

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 23.03.2012
Date of Reporting : 24.03.2012

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
29631	1449	31080	49.65	25926	1000	26926	49.99	684.9	36.64

* 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	47.28	12.92		60.19	45.79	43.32	-2.47	103.51	3.20
Haryana	47.76	0.83		48.58	28.73	45.40	16.67	93.98	5.58
Rajasthan	86.84	2.09	1.89	90.82	47.53	62.48	14.95	153.30	2.36
Delhi	25.80			25.80	45.01	33.16	-11.86	58.95	0.00
UP	83.51	6.08	14.40	103.99	93.32	88.03	-5.28	192.03	23.20
Uttarakhand		10.50		10.50	14.32	18.27	3.95	28.77	0.00
HP		8.89		8.89	16.15	14.34	-1.81	23.23	0.00
J & K		7.67	0.00	7.67	18.90	20.16	1.26	27.82	2.30
Chandigarh				0.00	3.97	3.36	-0.61	3.36	0.00
Total	291.19	48.96	16.29	356.44	313.70	328.51	14.81	684.94	36.64

* 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	4770	266	199	-224	3763	0	-236	-148	-3.86
Haryana	3867	559	825	-153	3405	0	358	-153	-3.67
Rajasthan	5796	29	449	6	6714	0	971	6	0.12
Delhi	2933	0	-305	57	1460	0	-450	-229	-0.84
UP	8467	445	-963	265	7464	1000	-192	243	6.14
Uttarakhand	1292	0	160	150	1037	0	286	150	3.60
HP	982	0	-4	-297	762	0	-88	146	0.38
J&K	1343	150	56	-277	1229	0	158	-177	-4.76
Chandigarh	181	0	-25	0	92	0	-20	0	0.00
Total	29631	1449	392	-473	25926	1000	787	-162	-2.89

* 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)	UI [OG:(+ve), UG: (-ve)]	
								Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1960	2101	2118	47.56	1982	47.04	0.52
	Rihand I STPS	1000	915	994	983	22.10	921	21.73	0.37
	Rihand II STPS	1000	975	1045	1018	23.57	982	23.30	0.27
	Dadri I STPS	840	803	884	618	17.51	730	15.77	1.74
	Dadri II STPS	980	973	1029	743	21.86	911	21.65	0.21
	Unchahar I TPS	440	406	435	384	9.73	406	9.32	0.42
	Unchahar II TPS	440	404	439	369	9.71	405	8.94	0.77
	Unchahar III TPS	210	202	220	192	4.83	201	4.57	0.25
	ISTPP (Jhajjar)	1000	0	0	0	0.00	0	0.00	0.00
	Dadri GPS	830	825	773	597	16.49	687	16.10	0.39
	Anta GPS	419	400	366	301	8.06	336	7.91	0.15
	Auraiya GPS	663	481	311	328	7.43	310	7.44	-0.01
	Sub Total (A)	9822	8344	8597	7651	188.87	7870	183.78	5.09
B. NPC	NAPS	440	270	300	316	6.65	277	6.48	0.17
	RAPS- B	440	430	463	466	10.09	420	10.32	-0.23
	RAPS- C	440	420	464	474	10.12	422	10.08	0.04
	Sub Total (B)	1320	1120	1227	1256	26.86	1119	26.88	-0.02
C. NHPC	Chamera I HPS	540	534	540	0	8.42	351	8.27	0.15
	Chamera II HPS	300	297	202	0	2.84	118	2.52	0.32
	Bairasuil HPS	180	179	179	120	3.45	144	3.29	0.16
	Salal-HPS	690	309	433	306	7.80	325	7.28	0.52
	Tanakpur-HPS	94	25	30	25	0.59	25	0.58	0.01
	Uri-HPS	480	475	480	477	11.57	482	9.59	1.99
	Dhauliganga-HPS	280	210	208	0	1.14	48	1.06	0.08
	Dulhasti-HPS	390	388	423	0	3.63	151	3.06	0.57
	Sewa-II HPS	120	119	125	84	2.83	118	2.74	0.09
	Sub Total (C)	3074	2536	2620	1012	42.27	1761	38.39	3.88
D. NJPC	Nathpa Jhakri	1500	1200	1538	0	8.90	371	9.02	-0.12
	Sub Total (D)	1500	1200	1538	0	8.90	371	9.02	-0.12
E. THDC	Tehri HPS	1000	570	514	0	6.60	275	6.50	0.10
	Koteshwar HPS	300	300	202	0	2.64	110	2.50	0.14
	Sub Total (E)	1300	870	716	0	9.24	385	9.00	0.24
F. BBMB	Bhakra HPS	1480	719	988	414	17.64	735	17.26	0.38
	Dehar HPS	990	292	495	145	7.57	315	7.00	0.57
	Pong HPS	396	256	306	246	6.37	265	6.15	0.22
	Sub Total (F)	2866	1267	1789	805	31.58	1316	30.41	1.17
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.79	33	0.63	0.16
	KWHEP HPS(IPP)	1000	0	359	0	3.80	158	4.32	-0.52
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	131	124	3.14	131	2.75	0.39
	Sub Total (G)	1592	0	490	124	7.73	322	7.70	0.03
H. Total Regional Entities (A-G)	21475	15337	16977	10848	315.45	13144	305.19	10.26	

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	1040	830	21.16	882
	Guru Nanak Dev TPS(Bhatinda)	440	220	219	4.70	196
	Guru Hargobind Singh TPS(L.mbt)	920	964	967	21.41	892
	Thermal (Total)	2620	2224	2016	47.28	1970
	Total Hydro	1148	613	361	12.92	538
	Total Punjab	3768	2837	2377	60.19	2508
Haryana	Panipat TPS	1360	770	1011	21.61	900
	DCRTPP (Yamuna nagar)	600	278	279	5.60	233
	Faridabad GPS (NTPC)	432	402	317	9.54	398
	RGTPP (kheldar) (IPP)	1200	375	457	11.01	459
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	660	0	0	0.00	0
	Thermal (Total)	4277	1825	2064	47.76	1990
	Total Hydro	62	18	25	0.83	35
	Total Haryana	4339	1843	2089	48.58	2024
Rajasthan	kota TPS	1240	1169	1167	27.82	1159
	suratgarh TPS	1500	1141	1143	27.07	1128
	Chabra TPS	500	225	223	5.23	218
	Dholpur GPS	330	160	160	3.91	163
	Ramgarh GPS	113	64	63	1.58	66
	RAPS A (NPC)	300	179	184	4.48	187
	Barsingsar (NLC)	250	201	213	5.30	221
	Giral LTPS (IPP)	250	102	119	2.68	112
	Rajwest LTPS (IPP)	540	347	355	8.78	366
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Thermal (Total)	5158	3588	3627	86.84	3618
	Total Hydro	550	74	83	2.09	87
	Wind power	1294	53	127	1.13	47
	Biomass	71	47	47	0.76	32
	Solar	50	0	0	0.00	0
	Renewable/Others (Total)	1365	100	174	1.89	79
	Total Rajasthan	7073	3762	3884	90.82	3784
UP	Anpara TPS	1630	1285	1326	31.50	1313
	Obra TPS	1442	482	482	11.50	479
	Paricha TPS	640	321	239	6.20	258
	Panki TPS	210	140	125	2.50	104
	Harduaganj TPS	415	43	45	1.00	42
	Tanda TPS (NTPC)	440	397	402	9.32	388
	Roza TPS (IPP)	900	279	225	6.44	268
	Anpara-C (IPP)	1200	504	342	9.64	402
	Bajaj Energy Pvt.Ltd(IPP) TPS	180	193	173	5.42	226
	Thermal (Total)	7057	3644	3359	83.51	3480
	Vishnuparyag HPS (IPP)	400	89	79	1.99	83
	Other Hydro	527	193	41	4.09	171
	Cogeneration	951	600	600	14.40	600
	Total UP	8935	4526	4079	103.99	4250
Uttarakhand	Total Hydro	1303	481	302	10.50	437
	Total Uttarakhand	1303	481	302	10.50	437
Delhi	Rajghat TPS	135	91	49	1.98	82
	Delhi Gas Turbine	282	79	77	1.92	80
	Pragati Gas Turbine	330	276	269	7.08	295
	Rithala GPS	108	28	27	0.66	28
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	680	560	14.17	590
	Thermal (Total)	2000	1154	982	25.80	1075
	Total Delhi	2000	1154	982	25.80	1075
HP	Baspa HPS (IPP)	330	31	31	1.02	43
	Malana HPS (IPP)	101	55	0	0.51	21
	Other Hydro	571	321	310	7.35	306
	Total HP	1002	407	341	9	370
J & K	Baglihar HPS (IPP)	450	354	352	5.25	219
	Other Hydro	323	95	105	2.41	101
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	449	457	7.67	319
Total State Control Area Generation		29376	15459	14511	356.44	14769
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1059	1921	39.47	1645
Total Regional Availability(Gross)		50851	33495	27280	711.35	29557

IV. Total Hydro Generation:

Regional Entities Hydro	10033	7022	1817	96.58	4024
State Control Area Hydro	5365	2235	1610	46.97	1957
Total Regional Hydro	15397	9257	3427	143.55	5981

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	-400	-400	0	400	0.00	9.66	-9.66
Gwalior-Agra (D/C)	405	1006	1080	0	15.77	0.00	15.77
Zerda-Kankroli	-144	40	0	220	0.00	2.15	-2.15
Zerda-Bhinmal	-100	116	173	197	0.00	0.36	-0.36
Malanpur-Auraiya	-95	-3	0	172	0.00	1.28	-1.28
Badod-Kota/Morak	-4	-4	93	48	3.23	0.00	3.23
Sub Total WR	-338	755			19.00	13.44	5.56
Pusauli Bypass	-106	-45	81	151	3.56	0.96	2.60
MZP- GKP (D/C)	548	376	548	0	9.23	0.00	9.23
Patna-Balia(D/C)	239	185	355	0	6.26	0.00	6.26
B'Sharif-Balia (D/C)	330	188	381	0	5.74	0.00	5.74
Barh - balia(D/C)	264	420	452	0	7.77	0.00	7.77
Pusauli-Sahupuri	152	74	200	0	3.27	0.00	3.27
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-32	0	48	0.00	0.95	-0.95
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1397	1166			35.83	1.91	33.91
Total IR Exch	1059	1921			54.83	15.36	39.47

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
27.90	0.31	28.21	-3.02	2.41	1.83	-3.32	1.58	-1.58

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
28.59	-4.72	23.87	33.91	5.56	39.47	5.32	10.28	15.60

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	0.10	0.40	3.30	23.40	95.80	89.50	7.20	0.90

<----- 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					
50.35	6.02	48.96	19.08	49.80	0.66	0.16	50.17	49.56

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	409	04:02	399	18:58	0.0	0.0	0.0	0.0
Gorakhpur	400	434	04:05	398	18:56	0.0	0.0	45.4	8.5
Bareilly	400	426	04:04	399	09:15	0.0	0.0	21.3	0.0
Kanpur	400	418	17:03	394	18:56	0.0	0.0	0.0	0.0
Dadri	400	424	04:04	401	10:07	0.0	0.0	9.0	0.0
Ballabgarh	400	426	04:04	402	09:41	0.0	0.0	14.6	0.0
Bawana	400	428	03:58	400	19:08	0.0	0.0	24.5	0.0
Bassi	400	420	14:04	395	23:15	0.0	0.0	0.0	0.0
Hissar	400	415	04:01	392	09:36	0.0	0.0	0.0	0.0
Moga	400	424	03:46	401	10:06	0.0	0.0	17.9	0.0
Abdullapur	400	428	04:04	294	08:12	0.1	0.1	26.2	0.0
Nalagarh	400	427	04:04	408	10:12	0.0	0.0	32.1	0.0
Kishenpur	400	421	02:57	401	10:13	0.0	0.0	0.1	0.0
Wagoora	400	404	02:56	382	20:20	0.0	36.7	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	479.61	454.47	488.10	671.08	239.90	568.97
Pong	426.72	384.05	404.42	328.16	410.44	514.41	116.61	432.79
Tehri	829.79	740.04	773.15	240.72	818.65	982.26	71.90	188.00
Koteshwar	612.50	598.50	609.20	4.21	NA	NA	172.00	172.00
Chamera-I	760.00	748.75	755.49	NA	754.75	NA	179.78	228.16
Rihand	268.22	252.98	260.27	319.80	255.45	94.20	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	496.10	NA	504.16	NA	134.67	142.49

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 23.03.2012 :

1.Normal

XII. Synchronisation of new generating units :

XIII. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :
1.3*80 MVAR Bus Reactor-2 first time charged at Balia at 17:24 hrs on 23.03.2012.

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 23.03.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER