

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.02.2013
Date of Reporting : 23.02.2013

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
29867	3643	33510	50.02	22957	650	23607	50.23	653.3	46.29

* 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	25.07	9.57		34.64	45.11	45.32	0.21	79.97	2.43
Haryana	29.16	0.36		29.52	50.75	51.68	0.94	81.21	2.95
Rajasthan	85.19	4.81	6.13	96.14	59.94	58.40	-1.54	154.53	0.00
Delhi	24.90			24.90	35.38	33.85	-1.52	58.75	0.11
UP	96.06	6.04	13.20	115.30	71.06	70.43	-0.63	185.72	38.45
Uttarakhand		10.48		10.48	18.91	19.38	0.47	29.86	0.63
HP		5.40		5.40	18.31	18.30	0.00	23.70	0.03
J & K		8.11	0.00	8.11	32.06	27.85	-4.20	35.96	1.70
Chandigarh				0.00	3.64	3.60	-0.04	3.60	0.00
Total	260.38	44.77	19.33	324.48	335.14	328.82	-6.32	653.30	46.29

* 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	4192	600	189	-287	2403	0	49	293	5.83
Haryana	4367	220	-13	-158	2943	0	164	-511	-8.51
Rajasthan	6149	0	-639	862	5704	0	-111	557	20.19
Delhi	3004	3	-57	-1047	1309	0	-38	-1751	-31.14
UP	7711	2640	-1	-5	7357	650	156	-61	-1.66
Uttarakhand	1486	80	11	460	1089	0	-2	332	9.53
HP	1090	0	-131	144	704	0	-26	375	6.86
J&K	1681	100	-143	401	1352	0	-122	376	9.47
Chandigarh	188	0	-20	-15	96	0	-6	-30	-0.31
Total	29867	3643	-804	355	22957	650	63	-420	10.26

* 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	1960	2112	1540	44.48	1853	44.06	0.42	
	Rihand I STPS	1000	925	993	705	20.43	851	20.29	0.15	
	Rihand II STPS	1000	975	1032	730	21.58	899	21.43	0.15	
	Rihand III STPS	500	323	497	0	6.97	291	7.01	-0.03	
	Dadri I STPS	840	807	763	614	15.59	650	16.13	-0.54	
	Dadri II STPS	980	969	843	713	19.73	822	20.55	-0.82	
	Unchahar I TPS	420	407	386	308	8.29	346	8.37	-0.08	
	Unchahar II TPS	420	405	390	309	8.16	340	8.07	0.09	
	Unchahar III TPS	210	202	174	152	4.05	169	4.07	-0.02	
	ISTPP (Jhajjar)	1500	980	479	389	9.86	411	10.06	-0.20	
	Dadri GPS	830	833	348	308	7.90	329	7.95	-0.05	
	Anta GPS	419	423	215	191	5.13	214	4.90	0.23	
	Auraiva GPS	663	655	268	248	6.68	278	6.31	0.37	
	Sub Total (A)	10782	9864	8500	6207	178.87	7453	179.20	-0.33	
	B. NPC	NAPS	440	306	334	340	7.23	301	7.34	-0.12
		RAPS- B	440	426	464	467	10.10	421	10.22	-0.12
RAPS- C		440	430	471	477	10.18	424	10.32	-0.14	
Sub Total (B)		1320	1162	1269	1284	27.51	1146	27.89	-0.38	
C. NHPC	Chamera I HPS	540	550	540	0	2.30	96	2.28	0.02	
	Chamera II HPS	300	204	206	0	1.27	53	1.29	-0.02	
	Chamera III HPS	231	231	233	0	0.61	26	0.60	0.02	
	Bairasuil HPS	180	182	120	0	0.90	37	0.87	0.03	
	Salal-HPS	690	297	476	211	7.83	326	6.98	0.85	
	Tanakpur-HPS	94	35	33	31	0.84	35	0.79	0.05	
	Uri-HPS	480	200	333	207	5.49	229	4.91	0.58	
	Dhauliganga-HPS	280	216	139	0	1.04	43	1.01	0.02	
	Dulhasti-HPS	390	0	0	0	0.00	0	0.00	0.00	
	Sewa-II HPS	120	120	126	0	2.01	84	1.96	0.05	
	Sub Total (C)	3305	2035	2206	449	22.28	928	20.69	1.59	
	D. NJPC	Nathpa Jhakri	1500	1218	1084	0	5.40	225	5.41	-0.01
Sub Total (D)		1500	1218	1084	0	5.40	225	5.41	-0.01	
E. THDC	Tehri HPS	1000	890	666	0	5.50	229	5.60	-0.10	
	Koteswar HPS	400	200	101	86	2.65	110	2.70	-0.05	
	Sub Total (E)	1400	1090	767	86	8.15	340	8.30	-0.15	
F. BBMB	Bhakra HPS	1480	468	831	387	10.45	435	11.24	-0.79	
	Dehar HPS	990	155	495	0	3.85	160	3.71	0.14	
	Pong HPS	396	176	310	0	4.37	182	5.01	-0.64	
	Sub Total (F)	2866	799	1636	387	18.67	778	19.96	-1.29	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	29	0	0.36	15	0.33	0.03	
	KWHEP HPS(IPP)	1000	0	180	0	2.70	112	2.72	-0.02	
	Malana Stg-II HPS	100	0	28	0	0.12	5	0.10	0.02	
	Shree Cement TPS	300	0	215	149	4.63	193	4.50	0.14	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	452	149	7.81	325	7.64	0.17	
	H. Total Regional Entities (A-G)	22836	16167	15914	8562	268.68	11195	269.09	-0.41	

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	630	510	12.89	537
	Guru Nanak Dev TPS(Bhatinda)	440	116	105	2.34	97
	Guru Hargobind Singh TPS(L.mbt)	920	512	362	9.85	410
	Thermal (Total)	2620	1258	977	25.07	1045
	Total Hydro	1148	569	299	9.57	399
Total Punjab	3768	1827	1276	34.64	1443	
Haryana	Panipat TPS	1367	438	404	10.24	427
	DCRTPP (Yamuna nagar)	600	284	257	6.49	270
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	597	694	12.44	518
	Thermal (Total)	4944	1319	1355	29.16	1215
	Total Hydro	62	13	15	0.36	15
	Total Haryana	5006	1332	1370	29.52	1230
Rajasthan	kota TPS	1240	1058	1147	26.89	1120
	suratgarh TPS	1500	943	1143	26.26	1094
	Chabra TPS	500	389	432	9.85	410
	Dholpur GPS	330	140	119	2.76	115
	Ramgarh GPS	111	44	44	0.90	37
	RAPS A (NPC)	300	197	197	4.83	201
	Barsingsar (NLC)	250	155	194	4.33	180
	Giral LTPS	250	73	72	1.41	59
	Rajwest LTPS (IPP)	675	361	297	7.98	333
	VSLP LTPS (IPP)	135	0		0.00	0
	Thermal (Total)	5291	3360	3645	85.19	3550
	Total Hydro	550	117	127	4.81	201
	Wind power	2191	628	152	5.49	229
	Biomass	91	19	19	0.46	19
	Solar	201	4	0	0.17	7
	Renewable/Others (Total)	2483	647	171	6.13	255
	Total Rajasthan	8324	4124	3943	96.14	4006
UP	Anpara TPS	1630	1314	1317	27.60	1150
	Obra TPS	1382	358	410	8.60	358
	Paricha TPS	890	676	614	14.20	592
	Panki TPS	210	70	75	1.50	63
	Harduaganj TPS	665	130	289	4.80	200
	Tanda TPS (NTPC)	440	405	327	9.46	394
	Roza TPS (IPP)	1200	581	594	16.87	703
	Anpara-C (IPP)	1200	273	270	6.43	268
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	235	238	6.60	275
	Thermal (Total)	8067	4042	4134	96.06	4002
	Vishnuparyag HPS (IPP)	400	70	65	1.63	68
	Other Hydro	527	232	151	4.41	184
	Cogeneration	981	550	550	13.20	550
	Total UP	9975	4894	4900	115.30	4736
Uttarakhand	Total Hydro	1303	506	408	10.48	437
	Total Uttarakhand	1303	506	408	10.48	437
Delhi	Rajghat TPS	135	105	102	2.74	114
	Delhi Gas Turbine	282	87	86	2.09	87
	Pragati Gas Turbine	330	264	265	6.70	279
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	220	222	5.65	236
	Badarpur TPS (NTPC)	705	340	345	7.72	322
	Thermal (Total)	2237	1016	1020	24.90	1037
	Total Delhi	2237	1016	1020	24.90	1037
HP	Baspa HPS (IPP)	330	0	0	1.00	42
	Malana HPS (IPP)	86	39	0	0.18	8
	Other Hydro	589	220	128	4.22	176
	Total HP	1005	259	128	5.40	225
J & K	Baglihar HPS (IPP)	450	146	146	3.56	148
	Other Hydro	323	95	130	4.55	189
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	241	276	8.11	338
Total State Control Area Generation		32574	14199	13321	324.48	13452
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2500	1166	66.00	2750
Total Regional Availability(Gross)		55410	32613	23049	659.15	27397

IV. Total Hydro Generation:

Regional Entities Hydro	10364	5930	922	57.67	2403
State Control Area Hydro	5368	1937	1404	44.77	1797
Total Regional Hydro	15731	7867	2326	102.44	4201

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	100	-300	300	500	1.79	2.00	-0.21
Gwalior-Agra (D/C)	258	210	928	0	8.84	0.00	8.84
Zerda-Kankroli	-95	-282	86	306	0.00	3.13	-3.13
Zerda-Bhinmal	-56	-161	246	243	0.00	0.59	-0.59
Malanpur-Auraiya	-84	-92	0	110	0.00	1.44	-1.44
Badod-Kota/Morak	-99	-194	0	207	0.00	2.55	-2.55
Mundra-Mohindergarh(HVDC)	1267	1262	1267	0	30.62	0.00	30.62
Sub Total WR	1291	443			41.25	9.70	31.55
Pusauli Bypass	300	400	400	0	9.01	0.00	9.01
MZP- GKP (D/C)	70	40	456	0	4.61	0.00	4.61
Patna-Balia(D/C)	500	279	718	0	11.93	0.00	11.93
B'Sharif-Balia (D/C)	216	88	436	0	6.41	0.00	6.41
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-62	-119	0	122	0.00	1.48	-1.48
Gaya-Fatehpur (765 Kv)	107	-38	210	38	2.42	0.00	2.42
Pusauli-Sahupuri	115	111	133	0	2.43	0.00	2.43
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-37	-38	0	42	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1209	723			36.81	2.37	34.45
Total IR Exch	2500	1166			78.07	12.07	66.00

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
36.33	0.17	36.51	-1.33	-0.98	0.48	3.77	3.54	-3.54
Total IR Schedule (MU)								
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
39.20	45.21	84.40	34.45	31.55	66.00	-4.75	-13.66	-18.41

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	0.30	1.50	82.00	80.80	64.20	17.70

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					
50.53	13.08	49.40	6.50	50.06	0.28	0.16	50.39	0.00

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	415	1:42	404	7:58	0.0	0.0	0.0	0.0
Gorakhpur	400	428	1:31	409	11:24	0.0	0.0	61.7	0.0
Bareilly	400	431	3:01	407	6:49	0.0	0.0	42.3	0.4
Kanpur	400	426	3:00	402	6:49	0.0	0.0	27.7	0.0
Dadri	400	432	2:17	407	11:45	0.0	0.0	39.6	6.0
Ballabgarh	400	437	2:17	409	18:40	0.0	0.0	47.8	28.1
Bawana	400	425	21:31	409	18:40	0.0	0.0	19.6	0.0
Bassi	400	435	3:58	397	6:49	0.0	0.0	42.6	8.6
Hissar	400	427	2:56	399	18:40	0.0	0.0	29.3	0.0
Moga	400	430	3:00	400	11:59	0.0	0.0	33.6	0.0
Abdullapur	400	427	0:41	402	18:38	0.0	0.0	30.7	0.0
Nalagarh	400	435	2:57	406	18:41	0.0	0.0	40.8	12.3
Kishenpur	400	432	4:59	397	19:03	0.0	0.0	34.7	0.3
Wagoora	400	415	4:59	371	19:03	12.6	33.0	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	485.87	610.73	490.24	738.95	193.18	309.79
Pong	426.72	384.05	404.33	328.16	409.11	464.36	86.79	360.64
Tehri	829.79	740.04	791.30	468.00	818.65	982.26	51.59	150.00
Koteswar	612.50	598.50	610.50	4.69	NA	NA	151.00	156.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	259.51	NA	261.88	NA	NA	NA
RPS	352.80	343.81	346.91	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	296.88	NA	NA	NA	NA	NA
RSD	527.91	487.91	509.57	NA	499.60	NA	77.05	155.54

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 22.02.2013 :
Scattered Rain 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 : 22.02.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER