

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 27.02.2013
Date of Reporting : 28.02.2013

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
29397	2960	32357	50.09	23660	650	24310	50.26	656.9	50.53

* 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	25.36	6.79		32.15	45.13	45.02	-0.11	77.17	2.11
Haryana	30.79	0.44		31.23	51.90	53.16	1.26	84.38	0.18
Rajasthan	93.70	4.86	4.34	102.90	63.95	62.42	-1.53	165.32	0.00
Delhi	32.69			32.69	27.28	24.68	-2.59	57.37	0.11
UP	87.07	6.51	16.80	110.37	73.64	76.85	3.21	187.22	46.44
Uttarakhand		11.38		11.38	17.69	19.07	1.39	30.45	0.00
HP		6.62		6.62	16.72	16.07	-0.65	22.69	0.00
J & K		8.67	0.00	8.67	30.01	20.01	-10.01	28.68	1.70
Chandigarh				0.00	3.55	3.60	0.05	3.60	0.00
Total	269.60	45.26	21.14	336.01	329.88	320.88	-8.99	656.89	50.53

* 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	3950	600	117	-201	2276	0	-121	149	3.36
Haryana	4645	0	44	145	2801	0	-4	-227	-5.99
Rajasthan	6234	0	-545	866	6268	0	-162	606	21.23
Delhi	2999	0	218	-1087	1303	0	-204	-1739	-31.42
UP	7437	2260	-63	-6	8067	650	342	-61	-1.67
Uttarakhand	1546	0	243	431	1106	0	-2	327	8.71
HP	1010	0	28	150	716	0	-50	375	6.20
J&K	1383	100	-337	384	1032	0	-549	324	8.79
Chandigarh	193	0	1	0	91	0	-13	-30	-0.32
Total	29397	2960	-294	681	23660	650	-763	-275	8.90

* 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	1987	1473	42.64	1777	42.53	0.10
	Rihand I STPS	1000	927	837	700	18.47	769	18.59	-0.13
	Rihand II STPS	1000	980	798	694	18.67	778	18.78	-0.11
	Rihand III STPS	500	193	0	356	3.50	146	4.06	-0.57
	Dadri I STPS	840	807	775	615	15.91	663	17.58	-1.67
	Dadri II STPS	980	969	895	700	15.79	658	14.05	1.74
	Unchahar I TPS	420	407	440	308	8.53	355	8.68	-0.15
	Unchahar II TPS	420	405	435	310	8.08	337	8.14	-0.06
	Unchahar III TPS	210	202	211	154	4.01	167	4.10	-0.09
	ISTPP (Jhajjar)	1500	980	483	385	9.51	396	9.71	-0.20
	Dadri GPS	830	827	397	349	8.07	336	8.20	-0.14
	Anta GPS	419	417	266	225	5.57	232	5.88	-0.32
	Auraiva GPS	663	660	154	160	3.60	150	3.66	-0.06
	Sub Total (A)	10782	9733	7678	6429	162.34	6764	164.00	-1.66
	B. NPC	NAPS	440	304	332	338	7.17	299	7.30
RAPS- B		440	426	467	467	10.19	425	10.22	-0.04
RAPS- C		440	430	474	478	10.20	425	10.32	-0.12
Sub Total (B)		1320	1160	1273	1283	27.56	1148	27.84	-0.28
C. NHPC	Chamera I HPS	540	550	540	0	3.24	135	3.31	-0.07
	Chamera II HPS	300	204	177	0	1.93	80	1.74	0.18
	Chamera III HPS	231	231	159	0	1.03	43	1.03	-0.01
	Bairasuil HPS	180	182	182	0	1.77	74	1.79	-0.02
	Salal-HPS	690	332	423	226	7.95	331	8.11	-0.17
	Tanakpur-HPS	94	32	32	27	0.73	30	0.77	-0.04
	Uri-HPS	480	346	433	353	9.08	378	8.75	0.33
	Dhauliganga-HPS	280	216	207	0	0.80	33	0.85	-0.06
	Dulhasti-HPS	390	0	0	0	0.00	0	0.00	0.00
	Sewa-II HPS	120	120	126	99	2.86	119	2.87	-0.01
	Sub Total (C)	3305	2213	2279	705	29.38	1224	29.23	0.15
D. NJPC	Natpda Jhakri	1500	1085	1090	0	6.50	271	6.74	-0.24
	Sub Total (D)	1500	1085	1090	0	6.50	271	6.74	-0.24
E. THDC	Tehri HPS	1000	880	889	0	6.07	253	6.00	0.07
	Koteshwar HPS	400	100	100	95	2.28	95	2.40	-0.12
	Sub Total (E)	1400	980	989	95	8.36	348	8.40	-0.04
F. BBMB	Bhakra HPS	1480	338	627	306	8.14	339	8.10	0.04
	Dehar HPS	990	215	495	0	5.25	219	5.17	0.08
	Pong HPS	396	104	310	0	2.60	108	5.01	-2.41
	Sub Total (F)	2866	657	1432	306	15.99	666	18.28	-2.29
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.37	15	0.35	0.02
	KWHEP HPS(IPP)	1000	0	300	0	3.20	133	3.46	-0.26
	Malana Stg-II HPS	100	0	31	0	0.13	5	0.11	0.02
	Shree Cement TPS	300	0	275	217	6.12	255	6.25	-0.12
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	606	217	9.82	409	10.16	-0.34
H. Total Regional Entities (A-G)	22836	15828	15347	9035	259.94	10831	264.65	-4.70	

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	550	13.10	546
	Guru Nanak Dev TPS(Bhatinda)	440	120	105	2.41	101
	Guru Hargobind Singh TPS(L.mbt)	920	521	382	9.85	411
	Thermal (Total)	2620	1271	1037	25.36	1057
	Total Hydro	1148	325	325	6.79	283
	Total Punjab	3768	1596	1362	32.15	1340
Haryana	Panipat TPS	1367	429	403	10.31	429
	DCRTPP (Yamuna nagar)	600	303	220	6.12	255
	Faridabad GPS (NTPC)	432	162	156	3.91	163
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	605	377	10.45	435
	Thermal (Total)	4944	1499	1156	30.79	1283
	Total Hydro	62	19	15	0.44	18
	Total Haryana	5006	1518	1171	31.23	1301
	Rajasthan	kota TPS	1240	1068	1150	26.67
suratgarh TPS		1500	1092	1320	29.05	1211
Chabra TPS		500	393	410	9.91	413
Dholpur GPS		330	141	141	3.27	136
Ramgarh GPS		111	32	0	0.39	16
RAPS A (NPC)		300	197	197	4.85	202
Barsingsar (NLC)		250	107	115	3.28	137
Giral LTPS		250	147	112	2.68	112
Rajwest LTPS (IPP)		675	608	482	13.60	566
VSLP LTPS (IPP)		135	0	0	0.00	0
Thermal (Total)		5291	3785	3927	93.70	3904
Total Hydro		550	209	120	4.86	202
Wind power		2191	44	231	3.47	145
Biomass		91	28	28	0.66	28
Solar		201	5	0	0.21	9
Renewable/Others (Total)		2483	72	259	4.34	181
Total Rajasthan		8324	4066	4306	102.90	4288
UP	Anpara TPS	1630	819	1144	23.30	971
	Obra TPS	1382	552	560	12.00	500
	Paricha TPS	890	436	429	9.20	383
	Panki TPS	210	75	75	1.50	63
	Harduaganj TPS	665	283	302	6.10	254
	Tanda TPS (NTPC)	440	336	404	9.71	405
	Roza TPS (IPP)	1200	644	648	17.40	725
	Anpara-C (IPP)	1200	0	0	0.00	0
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	284	358	7.85	327
	Thermal (Total)	8067	3429	3920	87.07	3628
	Vishnuparyag HPS (IPP)	400	64	69	1.58	66
	Other Hydro	527	251	197	4.93	205
	Cogeneration	981	700	700	16.80	700
	Total UP	9975	4444	4886	110.37	4533
Uttarakhand	Total Hydro	1303	540	460	11.38	474
	Total Uttarakhand	1303	540	460	11.38	474
Delhi	Rajghat TPS	135	100	106	2.76	115
	Delhi Gas Turbine	282	167	166	4.31	180
	Pragati Gas Turbine	330	299	269	7.16	298
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	33	213	4.26	178
	Badarpur TPS (NTPC)	705	695	600	14.20	592
	Thermal (Total)	2237	1294	1354	32.69	1362
	Total Delhi	2237	1294	1354	32.69	1362
	HP	Baspa HPS (IPP)	330	0	0	1.08
Malana HPS (IPP)		86	45	0	0.20	8
Other Hydro		589	246	186	5.34	223
Total HP		1005	291	186	6.62	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	14138	14005	336.01	13935
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3287	973	72.65	3027
Total Regional Availability(Gross)		55410	32772	24013	668.60	27793

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6121	1106	63.92	2663
State Control Area Hydro	5368	2024	1583	45.26	1820
Total Regional Hydro	15731	8145	2689	109.18	4484

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	200	-300	400	300	4.40	1.56	2.84
Gwalior-Agra (D/C)	182	74	580	0	7.46	0.00	7.46
Zerda-Kankroli	-76	-274	40	312	0.00	2.55	-2.55
Zerda-Bhinmal	-5	-175	183	233	0.00	0.36	-0.36
Malanpur-Auraiya	-96	-90	0	111	0.00	1.57	-1.57
Badod-Kota/Morak	-102	-200	8	205	0.00	2.13	-2.13
Mundra-Mohindergarh(HVDC)	1265	1212	1265	0	30.27	0.00	30.27
Sub Total WR	1368	247			42.13	8.17	33.96
Pusauli Bypass	450	450	450	0	10.61	0.00	10.61
MZP- GKP (D/C)	296	128	408	0	5.99	0.00	5.99
Patna-Balia(D/C)	802	391	802	0	14.29	0.00	14.29
B'Sharif-Balia (D/C)	356	47	372	0	5.75	0.00	5.75
Barh - Balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Balia	-127	-318	0	318	0.00	2.31	-2.31
Gaya-Fatehpur (765 Kv)	60	-66	225	66	2.47	0.00	2.47
Pusauli-Sahupuri	120	134	137	0	2.90	0.00	2.90
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	1919	726			42.01	3.32	38.69
Total IR Exch	3287	973			84.14	11.49	72.65

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
42.52	0.09	42.61	-3.36	-1.77	0.00	1.79	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
43.47	42.07	85.53	38.69	33.96	72.65	-4.78	-8.11	-12.89

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	1.00	70.20	70.10	82.50	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					
50.50	13.03	49.70	18.27	50.12	0.33	0.13	50.41	49.98

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	3:19	412	17:25	17.4	17.4	0.0	0.0
Gorakhpur	400	423	22:26	413	17:33	0.0	0.0	40.4	0.0
Bareilly	400	431	4:03	408	6:38	0.0	0.0	34.8	0.1
Kanpur	400	426	3:08	403	6:41	0.0	0.0	18.2	0.0
Dadri	400	428	4:01	407	18:55	0.0	0.0	22.8	0.0
Ballabgarh	400	435	4:04	410	6:41	0.0	0.0	43.7	13.2
Bawana	400	431	3:10	410	18:54	0.0	0.0	23.9	0.9
Bassi	400	436	4:02	402	6:39	0.0	0.0	40.2	10.3
Hissar	400	424	4:02	400	6:12	0.0	0.0	11.5	0.0
Moga	400	430	3:37	403	18:54	0.0	0.0	21.9	0.0
Abdullapur	400	430	4:01	407	6:37	0.0	0.0	42.5	0.0
Nalagarh	400	432	4:03	406	6:41	0.0	0.0	42.0	1.5
Kishenpur	400	434	3:51	401	18:37	0.0	0.0	22.9	1.9
Wagoora	400	425	4:08	383	18:52	0.0	10.5	4.4	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	485.57	602.35	488.13	671.08	240.72	233.64
Pong	426.72	384.05	403.89	312.39	408.36	444.61	87.06	181.85
Tehri	829.79	740.04	789.60	453.12	818.65	982.26	39.65	157.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	126.50	87.80
Rihand	268.22	252.98	NA	NA	261.88	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	509.10	NA	498.12	NA	130.40	113.38

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 27.02.2013 :
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 : 27.02.2013

पारी प्रभाती अश्विन्ता / SHIFT CHARGE ENGINEER