

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.12.2011
Date of Reporting : 23.12.2011

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
29953	4004	33957	49.83	25348	674	26022	50.17	671.5	63.87

* 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	34.64	12.38		47.02	26.43	34.79	8.37	81.81	10.08
Haryana	52.50	0.53		53.03	26.16	35.39	9.23	88.42	11.05
Rajasthan	88.01	5.17	18.58	111.76	49.60	49.28	-0.33	161.04	0.26
Delhi	25.01			25.01	41.31	37.34	-3.97	62.35	1.14
UP	80.65	6.70	15.60	102.95	80.83	83.81	2.98	186.76	37.90
Uttarakhand		10.35		10.35	17.17	18.16	0.99	28.51	1.09
HP		5.18		5.18	16.89	19.44	2.55	24.61	0.47
J & K		5.50	0.00	5.50	22.91	28.99	6.08	34.49	1.90
Chandigarh				0.00	3.34	3.55	0.21	3.55	0.00
Total	280.81	45.81	34.18	360.79	284.63	310.73	26.11	671.52	63.87

* 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	3634	600	-55	-403	3107	0	125	-901	-11.18	
Haryana	4115	1257	520	-56	3477	24	325	-68	-1.58	
Rajasthan	6856	70	294	431	6418	0	109	546	14.72	
Delhi	3242	62	-138	-122	1440	0	24	-398	-4.87	
UP	7525	1835	-853	267	7507	650	258	267	6.41	
Uttarakhand	1472	80	22	332	1051	0	100	332	7.97	
HP	1208	0	-126	8	802	0	169	237	3.70	
J&K	1703	100	108	216	1453	0	325	247	5.81	
Chandigarh	198	0	-16	0	93	0	5	-30	-0.24	
Total	29953	4004	-243	674	25348	674	1440	232	20.73	

* 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	1727	1831	1861	41.85	1744	41.44	0.41
	Rihand I STPS	1000	871	970	914	21.10	879	20.91	0.19
	Rihand II STPS	1000	977	1043	1034	23.64	985	23.45	0.19
	Dadri I STPS	840	793	867	628	17.91	746	17.80	0.11
	Dadri II STPS	980	947	1045	773	21.42	893	21.56	-0.14
	Unchahar I TPS	440	305	417	317	7.39	308	7.31	0.08
	Unchahar II TPS	440	297	419	304	7.19	300	7.12	0.07
	Unchahar III TPS	210	149	212	150	3.62	151	3.54	0.08
	ISTPP (Jhajjar)	1000	475	501	482	10.83	451	10.87	-0.04
	Dadri GPS	830	843	830	546	18.03	751	18.17	-0.13
	Anta GPS	419	278	267	257	6.32	263	6.17	0.15
	Auraiya GPS	663	654	603	434	13.79	574	13.80	-0.02
	Sub Total (A)	9822	8316	9005	7700	193.09	8045	192.14	0.95
B. NPC	NAPS	440	220	256	261	5.26	219	5.28	-0.03
	RAPS- B	440	419	463	464	10.09	420	10.06	0.04
	RAPS- C	440	420	474	477	10.21	425	10.08	0.13
	Sub Total (B)	1320	1059	1193	1202	25.56	1065	25.42	0.14
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	212	0	1.18	49	1.23	-0.05
	Bairasuil HPS	180	179	120	0	0.45	19	0.46	-0.01
	Salal-HPS	690	126	252	90	2.94	123	3.03	-0.08
	Tanakpur-HPS	94	32	41	14	0.72	30	0.75	-0.03
	Uri-HPS	480	128	230	44	3.08	129	2.92	0.17
	Dhauliganga-HPS	280	210	209	0	1.07	45	1.05	0.02
	Dulhasti-HPS	390	213	0	0	2.25	94	2.33	-0.08
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	3074	1186	1064	148	11.69	487	11.77	-0.08
D. NJPC	Nathpa Jhakri	1500	956	1359	0	7.56	315	7.59	-0.03
	Sub Total (D)	1500	956	1359	0	7.56	315	7.59	-0.03
E. THDC	Tehri HPS	1000	1040	516	0	7.53	314	7.50	0.03
	Koteswar HPS	200	119	204	0	2.04	85	2.00	0.04
	Sub Total (E)	1200	1159	720	0	9.58	399	9.50	0.08
F. BBMB	Bhakra HPS	1480	654	944	522	15.85	660	15.71	0.14
	Dehar HPS	990	129	495	0	3.30	138	3.10	0.21
	Pong HPS	396	180	306	126	4.63	193	4.32	0.31
	Sub Total (F)	2866	963	1745	648	23.78	991	23.12	0.66
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.32	13	0.30	0.01
	KWHEP HPS(IPP)	1000	0	485	0	4.09	170	3.96	0.12
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	140	118	3.24	135	2.79	0.45
	Sub Total (G)	1442	0	625	118	7.64	318	7.05	0.59
H. Total Regional Entities (A-G)		21225	13639	15711	9816	278.89	11620	276.58	2.30

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	23.59	983	
	Guru Nanak Dev TPS(Bhatinda)	440	210	215	3.28	137	
	Guru Hargobind Singh TPS(L.mbt)	920	256	697	7.77	324	
	Thermal (Total)	2620	1516	1962	34.64	1443	
	Total Hydro	1148	588	189	12.38	516	
	Total Punjab	3768	2104	2151	47.02	1959	
Haryana	Panipat TPS	1360	1015	1041	25.13	1047	
	DCRTPP (Yamuna nagar)	600	278	279	6.57	274	
	Faridabad GPS (NTPC)	432	428	428	10.42	434	
	RGTPP (khedar) (IPP)	1200	405	396	10.38	433	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Thermal (Total)	3617	2126	2144	52.50	2188	
	Total Hydro	62	21	22	0.53	22	
		Total Haryana	3679	2147	2166	53.03	2210
Rajasthan	kota TPS	1240	1175	1178	27.71	1154	
	suratgarh TPS	1500	1138	1106	26.80	1117	
	Chabra TPS	500	436	424	9.72	405	
	Dholpur GPS	330	225	225	5.31	221	
	Ramgarh GPS	113	65	65	1.72	72	
	RAPS A (NPC)	300	180	180	4.46	186	
	Barsingsar (NLC)	250	95	100	2.64	110	
	Giral LTPS (IPP)	250	64	40	1.10	46	
	Rajwest LTPS (IPP)	540	345	365	8.54	356	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5158	3723	3683	88.01	3667	
	Total Hydro	550	164	178	5.17	216	
	Wind power	1294	471	554	12.55	523	
	Biomass	71	29	29	0.69	29	
	Solar	50	0	0	0.17	7	
	Renewable/Others (Total)	1365	500	583	18.58	774	
		Total Rajasthan	7073	4387	4444	111.76	4657
UP	Anpara TPS	1630	1532	1561	33.20	1383	
	Obra TPS	1442	642	673	14.00	583	
	Paricha TPS	640	215	219	4.80	200	
	Panki TPS	210	185	155	3.80	158	
	Harduaganj TPS	415	50	46	1.00	42	
	Tanda TPS (NTPC)	440	400	390	9.65	402	
	Roza TPS (IPP)	600	502	495	12.10	504	
	Anpara-C (IPP)	1200	0	0	0.00	0	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	116	78	2.10	87	
	Thermal (Total)	6757	3642	3617	80.65	3360	
	Vishnuparyag HPS (IPP)	400	104	99	2.28	95	
	Other Hydro	527	287	44	4.42	184	
	Cogeneration	951	650	650	15.60	650	
		Total UP	8635	4683	4410	102.95	4195
	Uttarakhand	Total Hydro	1303	569	348	10.35	431
Total Uttarakhand		1303	569	348	10.35	431	
Delhi	Rajghat TPS	135	89	92	2.51	104	
	Delhi Gas Turbine	282	201	157	4.91	205	
	Praagati Gas Turbine	330	307	270	7.41	309	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	480	420	10.19	424	
	Thermal (Total)	2000	1077	939	25.01	1042	
	Total Delhi	2000	1077	939	25.01	1042	
HP	Baspa HPS (IPP)	330	0	0	1.32	55	
	Malana HPS (IPP)	101	46	0	0.26	11	
	Other Hydro	571	225	105	3.60	150	
	Total HP	1002	271	105	5	216	
J & K	Baglihar HPS (IPP)	450	262	152	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	252	5.50	229
Total State Control Area Generation		28416	15554	14815	360.79	14938	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1314	1595	46.52	1938	
Total Regional Availability(Gross)		49641	32579	26226	686.20	28497	

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5513	914	60.24	2510
State Control Area Hydro	5365	2216	1138	43.53	1814
Total Regional Hydro	15447	7729	2052	103.77	4324

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	-200	-500	0	500	0.00	7.64	-7.64
Gwalior-Agra (D/C)	433	739	1156	0	19.42	0.00	19.42
Zerda-Kankroli	-151	-45	132	154	0.00	0.34	-0.34
Zerda-Bhinmal	-90	24	237	152	1.33	0.00	1.33
Malanpur-Auraiya	-156	-64	0	164	0.00	2.21	-2.21
Badod-Kota/Morak	-91	-119	9	135	0.00	1.81	-1.81
Sub Total WR	-255	35			20.75	12.00	8.75
Pusauli Bypass	200	200	200	0	4.84	0.00	4.84
MZP- GKP (D/C)	402	525	609	0	11.95	0.00	11.95
Patna-Balia(D/C)	298	380	430	0	8.35	0.00	8.35
B'Sharif-Balia (D/C)	219	392	449	0	6.95	0.00	6.95
Barh - balia(D/C)	359	0	470	0	4.07	0.00	4.07
Pusauli-Sahupuri	121	97	161	0	2.31	0.00	2.31
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	1569	1560			38.46	0.69	37.77
Total IR Exch	1314	1595			59.21	12.69	46.52

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
12.23	0.53	12.76	14.62	8.17	0.21	0.22	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
30.40	0.40	30.80	37.77	8.75	46.52	7.37	8.35	15.72

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	1.30	9.80	37.60	89.50	61.70	12.20	0.70

←----- 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)		
50.31	4.05	49.08	14.45	49.76	1.01	0.21	50.28	49.44

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	04:01	400	09:36	0.0	0.0	0.0	0.0
Gorakhpur	400	427	13:04	409	09:47	0.0	0.0	20.0	0.0
Bareilly	400	425	04:05	398	09:45	0.0	0.0	3.5	0.0
Kanpur	400	421	04:05	400	18:27	0.0	0.0	0.0	0.0
Dadri	400	422	04:04	400	14:23	0.0	0.0	0.8	0.0
Ballabgarh	400	424	04:02	401	09:45	0.0	0.0	6.1	0.0
Bawana	400	424	04:02	401	09:45	0.0	0.0	5.7	0.0
Bassi	400	419	04:04	394	09:38	0.0	0.0	0.0	0.0
Hissar	400	415	04:04	394	14:26	0.0	0.0	0.0	0.0
Moga	400	423	04:04	402	14:24	0.0	0.0	2.8	0.0
Abdullapur	400	420	21:54	402	17:25	0.0	0.0	0.0	0.0
Nalagarh	400	426	01:40	404	14:27	0.0	0.0	23.3	0.0
Kishenpur	400	414	04:04	386	11:15	0.0	3.3	0.0	0.0
Wagoora	400	388	04:04	363	14:18	67.8	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	503.72	1258.87	504.93	1312.37	174.15	437.35
Pong	426.72	384.05	414.62	656.23	417.88	794.52	47.77	278.41
Tehri	829.79	740.04	812.40	850.25	818.65	982.26	68.80	149.00
Koteshwar	612.50	598.50	607.25	3.32	NA	NA	149.00	146.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	42.61	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	514.04	NA	515.83	NA	75.63	117.85

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 22.12.2011 :

1. Fog in Haryana / Punjab/ NCR/ 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 : 22.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER