

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 10.04.2013

Date of Reporting : 11.04.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 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
30808	3831	34639	49.83	26187	2376	28563	50.07	668.6	77.66

* 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	46.45	5.95		52.40	45.60	44.75	-0.85	97.14	0.63
Haryana	37.41	0.59		37.99	48.96	48.53	-0.43	86.52	2.63
Rajasthan	80.04	0.46	4.58	85.08	47.91	47.31	-0.59	132.39	3.18
Delhi	26.90			26.90	46.68	45.79	-0.89	72.69	0.59
UP	94.89	5.71	19.20	119.79	74.18	75.56	1.38	195.35	68.07
Uttarakhand		11.16		11.16	17.09	19.26	2.17	30.42	0.37
HP		10.43		10.43	13.20	12.91	-0.29	23.34	0.24
J & K		7.35	0.00	7.35	20.58	19.26	-1.33	26.61	1.70
Chandigarh				0.00	3.87	4.10	0.23	4.10	0.24
Total	285.67	41.65	23.78	351.10	318.06	317.47	-0.59	668.57	77.66

* 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	4705	50	-32	-89	4019	0	-137	471	5.11
Haryana	4587	551	-16	49	3103	0	2	-429	-5.89
Rajasthan	5879	365	-13	194	5406	36	-104	220	4.70
Delhi	3513	0	4	-224	2345	0	-151	-690	-9.59
UP	8196	2685	-213	-24	8321	2340	107	117	0.98
Uttarakhand	1262	80	-172	265	1183	0	206	226	5.51
HP	1088	0	-69	-390	813	0	37	56	-1.90
J&K	1372	100	-140	-44	872	0	-160	-60	-1.34
Chandigarh	206	0	1	-15	124	0	5	0	0.26
Total	30808	3831	-651	-279	26187	2376	-195	-89	-2.16

* 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 (OG:(+ve), UG: (-ve))
A. NTPC	Singrauli STPS	2000	1095	1147	1302	26.72	1113	25.97	0.75	
	Rihand I STPS	1000	925	1000	995	22.22	926	21.92	0.30	
	Rihand II STPS	1000	975	1044	1043	23.40	975	23.28	0.12	
	Rihand III STPS	500	465	504	510	11.25	469	11.16	0.09	
	Dadri I STPS	840	807	880	807	19.06	794	19.37	-0.31	
	Dadri II STPS	980	969	508	509	11.45	477	15.39	-3.94	
	Unchahar I TPS	420	406	441	444	9.76	407	9.74	0.01	
	Unchahar II TPS	420	399	441	441	9.61	400	9.58	0.03	
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00	
	ISTPP (Jhajjar)	1500	995	505	357	9.18	382	9.20	-0.02	
	Dadri GPS	830	794	391	386	9.04	376	9.34	-0.31	
	Anta GPS	419	389	258	222	5.93	247	5.85	0.08	
	Auraiva GPS	663	630	301	317	7.20	300	7.18	0.02	
	Sub Total (A)	10782	8849	7420	7333	164.79	6866	167.97	-3.18	
B. NPC	NAPS	440	0	0	0.00	0	0.00	0.00	0.00	
	RAPS- B	440	419	460	463	10.00	417	10.06	-0.06	
	RAPS- C	440	430	468	474	10.12	422	10.32	-0.20	
	Sub Total (B)	1320	849	928	937	20.12	838	20.38	-0.26	
C. NHPC	Chamera I HPS	540	550	540	0	4.53	189	4.37	0.16	
	Chamera II HPS	300	310	308	56	3.61	150	3.53	0.07	
	Chamera III HPS	231	0	0	0	0.00	0	0.00	0.00	
	Bairasuil HPS	180	182	182	20	2.29	95	2.23	0.06	
	Salal-HPS	690	252	359	256	3.70	154	6.05	-2.35	
	Tanakpur-HPS	94	30	32	30	0.78	32	0.71	0.07	
	Uri-HPS	480	430	480	480	10.76	448	10.56	0.20	
	Dhauliganga-HPS	280	280	282	0	1.81	75	1.73	0.07	
	Dulhasti-HPS	390	387	403	0	3.93	164	3.94	-0.01	
	Sewa-II HPS	120	119	126	103	2.67	111	2.58	0.09	
	Sub Total (C)	3305	2539	2712	945	34.07	1419	35.70	-1.64	
	D.NJPC	Natpda Jhakri	1500	1605	1359	0	14.05	585	13.80	0.25
		Sub Total (D)	1500	1605	1359	0	14.05	585	13.80	0.25
E. THDC	Tehri HPS	1000	550	554	170	8.11	338	8.00	0.11	
	Koteshwar HPS	400	373	304	0	3.38	141	3.30	0.08	
	Sub Total (E)	1400	923	858	170	11.49	479	11.30	0.19	
F. BBMB	Bhakra HPS	1480	304	314	318	7.67	320	7.30	0.37	
	Dehar HPS	990	300	825	330	8.32	347	7.20	1.13	
	Pong HPS	396	6	120	0	0.17	7	5.01	-4.84	
	Sub Total (F)	2866	610	1259	648	16.16	673	19.50	-3.34	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	26	30	0.69	29	0.69	0.00	
	KWHEP HPS(IPP)	1000	0	302	0	7.58	316	7.68	-0.10	
	Malana Stg-II HPS	100	0	61	0	0.40	17	0.36	0.04	
	Shree Cement TPS	300	0	266	261	6.34	264	5.05	1.29	
	Budhil HPS(IPP)	70	0	35	35	0.52	22	0.51	0.01	
	Sub Total (G)	1662	0	690	326	15.53	647	14.29	1.23	
	H. Total Regional Entities (A-G)	22836	15375	15226	10359	276.20	11508	282.93	-6.73	

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	931	22.33	931
	Guru Nanak Dev TPS(Bhatinda)	440	214	190	4.45	186
	Guru Hargobind Singh TPS(L.mbt)	920	969	881	19.66	819
	Thermal (Total)	2620	2233	2002	46.45	1935
	Total Hydro	1148	342	225	5.95	248
Total Punjab	3768	2575	2227	52.40	2183	
Haryana	Panipat TPS	1367	443	422	10.55	439
	DCRTPP (Yamuna nagar)	600	563	506	12.53	522
	Faridabad GPS (NTPC)	432	186	165	4.26	178
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	443	422	10.07	420
	Thermal (Total)	4944	1635	1515	37.41	1559
	Total Hydro	62	24	23	0.59	25
	Total Haryana	5006	1659	1538	37.99	1583
	Rajasthan	kota TPS	1240	1172	1167	27.81
suratgarh TPS		1500	1121	901	23.20	967
Chabra TPS		500	228	228	5.24	218
Dholpur GPS		330	135	146	3.23	135
Ramgarh GPS		111	35	35	0.89	37
RAPS A (NPC)		300	178	178	4.68	195
Barsingsar (NLC)		250	0	0	0.00	0
Giral LTPS		250	40	40	0.83	35
Rajwest LTPS (IPP)		1080	598	608	14.16	590
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5696	3507	3303	80.04	3335
Total Hydro		550	0	0	0.46	19
Wind power		2191	20	257	2.37	99
Biomass		91	34	34	0.81	34
Solar		201	0	0	1.40	58
Renewable/Others (Total)		2483	54	291	4.58	191
Total Rajasthan		8729	3561	3594	85.08	3545
UP	Anpara TPS	1630	1305	1332	28.60	1192
	Obra TPS	1382	505	459	10.40	433
	Paricha TPS	890	727	731	15.90	663
	Panki TPS	210	80	85	1.80	75
	Harduaganj TPS	665	36	42	0.70	29
	Tanda TPS (NTPC)	440	405	406	9.88	412
	Roza TPS (IPP)	1200	284	270	6.74	281
	Anpara-C (IPP)	1200	528	513	12.49	521
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	324	405	8.38	349
	Thermal (Total)	8067	4194	4243	94.89	3954
	Vishnuparyag HPS (IPP)	400	95	95	2.29	95
	Other Hydro	527	143	152	3.41	142
	Cogeneration	981	800	800	19.20	800
	Total UP	9975	5232	5290	119.79	4896
Uttarakhand	Total Hydro	1303	485	454	11.16	465
	Total Uttarakhand	1303	485	454	11.16	465
Delhi	Rajghat TPS	135	105	105	2.45	102
	Delhi Gas Turbine	282	193	194	4.58	191
	Pragati Gas Turbine	330	288	296	7.08	295
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	605	480	12.79	533
	Thermal (Total)	2237	1191	1075	26.90	1121
	Total Delhi	2237	1191	1075	26.90	1121
HP	Baspa HPS (IPP)	330	39	78	1.34	56
	Malana HPS (IPP)	86	59	0	0.41	17
	Other Hydro	589	375	348	8.68	362
Total HP	1005	473	426	10.43	435	
J & K	Baglihar HPS (IPP)	450	248	244	5.90	246
	Other Hydro	323	95	97	1.45	60
	Gas/Diesel/Others	183	0	0	0.00	0
Total J & K	956	343	341	7.35	306	
Total State Control Area Generation		32979	15519	14945	351.10	14534
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1752	1989	53.06	2211
Total Regional Availability(Gross)		55815	32497	27293	680.35	28253

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6577	1793	84.43	3518
State Control Area Hydro	5368	1810	1621	41.65	1640
Total Regional Hydro	15731	8387	3414	126.08	5158

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	-150	350	300	2.12	2.31	-0.19
Gwalior-Agra (D/C)	491	931	1270	0	20.38	0.00	20.38
Zerda-Kankroli	-118	-76	0	234	0.00	2.90	-2.90
Zerda-Bhinmal	-62	-34	67	162	0.00	1.34	-1.34
Malanpur-Auraiya	-107	-61	0	123	0.00	1.61	-1.61
Badod-Kota/Morak	-144	-122	0	203	0.00	3.66	-3.66
Mundra-Mohindergarh(HVDC)	1265	1264	1268	0	30.67	0.00	30.67
Sub Total WR	1575	1572			53.17	11.82	41.34
Pusauli Bypass	150	150	150	0	3.63	0.00	3.63
MZP- GKP (D/C)	30	-50	136	154	0.48	0.00	0.48
Patna-Balia(D/C)	115	153	306	0	6.59	0.00	6.59
B'Sharif-Balia (D/C)	-39	47	168	39	2.45	0.00	2.45
Pusauli-Balia	-153	-126	0	153	0.00	2.63	-2.63
Gaya-Fatehpur (765 Kv)	-9	-41	88	101	0.00	0.38	-0.38
Pusauli-Sahupuri	119	144	159	0	2.49	0.00	2.49
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.92	-0.92
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	177	237			15.63	3.92	11.71
Total IR Exch	1752	1989			68.80	15.74	53.06

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
26.24	0.27	26.50	-5.83	-9.02	-6.63	5.02	-3.66	3.66

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
10.39	41.91	52.31	11.71	41.34	53.06	1.32	-0.57	0.75

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	1.30	13.50	98.70	86.50	12.90	0.00

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				
50.20	23.57	49.37	21.09	49.85	0.43	0.14	50.17	49.65

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	412	10:33	404	19:09	0.0	0.0	0.0	0.0
Gorakhpur	400	430	3:34	413	19:58	0.0	0.0	51.5	0.0
Bareilly	400	429	2:44	393	12:16	0.0	0.0	22.8	0.0
Kanpur	400	425	2:45	405	19:11	0.0	0.0	17.5	0.0
Dadri	400	425	2:46	405	12:19	0.0	0.0	11.0	0.0
Ballabgarh	400	432	2:45	407	19:13	0.0	0.0	46.4	2.2
Bawana	400	426	2:46	404	12:10	0.0	0.0	12.4	0.0
Bassi	400	432	4:03	408	19:13	0.0	0.0	44.5	0.8
Hissar	400	420	2:44	398	19:11	0.0	0.0	0.0	0.0
Moga	400	423	2:46	403	19:11	0.0	0.0	3.1	0.0
Abdullapur	400	422	0:00	405	19:11	0.0	0.0	3.4	0.0
Nalagarh	400	430	2:44	409	12:09	0.0	0.0	29.1	0.0
Kishenpur	400	427	0:52	404	19:09	0.0	0.0	19.8	0.0
Wagoora	400	422	2:44	386	19:05	0.0	1.8	1.4	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	784	13:11	751	19:46	0.0	0.0	0.0	0.0
Balia	765	767	2:47	738	19:51	0.0	1.8	0.0	0.0
Moga	765	793	2:46	754	19:12	0.0	0.0	0.0	0.0
Agra	765	799	2:46	770	1:15	44.1	44.1	0.0	0.0
Bhiwani	765	798	2:47	758	19:13	0.0	0.0	0.0	0.0
Unnao	765	780	13:11	753	19:12	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 10.04.2013 :

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 : 10.04.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER