

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 23.03.2013
Date of Reporting : 24.03.2013

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
31085	2010	33095	50.07	30416	650	31066	50.03	755.1	42.78

* 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	41.91	13.17		55.08	48.33	47.73	-0.60	102.81	0.63
Haryana	52.17	0.66		52.83	56.07	55.28	-0.79	108.10	0.00
Rajasthan	90.06	2.57	20.49	113.12	64.43	56.93	-7.50	170.05	0.14
Delhi	24.95			24.95	36.98	35.10	-1.88	60.05	0.00
UP	103.75	5.74	19.20	128.70	96.88	95.76	-1.13	224.46	40.15
Uttarakhand		13.41		13.41	17.49	17.32	-0.17	30.73	0.16
HP		9.04		9.04	15.04	14.06	-0.97	23.10	0.00
J & K		10.39	0.00	10.39	23.98	21.89	-2.09	32.28	1.70
Chandigarh				0.00	3.65	3.50	-0.15	3.50	0.00
Total	312.84	54.98	39.69	407.51	362.85	347.57	-15.28	755.08	42.78

* 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	4700	0	-57	-67	3968	0	-39	196	-0.47
Haryana	5048	0	18	-323	3989	0	69	-626	-7.92
Rajasthan	5719	0	-210	692	7449	0	-66	899	20.24
Delhi	3068	0	157	-935	1776	0	-105	-1447	-26.76
UP	8350	1910	-269	14	10126	650	107	79	1.61
Uttarakhand	1534	0	252	334	1116	0	-8	242	6.57
HP	928	0	-85	-191	745	0	-7	101	0.97
J&K	1548	100	43	-21	1147	0	-122	-21	-0.50
Chandigarh	190	0	-2	-45	100	0	-6	-5	-0.46
Total	31085	2010	-153	-543	30416	650	-176	-582	-6.72

* 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	1963	1811	2108	45.93	1914	44.94	1.00
	Rihand I STPS	1000	715	650	771	16.21	676	16.12	0.09
	Rihand II STPS	1000	975	831	1038	21.93	914	21.57	0.37
	Rihand III STPS	500	485	431	509	11.05	460	11.15	-0.10
	Dadri I STPS	840	807	674	724	15.38	641	18.12	-2.74
	Dadri II STPS	980	969	778	987	17.82	742	17.66	0.16
	Unchahar I TPS	420	408	435	435	9.39	391	8.66	0.73
	Unchahar II TPS	420	406	432	439	9.25	385	8.24	1.01
	Unchahar III TPS	210	202	221	221	4.74	198	4.15	0.59
	ISTPP (Jhajjar)	1500	995	666	714	15.25	636	15.52	-0.27
	Dadri GPS	830	799	322	394	8.56	357	9.01	-0.45
	Anta GPS	419	403	237	252	5.69	237	5.78	-0.10
	Auraiva GPS	663	639	149	155	3.53	147	3.92	-0.40
	Sub Total (A)	10782	9766	7637	8747	184.73	7697	184.85	-0.12
	B. NPC	NAPS	440	297	325	337	7.08	295	7.12
RAPS- B		440	416	460	462	9.99	416	9.98	0.01
RAPS- C		440	430	465	476	10.19	424	10.32	-0.13
Sub Total (B)		1320	1143	1250	1275	27.26	1136	27.43	-0.17
C. NHPC	Chamera I HPS	540	550	450	0	4.05	169	4.12	-0.07
	Chamera II HPS	300	310	305	0	2.33	97	2.33	0.00
	Chamera III HPS	231	231	134	0	1.48	62	1.52	-0.04
	Bairasuil HPS	180	182	132	60	1.88	78	1.84	0.04
	Salal-HPS	690	267	431	207	6.19	258	6.28	-0.09
	Tanakpur-HPS	94	29	31	24	0.69	29	0.69	-0.01
	Uri-HPS	480	476	480	475	11.61	484	11.51	0.10
	Dhauliganga-HPS	280	289	144	0	1.32	55	1.28	0.04
	Dulhasti-HPS	390	387	400	0	3.00	125	3.05	-0.05
	Sewa-II HPS	120	119	125	123	2.75	114	2.68	0.06
	Sub Total (C)	3305	2839	2632	889	35.30	1471	35.32	-0.02
	D.NJPC	Natpda Jhakri	1500	1605	1192	0	8.28	345	8.26
Sub Total (D)		1500	1605	1192	0	8.28	345	8.26	0.01
E. THDC	Tehri HPS	1000	590	593	0	8.92	372	9.00	-0.08
	Koteshwar HPS	400	300	291	0	3.84	160	3.80	0.04
	Sub Total (E)	1400	890	884	0	12.76	532	12.80	-0.04
F. BBMB	Bhakra HPS	1480	796	994	523	19.01	792	19.10	-0.09
	Dehar HPS	990	288	660	150	7.49	312	6.92	0.57
	Pong HPS	396	203	300	60	4.54	189	5.01	-0.47
	Sub Total (F)	2866	1288	1954	733	31.04	1293	31.03	0.01
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.65	27	0.60	0.05
	KWHEP HPS(IPP)	1000	0	142	0	4.26	178	4.33	-0.06
	Malana Stg-II HPS	100	0	42	0	0.28	12	0.25	0.03
	Shree Cement TPS	300	0	264	278	6.43	268	6.40	0.03
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	448	278	11.62	484	11.58	0.04
H. Total Regional Entities (A-G)	22836	17531	15997	11922	310.98	12958	311.26	-0.28	

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	850	850	20.63	859
	Guru Nanak Dev TPS(Bhatinda)	440	170	200	3.28	137
	Guru Hargobind Singh TPS(L.mbt)	920	746	734	18.00	750
	Thermal (Total)	2620	1766	1784	41.91	1746
	Total Hydro	1148	528	541	13.17	549
	Total Punjab	3768	2294	2325	55.08	2295
Haryana	Panipat TPS	1367	1090	1103	26.03	1085
	DCRTPP (Yamuna nagar)	600	562	564	13.09	545
	Faridabad GPS (NTPC)	432	174	150	4.07	169
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	383	391	8.98	374
	Thermal (Total)	4944	2209	2208	52.17	2174
	Total Hydro	62	28	25	0.66	27
	Total Haryana	5006	2237	2233	52.83	2201
	Rajasthan	kota TPS	1240	1110	1075	26.15
suratgarh TPS		1500	907	1127	27.18	1132
Chabra TPS		500	406	402	9.83	410
Dholpur GPS		330	129	143	3.30	138
Ramgarh GPS		111	69	71	1.80	75
RAPS A (NPC)		300	179	179	4.79	200
Barsingsar (NLC)		250	177	178	4.21	175
Giral LTPS		250	91	97	1.94	81
Rajwest LTPS (IPP)		1080	425	396	10.87	453
VSLP LTPS (IPP)		135	0		0.00	0
Thermal (Total)		5696	3493	3668	90.06	3753
Total Hydro		550	77	88	2.57	107
Wind power		2191	917	984	18.83	784
Biomass		91	27	28	0.64	27
Solar		201	25	0	1.02	43
Renewable/Others (Total)		2483	944	1012	20.49	854
Total Rajasthan		8729	4514	4768	113.12	4713
UP	Anpara TPS	1630	1050	1039	22.60	942
	Obra TPS	1382	483	467	10.50	438
	Paricha TPS	890	673	661	14.40	600
	Panki TPS	210	85	80	1.70	71
	Harduaganj TPS	665	278	286	6.20	258
	Tanda TPS (NTPC)	440	404	408	9.90	412
	Roza TPS (IPP)	1200	653	803	18.35	764
	Anpara-C (IPP)	1200	467	464	11.18	466
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	316	405	8.93	372
	Thermal (Total)	8067	4409	4613	103.75	4323
	Vishnuparyag HPS (IPP)	400	108	86	1.46	61
	Other Hydro	527	110	232	4.29	179
	Cogeneration	981	800	800	19.20	800
	Total UP	9975	5427	5731	128.70	5302
Uttarakhand	Total Hydro	1303	488	553	13.41	559
	Total Uttarakhand	1303	488	553	13.41	559
Delhi	Rajghat TPS	135	56	51	1.43	60
	Delhi Gas Turbine	282	156	158	3.35	139
	Pragati Gas Turbine	330	295	268	7.08	295
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	640	580	13.10	546
	Thermal (Total)	2237	1147	1057	24.95	1040
	Total Delhi	2237	1147	1057	24.95	1040
HP	Baspa HPS (IPP)	330	31	41	1.22	51
	Malana HPS (IPP)	86	40	0	0.26	11
	Other Hydro	589	333	287	7.56	315
	Total HP	1005	404	328	9.04	377
J & K	Baglihar HPS (IPP)	450	246	244	5.85	244
	Other Hydro	323	95	130	4.55	189
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	341	374	10.39	433
Total State Control Area Generation		32979	16852	17369	407.51	16919
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1415	2578	49.17	2049
Total Regional Availability(Gross)		55815	34264	31869	767.66	31925

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6846	1622	92.56	3857
State Control Area Hydro	5368	1976	2141	54.98	2230
Total Regional Hydro	15731	8822	3763	147.54	6087

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	0	50	150	300	1.23	0.22	1.01
Gwalior-Agra (D/C)	363	675	824	0	13.14	0.00	13.14
Zerda-Kankroli	-205	-98	0	366	0.00	4.10	-4.10
Zerda-Bhinmal	-199	-37	97	350	0.00	2.81	-2.81
Malanpur-Auraiya	-138	-110	0	167	0.00	2.65	-2.65
Badod-Kota/Morak	-239	-136	0	239	0.00	3.87	-3.87
Mundra-Mohindergarh(HVDC)	1052	1050	1055	0	25.39	0.00	25.39
Sub Total WR	634	1394			39.76	13.64	26.12
Pusauli Bypass	400	400	400	0	9.04	0.00	9.04
MZP- GKP (D/C)	0	110	144	0	0.64	0.00	0.64
Patna-Balia(D/C)	336	508	551	0	9.94	0.00	9.94
B'Sharif-Balia (D/C)	90	186	195	0	3.32	0.00	3.32
Pusauli-Balia	-140	-100	0	149	0.00	2.36	-2.36
Gaya-Fatehpur (765 Kv)	0	-25	26	41	0.17	0.00	0.17
Pusauli-Sahupuri	131	145	153	0	3.13	0.00	3.13
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.83	-0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	781	1184			26.24	3.19	23.05
Total IR Exch	1415	2578			66.00	16.83	49.17

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
38.99	0.15	39.13	-11.84	-0.39	0.92	-6.60	-2.09	2.11

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
26.12	39.63	65.75	23.05	26.12	49.17	-3.07	-13.51	-16.58

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	0.28	92.49	92.21	83.90	7.51

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
50.73	14.40	49.67	0.52	50.12	0.30	0.10	50.38	49.91

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	414	18:01	403	9:09	0.0	0.0	0.0	0.0
Gorakhpur	400	428	5:26	408	11:27	0.0	0.0	56.8	0.0
Bareilly	400	424	17:37	402	11:15	0.0	0.0	4.6	0.0
Kanpur	400	418	4:05	400	11:15	0.0	0.0	0.0	0.0
Dadri	400	421	4:00	405	11:12	0.0	0.0	1.8	0.0
Ballabgarh	400	428	4:03	408	11:53	0.0	0.0	37.7	0.0
Bawana	400	424	4:02	406	11:14	0.0	0.0	12.7	0.0
Bassi	400	426	17:35	400	11:43	0.0	0.0	6.5	0.0
Hissar	400	414	4:03	392	11:31	0.0	0.0	0.0	0.0
Moga	400	420	4:02	397	12:00	6.4	6.4	0.0	0.0
Abdullapur	400	425	2:30	249	21:26	0.3	0.3	5.7	0.0
Nalagarh	400	427	4:05	403	11:32	0.0	0.0	24.3	0.0
Kishenpur	400	418	23:52	397	7:13	0.0	0.0	0.0	0.0
Wagoora	400	411	17:15	382	7:18	0.0	10.8	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	774	4:05	730	11:15	0.0	14.6	0.0	0.0
Balia	765	771	15:10	732	11:16	0.0	15.2	0.0	0.0
Moga	765	785	23:53	741	11:31	0.0	0.1	0.0	0.0
Lucknow	765	782	5:30	746	11:15	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	481.36	488.47	479.61	454.47	300.30	623.14
Pong	426.72	384.05	400.29	223.85	404.42	328.16	93.93	318.99
Tehri	829.79	740.04	778.60	303.00	818.65	982.26	64.36	248.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	111.12	109.36
Rihand	268.22	252.98	258.10	NA	260.05	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	507.70	NA	496.20	NA	120.26	157.55

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 23.03.2013 :
Rains in Punjab and HP.

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 : 23.03.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER