

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.12.2011
Date of Reporting : 16.12.2011

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Off Peak (03:00 Hrs) MW			Day Energy (Net MU)		
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
30118	3875	33992	49.78	24707	755	25462	50.02	658.2	59.30

* 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	49.45	11.45		60.91	27.03	23.91	-3.11	84.82	5.32
Haryana	55.00	0.65		55.65	27.39	32.46	5.07	88.11	14.40
Rajasthan	82.01	5.52	7.81	95.34	52.20	61.72	9.53	157.07	4.78
Delhi	22.11			22.11	36.72	35.04	-1.68	57.16	0.78
UP	88.48	6.37	15.60	110.46	77.55	72.57	-4.98	183.03	31.15
Uttarakhand		8.40		8.40	17.44	19.24	1.81	27.64	0.77
HP		5.18		5.18	17.10	17.75	0.64	22.93	0.20
J & K		5.45	0.00	5.45	23.95	28.51	4.56	33.95	1.90
Chandigarh				0.00	3.50	3.51	0.01	3.51	0.00
Total	297.07	43.03	23.41	363.50	282.87	294.71	11.84	658.21	59.30

* 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	
Punjab	4146	600	-155	-403	2991	0	-229	-901	-11.18
Haryana	3862	980	-9	-58	3510	0	224	-70	-1.62
Rajasthan	6832	403	710	431	6506	0	736	546	14.72
Delhi	3007	113	-101	-122	1310	0	-328	-598	-6.27
UP	7969	1535	-776	167	7182	755	-54	167	4.01
Uttarakhand	1307	140	-110	332	961	0	40	332	7.97
HP	1122	3	-224	78	742	0	103	237	4.19
J&K	1684	100	-27	223	1416	0	274	254	5.95
Chandigarh	189	0	-14	0	907	0	-4	-30	-0.24
Total	30118	3875	-707	648	24707	755	762	-63	17.52

* 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	1857	1855	41.98	1749	41.52	0.46
	Rihand I STPS	1000	817	994	875	19.79	824	19.60	0.19
	Rihand II STPS	1000	977	1037	1038	23.67	986	23.45	0.22
	Dadri I STPS	840	592	640	495	13.82	576	13.81	0.00
	Dadri II STPS	980	963	1041	926	23.11	963	22.93	0.18
	Unchahar I TPS	440	375	436	400	9.02	376	8.95	0.07
	Unchahar II TPS	440	374	437	399	9.06	378	8.92	0.14
	Unchahar III TPS	210	187	219	200	4.53	189	4.47	0.05
	ISTPP (Jhajjar)	1000	475	506	517	11.44	477	11.28	0.17
	Dadri GPS	830	773	826	518	15.42	642	15.62	-0.21
	Anta GPS	419	275	248	218	6.02	251	5.69	0.33
	Auraiya GPS	663	603	630	281	12.87	536	12.13	0.74
	Sub Total (A)	9822	8142	8871	7722	190.71	7946	188.36	2.35
B. NPC	NAPS	440	200	256	262	5.31	221	4.80	0.51
	RAPS- B	440	421	464	461	10.05	419	10.10	-0.05
	RAPS- C	440	420	477	475	10.21	426	10.08	0.13
	Sub Total (B)	1320	1041	1197	1198	25.57	1065	24.98	0.59
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	168	0	1.29	54	1.30	-0.02
	Bairasuil HPS	180	179	100	0	0.49	20	0.48	0.01
	Salal-HPS	690	116	230	32	2.59	108	2.78	-0.19
	Tanakpur-HPS	94	34	38	29	0.80	33	0.80	-0.01
	Uri-HPS	480	135	154	105	3.22	134	3.21	0.02
	Dhauliganga-HPS	280	277	213	0	1.20	50	1.21	-0.01
	Dulhasti-HPS	390	388	389	0	3.49	145	3.40	0.09
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	3074	1425	1292	166	13.07	545	13.17	-0.10
D. NJPC	Nathpa Jhakri	1500	1041	1352	0	8.49	354	8.26	0.23
	Sub Total (D)	1500	1041	1352	0	8.49	354	8.26	0.23
E. THDC	Tehri HPS	1000	1040	691	0	6.00	250	6.00	0.00
	Koteshwar HPS	200	119	203	0	2.29	96	2.10	0.19
	Sub Total (E)	1200	1159	894	0	8.29	345	8.10	0.19
F. BBMB	Bhakra HPS	1480	658	924	526	16.43	685	15.80	0.63
	Dehar HPS	990	139	495	0	3.27	136	3.34	-0.07
	Pong HPS	396	258	366	180	6.52	272	6.18	0.34
	Sub Total (F)	2866	1055	1785	706	26.22	1093	25.32	0.90
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.35	15	0.32	0.03
	KWHEP HPS(IPP)	1000	0	360	0	4.22	176	4.20	0.02
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	138	141	3.35	140	2.78	0.57
	Sub Total (G)	1442	0	498	141	7.92	330	7.30	0.62
H. Total Regional Entities (A-G)		21225	13863	15889	9933	280.28	11678	275.49	4.79

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	23.60	983	
	Guru Nanak Dev TPS(Bhatinda)	440	212	215	4.54	189	
	Guru Hargobind Singh TPS(L.mbt)	920	961	957	21.32	888	
	Thermal (Total)	2620	2223	2222	49.45	2061	
	Total Hydro	1148	398	257	11.45	477	
	Total Punjab	3768	2621	2479	60.91	2538	
Haryana	Panipat TPS	1360	1086	1054	25.80	1075	
	DCRTPP (Yamuna nagar)	600	279	280	6.54	272	
	Faridabad GPS (NTPC)	432	459	463	10.37	432	
	RGTPP (khedar) (IPP)	1200	513	437	12.30	512	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Thermal (Total)	3617	2337	2234	55.00	2292	
	Total Hydro	62	23	27	0.65	27	
		Total Haryana	3679	2360	2261	55.65	2319
Rajasthan	kota TPS	1240	1170	1178	27.70	1154	
	suratgarh TPS	1500	1142	1165	27.16	1132	
	Chabra TPS	500	370	340	6.15	256	
	Dholpur GPS	330	254	259	6.14	256	
	Ramgarh GPS	113	65	65	1.68	70	
	RAPS A (NPC)	300	175	182	4.39	183	
	Barsingar (NLC)	250	30	0	0.14	6	
	Giral LTPS (IPP)	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	540	365	320	8.66	361	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5158	3571	3509	82.01	3417	
	Total Hydro	550	208	182	5.52	230	
	Wind power	1294	24	57	1.09	45	
	Biomass	71	43	43	1.03	43	
	Solar	50	0	0	0.17	7	
	Renewable/Others (Total)	1365	67	100	7.81	325	
		Total Rajasthan	7073	3846	3791	95.34	3973
UP	Anpara TPS	1630	1400	1371	33.10	1379	
	Obra TPS	1442	435	416	10.50	438	
	Paricha TPS	640	343	345	8.30	346	
	Panki TPS	210	140	108	3.20	133	
	Harduaganj TPS	415	0	0	0.00	0	
	Tanda TPS (NTPC)	440	405	407	9.86	411	
	Roza TPS (IPP)	600	495	445	10.80	450	
	Anpara-C (IPP)	1200	423	423	10.08	420	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	119	116	2.65	110	
	Thermal (Total)	6757	3760	3631	88.48	3687	
	Vishnuparyag HPS (IPP)	400	108	109	2.56	107	
	Other Hydro	527	148	40	3.81	159	
	Cogeneration	951	650	650	15.60	650	
		Total UP	8635	4666	4430	110.46	4496
	Uttarakhand	Total Hydro	1303	498	279	8.40	350
	Total Uttarakhand	1303	498	279	8.40	350	
Delhi	Rajghat TPS	135	46	49	1.06	44	
	Delhi Gas Turbine	282	237	152	4.47	186	
	Praagati Gas Turbine	330	312	295	7.46	311	
	Rithala GPS	108	0	0	0.00	0	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	400	410	9.12	380	
	Thermal (Total)	2000	995	906	22.11	921	
	Total Delhi	2000	995	906	22.11	921	
HP	Baspa HPS (IPP)	330	0	0	1.32	55	
	Malana HPS (IPP)	101	43	0	0.27	11	
	Other Hydro	571	172	110	3.60	150	
	Total HP	1002	215	110	5	216	
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	227
Total State Control Area Generation		28416	15513	14504	363.50	15039	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			883	1132	37.30	1554	
Total Regional Availability(Gross)		49641	32285	25569	681.07	28271	

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5821	1013	63.99	2666
State Control Area Hydro	5365	1802	1143	40.47	1686
Total Regional Hydro	15447	7623	2156	104.46	4352

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	0	-300	0	300	0.00	5.19	-5.19
Gwalior-Agra (D/C)	194	450	966	0	14.74	0.00	14.74
Zerda-Kankroli	-132	-17	95	132	0.00	0.43	-0.43
Zerda-Bhinmal	-44	82	297	68	2.10	0.00	2.10
Malanpur-Auraiya	-221	-109	0	221	0.00	2.76	-2.76
Badod-Kota/Morak	-58	-61	20	103	0.00	1.04	-1.04
Sub Total WR	-261	45			16.84	9.42	7.42
Pusauli Bypass	300	300	300	0	7.26	0.00	7.26
MZP- GKP (D/C)	248	291	436	0	7.69	0.00	7.69
Patna-Balia(D/C)	209	289	321	0	6.32	0.00	6.32
B'Sharif-Balia (D/C)	44	185	279	0	3.87	0.00	3.87
Barh - balia(D/C)	251	0	337	0	3.43	0.00	3.43
Pusauli-Sahupuri	122	56	150	0	2.18	0.00	2.18
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	1144	1087			30.75	0.87	29.88
Total IR Exch	883	1132			47.58	10.29	37.30

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
17.47	0.60	18.08	11.39	4.38	-4.20	3.41	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
28.08	-0.50	27.59	29.88	7.42	37.30	1.79	7.92	9.71

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	1.40	23.00	49.10	76.70	49.60	6.10	0.30

←----- 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	Hz				
50.26	5.05	49.10	17.14	49.69	1.45	0.22	50.14	49.42

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	03:59	399	18:20	0.0	0.0	0.0	0.0
Gorakhpur	400	429	04:00	412	11:35	0.6	0.6	46.2	0.0
Bareilly	400	425	04:00	401	16:14	0.0	0.0	10.0	0.0
Kanpur	400	420	03:59	403	11:03	0.0	0.0	0.0	0.0
Dadri	400	419	04:00	400	15:25	0.0	0.0	0.0	0.0
Ballabgarh	400	423	03:59	403	15:24	0.0	0.0	3.6	0.0
Bawana	400	422	04:00	402	16:46	0.0	0.0	1.5	0.0
Bassi	400	423	03:59	394	18:16	0.0	0.0	0.8	0.0
Hissar	400	413	20:25	400	14:12	15.5	15.5	0.0	0.0
Moga	400	421	04:03	397	10:46	0.0	0.0	0.0	0.0
Abdullapur	400	421	05:05	402	16:44	0.0	0.0	0.1	0.0
Nalagarh	400	427	04:00	405	14:27	0.0	0.0	25.7	0.0
Kishenpur	400	412	03:59	387	15:29	0.0	4.2	0.0	0.0
Wagoora	400	391	04:03	356	18:34	67.2	98.9	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	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 15.12.2011 :

1. Fog in some parts of 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 : 15.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER