

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.03.2013
Date of Reporting : 15.03.2013

I. Regional Availability/Demand:

Evening Peak (19:00 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
31335	2288	33623	50.11	27223	1130	28353	50.26	714.6	49.79

* 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	36.39	11.12		47.52	37.45	37.75	0.30	85.27	0.00
Haryana	48.87	0.47		49.35	54.75	50.78	-3.97	100.13	0.03
Rajasthan	94.13	3.67	8.04	105.84	70.97	70.58	-0.39	176.42	0.08
Delhi	22.41			22.41	39.91	37.28	-2.63	59.69	0.00
UP	92.85	7.02	19.20	119.07	87.82	88.85	1.03	207.92	47.74
Uttarakhand		14.32		14.32	14.38	14.26	-0.12	28.58	0.24
HP		8.47		8.47	14.41	14.32	-0.08	22.79	0.00
J & K		10.37	0.00	10.37	23.36	20.01	-3.35	30.38	1.70
Chandigarh				0.00	3.55	3.46	-0.09	3.46	0.00
Total	294.66	55.45	27.24	377.34	346.58	337.29	-9.29	714.63	49.79

* 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	
Punjab	4185	0	120	-263	2815	0	-37	16	-5.56
Haryana	5207	0	-100	108	3551	0	-643	-193	-1.08
Rajasthan	6281	0	-176	532	7330	0	-68	1231	22.41
Delhi	3087	0	216	-565	1666	0	-74	-1285	-18.93
UP	8579	2188	41	-118	8860	1130	-27	-42	-2.02
Uttarakhand	1282	0	-98	316	1086	0	66	159	5.90
HP	946	0	66	-262	774	0	52	124	0.56
J&K	1585	100	22	-30	1047	0	-183	-30	-0.78
Chandigarh	183	0	-8	-51	94	0	-8	0	-0.34
Total	31335	2288	83	-332	27223	1130	-922	-21	0.15

* 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	1970	2094	1992	47.20	1967	46.44	0.76	
	Rihand I STPS	1000	675	735	722	16.04	668	15.63	0.40	
	Rihand II STPS	1000	951	999	1035	22.51	938	22.16	0.34	
	Rihand III STPS	500	0	0	0	0.00	0	0.00	0.00	
	Dadri I STPS	840	807	651	892	15.70	654	19.14	-3.44	
	Dadri II STPS	980	969	852	795	17.87	744	20.79	-2.92	
	Unchahar I TPS	420	408	435	432	9.50	396	9.47	0.03	
	Unchahar II TPS	420	406	440	412	9.28	387	9.10	0.18	
	Unchahar III TPS	210	202	207	203	4.63	193	4.57	0.06	
	ISTPP (Jhajjar)	1500	995	831	504	14.66	611	17.54	-2.88	
	Dadri GPS	830	813	340	374	8.21	342	8.32	-0.11	
	Anta GPS	419	405	230	221	5.41	225	5.50	-0.09	
	Auraiva GPS	663	640	152	157	3.56	148	3.69	-0.13	
	Sub Total (A)	10782	9241	7966	7739	174.55	7273	182.34	-7.78	
	B. NPC	NAPS	440	297	335	343	7.18	299	7.13	0.05
		RAPS- B	440	418	460	461	10.07	420	10.03	0.04
RAPS- C		440	430	474	478	10.19	425	10.32	-0.13	
Sub Total (B)		1320	1145	1269	1282	27.45	1144	27.48	-0.03	
C. NHPC	Chamera I HPS	540	550	540	0	3.25	135	3.23	0.02	
	Chamera II HPS	300	306	306	0	1.85	77	1.87	-0.02	
	Chamera III HPS	231	231	221	0	1.18	49	1.16	0.02	
	Bairasuil HPS	180	182	110	20	1.99	83	2.07	-0.08	
	Salal-HPS	690	304	448	255	7.81	325	7.06	0.74	
	Tanakpur-HPS	94	29	28	19	0.71	29	0.67	0.03	
	Uri-HPS	480	463	478	444	10.99	458	10.93	0.06	
	Dhauliganga-HPS	280	288	137	0	0.91	38	0.98	-0.07	
	Dulhasti-HPS	390	386	403	0	2.76	115	2.61	0.15	
	Sewa-II HPS	120	120	127	118	2.88	120	2.87	0.01	
	Sub Total (C)	3305	2858	2798	856	34.33	1430	33.47	0.86	
	D.NJPC	Natpcha Jhakri	1500	1605	1527	0	7.27	303	7.60	-0.33
Sub Total (D)		1500	1605	1527	0	7.27	303	7.60	-0.33	
E. THDC	Tehri HPS	1000	630	632	0	8.95	373	9.00	-0.05	
	Koteshwar HPS	400	400	399	90	3.38	141	3.30	0.08	
	Sub Total (E)	1400	1030	1031	90	12.33	514	12.30	0.03	
F. BBMB	Bhakra HPS	1480	662	996	412	15.81	659	15.89	-0.08	
	Dehar HPS	990	245	495	150	5.82	243	5.87	-0.05	
	Pong HPS	396	204	304	62	5.04	210	5.01	0.03	
	Sub Total (F)	2866	1111	1795	624	26.67	1111	26.77	-0.10	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.42	17	0.40	0.02	
	KWHEP HPS(IPP)	1000	0	140	0	3.70	154	3.71	-0.02	
	Malana Stg-II HPS	100	0	45	0	0.23	9	0.19	0.03	
	Shree Cement TPS	300	0	264	265	6.43	268	6.47	-0.05	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	449	265	10.77	449	10.78	-0.01	
H. Total Regional Entities (A-G)	22836	16990	16835	10856	293.36	12224	300.74	-7.38		

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	740	850	16.67	695
	Guru Nanak Dev TPS(Bhatinda)	440	120	105	2.73	114
	Guru Hargobind Singh TPS(L.mbt)	920	775	694	16.99	708
	Thermal (Total)	2620	1635	1649	36.39	1516
	Total Hydro	1148	492	458	11.12	464
Total Punjab	3768	2127	2107	47.52	1980	
Haryana	Panipat TPS	1367	1109	1026	21.70	904
	DCRTPP (Yamuna nagar)	600	560	276	11.70	487
	Faridabad GPS (NTPC)	432	177	410	5.84	243
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	372	499	9.64	402
	Thermal (Total)	4944	2218	2211	48.87	2036
	Total Hydro	62	16	20	0.47	20
	Total Haryana	5006	2234	2231	49.35	2056
	Rajasthan	kota TPS	1240	885	970	23.08
suratgarh TPS		1500	1147	1136	29.19	1216
Chabra TPS		500	390	418	10.36	432
Dholpur GPS		330	142	145	3.36	140
Ramgarh GPS		111	68	72	1.83	76
RAPS A (NPC)		300	179	179	4.83	201
Barsingsar (NLC)		250	185	187	4.36	182
Giral LTPS		250	128	70	2.62	109
Rajwest LTPS (IPP)		1080	718	415	14.51	604
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5696	3842	3592	94.13	3922
Total Hydro		550	118	74	3.67	153
Wind power		2191	49	488	6.07	253
Biomass		91	23	23	0.56	23
Solar		201	35	0	1.41	59
Renewable/Others (Total)		2483	72	511	8.04	335
Total Rajasthan		8729	4032	4177	105.84	4410
UP	Anpara TPS	1630	904	863	19.30	804
	Obra TPS	1382	522	548	11.90	496
	Paricha TPS	890	815	798	16.40	683
	Panki TPS	210	70	80	1.30	54
	Harduaganj TPS	665	60	249	4.10	171
	Tanda TPS (NTPC)	440	406	405	9.90	412
	Roza TPS (IPP)	1200	810	803	19.41	809
	Anpara-C (IPP)	1200	0	0	0.00	0
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	403	403	10.54	439
	Thermal (Total)	8067	3990	4149	92.85	3869
	Vishnuparyag HPS (IPP)	400	0	75	1.50	62
	Other Hydro	527	266	176	5.53	230
	Cogeneration	981	800	800	19.20	800
	Total UP	9975	5056	5200	119.07	4899
Uttarakhand	Total Hydro	1303	656	580	14.32	597
	Total Uttarakhand	1303	656	580	14.32	597
Delhi	Rajghat TPS	135	56	57	1.26	53
	Delhi Gas Turbine	282	113	154	3.27	136
	Pragati Gas Turbine	330	145	147	4.13	172
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	635	570	13.76	573
	Thermal (Total)	2237	949	928	22.41	934
	Total Delhi	2237	949	928	22.41	934
HP	Baspa HPS (IPP)	330	0	0	0.72	30
	Malana HPS (IPP)	86	45	0	0.23	9
	Other Hydro	589	328	253	7.52	313
Total HP	1005	373	253	8.47	353	
J & K	Baglihar HPS (IPP)	450	248	234	5.82	243
	Other Hydro	323	95	130	4.55	189
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	343	364	10.37	432
Total State Control Area Generation		32979	15770	15840	377.34	15660
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			898	1517	50.64	2110
Total Regional Availability(Gross)		55815	33503	28213	721.35	29994

IV. Total Hydro Generation:

Regional Entities Hydro	10364	7336	1570	84.94	3539
State Control Area Hydro	5368	2264	1925	55.45	2248
Total Regional Hydro	15731	9600	3495	140.38	5787

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	150	50	300	100	1.32	0.36	0.96
Gwalior-Agra (D/C)	-63	311	743	63	10.12	0.00	10.12
Zerda-Kankroli	-128	-90	109	248	0.00	1.97	-1.97
Zerda-Bhinmal	-76	-14	107	229	0.00	0.23	-0.23
Malanpur-Auraiya	-196	-132	0	196	0.00	2.88	-2.88
Badod-Kota/Morak	-140	-86	0	153	0.00	2.16	-2.16
Mundra-Mohindergarh(HVDC)	968	718	968	0	21.72	0.00	21.72
Sub Total WR	515	757			33.16	7.60	25.56
Pusauli Bypass	150	150	150	0	3.61	0.00	3.61
MZP- GKP (D/C)	24	70	240	0	2.74	0.00	2.74
Patna-Balia(D/C)	244	426	570	0	10.55	0.00	10.55
B'Sharif-Balia (D/C)	18	125	307	0	4.87	0.00	4.87
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-173	-125	28	173	0.00	1.10	-1.10
Gaya-Fatehpur (765 Kv)	27	20	218	3	2.79	0.00	2.79
Pusauli-Sahupuri	131	134	167	0	2.75	0.00	2.75
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	44	0.00	1.14	-1.14
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	383	760			27.31	2.23	25.08
Total IR Exch	898	1517			60.47	9.83	50.64

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
40.02	0.12	40.14	-7.21	-0.84	-0.45	-7.42	-2.77	2.77
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
29.72	30.30	60.02	25.08	25.56	50.64	-4.64	-4.74	-9.38

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	0.10	92.80	92.70	57.00	7.20

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					
50.56	17.04	49.66	14.48	50.03	0.15	0.12	50.43	49.94

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	410	17:04	402	18:25	0.0	0.0	0.0	0.0
Gorakhpur	400	432	17:03	414	18:12	0.0	0.0	69.5	0.7
Bareilly	400	425	3:46	407	11:41	0.0	0.0	15.0	0.0
Kanpur	400	417	3:34	398	13:42	0.0	0.0	0.0	0.0
Dadri	400	424	3:49	407	18:55	0.0	0.0	7.9	0.0
Ballabhgarh	400	427	3:32	409	11:34	0.0	0.0	16.3	0.0
Bawana	400	427	3:33	408	19:11	0.0	0.0	17.7	0.0
Bassi	400	420	17:05	399	22:10	0.0	0.0	0.0	0.0
Hissar	400	420	3:30	396	19:11	0.0	0.0	0.0	0.0
Moga	400	423	3:35	397	19:11	0.0	0.0	1.8	0.0
Abdullapur	400	426	3:59	407	12:08	0.0	0.0	12.1	0.0
Nalagarh	400	427	1:51	407	11:34	0.0	0.0	29.3	0.0
Kishenpur	400	425	3:29	398	11:01	21.4	21.4	7.7	0.0
Wagoora	400	417	3:35	375	19:39	5.6	14.7	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	483.59	552.50	482.84	527.87	249.64	482.89
Pong	426.72	384.05	401.95	266.33	405.98	370.28	90.50	351.36
Tehri	829.79	740.04	783.20	360.00	818.65	982.26	67.80	240.00
Koteswar	612.50	598.50	610.10	4.69	NA	NA	226.00	218.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	88.03	117.06
Rihand	268.22	252.98	258.62	NA	260.63	NA	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	508.48	NA	496.71	NA	140.03	188.25

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 14.03.2013 :
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 : 14.03.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER