Koteshwar	612.50	598.50	607.45	3.32	NA	NA	146.00	144.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	45.30	0.00
Rihand	268.22	252.98	263.96	542.00	257.56	181.70	NA	NA
RPS	352.80	343.81	350.41	NA	NA	NA	NA	234.69
Jawahar Sagar	298.70	295.78	297.73	NA	NA	NA	NA	243.47
RSD	527.91	487.91	514.44	NA	516.12	NA	63.34	242.22

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 16.12.2011 :

1. Fog in Eastern U.P.

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 : 16.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER