

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.04.2013
Date of Reporting : 12.04.2013

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
31868	3365	35232	49.92	26543	3051	29594	50.03	692.2	71.84

* 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	50.82	5.94		56.76	47.64	48.32	0.68	105.07	1.21
Haryana	38.43	0.59		39.02	51.29	52.88	1.59	91.90	2.45
Rajasthan	87.64	0.11	6.06	93.82	50.77	47.40	-3.37	141.22	0.56
Delhi	28.22			28.22	47.34	46.48	-0.86	74.71	0.22
UP	92.16	5.64	19.20	117.00	79.66	82.32	2.66	199.32	65.10
Uttarakhand		10.69		10.69	14.25	14.70	0.45	25.39	0.37
HP		10.07		10.07	12.26	13.58	1.33	23.65	0.24
J & K		7.19	0.00	7.19	21.41	19.48	-1.93	26.67	1.70
Chandigarh				0.00	4.04	4.29	0.25	4.29	0.00
Total	297.27	40.22	25.26	362.75	328.65	329.45	0.80	692.20	71.84

* 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	4836	70	-6	-91	4061	0	-8	361	3.17
Haryana	4800	437	242	65	3610	100	222	-407	-4.98
Rajasthan	6054	243	-79	221	5712	0	4	224	8.84
Delhi	3491	0	-99	-164	2425	6	-60	-608	-6.90
UP	8752	2260	-439	-24	7878	2795	332	117	0.98
Uttarakhand	1296	225	74	249	929	150	9	226	5.53
HP	1063	30	-54	-362	811	0	44	7	-2.24
J&K	1374	100	-149	6	987	0	-32	-11	-0.16
Chandigarh	202	0	-16	0	130	0	13	0	0.45
Total	31868	3365	-526	-100	26543	3051	523	-92	4.69

* 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	
										UI
A. NTPC	Singrauli STPS	2000	1245	1360	1367	30.12	1255	29.86	0.26	
	Rihand I STPS	1000	914	1005	985	22.01	917	21.90	0.11	
	Rihand II STPS	1000	975	1032	1042	23.36	973	23.40	-0.04	
	Rihand III STPS	500	468	502	513	11.35	473	11.24	0.11	
	Dadri I STPS	840	807	864	870	18.72	780	19.31	-0.59	
	Dadri II STPS	980	917	1077	511	14.22	592	16.34	-2.12	
	Unchahar I TPS	420	406	438	445	9.74	406	9.74	-0.01	
	Unchahar II TPS	420	398	439	443	9.56	398	9.56	-0.01	
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00	
	ISTPP (Jhajjar)	1500	995	508	380	8.14	339	9.26	-1.12	
	Dadri GPS	830	794	563	393	10.67	445	10.93	-0.26	
	Anta GPS	419	389	250	251	5.99	250	6.10	-0.10	
	Auraiva GPS	663	625	302	316	7.22	301	8.68	-1.45	
	Sub Total (A)	10782	8934	8340	7516	171.09	7129	176.30	-5.21	
	B. NPC	NAPS	440	0	0	0	0.00	0	0.00	0.00
		RAPS- B	440	418	463	464	10.07	420	10.03	0.04
RAPS- C		440	430	474	473	10.13	422	10.32	-0.20	
Sub Total (B)		1320	848	937	937	20.20	842	20.35	-0.16	
C. NHPC	Chamera I HPS	540	550	540	0	4.77	199	4.70	0.07	
	Chamera II HPS	300	310	310	0	3.09	129	3.37	-0.28	
	Chamera III HPS	231	0	0	0	0.00	0	0.00	0.00	
	Bairasuil HPS	180	182	150	10	2.06	86	2.22	-0.16	
	Salal-HPS	690	246	228	200	5.79	241	5.73	0.06	
	Tanakpur-HPS	94	33	49	32	0.77	32	0.78	-0.01	
	Uri-HPS	480	476	480	480	11.65	485	11.62	0.02	
	Dhauliganga-HPS	280	280	286	0	1.89	79	1.93	-0.04	
	Dulhasti-HPS	390	387	410	0	4.23	176	4.34	-0.11	
	Sewa-II HPS	120	119	123	123	2.66	111	2.70	-0.04	
	Sub Total (C)	3305	2582	2576	845	36.90	1538	37.39	-0.48	
	D.NJPC	Nathpa Jhakri	1500	1605	1420	0	12.29	512	12.50	-0.21
		Sub Total (D)	1500	1605	1420	0	12.29	512	12.50	-0.21
E. THDC	Tehri HPS	1000	545	547	0	6.05	252	6.00	0.05	
	Koteswar HPS	400	300	292	0	3.07	128	3.00	0.07	
	Sub Total (E)	1400	845	839	0	9.12	380	9.00	0.12	
F. BBMB	Bhakra HPS	1480	304	312	321	7.40	308	7.30	0.10	
	Dehar HPS	990	327	825	330	8.32	347	7.86	0.47	
	Pong HPS	396	9	120	0	0.31	13	5.01	-4.70	
	Sub Total (F)	2866	640	1257	651	16.03	668	20.16	-4.13	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	30	31	0.72	30	0.69	0.03	
	KWHEP HPS(IPP)	1000	0	300	0	6.56	273	6.96	-0.40	
	Malana Stg-II HPS	100	0	0	0	0.31	13	0.30	0.01	
	Shree Cement TPS	300	0	226	269	5.87	244	4.71	1.15	
	Budhil HPS(IPP)	70	0	25	10	0.41	17	0.82	-0.42	
	Sub Total (G)	1662	0	581	310	13.86	578	13.48	0.38	
H. Total Regional Entities (A-G)	22836	15454	15950	10259	279.49	11645	289.18	-9.69		

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	930	23.36	973
	Guru Nanak Dev TPS(Bhatinda)	440	202	190	6.37	266
	Guru Hargobind Singh TPS(L.mbt)	920	965	821	21.09	879
	Thermal (Total)	2620	2217	1941	50.82	2117
	Total Hydro	1148	327	222	5.94	247
	Total Punjab	3768	2544	2163	56.76	2365
Haryana	Panipat TPS	1367	518	486	11.69	487
	DCRTPP (Yamuna nagar)	600	610	592	13.22	551
	Faridabad GPS (NTPC)	432	194	165	4.08	170
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	598	432	9.44	393
	Thermal (Total)	4944	1920	1675	38.43	1601
	Total Hydro	62	23	25	0.59	25
	Total Haryana	5006	1943	1700	39.02	1626
	Rajasthan	kota TPS	1240	1172	1172	27.72
suratgarh TPS		1500	1136	1129	25.87	1078
Chabra TPS		500	427	291	9.38	391
Dholpur GPS		330	135	135	3.28	137
Ramgarh GPS		111	35	39	0.92	38
RAPS A (NPC)		300	190	178	4.70	196
Barsingsar (NLC)		250	0	0	0.00	0
Giral LTPS		250	0	58	0.88	37
Rajwest LTPS (IPP)		1080	622	634	14.90	621
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5696	3717	3636	87.64	3652
Total Hydro		550	20	0	0.11	5
Wind power		2191	31	314	3.73	155
Biomass		91	32	32	0.78	32
Solar		201	0	0	1.56	65
Renewable/Others (Total)		2483	63	346	6.06	253
Total Rajasthan		8729	3800	3982	93.82	3909
UP	Anpara TPS	1630	1393	1370	29.70	1238
	Obra TPS	1382	443	570	9.60	400
	Paricha TPS	890	665	0	9.60	400
	Panki TPS	210	75	80	1.60	67
	Harduaganj TPS	665	286	44	3.60	150
	Tanda TPS (NTPC)	440	302	408	8.90	371
	Roza TPS (IPP)	1200	275	284	6.56	273
	Anpara-C (IPP)	1200	538	540	12.99	541
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	405	405	9.62	401
	Thermal (Total)	8067	4382	3701	92.16	3840
	Vishnuparyag HPS (IPP)	400	89	95	2.19	91
	Other Hydro	527	154	182	3.45	144
	Cogeneration	981	800	800	19.20	800
	Total UP	9975	5425	4778	117.00	4783
Uttarakhand	Total Hydro	1303	468	441	10.69	445
	Total Uttarakhand	1303	468	441	10.69	445
Delhi	Rajghat TPS	135	102	104	2.43	101
	Delhi Gas Turbine	282	224	196	6.10	254
	Pragati Gas Turbine	330	290	263	6.91	288
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	605	515	12.79	533
	Thermal (Total)	2237	1221	1078	28.22	1176
	Total Delhi	2237	1221	1078	28.22	1176
HP	Baspa HPS (IPP)	330	58	96	1.55	65
	Malana HPS (IPP)	86	16	0	0.33	14
	Other Hydro	589	329	357	8.18	341
	Total HP	1005	403	453	10.07	419
J & K	Baglihar HPS (IPP)	450	248	244	5.79	241
	Other Hydro	323	46	93	1.40	58
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	294	337	7.19	300
Total State Control Area Generation		32979	16098	14932	362.75	15023
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1829	2878	65.95	2748
Total Regional Availability(Gross)		55815	33877	28069	708.19	29417

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6422	1527	81.93	3414
State Control Area Hydro	5368	1689	1660	40.22	1584
Total Regional Hydro	15731	8111	3187	122.15	4998

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	250	200	400	0	4.59	0.00	4.59
Gwalior-Agra (D/C)	508	992	1401	0	24.02	0.00	24.02
Zerda-Kankroli	-129	-159	0	214	0.00	3.07	-3.07
Zerda-Bhinmal	-36	-105	24	188	0.00	1.58	-1.58
Malanpur-Auraiya	-111	-67	0	135	0.00	1.29	-1.29
Badod-Kota/Morak	-134	-125	0	177	0.00	3.33	-3.33
Mundra-Mohindergarh(HVDC)	1265	1269	1269	0	30.66	0.00	30.66
Sub Total WR	1613	2005			59.27	9.27	50.00
Pusauli Bypass	150	150	150	0	3.64	0.00	3.64
MZP- GKP (D/C)	-80	200	310	80	2.86	0.00	2.86
Patna-Balia(D/C)	215	367	426	0	7.31	0.00	7.31
B'Sharif-Balia (D/C)	32	153	222	0	2.82	0.00	2.82
Pusauli-Balia	-169	-133	0	173	0.00	3.16	-3.16
Gaya-Fatehpur (765 Kv)	-22	32	113	75	0.49	0.00	0.49
Pusauli-Sahupuri	126	144	173	0	2.97	0.00	2.97
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.97	-0.97
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	216	873			20.08	4.13	15.95
Total IR Exch	1829	2878			79.35	13.40	65.95

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdi (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
27.13	0.28	27.41	-2.87	-10.72	-8.09	12.78	-3.05	3.05

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
13.40	43.32	56.72	15.95	50.00	65.95	2.55	6.68	9.23

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	0.00	0.30	91.70	91.70	48.80	8.30

<----- 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				
50.48	18.03	49.63	22.34	50.01	0.19	0.14	50.28	49.84

VII. Voltage profile 400 kV

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	411	0:38	404	13:46	0.0	0.0	0.0	0.0
Gorakhpur	400	424	17:02	409	2:37	0.0	0.0	14.7	0.0
Bareilly	400	424	8:00	404	12:05	0.0	0.0	1.0	0.0
Kanpur	400	420	2:59	405	19:12	0.0	0.0	0.0	0.0
Dadri	400	422	4:09	403	19:19	0.0	0.0	3.6	0.0
Balabhgarh	400	428	2:58	410	19:20	0.0	0.0	31.8	0.0
Bawana	400	422	2:59	402	19:19	0.0	0.0	1.5	0.0
Bassi	400	427	18:01	412	11:47	0.0	0.0	28.6	0.0
Hissar	400	416	4:09	396	19:20	0.0	0.0	0.0	0.0
Moga	400	423	2:58	399	19:20	0.0	0.0	10.0	0.0
Abdullapur	400	426	2:58	404	12:05	0.0	0.0	15.5	0.0
Nalagarh	400	429	3:00	407	19:19	0.0	0.0	28.5	0.0
Kishenpur	400	428	3:05	401	19:19	0.0	0.0	23.7	0.0
Wagoora	400	416	4:32	383	19:34	0.0	3.3	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	775	11:04	749	19:22	0.0	0.0	0.0	0.0
Balia	765	767	17:34	735	1:48	0.0	26.1	0.0	0.0
Moga	765	790	2:58	749	19:20	0.0	0.0	0.0	0.0
Agra	765	797	11:04	768	19:23	0.0	0.0	0.0	0.0
Bhiwani	765	793	3:03	753	19:21	0.0	0.0	0.0	0.0
Unnao	765	773	7:59	751	19:20	0.0	0.0	0.0	0.0

IX. 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	477.97	414.26	474.98	350.94	276.77	461.88
Pong	426.72	384.05	400.05	216.87	402.94	288.96	86.37	61.87
Tehri	829.79	740.04	769.35	139.50	818.65	982.26	68.22	223.00
Koteshwar	612.50	598.50	610.20	4.44	609.90	4.44	223.00	223.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	128.16	121.13
Rihand	268.22	252.98	257.50	179.00	259.32	268.30	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.94	NA	NA	NA	NA	NA
RSD	527.91	487.91	506.81	NA	496.38	NA	96.08	142.52

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 11.04.2013 :

1.Normal weather.

XIII. Synchronisation of new generating units :

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

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 11.04.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER