

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 28.02.2013
Date of Reporting : 01.03.2013

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
29816	2934	32750	50.10	24232	650	24882	50.34	668.1	35.10

* 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	25.51	6.97		32.48	47.70	48.58	0.88	81.06	1.80
Haryana	31.43	0.44		31.87	49.61	52.03	2.42	83.89	0.00
Rajasthan	94.52	4.14	6.18	104.84	63.84	60.36	-3.48	165.20	0.00
Delhi	31.70			31.70	26.36	25.12	-1.25	56.82	0.07
UP	89.79	6.51	16.80	113.10	75.04	76.58	1.55	189.68	31.52
Uttarakhand		11.06		11.06	17.66	18.48	0.82	29.54	0.00
HP		6.63		6.63	18.34	16.90	-1.44	23.53	0.01
J & K		8.67	0.00	8.67	31.79	26.11	-5.68	34.77	1.70
Chandigarh				0.00	3.62	3.58	-0.04	3.58	0.00
Total	272.95	44.41	22.98	340.34	333.95	327.73	-6.21	668.07	35.10

* 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	3948	600	5	-236	2589	0	195	184	1.62
Haryana	4496	230	55	10	2876	0	99	-784	-10.39
Rajasthan	6191	0	-367	889	6527	0	-52	629	21.32
Delhi	2970	0	74	-1124	1291	0	-7	-1820	-32.29
UP	7872	2000	-28	-6	7922	650	287	-61	-1.36
Uttarakhand	1483	0	154	392	996	0	-56	327	8.16
HP	1018	4	-150	119	732	0	-87	375	5.87
J&K	1649	100	-124	370	1206	0	-293	311	8.46
Chandigarh	189	0	-6	-5	93	0	-6	-30	-0.31
Total	29816	2934	-387	409	24232	650	79	-870	1.09

* 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	1960	1952	43.55	1814	43.68	-0.14	
	Rihand I STPS	1000	930	977	703	20.43	851	20.74	-0.31	
	Rihand II STPS	1000	985	967	742	20.75	864	20.98	-0.23	
	Rihand III STPS	500	490	501	423	10.89	454	11.24	-0.36	
	Dadri I STPS	840	807	685	607	14.78	616	18.06	-3.28	
	Dadri II STPS	980	969	713	689	16.28	678	15.22	1.06	
	Unchahar I TPS	420	407	380	310	8.35	348	8.50	-0.16	
	Unchahar II TPS	420	405	391	314	8.15	340	8.20	-0.05	
	Unchahar III TPS	210	202	198	152	4.06	169	4.12	-0.06	
	ISTPP (Jhajjar)	1500	980	0	0	8.06	336	8.54	-0.49	
	Dadri GPS	830	822	323	334	7.97	332	8.20	-0.23	
	Anta GPS	419	408	255	249	5.68	237	5.82	-0.14	
	Auraiya GPS	663	657	157	159	3.62	151	3.75	-0.12	
	Sub Total (A)	10782	10022	7507	6634	172.55	7190	177.06	-4.50	
	B. NPC	NAPS	440	302	338	341	7.26	303	7.25	0.01
RAPS- B		440	423	466	468	10.25	427	10.15	0.10	
RAPS- C		440	430	478	477	10.22	426	10.32	-0.10	
Sub Total (B)		1320	1155	1282	1286	27.73	1155	27.72	0.01	
C. NHPC	Chamera I HPS	540	550	540	0	3.43	143	3.40	0.03	
	Chamera II HPS	300	204	100	0	1.63	68	1.74	-0.11	
	Chamera III HPS	231	231	139	0	0.90	37	0.90	0.00	
	Bairasuil HPS	180	182	120	29	1.64	68	1.74	-0.10	
	Salal-HPS	690	283	423	226	6.01	251	6.46	-0.45	
	Tanakpur-HPS	94	30	32	27	0.71	30	0.73	-0.02	
	Uri-HPS	480	480	471	397	10.13	422	10.27	-0.14	
	Dhauliganga-HPS	280	216	206	0	0.89	37	0.92	-0.04	
	Dulhasti-HPS	390	0	0	0	0.00	0	0.00	0.00	
	Sewa-II HPS	120	120	127	105	2.90	121	2.94	-0.04	
	Sub Total (C)	3305	2296	2158	784	28.24	1177	29.11	-0.87	
	D.NJPC	Nathpa Jhakri	1500	1085	1077	0	6.16	257	6.30	-0.14
		Sub Total (D)	1500	1085	1077	0	6.16	257	6.30	-0.14
E. THDC	Tehri HPS	1000	880	875	0	5.94	247	6.00	-0.06	
	Koteshwar HPS	400	100	101	70	2.25	94	2.40	-0.15	
	Sub Total (E)	1400	980	976	70	8.19	341	8.40	-0.21	
F. BBMB	Bhakra HPS	1480	346	631	288	8.55	356	8.29	0.26	
	Dehar HPS	990	230	495	0	5.69	237	5.52	0.17	
	Pong HPS	396	124	310	0	3.11	130	5.01	-1.90	
	Sub Total (F)	2866	699	1436	288	17.35	723	18.82	-1.47	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.36	15	0.35	0.01	
	KWHEP HPS(IPP)	1000	0	299	0	2.90	121	3.02	-0.12	
	Malana Stg-II HPS	100	0	30	0	0.13	5	0.11	0.01	
	Shree Cement TPS	300	0	275	217	6.12	255	6.22	-0.10	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	604	217	9.51	396	9.70	-0.19	
H. Total Regional Entities (A-G)	22836	16238	15040	9279	269.73	11239	277.10	-7.37		

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	580	580	13.99	583
	Guru Nanak Dev TPS(Bhatinda)	440	120	105	1.78	74
	Guru Hargobind Singh TPS(L.mbt)	920	453	362	9.74	406
	Thermal (Total)	2620	1153	1047	25.51	1063
	Total Hydro	1148	336	259	6.97	291
	Total Punjab	3768	1489	1306	32.48	1353
Haryana	Panipat TPS	1367	453	426	10.41	434
	DCRTPP (Yamuna nagar)	600	279	279	6.60	275
	Faridabad GPS (NTPC)	432	164	157	3.97	165
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	613	378	10.45	436
	Thermal (Total)	4944	1509	1240	31.43	1310
	Total Hydro	62	16	18	0.44	18
	Total Haryana	5006	1525	1258	31.87	1328
	Rajasthan	kota TPS	1240	1053	1150	26.83
suratgarh TPS		1500	1127	1216	28.04	1169
Chabra TPS		500	359	446	9.85	411
Dholpur GPS		330	141	140	3.38	141
Ramgarh GPS		111	43	45	1.08	45
RAPS A (NPC)		300	197	197	4.84	202
Barsingsar (NLC)		250	193	194	4.49	187
Giral LTTPS		250	59	59	1.42	59
Rajwest LTTPS (IPP)		675	659	545	14.58	607
VSLP LTTPS (IPP)		135	0		0.00	0
Thermal (Total)		5291	3831	3992	94.52	3938
Total Hydro		550	100	118	4.14	172
Wind power		2191	133	135	5.37	224
Biomass		91	29	29	0.69	29
Solar		201	3	0	0.12	5
Renewable/Others (Total)		2483	162	164	6.18	258
Total Rajasthan		8324	4093	4274	104.84	4368
UP	Anpara TPS	1630	1396	1251	27.10	1129
	Obra TPS	1382	569	539	11.90	496
	Paricha TPS	890	427	439	9.60	400
	Panki TPS	210	75	65	1.60	67
	Harduaganj TPS	665	294	254	6.10	254
	Tanda TPS (NTPC)	440	333	332	9.17	382
	Roza TPS (IPP)	1200	585	591	16.51	688
	Anpara-C (IPP)	1200	0	0	0.00	0
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	316	361	7.81	325
	Thermal (Total)	8067	3995	3832	89.79	3741
	Vishnuparyag HPS (IPP)	400	66	69	1.56	65
	Other Hydro	527	255	251	4.95	206
	Cogeneration	981	700	700	16.80	700
	Total UP	9975	5016	4852	113.10	4647
Uttarakhand	Total Hydro	1303	495	367	11.06	461
	Total Uttarakhand	1303	495	367	11.06	461
Delhi	Rajghat TPS	135	32	98	1.63	68
	Delhi Gas Turbine	282	168	166	3.97	166
	Pragati Gas Turbine	330	305	262	6.77	282
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	286	214	5.84	243
	Badarpur TPS (NTPC)	705	695	575	13.49	562
	Thermal (Total)	2237	1486	1315	31.70	1321
	Total Delhi	2237	1486	1315	31.70	1321
HP	Baspa HPS (IPP)	330	0	0	0.67	28
	Malana HPS (IPP)	86	33	0	0.28	12
	Other Hydro	589	272	207	5.67	236
	Total HP	1005	305	207	6.63	276
J & K	Baglihar HPS (IPP)	450	294	150	4.12	172
	Other Hydro	323	95	130	4.55	189
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	389	280	8.67	361
Total State Control Area Generation		32574	14798	13859	340.34	14116
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2309	1841	71.50	2979
Total Regional Availability(Gross)		55410	32147	24979	681.56	28333

IV. Total Hydro Generation:

Regional Entities Hydro	10364	5976	1142	63.32	2638
State Control Area Hydro	5368	1896	1500	44.41	1785
Total Regional Hydro	15731	7872	2642	107.73	4424

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	-400	350	400	1.45	2.90	-1.45
Gwalior-Agra (D/C)	0	171	766	0	9.00	0.00	9.00
Zerda-Kankroli	-136	-213	54	279	0.00	2.57	-2.57
Zerda-Bhinmal	-77	-122	168	214	0.00	0.63	-0.63
Malanpur-Auraiya	-170	-103	0	232	0.00	2.47	-2.47
Badod-Kota/Morak	-131	-167	0	188	0.00	2.34	-2.34
Mundra-Mohindergarh(HVDC)	1266	1265	1267	0	30.01	0.00	30.01
Sub Total WR	902	431			40.47	10.90	29.56
Pusauli Bypass	450	450	450	0	9.49	0.00	9.49
MZP- GKP (D/C)	244	260	462	0	7.77	0.00	7.77
Patna-Balia(D/C)	537	491	795	0	14.94	0.00	14.94
B'Sharif-Balia (D/C)	159	161	421	0	6.24	0.00	6.24
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-132	-117	0	132	0.00	2.09	-2.09
Gaya-Fatehpur (765 Kv)	68	63	267	0	3.46	0.00	3.46
Pusauli-Sahupuri	119	142	151	0	3.14	0.00	3.14
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-40	0	44	0.00	1.01	-1.01
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1407	1410			45.04	3.10	41.94
Total IR Exch	2309	1841			85.50	14.00	71.50

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
42.75	0.18	42.92	-3.39	-3.21	-0.03	-4.18	4.22	-4.22
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
43.72	33.41	77.13	41.94	29.56	71.50	-1.79	-3.85	-5.63

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	0.00	70.20	70.20	82.00	29.80

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					
50.51	23.45	49.76	6.28	50.12	0.35	0.14	50.46	49.93

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	414	4:03	401	9:23	0.0	0.0	0.0	0.0
Gorakhpur	400	427	0:33	411	10:42	0.0	0.0	44.1	0.0
Bareilly	400	430	4:04	404	9:23	0.0	0.0	29.3	0.0
Kanpur	400	425	4:02	400	6:24	0.0	0.0	15.5	0.0
Dadri	400	427	3:05	404	9:14	0.0	0.0	21.4	0.0
Ballabgarh	400	432	3:19	407	9:23	0.0	0.0	38.1	1.9
Bawana	400	428	5:03	408	11:11	0.0	0.0	14.2	0.0
Bassi	400	434	4:02	399	6:40	0.0	0.0	35.0	1.7
Hissar	400	422	3:19	397	6:42	0.0	0.0	2.2	0.0
Moga	400	424	1:57	400	6:42	0.0	0.0	13.6	0.0
Abdullapur	400	426	3:19	406	6:27	0.0	0.0	38.1	0.0
Nalagarh	400	430	1:49	403	6:20	0.0	0.0	37.1	0.0
Kishenpur	400	422	3:19	400	6:42	0.0	0.0	2.5	0.0
Wagoora	400	409	4:00	377	19:45	5.3	22.9	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	485.56	602.35	487.82	661.49	230.36	244.49
Pong	426.72	384.05	403.76	312.39	408.24	435.19	112.56	212.60
Tehri	829.79	740.04	789.35	442.00	818.65	982.26	39.32	154.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	106.10	92.90
Rihand	268.22	252.98	NA	NA	261.88	NA	NA	NA
RPS	352.80	343.81	346.65	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	296.45	NA	NA	NA	NA	NA
RSD	527.91	487.91	509.01	NA	497.83	NA	156.42	144.36

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 28.02.2013 :
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 : 28.02.2013

पारी प्रभाती अशियंता / SHIFT CHARGE ENGINEER