

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.03.2013
Date of Reporting : 23.03.2013

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
32522	2100	34622	50.07	30296	1535	31831	50.08	769.7	51.93

* 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	43.59	12.80		56.39	52.15	51.90	-0.25	108.29	0.59
Haryana	55.75	0.64		56.39	57.42	56.08	-1.34	112.47	0.20
Rajasthan	95.24	3.09	12.36	110.69	71.21	65.73	-5.49	176.41	0.34
Delhi	25.23			25.23	39.16	36.58	-2.58	61.81	0.00
UP	100.76	6.39	19.20	126.35	94.68	93.87	-0.81	220.21	48.69
Uttarakhand		13.57		13.57	17.49	17.63	0.14	31.21	0.31
HP		8.79		8.79	15.86	14.62	-1.25	23.40	0.07
J & K		10.39	0.00	10.39	23.89	22.04	-1.85	32.43	1.73
Chandigarh				0.00	3.74	3.45	-0.28	3.45	0.00
Total	320.57	55.68	31.56	407.80	375.60	361.89	-13.71	769.69	51.93

* 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	4865	0	-69	-144	4036	0	79	160	-1.62
Haryana	5172	0	-159	-40	4232	0	224	-528	-4.75
Rajasthan	6321	0	-276	577	7692	0	-182	891	19.73
Delhi	3151	0	67	-817	1750	0	-85	-1400	-24.28
UP	8715	2000	105	14	9467	1535	-128	79	1.61
Uttarakhand	1567	0	185	336	1092	0	-32	257	6.70
HP	978	0	0	-152	765	0	-23	101	1.30
J&K	1565	100	55	-24	1171	0	-101	-21	-0.55
Chandigarh	189	0	-15	-40	91	0	-5	0	-0.25
Total	32522	2100	-107	-290	30296	1535	-253	-461	-2.11

* 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	2109	2105	47.43	1976	47.01	0.43
	Rihand I STPS	1000	715	754	774	17.19	716	17.12	0.07
	Rihand II STPS	1000	975	1015	1039	23.30	971	23.33	-0.04
	Rihand III STPS	500	485	505	525	11.62	484	11.64	-0.02
	Dadri I STPS	840	807	777	714	16.59	691	18.30	-1.71
	Dadri II STPS	980	969	689	811	17.18	716	16.78	0.40
	Unchahar I TPS	420	408	440	434	9.55	398	9.31	0.24
	Unchahar II TPS	420	406	439	442	9.39	391	8.86	0.53
	Unchahar III TPS	210	202	217	206	4.67	194	4.45	0.22
	ISTPP (Jhajjar)	1500	995	689	691	15.27	636	15.52	-0.25
	Dadri GPS	830	799	347	391	8.58	358	8.78	-0.20
	Anta GPS	419	403	240	245	5.78	241	5.70	0.08
	Auraiva GPS	663	642	147	158	3.56	148	3.74	-0.18
	Sub Total (A)	10782	9768	8368	8535	190.09	7921	190.54	-0.45
	B. NPC	NAPS	440	296	340	340	7.13	297	7.10
RAPS- B		440	416	459	466	10.00	417	9.98	0.02
RAPS- C		440	430	469	476	10.19	425	10.32	-0.13
Sub Total (B)		1320	1142	1268	1282	27.33	1139	27.41	-0.08
C. NHPC	Chamera I HPS	540	550	450	0	3.96	165	3.93	0.03
	Chamera II HPS	300	310	298	0	2.40	100	2.23	0.17
	Chamera III HPS	231	231	232	0	1.40	58	1.35	0.06
	Bairasuil HPS	180	182	182	60	1.88	79	1.80	0.09
	Salal-HPS	690	272	430	208	6.54	273	6.36	0.18
	Tanakpur-HPS	94	30	31	31	0.71	30	0.72	0.00
	Uri-HPS	480	479	480	478	11.40	475	11.54	-0.14
	Dhauliganga-HPS	280	289	141	0	1.28	53	1.29	-0.01
	Dulhasti-HPS	390	387	403	0	2.85	119	2.70	0.14
	Sewa-II HPS	120	120	126	102	2.82	117	2.76	0.05
	Sub Total (C)	3305	2849	2773	879	35.25	1469	34.68	0.57
	D.NJPC	Nathpa Jhakri	1500	1605	1516	0	9.24	385	9.20
Sub Total (D)		1500	1605	1516	0	9.24	385	9.20	0.04
E. THDC	Tehri HPS	1000	600	604	0	8.34	347	8.30	0.04
	Koteshwar HPS	400	300	308	0	3.63	151	3.60	0.03
	Sub Total (E)	1400	900	912	0	11.97	499	11.90	0.07
F. BBMB	Bhakra HPS	1480	799	994	523	19.20	800	19.18	0.02
	Dehar HPS	990	248	660	140	6.46	269	5.94	0.52
	Pong HPS	396	212	300	60	5.27	220	5.01	0.26
	Sub Total (F)	2866	1258	1954	723	30.93	1289	30.13	0.80
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.51	21	0.49	0.02
	KWHEP HPS(IPP)	1000	0	140	0	4.79	200	4.80	-0.02
	Malana Stg-II HPS	100	0	45	0	0.28	12	0.23	0.05
	Shree Cement TPS	300	0	267	263	6.32	263	6.44	-0.12
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	452	263	11.90	496	11.96	-0.06
H. Total Regional Entities (A-G)	22836	17523	17243	11682	316.70	13196	315.81	0.89	

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	900	690	20.52	855
	Guru Nanak Dev TPS(Bhatinda)	440	200	200	4.69	195
	Guru Hargobind Singh TPS(L.mbt)	920	811	731	18.39	766
	Thermal (Total)	2620	1911	1621	43.59	1816
	Total Hydro	1148	537	449	12.80	533
	Total Punjab	3768	2448	2070	56.39	2350
Haryana	Panipat TPS	1367	1081	1109	26.17	1091
	DCRTPP (Yamuna nagar)	600	561	560	13.25	552
	Faridabad GPS (NTPC)	432	170	152	4.40	183
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	618	408	11.92	497
	Thermal (Total)	4944	2430	2229	55.75	2323
	Total Hydro	62	28	25	0.64	27
	Total Haryana	5006	2458	2254	56.39	2350
	Rajasthan	kota TPS	1240	1099	1172	27.13
suratgarh TPS		1500	1183	13	29.70	1238
Chabra TPS		500	405	392	10.03	418
Dholpur GPS		330	143	144	3.35	140
Ramgarh GPS		111	70	71	1.79	74
RAPS A (NPC)		300	179	179	4.78	199
Barsingsar (NLC)		250	179	187	4.20	175
Giral LTPS		250	97	127	2.48	103
Rajwest LTPS (IPP)		1080	448	698	11.78	491
VSLP LTPS (IPP)		135	0		0.00	0
Thermal (Total)		5696	3803	2983	95.24	3968
Total Hydro		550	157	224	3.09	129
Wind power		2191	400	440	10.74	447
Biomass		91	27	27	0.64	27
Solar		201	24	0	0.98	41
Renewable/Others (Total)		2483	427	467	12.36	515
Total Rajasthan		8729	4387	3674	110.69	4612
UP	Anpara TPS	1630	941	931	21.10	879
	Obra TPS	1382	429	445	10.60	442
	Paricha TPS	890	563	539	13.10	546
	Panki TPS	210	72	59	1.70	71
	Harduaganj TPS	665	264	41	5.30	221
	Tanda TPS (NTPC)	440	404	409	9.90	413
	Roza TPS (IPP)	1200	599	803	18.79	783
	Anpara-C (IPP)	1200	463	446	11.27	470
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	369	405	9.00	375
	Thermal (Total)	8067	4104	4078	100.76	4198
	Vishnuparyag HPS (IPP)	400	81	81	1.94	81
	Other Hydro	527	206	234	4.45	185
	Cogeneration	981	800	800	19.20	800
	Total UP	9975	5191	5193	126.35	5184
Uttarakhand	Total Hydro	1303	582	541	13.57	566
	Total Uttarakhand	1303	582	541	13.57	566
Delhi	Rajghat TPS	135	55	55	1.24	52
	Delhi Gas Turbine	282	155	155	3.80	158
	Pragati Gas Turbine	330	295	268	6.87	286
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	635	585	13.32	555
	Thermal (Total)	2237	1140	1063	25.23	1051
	Total Delhi	2237	1140	1063	25.23	1051
	HP	Baspa HPS (IPP)	330	28	28	1.10
Malana HPS (IPP)		86	44	0	0.25	10
Other Hydro		589	315	312	7.44	310
Total HP		1005	387	340	8.79	366
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	16934	15509	407.80	16911
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1694	3292	61.25	2552
Total Regional Availability(Gross)		55815	35871	30483	785.75	32659

IV. Total Hydro Generation:

Regional Entities Hydro	10364	7340	1602	92.96	3873
State Control Area Hydro	5368	2238	2187	55.68	2239
Total Regional Hydro	15731	9578	3789	148.64	6112

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	50	50	150	0	1.46	0.40	1.06
Gwalior-Agra (D/C)	348	760	839	0	14.24	0.00	14.24
Zerda-Kankroli	-217	-85	0	255	0.00	3.66	-3.66
Zerda-Bhinmal	-173	-36	46	256	0.00	2.13	-2.13
Malanpur-Auraiya	-165	-96	0	169	0.00	2.71	-2.71
Badod-Kota/Morak	-163	-143	0	208	0.00	3.48	-3.48
Mundra-Mohindergarh(HVDC)	1052	1051	1054	0	25.40	0.00	25.40
Sub Total WR	732	1501			41.10	12.38	28.72
Pusauli Bypass	400	400	400	0	9.21	0.00	9.21
MZP- GKP (D/C)	6	346	382	0	3.80	0.00	3.80
Patna-Balia(D/C)	436	617	646	0	12.41	0.00	12.41
B'Sharif-Balia (D/C)	136	307	351	0	5.22	0.00	5.22
Pusauli-Balia	-106	-51	0	114	0.00	1.71	-1.71
Gaya-Fatehpur (765 Kv)	0	25	82	27	0.22	0.00	0.22
Pusauli-Sahupuri	126	187	216	0	4.22	0.00	4.22
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	962	1791			35.07	2.54	32.53
Total IR Exch	1694	3292			76.17	14.92	61.25

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
41.64	0.11	41.75	-10.13	0.68	1.33	-5.54	-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
30.86	43.05	73.91	32.53	28.72	61.25	1.67	-14.33	-12.66

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	0.42	95.62	95.20	79.70	4.38

<----- 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	17.09	49.73	18.13	50.09	0.23	0.09	50.40	49.90

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	409	4:08	401	11:50	0.0	0.0	0.0	0.0
Gorakhpur	400	428	17:39	408	11:40	0.0	0.0	35.4	0.0
Bareilly	400	423	17:05	397	11:13	0.0	0.0	4.0	0.0
Kanpur	400	420	4:34	395	11:14	0.0	0.0	0.0	0.0
Dadri	400	420	21:13	399	11:19	0.0	0.0	0.0	0.0
Ballabgarh	400	427	4:34	401	11:19	0.0	0.0	22.0	0.0
Bawana	400	423	4:03	402	11:14	0.0	0.0	9.0	0.0
Bassi	400	422	4:34	393	11:15	0.0	0.0	2.0	0.0
Hissar	400	413	21:13	390	11:14	0.0	0.0	0.0	0.0
Moga	400	417	20:58	392	11:12	0.0	0.0	0.0	0.0
Abdullapur	400	428	4:08	239	9:54	0.1	0.1	25.6	0.0
Nalagarh	400	426	4:03	400	11:11	0.0	0.0	16.9	0.0
Kishenpur	400	420	4:03	399	18:56	0.0	0.0	0.0	0.0
Wagoora	400	412	3:55	383	7:55	0.0	13.0	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	4:36	731	11:19	0.0	16.0	0.0	0.0
Balia	765	770	4:35	728	11:12	0.0	11.6	0.0	0.0
Moga	765	779	4:08	736	11:19	0.0	2.6	0.0	0.0
Lucknow	765	781	4:36	740	11:19	0.0	1.2	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	481.68	495.33	479.95	461.95	237.49	629.77
Pong	426.72	384.05	400.44	230.85	404.60	328.16	84.92	368.97
Tehri	829.79	740.04	779.20	312.00	818.65	982.26	63.77	229.00
Koteshwar	612.50	598.50	611.70	5.46	NA	NA	229.00	241.00
Chamera-I	760.00	748.75	751.52	2.53	NA	NA	107.93	107.05
Rihand	268.22	252.98	258.14	NA	260.27	NA	NA	NA
RPS	352.80	343.81	346.07	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	296.24	NA	NA	NA	NA	NA
RSD	527.91	487.91	507.76	NA	496.14	NA	94.18	158.35

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 22.03.2013 :
Normal Weather in Northern Region.

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 : 22.03.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER