

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.03.2012
Date of Reporting : 14.03.2012

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
28569	2621	31190	49.71	22734	0	22734	50.18	655.9	31.88

* 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	49.00	10.45		59.45	40.07	33.61	-6.46	93.06	1.80
Haryana	49.40	0.52		49.92	25.40	42.21	16.81	92.12	4.31
Rajasthan	79.27	4.71	5.12	89.11	46.42	68.60	22.18	157.71	1.21
Delhi	27.63			27.63	34.96	26.74	-8.22	54.37	0.08
UP	78.68	5.22	14.40	98.30	82.67	81.29	-1.39	179.59	21.94
Uttarakhand		9.57		9.57	14.52	14.41	-0.11	23.98	0.64
HP		5.53		5.53	17.27	16.29	-0.98	21.82	0.00
J & K		5.98	0.00	5.98	22.28	24.03	1.75	30.01	1.90
Chandigarh				0.00	3.74	3.30	-0.44	3.30	0.00
Total	283.98	41.97	19.52	345.48	287.33	310.47	23.14	655.95	31.88

* 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	4240	150	-702	-240	2900	0	-205	-148	-4.10
Haryana	3704	774	201	-183	3085	0	390	-183	-4.40
Rajasthan	6070	67	306	6	6807	0	786	6	0.15
Delhi	2919	0	-446	-115	1233	0	-584	-340	-4.25
UP	7771	1310	-136	265	6303	0	-818	265	6.36
Uttarakhand	1250	220	-14	150	754	0	-85	150	3.60
HP	987	0	-370	-324	647	0	35	146	-0.09
J&K	1441	100	45	21	923	0	-101	21	0.51
Chandigarh	187	0	-3	0	82	0	-28	0	0.00
Total	28569	2621	-1118	-420	22734	0	-610	-82	-2.22

* 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	2082	1595	45.45	1894	45.09	0.35
	Rihand I STPS	1000	884	938	722	20.71	863	20.10	0.61
	Rihand II STPS	1000	975	1036	1007	21.84	910	22.19	-0.35
	Dadri I STPS	840	665	0	612	11.50	479	12.44	-0.93
	Dadri II STPS	980	766	0	750	16.80	700	16.56	0.24
	Unchahar I TPS	440	406	439	300	9.11	379	9.12	-0.01
	Unchahar II TPS	440	404	441	306	8.99	374	8.95	0.04
	Unchahar III TPS	210	202	219	154	4.56	190	4.54	0.02
	ISTPP (Jhajjar)	1000	0	0	0	0.00	0	0.00	0.00
	Dadri GPS	830	769	10	528	12.02	501	13.25	-1.24
	Anta GPS	419	413	394	256	7.80	325	7.63	0.18
	Auraiya GPS	663	481	324	294	7.05	294	6.96	0.09
	Sub Total (A)	9822	7925	5883	6524	165.82	6909	166.82	-1.00
B. NPC	NAPS	440	282	309	321	6.74	281	6.77	-0.03
	RAPS- B	440	423	464	468	10.12	422	10.15	-0.03
	RAPS- C	440	420	471	475	10.21	426	10.08	0.13
	Sub Total (B)	1320	1125	1244	1264	27.08	1128	27.00	0.08
C. NHPC	Chamera I HPS	540	534	540	0	4.37	182	4.27	0.09
	Chamera II HPS	300	297	242	0	1.89	79	1.75	0.14
	Bairasuil HPS	180	179	179	100	2.13	89	2.02	0.11
	Salal-HPS	690	195	302	143	4.57	191	4.52	0.05
	Tanakpur-HPS	94	22	22	15	0.53	22	0.50	0.03
	Uri-HPS	480	375	353	365	8.90	371	8.69	0.21
	Dhauliganga-HPS	280	210	212	0	0.81	34	0.82	-0.01
	Dulhasti-HPS	390	388	358	0	2.48	103	2.50	-0.02
	Sewa-II HPS	120	119	124	58	2.61	109	2.68	-0.07
	Sub Total (C)	3074	2318	2332	681	28.29	1179	27.75	0.54
D. NJPC	Nathpa Jhakri	1500	1200	1590	0	7.09	295	7.19	-0.10
	Sub Total (D)	1500	1200	1590	0	7.09	295	7.19	-0.10
E. THDC	Tehri HPS	1000	600	601	0	7.49	312	7.50	-0.01
	Koteshwar HPS	300	300	294	0	2.65	110	2.60	0.05
	Sub Total (E)	1300	900	895	0	10.13	422	10.10	0.03
F. BBMB	Bhakra HPS	1480	748	812	391	18.10	754	17.96	0.14
	Dehar HPS	990	185	495	0	4.86	203	4.45	0.41
	Pong HPS	396	141	306	0	3.60	150	3.39	0.21
	Sub Total (F)	2866	1075	1613	391	26.56	1107	25.80	0.76
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	29	0	0.38	16	0.37	0.01
	KWHEP HPS(IPP)	1000	0	400	0	3.73	155	4.18	-0.45
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	131	104	2.86	119	2.53	0.32
	Sub Total (G)	1592	0	560	104	6.97	290	7.09	-0.12
H. Total Regional Entities (A-G)	21475	14543	14117	8964	271.93	11330	271.74	0.19	

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	1045	890	24.21	1009	
	Guru Nanak Dev TPS(Bhatinda)	440	217	200	4.53	189	
	Guru Hargobind Singh TPS(L.mbt)	920	967	772	20.26	844	
	Thermal (Total)	2620	2229	1862	49.00	2042	
	Total Hydro	1148	427	331	10.45	435	
	Total Punjab	3768	2656	2193	59.45	2477	
Haryana	Panipat TPS	1360	873	662	20.20	842	
	DCRTPP (Yamuna nagar)	600	278	282	5.75	240	
	Faridabad GPS (NTPC)	432	413	330	9.74	406	
	RGTPP (kheldar) (IPP)	1200	543	567	13.70	571	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	660	0	0	0.00	0	
	Thermal (Total)	4277	2107	1841	49.40	2058	
	Total Hydro	62	16	16	0.52	22	
	Total Haryana	4339	2123	1857	49.92	2080	
Rajasthan	kota TPS	1240	1171	1076	27.50	1146	
	suratgarh TPS	1500	919	769	21.18	882	
	Chabra TPS	500	216	195	5.08	212	
	Dholpur GPS	330	299	299	7.18	299	
	Ramgarh GPS	113	39	30	0.79	33	
	RAPS A (NPC)	300	181	183	4.38	183	
	Barsingsar (NLC)	250	122	205	4.07	169	
	Giral LTPS (IPP)	250	76	75	1.83	76	
	Rajwest LTPS (IPP)	540	267	345	7.27	303	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Thermal (Total)	5158	3290	3177	79.27	3303	
	Total Hydro	550	209	147	4.71	196	
	Wind power	1294	153	529	4.34	181	
	Biomass	71	33	33	0.79	33	
	Solar	50	0	0	0.00	0	
	Renewable/Others (Total)	1365	186	562	5.12	214	
	Total Rajasthan	7073	3685	3886	89.11	3713	
	UP	Anpara TPS	1630	1350	1388	29.20	1217
		Obra TPS	1442	593	466	10.90	454
Paricha TPS		640	212	234	5.00	208	
Panki TPS		210	145	120	3.00	125	
Harduaganj TPS		415	36	38	0.80	33	
Tanda TPS (NTPC)		440	406	315	9.28	387	
Roza TPS (IPP)		900	509	302	10.24	427	
Anpara-C (IPP)		1200	0	432	6.33	264	
Bajaj Energy Pvt.Ltd(IPP) TPS		180	148	195	3.93	164	
Thermal (Total)		7057	3399	3490	78.68	3278	
Vishnuparyag HPS (IPP)		400	74	69	1.73	72	
Other Hydro		527	214	0	3.50	146	
Cogeneration		951	600	600	14.40	600	
Total UP		8935	4287	4159	98.30	4024	
Uttarakhand		Total Hydro	1303	540	302	9.57	399
	Total Uttarakhand	1303	540	302	9.57	399	
Delhi	Rajghat TPS	135	59	58	1.37	57	
	Delhi Gas Turbine	282	77	77	1.94	81	
	Pragati Gas Turbine	330	299	265	7.15	298	
	Rithala GPS	108	30	30	0.62	26	
	Bawana GPS	440	197	36	3.53	147	
	Badarpur TPS (NTPC)	705	675	565	13.02	543	
	Thermal (Total)	2000	1337	1175	27.63	1151	
	Total Delhi	2000	1337	1175	27.63	1151	
HP	Baspa HPS (IPP)	330	23	0	0.95	40	
	Malana HPS (IPP)	101	18	0	0.24	10	
	Other Hydro	571	193	132	4.34	181	
	Total HP	1002	234	132	6	230	
J & K	Baglihar HPS (IPP)	450	150	144	3.56	148	
	Other Hydro	323	95	105	2.41	101	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	245	249	5.98	249	
Total State Control Area Generation		29376	15107	13953	345.48	14323	
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			1707	1882	56.45	2352	
Total Regional Availability(Gross)		50851	30931	24799	673.86	28006	

IV. Total Hydro Generation:

Regional Entities Hydro	10033	6859	1072	76.18	3174
State Control Area Hydro	5365	1885	1177	40.25	1677
Total Regional Hydro	15397	8744	2249	116.43	4851

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	-100	300	400	0.13	2.20	-2.07
Gwalior-Agra (D/C)	453	668	1185	0	19.28	0.00	19.28
Zerda-Kankroli	43	-42	174	71	0.90	0.00	0.90
Zerda-Bhinmal	99	20	345	29	3.20	0.00	3.20
Malanpur-Auraiya	-63	-80	0	104	0.00	1.01	-1.01
Badod-Kota/Morak	64	40	76	0	1.21	0.00	1.21
Sub Total WR	396	506			24.72	3.20	21.51
Pusauli Bypass	-76	274	301	76	3.51	0.25	3.25
MZP- GKP (D/C)	292	466	584	0	9.62	0.00	9.62
Patna-Balia(D/C)	527	415	742	0	11.69	0.00	11.69
B'Sharif-Balia (D/C)	486	204	729	0	9.80	0.00	9.80
Barh - balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	112	49	116	0	1.72	0.00	1.72
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-32	0	48	0.00	1.14	-1.14
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1311	1376			36.33	1.39	34.94
Total IR Exch	1707	1882			61.05	4.59	56.45

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
28.97	0.12	29.09	-0.01	0.25	4.23	-1.47	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
34.89	-5.18	29.71	34.94	21.51	56.45	0.05	26.70	26.75

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	0.20	1.70	12.80	91.60	80.50	31.60	6.70

<----- 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					
50.38	4.04	49.07	17.42	49.92	0.43	0.19	50.39	49.61

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	410	01:52	0	10:51	6.3	6.3	0.0	0.0
Gorakhpur	400	438	19:28	407	17:41	0.0	0.0	69.0	16.6
Bareilly	400	432	03:51	395	17:41	0.0	0.0	21.4	1.9
Kanpur	400	422	02:01	400	06:25	0.0	0.0	12.4	0.0
Dadri	400	429	04:01	0	17:38	2.9	2.9	19.5	0.0
Ballabgarh	400	431	03:38	403	17:42	0.0	0.0	22.6	0.7
Bawana	400	432	03:12	382	17:38	0.0	0.0	24.4	4.9
Bassi	400	425	20:27	397	06:26	0.0	0.0	4.0	0.0
Hissar	400	418	02:41	394	10:17	0.0	0.0	0.0	0.0
Moga	400	429	01:41	406	09:40	0.0	0.0	28.1	0.0
Abdullapur	400	432	02:44	295	23:38	0.1	0.1	24.5	3.8
Nalagarh	400	431	03:37	410	09:36	0.0	0.0	38.5	0.1
Kishenpur	400	428	01:39	399	19:14	0.0	0.0	20.6	0.0
Wagoora	400	411	01:43	378	22:05	1.6	17.0	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	483.21	536.06	490.69	758.57	157.98	599.16
Pong	426.72	384.05	406.09	370.28	411.34	544.90	60.02	235.99
Tehri	829.79	740.04	777.60	297.05	818.65	982.26	62.67	207.00
Koteshwar	612.50	598.50	607.36	2.54	NA	NA	NA	245.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	112.10	117.37
Rihand	268.22	252.98	260.60	338.50	255.67	102.80	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	497.12	NA	504.35	NA	102.73	200.82

* NA: Not Available

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

1. All the machines at Dadri(th) stage-1&2 and Dadri GPP tripped at 17:37 hrs. due to bus fault at Dadri. However generation has revived.
2. HVDC Rihand-Dadri Pole- 1&2 tripped at 17:37 hrs and subsequently restored at 18:24 and 18:32 hrs.

XI. Weather Conditions For 13.03.2012 :

1. Normal weather in NR.

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 : 13.03.2012

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER