

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.12.2011
Date of Reporting : 30.12.2011

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
31319	3747	35065	49.85	25777	505	26282	50.20	693.8	55.76

* 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	53.53	8.73		62.26	31.35	30.23	-1.12	92.49	6.16
Haryana	51.12	0.58		51.71	26.66	40.92	14.26	92.63	12.69
Rajasthan	86.89	5.06	13.93	105.88	50.99	54.03	3.04	159.91	0.33
Delhi	32.69			32.69	35.60	30.59	-5.01	63.29	0.16
UP	95.85	5.98	15.60	117.43	80.68	75.78	-4.90	193.20	33.37
Uttarakhand		9.99		9.99	18.33	20.15	1.82	30.14	0.00
HP		4.38		4.38	18.23	19.23	1.01	23.61	1.15
J & K		4.45	0.00	4.45	23.96	30.62	6.66	35.07	1.90
Chandigarh				0.00	3.41	3.48	0.07	3.48	0.00
Total	320.08	39.16	29.53	388.78	289.21	305.04	15.83	693.82	55.76

* 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	4149	600	-310	-403	3463	0	191	-901	-11.18	
Haryana	3968	1497	523	-68	3288	0	315	-70	-1.66	
Rajasthan	6739	0	184	421	6353	0	273	546	14.66	
Delhi	3321	0	-106	-122	1426	0	-259	-398	-4.87	
UP	8491	1550	-363	167	7855	505	102	167	4.01	
Uttarakhand	1571	0	117	332	1072	0	78	332	7.97	
HP	1202	0	-89	8	775	0	45	237	3.70	
J&K	1683	100	57	252	1456	0	334	254	6.08	
Chandigarh	195	0	-17	0	89	0	-2	-30	-0.24	
Total	31319	3747	-5	588	25777	505	1076	137	18.46	

* 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	1860	1851	42.08	1754	41.64	0.44
	Rihand I STPS	1000	878	982	926	21.20	884	21.08	0.13
	Rihand II STPS	1000	977	1043	1030	23.65	986	23.45	0.21
	Dadri I STPS	840	585	653	461	13.19	550	13.08	0.11
	Dadri II STPS	980	967	1018	791	21.58	899	22.05	-0.47
	Unchahar I TPS	440	379	412	308	8.89	370	8.99	-0.10
	Unchahar II TPS	440	378	415	305	8.82	368	8.90	-0.08
	Unchahar III TPS	210	189	212	158	4.46	186	4.46	0.00
	ISTPP (Jhajjar)	1000	417	405	396	9.11	380	9.57	-0.46
	Dadri GPS	830	841	821	656	18.29	762	18.33	-0.03
	Anta GPS	419	313	258	218	6.85	285	6.60	0.25
	Auraiya GPS	663	654	623	391	13.33	555	13.30	0.03
	Sub Total (A)	9822	8313	8702	7491	191.47	7978	191.44	0.02
B. NPC	NAPS	440	221	254	259	5.23	218	5.30	-0.07
	RAPS- B	440	421	469	470	10.16	423	10.10	0.05
	RAPS- C	440	420	471	479	10.22	426	10.08	0.14
	Sub Total (B)	1320	1062	1194	1208	25.61	1067	25.49	0.12
C. NHPC	Chamera I HPS	540	0	0	0	0.00	0	0.00	0.00
	Chamera II HPS	300	297	192	0	1.14	47	1.21	-0.07
	Bairasuil HPS	180	179	120	0	0.45	19	0.52	-0.08
	Salal-HPS	690	108	301	31	2.49	104	2.58	-0.10
	Tanakpur-HPS	94	29	36	26	0.72	30	0.73	-0.01
	Uri-HPS	480	120	210	10	2.64	110	2.84	-0.20
	Dhauliganga-HPS	280	210	137	0	1.02	43	1.06	-0.03
	Dulhasti-HPS	390	388	267	0	2.61	109	2.94	-0.33
	Sewa-II HPS	120	79	0	0	0.24	10	0.18	0.06
	Sub Total (C)	3074	1409	1263	67	11.30	471	12.06	-0.76
D. NJPC	Nathpa Jhakri	1500	1125	903	0	7.24	302	7.33	-0.09
	Sub Total (D)	1500	1125	903	0	7.24	302	7.33	-0.09
E. THDC	Tehri HPS	1000	1030	775	0	6.45	269	6.50	-0.05
	Koteswar HPS	200	119	102	0	2.00	84	2.00	0.00
	Sub Total (E)	1200	1149	877	0	8.45	352	8.50	-0.05
F. BBMB	Bhakra HPS	1480	666	944	522	16.29	679	15.97	0.32
	Dehar HPS	990	123	330	0	3.09	129	2.95	0.14
	Pong HPS	396	177	306	126	4.45	185	4.25	0.20
	Sub Total (F)	2866	966	1580	648	23.83	993	23.17	0.66
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	171	0	0.29	12	0.23	0.07
	KWHEP HPS(IPP)	1000	0	360	0	4.00	167	3.64	0.36
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	150	0	132	118	3.21	134	2.82	0.39
	Sub Total (G)	1442	0	663	118	7.51	313	6.69	0.82
H. Total Regional Entities (A-G)		21225	14024	15182	9532	275.41	11475	274.69	0.72

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	1260	1160	27.84	1160	
	Guru Nanak Dev TPS(Bhatinda)	440	215	215	4.63	193	
	Guru Hargobind Singh TPS(L.mbt)	920	960	847	21.06	877	
	Thermal (Total)	2620	2435	2222	53.53	2230	
	Total Hydro	1148	219	220	8.73	364	
	Total Punjab	3768	2654	2442	62.26	2594	
Haryana	Panipat TPS	1360	1020	1021	24.97	1040	
	DCRTPP (Yamuna nagar)	600	68	0	2.77	115	
	Faridabad GPS (NTPC)	432	426	441	10.35	431	
	RGTPP (khedar) (IPP)	1200	517	456	13.04	543	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Thermal (Total)	3617	2031	1918	51.12	2130	
	Total Hydro	62	21	22	0.58	24	
	Total Haryana	3679	2052	1940	51.71	2154	
	Rajasthan	kota TPS	1240	1157	1158	27.57	1149
suratgarh TPS		1500	1149	1107	27.01	1125	
Chabra TPS		500	250	205	5.62	234	
Dholpur GPS		330	230	229	5.47	228	
Ramgarh GPS		113	44	46	1.12	47	
RAPS A (NPC)		300	181	185	4.48	187	
Barsingar (NLC)		250	149	94	3.23	135	
Giral LTPS (IPP)		250	66	56	1.35	56	
Rajwest LTPS (IPP)		540	460	460	11.05	460	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Thermal (Total)		5158	3686	3540	86.89	3620	
Total Hydro		550	226	153	5.06	211	
Wind power		1294	225	421	7.94	331	
Biomass		71	45	45	0.94	39	
Solar		50	0	0	0.00	0	
Renewable/Others (Total)		1365	270	466	13.93	581	
Total Rajasthan		7073	4182	4159	105.88	4412	
UP		Anpara TPS	1630	1569	1616	34.30	1429
	Obra TPS	1442	683	681	14.60	608	
	Paricha TPS	640	227	237	5.00	208	
	Panki TPS	210	164	175	3.70	154	
	Harduaganj TPS	415	304	297	6.50	271	
	Tanda TPS (NTPC)	440	290	293	8.11	338	
	Roza TPS (IPP)	900	509	428	12.00	500	
	Anpara-C (IPP)	1200	396	338	8.90	371	
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	115	120	2.74	114	
	Thermal (Total)	7057	4257	4185	95.85	3994	
	Vishnuparyag HPS (IPP)	400	94	94	2.15	90	
	Other Hydro	527	200	38	3.83	159	
	Cogeneration	951	650	650	15.60	650	
	Total UP	8935	5201	4967	117.43	4803	
	Uttarakhand	Total Hydro	1303	556	359	9.99	416
		Total Uttarakhand	1303	556	359	9.99	416
Delhi	Rajghat TPS	135	52	49	1.30	54	
	Delhi Gas Turbine	282	191	152	4.52	189	
	Praagati Gas Turbine	330	308	302	7.51	313	
	Rithala GPS	108	19	33	0.55	23	
	Bawana GPS	440	200	50	4.82	201	
	Badarpur TPS (NTPC)	705	660	545	13.98	583	
	Thermal (Total)	2000	1430	1263	32.69	1362	
	Total Delhi	2000	1430	1263	32.69	1362	
HP	Baspa HPS (IPP)	330	168	0	1.17	49	
	Malana HPS (IPP)	101	18	0	0.25	10	
	Other Hydro	571	176	70	2.96	123	
	Total HP	1002	362	70	4	182	
J & K	Baglihar HPS (IPP)	450	150	132	3.19	133	
	Other Hydro	323	54	86	1.26	52	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	204	218	4.45	185	
Total State Control Area Generation		28716	16641	15418	388.78	16109	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1604	2157	50.24	2093	
Total Regional Availability(Gross)		49941	33427	27107	714.42	29678	

IV. Total Hydro Generation:

Regional Entities Hydro	10083	5286	833	58.33	2430
State Control Area Hydro	5365	1788	1080	37.01	1542
Total Regional Hydro	15447	7074	1913	95.34	3973

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	200	300	0	4.45	0.00	4.45
Gwalior-Agra (D/C)	391	792	1005	0	17.11	0.00	17.11
Zerda-Kankroli	-149	-57	43	204	0.00	1.32	-1.32
Zerda-Bhinmal	-89	29	199	153	0.74	0.06	0.69
Malanpur-Auraiya	-231	-142	0	231	0.00	2.69	-2.69
Badod-Kota/Morak	-80	-102	0	160	0.00	2.06	-2.06
Sub Total WR	42	720			22.31	6.13	16.18
Pusauli Bypass	300	300	300	0	7.26	0.00	7.26
MZP- GKP (D/C)	524	500	654	0	11.33	0.00	11.33
Patna-Balia(D/C)	396	373	419	0	7.93	0.00	7.93
B'Sharif-Balia (D/C)	236	227	294	0	4.49	0.00	4.49
Barh - balia(D/C)	0	0	398	0	1.10	0.00	1.10
Pusauli-Sahupuri	136	71	155	0	2.72	0.00	2.72
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-34	0	48	0.00	0.76	-0.76
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1562	1437			34.82	0.76	34.06
Total IR Exch	1604	2157			57.12	6.89	50.24

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
13.25	0.31	13.57	11.71	6.32	2.36	4.59	2.76	-2.76

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
30.39	6.85	37.24	34.06	16.18	50.24	3.67	9.33	13.00

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	5.30	30.40	93.00	67.90	19.10	1.70

←----- 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)
50.40	6.03	49.24	7.34	49.81	0.75	0.20	50.28	0.00

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	403	21:24	394	09:36	0.0	0.0	0.0	0.0
Gorakhpur	400	430	17:07	407	10:44	0.0	0.0	50.7	0.0
Bareilly	400	421	02:53	396	08:30	0.0	0.0	0.1	0.0
Kanpur	400	415	04:01	396	10:45	0.0	0.0	0.0	0.0
Dadri	400	415	02:52	390	14:50	0.0	0.0	0.0	0.0
Ballabgarh	400	419	04:05	394	10:48	0.0	0.0	0.0	0.0
Bawana	400	419	02:50	394	14:46	0.0	0.0	0.0	0.0
Bassi	400	421	04:04	393	11:05	0.0	0.0	0.5	0.0
Hissar	400	412	21:27	390	11:16	0.0	0.0	0.0	0.0
Moga	400	417	01:02	397	10:45	0.0	0.0	0.0	0.0
Abdullapur	400	420	02:49	288	19:18	0.0	0.0	0.0	0.0
Nalagarh	400	423	02:52	403	11:16	0.0	0.0	8.7	0.0
Kishenpur	400	415	02:03	389	14:12	0.0	0.1	0.0	0.0
Wagoora	400	396	02:03	365	10:35	69.3	93.6	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	502.56	1205.87	503.90	1258.87	171.09	454.48
Pong	426.72	384.05	414.00	633.63	417.00	755.83	39.33	270.77
Tehri	829.79	740.04	810.10	802.26	818.65	982.26	69.30	160.00
Koteshwar	612.50	598.50	607.90	3.64	NA	NA	160.00	133.00
Chamera-I	760.00	748.75	746.99	NA	746.91	NA	43.58	0.00
Rihand	268.22	252.98	263.62	520.00	257.34	172.40	NA	NA
RPS	352.80	343.81	350.18	NA	NA	NA	NA	276.09
Jawahar Sagar	298.70	295.78	297.88	NA	NA	NA	NA	22.85
RSD	527.91	487.91	511.06	NA	514.09	NA	66.54	257.57

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 29.12.2011 :

1. Cold & Light Fog in NR.

XII. Synchronisation of new generating units :

XIII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :

- 1: 315MVA (400/220kV) ICT-1 Fatehpur first time test charged at 21.24 hrs of dt. 29.12.2011.
- 2: 500MVA (765/400kV) ICT-1 Lucknow first time test charged at 22.07 hrs of dt. 29.12.2011.
- 3: 125MVAR Bus Reactor Fatehpur first time test charged at 23.00 hrs of dt. 29.12.2011.
- 4: 400kV Uri (I) - Uri (II) interconnector line first time test charged at 00.10 hrs of dt 30.12.2011.
- 5: Shree Cement unit #2 (150 MW) first time synchronised with grid at 00.30 hrs of dt 30.12.2011.

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 29.12.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER