

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.04.2013
Date of Reporting : 14.04.2013

I. Regional Availability/Demand:

Evening Peak (20:00 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
31574	2125	33699	50.25	27091	2475	29566	50.12	693.7	75.47

* 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	49.06	7.57		56.63	43.11	43.32	0.21	99.95	3.48
Haryana	45.47	0.55		46.02	45.62	43.21	-2.41	89.23	0.53
Rajasthan	86.02	0.08	3.82	89.91	50.46	48.68	-1.78	138.59	2.97
Delhi	26.66			26.66	49.44	40.87	-8.57	67.53	0.03
UP	104.26	5.12	19.20	128.57	81.15	83.20	2.05	211.78	64.86
Uttarakhand		10.62		10.62	18.85	20.26	1.41	30.87	1.69
HP		10.20		10.20	12.80	13.63	0.83	23.83	0.21
J & K		7.60	0.00	7.60	22.26	20.40	-1.86	28.01	1.70
Chandigarh				0.00	3.84	3.92	0.08	3.92	0.00
Total	311.46	41.73	23.02	376.21	327.52	317.49	-10.03	693.70	75.47

* 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 (20:00 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	4611	0	-39	-90	4268	0	61	289	1.24
Haryana	4423	0	-117	30	3737	0	45	-433	-7.72
Rajasthan	6310	0	-240	603	5398	165	6	230	6.96
Delhi	3153	0	-398	-214	2031	0	-545	-459	-6.66
UP	9075	1925	-241	-24	8404	2310	-177	117	0.98
Uttarakhand	1443	100	-30	489	1164	0	29	481	10.69
HP	1041	0	9	-350	828	0	37	102	-1.71
J&K	1324	100	-292	25	1131	0	41	33	0.65
Chandigarh	194		-19	-5	130	0	13	0	0.25
Total	31574	2125	-1367	462	27091	2475	-491	360	4.68

* 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	1245	1351	1377	30.35	1264	29.73	0.61	
	Rihand I STPS	1000	925	957	999	22.11	921	22.12	-0.01	
	Rihand II STPS	1000	973	1006	1042	23.12	963	23.27	-0.15	
	Rihand III STPS	500	468	492	508	11.32	472	11.24	0.09	
	Dadri I STPS	840	807	832	840	18.35	765	18.80	-0.45	
	Dadri II STPS	980	964	940	961	22.06	919	23.10	-1.05	
	Unchahar I TPS	420	405	419	442	9.65	402	9.69	-0.03	
	Unchahar II TPS	420	400	424	442	9.52	397	9.54	-0.02	
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00	
	ISTPP (Jhajjar)	1500	995	482	340	8.64	360	9.40	-0.76	
	Dadri GPS	830	794	390	403	9.11	379	9.96	-0.86	
	Anta GPS	419	389	246	266	6.02	251	6.30	-0.29	
	Auraiva GPS	663	627	286	313	7.17	299	7.35	-0.19	
	Sub Total (A)	10782	8991	7825	7933	177.41	7392	180.50	-3.10	
B. NPC	NAPS	440	0	0	0	0.00	0	0.00	0.00	
	RAPS- B	440	419	460	460	10.02	418	10.06	-0.03	
	RAPS- C	440	430	472	476	10.15	423	10.32	-0.18	
	Sub Total (B)	1320	849	932	936	20.17	840	20.38	-0.21	
C. NHPC	Chamera I HPS	540	550	540	0	5.82	242	5.30	0.52	
	Chamera II HPS	300	310	240	20	3.15	131	3.21	-0.06	
	Chamera III HPS	231	0	0	0	0.00	0	0.00	0.00	
	Bairasuil HPS	180	182	120	120	2.32	96	2.18	0.14	
	Salal-HPS	690	291	398	223	6.02	251	6.38	-0.36	
	Tanakpur-HPS	94	28	32	30	0.68	28	0.66	0.02	
	Uri-HPS	480	467	480	480	11.63	485	11.62	0.01	
	Dhauliganga-HPS	280	280	206	0	0.72	30	0.83	-0.11	
	Dulhasti-HPS	390	387	239	0	3.21	134	3.75	-0.53	
	Sewa-II HPS	120	119	109	38	2.26	94	2.36	-0.09	
	Sub Total (C)	3305	2613	2364	911	35.81	1492	36.28	-0.47	
	D.NJPC	Natpaha Jhakri	1500	1605	1278	0	11.29	470	11.36	-0.07
		Sub Total (D)	1500	1605	1278	0	11.29	470	11.36	-0.07
E. THDC	Tehri HPS	1000	540	542	0	6.00	250	6.00	0.00	
	Koteswar HPS	400	300	280	0	3.10	129	3.00	0.10	
	Sub Total (E)	1400	840	822	0	9.10	379	9.00	0.10	
F. BBMB	Bhakra HPS	1480	314	466	307	7.76	323	7.55	0.21	
	Dehar HPS	990	320	825	280	7.75	323	7.68	0.08	
	Pong HPS	396	10	120	0	0.31	13	5.01	-4.70	
	Sub Total (F)	2866	645	1411	587	15.82	659	20.23	-4.41	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	31	31	1.01	42	0.89	0.12	
	KWHEP HPS(IPP)	1000	0	519	0	5.82	243	5.82	0.00	
	Malana Stg-II HPS	100	0	0	35	0.54	22	0.48	0.05	
	Shree Cement TPS	300	0	178	237	5.75	239	5.31	0.44	
	Budhil HPS(IPP)	70	0	25	10	0.41	17	0.41	0.00	
	Sub Total (G)	1662	0	753	313	13.53	564	12.92	0.61	
H. Total Regional Entities (A-G)	22836	15542	15385	10680	283.12	11797	290.66	-7.55		

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	1050	1050	23.62	984
	Guru Nanak Dev TPS(Bhatinda)	440	205	205	4.44	185
	Guru Hargobind Singh TPS(L.mbt)	920	928	954	21.00	875
	Thermal (Total)	2620	2183	2209	49.06	2044
	Total Hydro	1148	342	342	7.57	315
	Total Punjab	3768	2525	2551	56.63	2360
Haryana	Panipat TPS	1367	767	856	19.79	825
	DCRTPP (Yamuna nagar)	600	558	560	12.91	538
	Faridabad GPS (NTPC)	432	152	145	3.87	161
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	372	372	8.89	371
	Thermal (Total)	4944	1849	1933	45.47	1895
	Total Hydro	62	22	20	0.55	23
	Total Haryana	5006	1871	1953	46.02	1917
	Rajasthan	kota TPS	1240	1172	981	25.13
suratgarh TPS		1500	907	897	21.06	878
Chabra TPS		500	452	450	10.79	450
Dholpur GPS		330	137	139	3.28	137
Ramgarh GPS		111	57	66	1.54	64
RAPS A (NPC)		300	190	190	4.73	197
Barsingsar (NLC)		250	0	0	0.00	0
Giral LTPS		250	124	58	2.15	90
Rajwest LTPS (IPP)		1080	716	715	17.34	722
VSLP LTPS (IPP)		135	0		0.00	0
Thermal (Total)		5696	3755	3496	86.02	3584
Total Hydro		550	0	0	0.08	3
Wind power		2191	96	36	1.92	80
Biomass		91	21	21	0.51	21
Solar		201	0	0	1.39	58
Renewable/Others (Total)		2483	117	57	3.82	159
Total Rajasthan		8729	3872	3553	89.91	3746
UP	Anpara TPS	1630	1258	1209	29.50	1229
	Obra TPS	1382	439	453	11.00	458
	Paricha TPS	890	683	684	15.10	629
	Panki TPS	210	68	72	1.70	71
	Harduaganj TPS	665	260	252	5.90	246
	Tanda TPS (NTPC)	440	399	401	9.74	406
	Roza TPS (IPP)	1200	477	270	9.05	377
	Anpara-C (IPP)	1200	529	540	12.74	531
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	403	405	9.52	397
	Thermal (Total)	8067	4516	4286	104.26	4344
	Vishnuparyag HPS (IPP)	400	99	99	2.32	97
	Other Hydro	527	138	128	2.80	117
	Cogeneration	981	800	800	19.20	800
	Total UP	9975	5553	5313	128.57	5261
Uttarakhand	Total Hydro	1303	494	397	10.62	442
	Total Uttarakhand	1303	494	397	10.62	442
Delhi	Rajghat TPS	135	105	104	2.51	105
	Delhi Gas Turbine	282	226	231	5.52	230
	Pragati Gas Turbine	330	289	267	6.64	277
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	27	0.44	18
	Badarpur TPS (NTPC)	705	585	490	11.55	481
	Thermal (Total)	2237	1205	1119	26.66	1111
	Total Delhi	2237	1205	1119	26.66	1111
	HP	Baspa HPS (IPP)	330	0	30	1.40
Malana HPS (IPP)		86	16	35	0.57	24
Other Hydro		589	272	325	8.24	343
Total HP		1005	288	390	10.20	425
J & K	Baglihar HPS (IPP)	450	440	294	6.20	258
	Other Hydro	323	46	93	1.40	58
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	486	387	7.60	317
Total State Control Area Generation		32979	16294	15663	376.21	15579
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2101	2243	54.54	2272
Total Regional Availability(Gross)		55815	33780	28586	713.87	29648

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6425	1564	79.39	3308
State Control Area Hydro	5368	1770	1664	41.73	1642
Total Regional Hydro	15731	8195	3228	121.12	4950

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 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	0	4.23	0.00	4.23
Gwalior-Agra (D/C)	914	680	1091	0	13.94	0.00	13.94
Zerda-Kankroli	-69	-176	0	281	0.00	4.67	-4.67
Zerda-Bhinmal	-32	-101	0	243	0.00	3.16	-3.16
Malanpur-Auraiya	-24	-101	0	148	0.00	2.03	-2.03
Badod-Kota/Morak	-22	-74	0	119	0.00	1.72	-1.72
Mundra-Mohindergarh(HVDC)	948	1268	1268	0	29.00	0.00	29.00
Sub Total WR	1815	1796			47.17	11.58	35.59
Pusauli Bypass	150	100	150	0	3.64	0.00	3.64
MZP- GKP (D/C)	70	36	184	0	11.20	0.00	11.20
Patna-Balia(D/C)	224	262	347	0	5.92	0.00	5.92
B'Sharif-Balia (D/C)	8	98	176	0	1.15	0.00	1.15
Pusauli-Balia	-196	-154	217	0	0.00	3.81	-3.81
Gaya-Fatehpur (765 Kv)	-72	11	55	109	0.00	0.86	-0.86
Pusauli-Sahupuri	138	134	164	0	2.68	0.00	2.68
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.97	-0.97
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	286	447			24.59	5.64	18.95
Total IR Exch	2101	2243			71.76	17.22	54.54

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

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdi (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
27.12	0.66	27.78	-4.91	-10.73	-2.70	10.08	-3.37	3.37

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
16.80	37.10	53.90	18.95	35.59	54.54	2.15	-1.51	0.64

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	3.61	93.61	90.00	64.13	6.39

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.55	19.02	49.63	22.06	50.06	0.26	0.13	50.36	49.73

VII. Voltage profile 400 kV

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	15:58	378	13:23	0.0	0.0	0.0	0.0
Gorakhpur	400	427	0:00	413	9:10	0.0	0.0	57.5	0.0
Bareilly	400	0	0:00	9999	0:00	0.0	0.0	0.0	0.0
Kanpur	400	421	21:10	406	11:06	0.0	0.0	0.8	0.0
Dadri	400	423	21:22	407	10:38	0.0	0.0	3.1	0.0
Balabhgarh	400	430	21:16	411	10:39	0.0	0.0	38.3	0.0
Bawana	400	422	21:18	408	10:39	0.0	0.0	0.9	0.0
Bassi	400	427	17:01	408	10:37	0.0	0.0	45.6	0.0
Hissar	400	415	21:18	401	6:52	0.0	0.0	0.0	0.0
Moga	400	417	17:02	403	10:40	0.0	0.0	0.0	0.0
Abdullapur	400	423	16:01	408	18:53	0.0	0.0	6.2	0.0
Nalagarh	400	424	1:12	408	11:08	0.0	0.0	6.9	0.0
Kishenpur	400	424	16:58	406	19:24	0.0	0.0	14.1	0.0
Wagoora	400	414	16:57	388	19:38	0.0	2.0	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	778	16:02	749	11:05	0.0	0.0	0.0	0.0
Balia	765	763	7:08	734	11:08	0.0	12.3	0.0	0.0
Moga	765	785	17:01	759	10:43	0.0	0.0	0.0	0.0
Agra	765	798	17:05	750	23:10	0.0	0.0	0.0	0.0
Bhiwani	765	790	21:18	765	11:07	0.0	0.0	0.0	0.0
Unnao	765	776	21:15	753	11:08	0.0	0.0	0.0	0.0

IX. 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	478.27	420.92	474.81	350.94	296.68	226.17
Pong	426.72	384.05	400.13	223.85	402.97	288.96	61.87	22.71
Tehri	829.79	740.04	767.85	186.00	818.65	982.26	65.80	226.00
Koteshwar	612.50	598.50	610.20	4.44	609.90	4.44	223.00	223.00
Chamera-I	760.00	748.75	756.79	NA	NA	NA	139.36	147.29
Rihand	268.22	252.98	257.40	175.00	259.11	257.10	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.94	NA	NA	NA	NA	NA
RSD	527.91	487.91	506.81	NA	496.38	NA	96.08	142.52

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 13.04.2013 :

1.Normal weather.

XIII. Synchronisation of new generating units :

XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 13.04.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER