

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.12.2011
Date of Reporting : 20.12.2011

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
31627	3185	34812	49.79	23863	650	24513	50.14	668.2	48.93

* 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	48.47	11.28		59.75	27.33	28.30	0.97	88.05	5.68
Haryana	54.73	0.60		55.33	27.33	32.66	5.33	87.99	7.26
Rajasthan	88.30	5.32	9.36	102.98	53.19	55.82	2.63	158.79	0.18
Delhi	21.83			21.83	44.23	38.13	-6.10	59.96	0.21
UP	82.94	6.55	15.60	105.08	80.10	77.73	-2.37	182.81	32.71
Uttarakhand		9.90		9.90	17.36	17.66	0.30	27.56	0.93
HP		5.19		5.19	17.41	18.33	0.92	23.51	0.07
J & K		5.50	0.00	5.50	24.16	30.44	6.28	35.94	1.90
Chandigarh				0.00	3.42	3.53	0.11	3.53	0.00
Total	296.28	44.32	24.96	365.56	294.52	302.60	8.07	668.15	48.93

* 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	4440	600	80	-403	3105	0	297	-901	-11.18	
Haryana	4244	938	368	-68	3127	0	-209	-70	-1.67	
Rajasthan	7034	0	351	431	6090	0	212	546	14.72	
Delhi	3194	2	-379	-122	1309	0	-735	-523	-5.75	
UP	8122	1545	-478	167	6990	650	-387	167	4.01	
Uttarakhand	1541	0	96	332	932	0	-84	332	7.97	
HP	1166	0	-258	8	708	0	89	237	3.70	
J&K	1696	100	36	252	1510	0	351	254	6.10	
Chandigarh	191	0	-10	0	92	0	1	-30	-0.24	
Total	31627	3185	-193	597	23863	650	-466	12	17.65	

* 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	1735	1850	1798	41.55	1731	41.35	0.20
	Rihand I STPS	1000	846	977	851	20.48	853	20.11	0.37
	Rihand II STPS	1000	977	1044	1033	23.34	973	23.14	0.20
	Dadri I STPS	840	773	863	681	18.04	751	18.02	0.02
	Dadri II STPS	980	967	1039	904	22.97	957	22.86	0.11
	Unchahar I TPS	440	341	440	322	8.15	340	8.07	0.08
	Unchahar II TPS	440	341	440	304	8.10	338	7.96	0.15
	Unchahar III TPS	210	170	219	170	4.06	169	3.99	0.06
	ISTPP (Jhajjar)	1000	475	500	395	10.87	453	10.95	-0.07
	Dadri GPS	830	841	745	544	17.72	738	17.81	-0.09
	Anta GPS	419	278	275	224	6.09	254	5.95	0.14
	Auraiya GPS	663	653	594	421	13.15	548	13.30	-0.15
	Sub Total (A)	9822	8397	8986	7647	194.52	8105	193.51	1.01
B. NPC	NAPS	440	218	260	260	5.33	222	5.23	0.09
	RAPS- B	440	421	465	467	10.08	420	10.10	-0.03
	RAPS- C	440	420	469	476	10.18	424	10.08	0.10
	Sub Total (B)	1320	1059	1194	1203	25.58	1066	25.42	0.16
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	175	0	1.27	53	1.37	-0.10
	Bairasuil HPS	180	179	120	0	0.47	20	0.47	0.00
	Salal-HPS	690	132	206	141	3.07	128	2.96	0.10
	Tanakpur-HPS	94	33	40	27	0.77	32	0.79	-0.01
	Uri-HPS	480	125	220	44	2.80	117	3.10	-0.30
	Dhauliganga-HPS	280	210	213	0	1.04	43	1.05	-0.01
	Dulhasti-HPS	390	303	381	0	2.73	114	2.81	-0.08
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	3074	1279	1355	212	12.14	506	12.54	-0.40
D. NJPC	Nathpa Jhakri	1500	1041	1335	0	8.85	369	9.32	-0.47
	Sub Total (D)	1500	1041	1335	0	8.85	369	9.32	-0.47
E. THDC	Tehri HPS	1000	1040	751	0	6.24	260	6.50	-0.27
	Koteswar HPS	200	98	203	0	1.69	70	1.60	0.09
	Sub Total (E)	1200	1138	954	0	7.92	330	8.10	-0.18
F. BBMB	Bhakra HPS	1480	685	944	582	16.80	700	16.44	0.36
	Dehar HPS	990	136	495	0	3.64	152	3.27	0.37
	Pong HPS	396	224	366	126	5.74	239	5.38	0.36
	Sub Total (F)	2866	1046	1805	708	26.18	1091	25.09	1.09
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.41	17	0.38	0.03
	KWHEP HPS(IPP)	1000	0	500	0	4.56	190	4.66	-0.11
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	140	126	3.27	136	2.79	0.49
	Sub Total (G)	1442	0	640	126	8.24	343	7.83	0.41
H. Total Regional Entities (A-G)		21225	13959	16269	9896	283.43	11810	281.81	1.62

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	950	22.99	958
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.59	191
	Guru Hargobind Singh TPS(L.mbt)	920	957	850	20.89	871
	Thermal (Total)	2620	2222	2015	48.47	2020
	Total Hydro	1148	433	240	11.28	470
Total Punjab	3768	2655	2255	59.75	2490	
Haryana	Panipat TPS	1360	1118	1037	25.91	1080
	DCRTPP (Yamuna nagar)	600	275	272	6.60	275
	Faridabad GPS (NTPC)	432	444	445	9.01	375
	RGTPP (khedar) (IPP)	1200	511	525	13.21	551
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Thermal (Total)	3617	2348	2279	54.73	2281
	Total Hydro	62	26	23	0.60	25
	Total Haryana	3679	2374	2302	55.33	2306
Rajasthan	kota TPS	1240	1176	1082	27.30	1138
	suratgarh TPS	1500	1156	1150	27.08	1128
	Chabra TPS	500	430	395	9.63	401
	Dholpur GPS	330	226	229	5.32	222
	Ramgarh GPS	113	65	65	1.69	71
	RAPS A (NPC)	300	181	180	4.44	185
	Barsingar (NLC)	250	115	98	2.61	109
	Giral LTPS (IPP)	250	45	52	0.97	40
	Rajwest LTPS (IPP)	540	355	465	9.27	386
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Thermal (Total)	5158	3749	3716	88.30	3679
	Total Hydro	550	179	181	5.32	222
	Wind power	1294	132	0	2.72	114
	Biomass	71	48	48	1.15	48
	Solar	50	0	0	0.17	7
	Renewable/Others (Total)	1365	180	48	9.36	390
	Total Rajasthan	7073	4108	3945	102.98	4291
UP	Anpara TPS	1630	1536	1415	32.60	1358
	Obra TPS	1442	650	664	14.20	592
	Paricha TPS	640	150	394	3.90	163
	Panki TPS	210	185	195	3.70	154
	Harduaganj TPS	415	44	44	0.90	38
	Tanda TPS (NTPC)	440	297	300	7.32	305
	Roza TPS (IPP)	600	432	428	10.80	450
	Anpara-C (IPP)	1200	360	297	7.35	306
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	104	116	2.17	90
	Thermal (Total)	6757	3758	3853	82.94	3456
	Vishnuparyag HPS (IPP)	400	103	99	2.37	99
	Other Hydro	527	277	43	4.17	174
	Cogeneration	951	650	650	15.60	650
	Total UP	8635	4788	4645	105.08	4280
Uttarakhand	Total Hydro	1303	531	360	9.90	413
	Total Uttarakhand	1303	531	360	9.90	413
Delhi	Rajghat TPS	135	96	46	1.64	69
	Delhi Gas Turbine	282	200	144	3.11	130
	Praagati Gas Turbine	330	307	267	6.78	282
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	415	415	10.30	429
	Thermal (Total)	2000	1018	872	21.83	910
Total Delhi	2000	1018	872	21.83	910	
HP	Baspa HPS (IPP)	330	0	0	1.32	55
	Malana HPS (IPP)	101	40	0	0.27	11
	Other Hydro	571	186	104	3.60	150
Total HP	1002	226	104	5	216	
J & K	Baglihar HPS (IPP)	450	260	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	314	232	5.50	229
Total State Control Area Generation		28416	16014	14715	365.56	15133
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1286	871	40.19	1674
Total Regional Availability(Gross)		49641	33569	25482	689.17	28617

IV. Total Hydro Generation:

Regional Entities Hydro	10083	6089	1046	63.34	2639
State Control Area Hydro	5365	1986	1183	41.95	1748
Total Regional Hydro	15447	8075	2229	105.29	4387

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	-300	0	300	0.00	5.76	-5.76
Gwalior-Agra (D/C)	463	408	928	0	14.61	0.00	14.61
Zerda-Kankroli	-102	-170	25	194	0.00	1.63	-1.63
Zerda-Bhinmal	-32	-53	183	111	0.88	0.00	0.88
Malanpur-Auraiya	-158	-154	0	163	0.00	2.93	-2.93
Badod-Kota/Morak	-59	-103	0	117	0.00	1.51	-1.51
Sub Total WR	-88	-372			15.49	11.83	3.66
Pusauli Bypass	300	300	300	0	7.29	0.00	7.29
MZP- GKP (D/C)	282	314	559	0	9.21	0.00	9.21
Patna-Balia(D/C)	284	298	547	0	7.90	0.00	7.90
B'Sharif-Balia (D/C)	133	281	424	0	6.57	0.00	6.57
Barh - balia(D/C)	286	0	463	0	4.19	0.00	4.19
Pusauli-Sahupuri	119	84	148	0	2.25	0.00	2.25
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	1374	1243			37.40	0.87	36.53
Total IR Exch	1286	871			52.89	12.70	40.19

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
16.69	0.52	17.21	14.11	5.19	0.76	3.55	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
34.90	0.83	35.73	36.53	3.66	40.19	1.63	2.82	4.45

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	0.00	5.40	31.90	92.40	65.90	21.30	2.20

←----- 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)
50.33	4.00	49.28	20.07	49.81	0.78	0.20	50.32	49.62

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	409	03:53	396	14:00	0.0	0.0	0.0	0.0
Gorakhpur	400	422	02:46	399	07:01	0.0	0.0	4.5	0.0
Bareilly	400	423	03:20	399	06:48	0.0	0.0	4.6	0.0
Kanpur	400	421	03:20	396	16:52	0.0	0.0	1.5	0.0
Dadri	400	422	03:07	398	14:49	0.0	0.0	7.7	0.0
Ballabgarh	400	426	03:20	400	07:20	0.0	0.0	16.6	0.0
Bawana	400	426	03:21	401	16:52	0.0	0.0	17.5	0.0
Bassi	400	421	04:03	385	07:26	0.0	3.6	1.0	0.0
Hissar	400	414	03:09	393	07:28	0.0	0.0	0.0	0.0
Moga	400	420	03:11	397	07:11	0.0	0.0	0.0	0.0
Abdullapur	400	424	03:08	400	08:15	0.0	0.0	11.9	0.0
Nalagarh	400	427	03:04	407	10:24	0.0	0.0	23.8	0.0
Kishenpur	400	412	03:03	391	07:07	0.0	0.0	0.0	0.0
Wagoora	400	389	03:03	362	20:49	70.5	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	504.20	1272.20	505.48	1325.82	173.10	461.56
Pong	426.72	384.05	414.94	668.52	418.16	807.91	51.11	348.69
Tehri	829.79	740.04	812.15	842.28	818.65	982.26	69.58	143.00
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 19.12.2011 :

1.Dense Fog in entire NCR, Haryana , Punjab , 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 : 19.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER