

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 12.04.2012
Date of Reporting : 13.04.2012

I. Regional Availability/Demand:

Evening Peak (20:00 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
32349	2031	34380	49.96	23037	0	23037	50.13	639.9	25.89

* 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	39.85	6.20		46.05	46.46	46.08	-0.38	92.13	1.80
Haryana	55.52	0.73		56.24	33.90	30.81	-3.09	87.06	11.81
Rajasthan	89.86	0.06	5.27	95.19	33.40	37.72	4.33	132.91	0.00
Delhi	25.10			25.10	52.41	44.45	-7.96	69.55	0.02
UP	85.57	6.66	9.60	101.83	74.25	75.76	1.51	177.59	10.12
Uttarakhand		11.65		11.65	11.97	15.89	3.92	27.54	0.77
HP		10.49		10.49	16.66	10.98	-5.68	21.47	0.00
J & K		13.58	0.00	13.58	17.60	14.49	-3.11	28.07	1.20
Chandigarh				0.00	3.78	3.53	-0.26	3.53	0.17
Total	295.90	49.37	14.87	360.14	290.43	279.72	-10.72	639.85	25.89

* 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 (20:00 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	4233	450	2	-94	3184	0	-198	-94	-2.24
Haryana	4620	336	405	74	3095	0	-306	74	1.78
Rajasthan	5686	0	-665	-290	5341	0	625	-290	-6.96
Delhi	3402	0	-201	311	2144	0	-368	311	7.45
UP	10458	995	1787	265	6582	0	-698	265	6.36
Uttarakhand	1287	150	107	47	869	0	26	47	1.14
HP	1044	0	-381	-436	662	0	-238	-42	-3.68
J&K	1425	100	7	-358	1079	0	-107	-358	-8.60
Chandigarh	194	0	-30	0	82	0	-15	0	0.00
Total	32349	2031	1032	-481	23037	0	-1279	-86	-4.75

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1460	1581	1312	33.98	1416	33.94	0.04
	Rihand I STPS	1000	905	990	702	19.78	824	19.54	0.23
	Rihand II STPS	1000	975	1049	731	21.36	890	21.14	0.22
	Dadri I STPS	840	803	851	606	14.84	619	14.99	-0.15
	Dadri II STPS	980	470	482	340	9.70	404	10.02	-0.32
	Unchahar I TPS	440	400	437	310	7.64	318	7.65	-0.01
	Unchahar II TPS	440	200	220	154	3.81	159	3.80	0.01
	Unchahar III TPS	210	199	208	154	3.91	163	3.89	0.02
	ISTPP (Jhajjar)	1000	470	505	427	10.20	425	11.14	-0.94
	Dadri GPS	830	807	576	508	12.11	504	12.48	-0.38
	Anta GPS	419	391	256	239	5.74	239	5.66	0.07
	Auraiya GPS	663	615	465	304	8.85	369	8.46	0.39
	Sub Total (A)	9822	7695	7620	5787	151.91	6330	152.72	-0.81
	B. NPC	NAPS	440	266	180	309	6.52	272	6.38
RAPS- B		440	404	437	454	9.79	408	9.70	0.10
RAPS- C		440	416	469	472	10.08	420	9.98	0.10
Sub Total (B)		1320	1086	1086	1235	26.40	1100	26.06	0.33
C. NHPC	Chamera I HPS	540	534	540	180	10.52	438	10.42	0.10
	Chamera II HPS	300	297	252	95	4.25	177	4.71	-0.46
	Bairasuil HPS	180	182	179	80	3.92	163	4.09	-0.17
	Salal-HPS	690	513	426	553	13.04	543	12.37	0.67
	Tanakpur-HPS	94	30	37	34	0.83	35	0.76	0.07
	Uri-HPS	480	480	480	476	11.42	476	11.55	-0.13
	Dhauliganga-HPS	280	277	278	0	2.06	86	2.03	0.02
	Dulhasti-HPS	390	388	391	165	7.84	327	8.23	-0.40
	Sewa-II HPS	120	119	123	191	2.77	115	2.72	0.05
	Sub Total (C)	3074	2820	2706	1774	56.63	2360	56.88	-0.25
D. NJPC	Nathpa Jhakri	1500	1600	1608	0	13.02	542	14.20	-1.18
	Sub Total (D)	1500	1600	1608	0	13.02	542	14.20	-1.18
E. THDC	Tehri HPS	1000	563	675	0	5.05	210	5.00	0.05
	Koteshwar HPS	300	300	302	0	2.76	115	2.70	0.06
	Sub Total (E)	1300	863	977	0	7.81	325	7.70	0.11
F. BBMB	Bhakra HPS	1480	466	769	406	11.48	478	11.19	0.29
	Dehar HPS	990	333	660	140	8.55	356	7.99	0.57
	Pong HPS	396	6	120	0	0.18	8	0.15	0.03
	Sub Total (F)	2866	805	1549	546	20.21	842	19.32	0.89
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	118	0	0.00	0	1.02	-1.02
	KWHEP HPS(IPP)	1000	0	600	220	7.00	291	7.63	-0.63
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	23	136	2.53	105	3.25	-0.73
	Sub Total (G)	1592	0	741	356	9.52	397	11.91	-2.38
H. Total Regional Entities (A-G)	21475	14870	16287	9698	285.50	11896	288.79	-3.29	

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	840	825	18.72	780
	Guru Nanak Dev TPS(Bhatinda)	440	100	95	2.00	83
	Guru Hargobind Singh TPS(L.mbt)	920	935	762	19.13	797
	Thermal (Total)	2620	1875	1682	39.85	1661
	Total Hydro	1148	376	83	6.20	258
	Total Punjab	3768	2251	1765	46.05	1919
Haryana	Panipat TPS	1360	1055	1007	25.07	1044
	DCRTPP (Yamuna nagar)	600	0	0	0.00	0
	Faridabad GPS (NTPC)	432	387	306	8.25	344
	RGTPP (kheldar) (IPP)	1200	951	902	22.20	925
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	660	0	409	0.00	0
	Thermal (Total)	4277	2393	2624	55.52	2313
	Total Hydro	62	25	30	0.73	30
	Total Haryana	4339	2418	2654	56.24	2344
	Rajasthan	kota TPS	1240	1175	1060	25.84
suratgarh TPS		1500	1362	883	27.09	1129
Chabra TPS		500	404	351	9.27	386
Dholpur GPS		330	250	225	5.87	245
Ramgarh GPS		111	21	21	0.51	21
RAPS A (NPC)		300	182	181	4.32	180
Barsingsar (NLC) IPP		250	215	0	4.76	198
Giral LTPS		250	56	88	1.42	59
Rajwest LTPS (IPP)		540	446	458	10.79	450
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5156	4111	3267	89.86	3744
Total Hydro		550	17	0	0.06	3
Wind power		1843	328	128	4.52	188
Biomass		91	31	31	0.75	31
Solar		128	0	0	0.00	0
Renewable/Others (Total)		1934	359	159	5.27	220
Total Rajasthan		7640	4487	3426	95.19	3966
UP		Anpara TPS	1630	1216	1398	26.90
	Obra TPS	1382	562	558	11.60	483
	Paricha TPS	640	423	432	9.20	383
	Panki TPS	210	165	145	3.30	138
	Harduaganj TPS	415	0	0	0.00	0
	Tanda TPS (NTPC)	440	291	255	6.58	274
	Roza TPS (IPP)	1200	1053	787	21.33	889
	Anpara-C (IPP)	1200	131	315	2.82	118
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	323	329	3.84	160
	Thermal (Total)	7567	4164	4219	85.57	3566
	Vishnuparyag HPS (IPP)	400	119	119	2.82	118
	Other Hydro	527	213	0	3.84	160
	Cogeneration	981	400	400	9.60	400
	Total UP	9475	4896	4738	101.83	4126
	Uttarakhand	Total Hydro	1303	523	425	11.65
Total Uttarakhand		1303	523	425	11.65	485
Delhi	Rajghat TPS	135	107	109	2.54	106
	Delhi Gas Turbine	282	30	155	3.39	141
	Pragati Gas Turbine	330	288	268	6.91	288
	Rithala GPS	108	36	26	0.73	30
	Bawana GPS	440	19	7	0.64	27
	Badarpur TPS (NTPC)	705	490	485	10.90	454
	Thermal (Total)	2000	970	1043	25.10	1046
	Total Delhi	2000	970	1043	25.10	1046
HP	Baspa HPS (IPP)	330	41	61	1.55	65
	Malana HPS (IPP)	101	43	13	0.55	23
	Other Hydro	571	399	345	8.39	350
	Total HP	1002	483	419	10	437
J & K	Baglihar HPS (IPP)	450	440	440	10.57	440
	Other Hydro	323	120	128	3.01	125
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	560	568	13.58	566
Total State Control Area Generation		30483	16588	15038	360.14	14888
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1896	719	23.63	984
Total Regional Availability(Gross)		51958	34771	25455	669.26	27768

IV. Total Hydro Generation:

Regional Entities Hydro	10033	7558	2540	104.67	4361
State Control Area Hydro	5365	2197	1525	46.55	1940
Total Regional Hydro	15397	9755	4065	151.22	6301

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	100	-200	200	200	0.58	3.78	-3.20
Gwalior-Agra (D/C)	665	335	1126	0	12.02	0.00	12.02
Zerda-Kankroli	-142	-294	0	356	0.00	5.35	-5.35
Zerda-Bhinmal	-152	-257	17	349	0.00	4.04	-4.04
Malanpur-Auraiya	-33	-101	0	157	0.00	1.77	-1.77
Badod-Kota/Morak	-32	14	20	132	0.00	0.65	-0.65
Sub Total WR	406	-503			12.60	15.59	-2.99
Pusauli Bypass	62	-1	103	163	0.72	0.97	-0.25
MZP- GKP (D/C)	438	471	615	0	9.47	0.00	9.47
Patna-Balia(D/C)	253	378	452	0	6.77	0.00	6.77
B'Sharif-Balia (D/C)	280	262	400	0	5.23	0.00	5.23
Barh - Balia(D/C)	282	0	385	0	3.70	0.00	3.70
Pusauli-Balia	0	0	0	0	0.00	0.00	0.00
Gaya-Fatehpur (765 Kv)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	169	86	169	0	2.65	0.00	2.65
K'nasa-Sahupuri	48	60	60	0	0.10	0.00	0.10
Son Ngr-Rihand	-42	-34	0	49	0.00	1.05	-1.05
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1490	1222			28.63	2.02	26.61
Total IR Exch	1896	719			41.23	17.60	23.63

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
22.66	0.55	23.21	-8.05	4.19	1.29	0.73	1.68	-1.68

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
18.13	-3.63	14.50	26.61	-2.99	23.63	8.48	0.64	9.12

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	0.30	4.50	94.10	89.90	43.40	5.60

<----- 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				
50.35	4.06	49.42	21.19	49.97	0.23	0.15	50.34	49.74

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	413	00:42	402	06:10	0.0	0.0	0.0	0.0
Gorakhpur	400	431	23:00	398	20:46	0.0	0.0	33.7	0.5
Bareilly	400	420	13:04	399	19:30	0.0	0.0	0.0	0.0
Kanpur	400	421	00:00	402	18:40	0.0	0.0	3.1	0.0
Dadri	400	426	01:17	404	19:19	0.0	0.0	19.8	0.0
Ballabgarh	400	427	01:54	406	18:58	0.0	0.0	21.4	0.0
Bawana	400	428	01:55	404	18:57	0.0	0.0	24.6	0.0
Bassi	400	428	04:02	407	05:41	0.0	0.0	28.9	0.0
Hissar	400	418	04:04	400	18:56	0.0	0.0	0.0	0.0
Moga	400	428	02:58	408	19:59	0.0	0.0	23.2	0.0
Abdullapur	400	430	01:12	406	18:56	0.0	0.0	49.3	0.0
Nalagarh	400	430	02:56	408	18:57	0.0	0.0	39.2	0.0
Kishenpur	400	421	03:28	398	20:02	0.0	0.0	0.0	0.0
Wagoora	400	409	03:12	382	20:02	0.0	16.2	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	474.81	350.94	484.34	569.03	350.93	48.55
Pong	426.72	384.05	402.97	288.96	410.18	504.32	37.92	11.58
Tehri	829.79	740.04	610.50	4.69	818.65	982.26	153.00	183.00
Koteshwar	612.50	598.50	609.80	4.44	NA	NA	196.00	188.00
Chamera-I	760.00	748.75	754.87	NA	NA	NA	200.71	202.47
Rihand	268.22	252.98	259.23	260.30	254.97	78.60	NA	NA
RPS	352.80	343.81	347.65	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.16	NA	NA	NA	NA	NA
RSD	527.91	487.91	496.38	NA	504.81	NA	231.34	186.32

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 12.04.2012 :

1. Normal weather in Northern Region.

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 : 12.04.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER