

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.12.2011
Date of Reporting : 15.12.2011

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
30839	3141		33980	49.68	24680	755	25435	50.03	663.6	57.68

* 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	49.34	11.27		60.61	26.59	24.77	-1.82	85.38	4.30
Haryana	52.71	0.71		53.42	27.47	32.93	5.46	86.36	15.37
Rajasthan	80.16	4.97	9.15	94.28	52.67	59.31	6.63	153.59	3.72
Delhi	23.99			23.99	39.02	33.62	-5.39	57.61	0.18
UP	89.87	6.56	15.60	112.03	76.52	79.87	3.35	191.90	31.79
Uttarakhand		8.02		8.02	17.50	19.75	2.25	27.77	0.42
HP		5.19		5.19	17.12	18.37	1.26	23.56	0.00
J & K		5.45	0.00	5.45	23.69	28.55	4.86	34.00	1.90
Chandigarh				0.00	3.46	3.45	-0.02	3.45	0.00
Total	296.07	42.17	24.75	362.99	284.05	300.62	16.58	663.61	57.68

* 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	Day Energy MU
Punjab	4082	300	-113	-403	3109	0	134	-901		-11.18
Haryana	3704	943	-9	-56	3289	0	161	-68		-1.57
Rajasthan	6770	318	613	431	6450	0	467	546		14.72
Delhi	3026	0	-275	-122	1305	0	-368	-598		-6.27
UP	8995	1480	282	167	7296	755	0	167		4.01
Uttarakhand	1305	0	-78	332	959	0	50	332		7.97
HP	1133	0	-368	78	750	0	108	237		4.19
J&K	1636	100	-75	216	1432	0	269	247		5.79
Chandigarh	188	0	-8	0	90	0	-6	-30		-0.24
Total	30839	3141	-31	643	24680	755	815	-68		17.41

* 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	1730	1848	1852	41.67	1736	41.50	0.17
	Rihand I STPS	1000	817	996	876	19.80	825	19.60	0.21
	Rihand II STPS	1000	977	1042	1041	23.67	986	23.45	0.22
	Dadri I STPS	840	592	645	460	13.66	569	13.54	0.12
	Dadri II STPS	980	957	1029	740	22.14	923	21.88	0.27
	Unchahar I TPS	440	404	438	372	9.50	396	9.23	0.26
	Unchahar II TPS	440	402	439	375	9.54	398	9.27	0.27
	Unchahar III TPS	210	201	220	182	4.81	200	4.67	0.14
	ISTPP (Jhajjar)	1000	475	510	492	11.35	473	11.28	0.07
	Dadri GPS	830	832	770	489	16.46	686	16.32	0.14
	Anta GPS	419	275	245	198	5.92	247	5.30	0.62
	Auraiya GPS	663	473	334	337	8.47	353	9.27	-0.80
	Sub Total (A)	9822	8134	8516	7414	186.99	7791	185.30	1.68
B. NPC	NAPS	440	200	253	254	5.24	218	4.80	0.44
	RAPS- B	440	419	457	466	10.08	420	10.06	0.02
	RAPS- C	440	420	468	476	10.19	424	10.08	0.10
	Sub Total (B)	1320	1039	1178	1196	25.50	1063	24.94	0.57
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	186	0	1.30	54	1.23	0.06
	Bairasuil HPS	180	127	120	0	0.50	21	0.41	0.09
	Salal-HPS	690	126	230	115	3.15	131	3.02	0.12
	Tanakpur-HPS	94	34	40	0	0.83	34	0.80	0.02
	Uri-HPS	480	144	232	45	3.36	140	3.32	0.04
	Dhauliganga-HPS	280	277	205	0	1.20	50	1.15	0.04
	Dulhasti-HPS	390	388	223	0	3.34	139	2.85	0.49
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	3074	1393	1236	160	13.67	569	12.79	0.87
D. NJPC	Nathpa Jhakri	1500	1233	1047	0	8.33	347	7.75	0.58
	Sub Total (D)	1500	1233	1047	0	8.33	347	7.75	0.58
E. THDC	Tehri HPS	1000	1040	1013	0	6.08	253	6.00	0.08
	Koteswar HPS	200	119	204	0	2.22	92	2.10	0.12
	Sub Total (E)	1200	1159	1217	0	8.29	346	8.10	0.19
F. BBMB	Bhakra HPS	1480	643	995	524	16.07	670	15.43	0.64
	Dehar HPS	990	158	495	0	3.80	158	3.79	0.01
	Pong HPS	396	254	366	186	6.44	268	6.11	0.33
	Sub Total (F)	2866	1055	1856	710	26.31	1096	25.32	0.99
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.35	14	0.32	0.03
	KWHEP HPS(IPP)	1000	0	290	0	3.87	161	4.32	-0.45
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	140	25	2.64	110	2.96	-0.32
	Sub Total (G)	1442	0	430	25	6.85	286	7.60	-0.74
H. Total Regional Entities (A-G)		21225	14013	15480	9505	275.94	11498	271.80	4.14

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	1045	23.41	975
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.63	193
	Guru Hargobind Singh TPS(L.mbt)	920	962	951	21.30	888
	Thermal (Total)	2620	2227	2211	49.34	2056
	Total Hydro	1148	392	260	11.27	470
	Total Punjab	3768	2619	2471	60.61	2525
Haryana	Panipat TPS	1360	1070	857	23.92	997
	DCRTPP (Yamuna nagar)	600	257	271	6.47	270
	Faridabad GPS (NTPC)	432	424	436	10.35	431
	RGTPP (khedar) (IPP)	1200	438	495	11.97	499
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Thermal (Total)	3617	2189	2059	52.71	2196
	Total Hydro	62	21	30	0.71	30
		Total Haryana	3679	2210	2089	53.42
Rajasthan	kota TPS	1240	1176	1174	27.71	1155
	suratgarh TPS	1500	1137	1165	27.27	1136
	Chabra TPS	500	340	270	6.57	274
	Dholpur GPS	330	250	253	6.12	255
	Ramgarh GPS	113	65	65	1.63	68
	RAPS A (NPC)	300	176	179	4.38	183
	Barsingar (NLC)	250	0	0	0.00	0
	Giral LTPS (IPP)	250	0	51	0.32	13
	Rajwest LTPS (IPP)	540	320	235	6.17	257
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Thermal (Total)	5158	3464	3392	80.16	3340
	Total Hydro	550	173	180	4.97	207
	Wind power	1294	12	282	3.53	147
	Biomass	71	33	33	0.64	27
	Solar	50	0	0	0.00	0
	Renewable/Others (Total)	1365	45	315	9.15	381
		Total Rajasthan	7073	3682	3887	94.28
UP	Anpara TPS	1630	1573	1516	33.30	1388
	Obra TPS	1442	493	485	11.00	458
	Paricha TPS	640	380	391	8.30	346
	Panki TPS	210	140	130	3.00	125
	Harduaganj TPS	415	0	0	0.00	0
	Tanda TPS (NTPC)	440	401	354	9.71	405
	Roza TPS (IPP)	600	495	448	11.00	458
	Anpara-C (IPP)	1200	432	495	11.38	474
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	119	75	2.18	91
	Thermal (Total)	6757	4033	3894	89.87	3745
	Vishnuparyag HPS (IPP)	400	109	109	2.58	107
	Other Hydro	527	160	40	3.98	166
	Cogeneration	951	650	650	15.60	650
		Total UP	8635	4952	4693	112.03
Uttarakhand	Total Hydro	1303	469	245	8.02	334
	Total Uttarakhand	1303	469	245	8.02	334
Delhi	Rajghat TPS	135	48	48	1.30	54
	Delhi Gas Turbine	282	197	149	4.51	188
	Praagati Gas Turbine	330	323	288	7.60	316
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	480	450	10.59	441
	Thermal (Total)	2000	1048	935	23.99	1000
	Total Delhi	2000	1048	935	23.99	1000
HP	Baspa HPS (IPP)	330	0	0	1.32	55
	Malana HPS (IPP)	101	48	0	0.27	11
	Other Hydro	571	190	108	3.60	150
		Total HP	1002	238	108	5
J & K	Baglihar HPS (IPP)	450	258	148	3.91	163
	Other Hydro	323	54	100	1.54	64
	Gas/Diesel/Others	183	0	0	0.00	0
		Total J & K	956	312	248	5.45
Total State Control Area Generation		28416	15530	14676	362.99	15017
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1465	1362	35.70	1488
Total Regional Availability(Gross)		49641	32475	25543	674.63	28002

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5786	895	63.45	2644
State Control Area Hydro	5365	1765	1111	39.59	1650
Total Regional Hydro	15447	7551	2006	103.04	4293

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	-300	-200	0	300	0.00	5.60	-5.60	
Gwalior-Agra (D/C)	408	544	813	0	13.53	0.00	13.53		
Zerda-Kankroli	15	-33	109	132	0.00	0.64	-0.64		
Zerda-Bhinmal	109	50	255	82	1.97	0.00	1.97		
Malanpur-Auraiya	-122	-119	0	143	0.00	1.71	-1.71		
Badod-Kota/Morak	-26	30	30	77	0.00	4.79	-4.79		
Sub Total WR	84	272			15.50	12.74	2.76		
Pusauli Bypass	300	300	300	0	7.27	0.00	7.27		
MZP- GKP (D/C)	441	245	490	0	9.08	0.00	9.08		
Patna-Balia(D/C)	295	168	334	0	5.32	0.00	5.32		
B'Sharif-Balia (D/C)	0	154	378	0	5.20	0.00	5.20		
Barh - balia(D/C)	249	204	396	0	4.88	0.00	4.88		
Pusauli-Sahupuri	126	53	151	0	2.06	0.00	2.06		
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	1381	1090			33.81	0.87	32.94		
Total IR Exch	1465	1362			49.31	13.61	35.70		

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
17.44	0.60	18.04	14.77	4.38	-3.42	3.96	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
32.29	0.05	32.34	32.94	2.76	35.70	0.65	2.71	3.36

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	0.10	2.20	22.80	57.90	77.20	42.10	3.20	0.00

----- 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				
50.18	3.04	48.93	8.24	49.65	1.65	0.21	50.16	49.29

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	408	03:04	399	15:00	0.0	0.0	0.0	0.0
Gorakhpur	400	430	04:03	407	11:33	0.0	0.0	32.9	0.0
Bareilly	400	424	04:03	396	11:31	0.0	0.0	7.7	0.0
Kanpur	400	420	04:06	398	14:40	0.0	0.0	0.0	0.0
Dadri	400	418	03:05	400	11:05	0.0	0.0	0.0	0.0
Ballabgarh	400	421	03:04	400	11:09	0.0	0.0	1.4	0.0
Bawana	400	421	03:24	401	11:32	0.0	0.0	0.7	0.0
Bassi	400	422	20:56	395	09:15	0.0	0.0	1.1	0.0
Hissar	400	411	20:43	392	08:22	0.0	0.0	0.0	0.0
Moga	400	419	04:04	398	09:10	0.0	0.0	0.0	0.0
Abdullapur	400	419	03:04	401	09:13	0.0	0.0	0.0	0.0
Nalagarh	400	425	20:47	406	09:10	0.0	0.0	22.2	0.0
Kishenpur	400	413	04:04	387	11:06	0.0	1.0	0.0	0.0
Wagoora	400	392	04:04	361	11:06	72.1	97.3	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	505.03	1312.37	506.63	1382.01	203.65	441.49
Pong	426.72	384.05	415.56	693.24	418.51	821.34	57.99	385.36
Tehri	829.79	740.04	813.25	872.26	818.65	982.26	53.86	139.00
Koteshwar	612.50	598.50	608.10	3.76	NA	NA	139.00	147.00
Chamera-I	760.00	748.75	747.80	NA	747.07	NA	45.28	0.00
Rihand	268.22	252.98	264.02	546.10	257.56	181.70	NA	NA
RPS	352.80	343.81	350.22	NA	NA	NA	NA	223.70
Jawahar Sagar	298.70	295.78	297.73	NA	NA	NA	NA	225.57
RSD	527.91	487.91	514.85	NA	516.52	NA	14.72	275.35

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 14.12.2011 :

1. Fog in Central & 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 : 14.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER