

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 17.04.2013
Date of Reporting : 18.04.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
33092	3592	36684	50.24	29244	1218	30462	50.09	728.5	47.89

* 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	48.62	6.16		54.78	47.16	47.38	0.22	102.16	0.34
Haryana	52.14	0.64		52.78	44.07	43.32	-0.75	96.10	0.76
Rajasthan	86.01	0.15	9.31	95.47	49.50	45.85	-3.65	141.32	0.00
Delhi	25.71			25.71	55.99	52.65	-3.34	78.36	0.04
UP	114.82	4.46	16.80	136.08	86.15	84.85	-1.30	220.93	44.92
Uttarakhand		12.78		12.78	19.69	19.36	-0.32	32.14	0.14
HP		10.75		10.75	14.05	13.84	-0.22	24.58	0.00
J & K		10.45	0.00	10.45	20.38	18.30	-2.09	28.75	1.70
Chandigarh				0.00	4.36	4.14	-0.22	4.14	0.00
Total	327.30	45.39	26.11	398.79	341.34	329.69	-11.65	728.48	47.89

* 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	4825	70	3	136	4246	0	-91	538	7.09
Haryana	4937	237	241	67	3840	0	-104	10	-1.84
Rajasthan	6298	0	-105	749	5628	0	-152	197	8.60
Delhi	3563	0	-196	-474	2702	0	-137	-953	-16.01
UP	9117	3185	241	-24	9662	1218	-213	907	6.61
Uttarakhand	1532	0	47	449	1210	0	-69	483	11.02
HP	1104	0	-22	-362	818	0	39	37	-2.21
J&K	1504	100	-84	-111	1011	0	-86	-119	-2.25
Chandigarh	212	0	-3	-18	127	0	-9	15	0.57
Total	33092	3592	122	412	29244	1218	-821	1116	11.58

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

A. NTPC	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
Rihand I STPS	1000	925	992	1005	22.20	925	22.09	0.11	
Rihand II STPS	1000	970	1031	1043	23.07	961	23.17	-0.10	
Rihand III STPS	500	366	0	506	8.51	355	8.78	-0.27	
Dadri I STPS	840	807	820	778	18.06	752	19.37	-1.31	
Dadri II STPS	980	969	96	918	20.84	868	22.66	-1.81	
Unchahar I TPS	420	405	419	439	9.44	393	9.53	-0.09	
Unchahar II TPS	420	400	427	221	9.22	384	9.27	-0.05	
Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00	
ISTPP (Jhajjar)	1500	995	444	357	8.56	357	8.84	-0.28	
Dadri GPS	830	795	366	402	8.98	374	9.23	-0.25	
Anta GPS	419	389	246	253	5.78	241	5.84	-0.05	
Auraiva GPS	663	628	304	310	7.19	299	7.01	0.18	
Sub Total (A)	10782	8893	6400	7593	171.67	7153	174.85	-3.18	
B. NPC	NAPS	440	130	158	158	3.06	128	3.12	-0.06
RAPS- B	440	416	458	462	9.99	416	9.98	0.01	
RAPS- C	440	430	469	470	10.10	421	10.32	-0.22	
Sub Total (B)	1320	976	1085	1090	23.15	965	23.42	-0.27	
C. NHPC	Chamera I HPS	540	550	540	0	5.62	234	5.55	0.07
Chamera II HPS	300	310	242	0	2.96	123	2.62	0.34	
Chamera III HPS	231	116	212	0	1.57	65	1.65	-0.08	
Bairasuil HPS	180	182	120	60	2.30	96	2.32	-0.03	
Salal-HPS	690	385	464	452	8.96	374	8.96	0.01	
Tanakpur-HPS	94	31	38	25	0.71	30	0.75	-0.04	
Uri-HPS	480	476	479	478	11.41	475	11.60	-0.19	
Dhauliganga-HPS	280	280	219	0	1.88	78	1.91	-0.04	
Dulhasti-HPS	390	387	334	36	6.29	262	6.15	0.14	
Sewa-II HPS	120	119	108	121	2.58	108	2.46	0.12	
Sub Total (C)	3305	2835	2756	1172	44.27	1845	43.97	0.30	
D.NJPC	Natpda Jhakri	1500	1605	1338	0	17.31	721	17.82	-0.51
Sub Total (D)	1500	1605	1338	0	17.31	721	17.82	-0.51	
E. THDC	Tehri HPS	1000	411	340	0	6.04	252	6.00	0.04
Koteshwar HPS	400	265	262	0	2.69	112	2.70	-0.01	
Sub Total (E)	1400	676	602	0	8.73	364	8.70	0.03	
F. BBMB	Bhakra HPS	1480	285	278	290	6.87	286	6.84	0.03
Dehar HPS	990	348	660	286	8.99	375	8.36	0.63	
Pong HPS	396	10	120	0	0.33	14	0.25	0.08	
Sub Total (F)	2866	644	1058	576	16.19	675	15.45	0.74	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	90	30	1.08	45	1.03	0.05
KWHEP HPS(IPP)	1000	0	716	300	10.09	420	10.14	-0.05	
Malana Stg-II HPS	100	0	0	0	0.37	16	0.33	0.04	
Shree Cement TPS	300	0	240	271	6.03	251	6.04	-0.02	
Budhil HPS(IPP)	70	0	34	10	0.35	15	0.41	-0.06	
Sub Total (G)	1662	0	1080	611	17.92	747	17.96	-0.04	
H. Total Regional Entities (A-G)	22836	15629	14319	11042	299.25	12469	302.18	-2.93	

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	1055	890	21.93	914
	Guru Nanak Dev TPS(Bhatinda)	440	336	298	6.76	282
	Guru Hargobind Singh TPS(L.mbt)	920	956	781	19.93	831
	Thermal (Total)	2620	2347	1969	48.62	2026
	Total Hydro	1148	224	344	6.16	257
Total Punjab	3768	2571	2313	54.78	2283	
Haryana	Panipat TPS	1367	964	1155	25.92	1080
	DCRTPP (Yamuna nagar)	600	560	563	12.89	537
	Faridabad GPS (NTPC)	432	182	158	4.00	167
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	493	375	9.33	389
	Thermal (Total)	4944	2199	2251	52.14	2172
	Total Hydro	62	25	24	0.64	27
	Total Haryana	5006	2224	2275	52.78	2199
	Rajasthan	kota TPS	1240	1062	985	24.75
suratgarh TPS		1500	933	1134	23.79	991
Chabra TPS		500	382	442	10.24	426
Dholpur GPS		330	134	134	3.37	141
Ramgarh GPS		111	68	69	1.72	72
RAPS A (NPC)		300	213	213	4.27	178
Barsingsar (NLC)		250	111	110	2.62	109
Giral LTPS		250	67	67	1.47	61
Rajwest LTPS (IPP)		1080	590	585	13.77	574
VSLP LTPS (IPP)		135	0		0.00	0
Thermal (Total)		5696	3560	3739	86.01	3584
Total Hydro		550	0	19	0.15	6
Wind power		2191	202	514	7.07	295
Biomass		91	34	34	0.83	34
Solar		201	0	0	1.42	59
Renewable/Others (Total)		2483	236	548	9.31	388
Total Rajasthan		8729	3796	4306	95.47	3978
UP		Anpara TPS	1630	1398	1379	29.80
	Obra TPS	1382	418	517	9.90	413
	Paricha TPS	890	633	799	15.90	663
	Panki TPS	210	80	85	1.70	71
	Harduaganj TPS	665	44	290	4.60	192
	Tanda TPS (NTPC)	440	397	404	9.59	400
	Roza TPS (IPP)	1200	527	534	12.79	533
	Anpara-C (IPP)	1200	963	863	22.10	921
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	364	364	8.44	352
	Thermal (Total)	8067	4824	5235	114.82	4784
	Vishnuparyag HPS (IPP)	400	103	108	2.47	103
	Other Hydro	527	85	100	1.99	83
	Cogeneration	981	700	700	16.80	700
	Total UP	9975	5712	6143	136.08	5567
Uttarakhand	Total Hydro	1303	575	521	12.78	532
	Total Uttarakhand	1303	575	521	12.78	532
Delhi	Rajghat TPS	135	99	100	2.66	111
	Delhi Gas Turbine	282	150	231	4.65	194
	Pragati Gas Turbine	330	218	266	6.71	279
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	570	510	11.70	487
	Thermal (Total)	2237	1037	1107	25.71	1071
	Total Delhi	2237	1037	1107	25.71	1071
HP	Baspa HPS (IPP)	330	29	39	1.63	68
	Malana HPS (IPP)	86	13	7	0.45	19
	Other Hydro	589	359	380	8.67	361
	Total HP	1005	401	426	10.75	448
J & K	Baglihar HPS (IPP)	450	380	374	9.05	377
	Other Hydro	323	46	93	1.40	58
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	426	467	10.45	435
Total State Control Area Generation		32979	16742	17558	398.79	16514
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3398	1645	43.29	1804
Total Regional Availability(Gross)		55815	34459	30245	741.33	30786

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6560	2078	98.05	4085
State Control Area Hydro	5368	1736	1901	45.39	1788
Total Regional Hydro	15731	8296	3979	143.43	5874

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	-200	-100	0	200	0.00	3.96	-3.96
Gwalior-Agra (D/C)	1110	844	1152	0	20.24	0.00	20.24
Zerda-Kankroli	-78	-285	0	345	0.00	5.70	-5.70
Zerda-Bhinmal	-42	-250	0	307	0.00	4.37	-4.37
Malanpur-Auraiya	-80	-68	0	101	0.00	1.57	-1.57
Badod-Kota/Morak	-50	-136	0	195	0.00	3.17	-3.17
Mundra-Mohindergarh(HVDC)	961	771	961	0	22.33	0.00	22.33
Sub Total WR	1621	776			42.57	18.77	23.81
Pusauli Bypass	150	150	150	0	3.60	0.00	3.60
MZP- GKP (D/C)	539	212	556	0	6.52	0.00	6.52
Patna-Balia(D/C)	430	315	444	0	2.95	0.00	2.95
B'Sharif-Balia (D/C)	371	147	371	0	5.45	0.00	5.45
Pusauli-Balia	-8	-70	0	78	0.00	1.78	-1.78
Gaya-Fatehpur (765 Kv)	199	9	199	0	1.55	0.99	0.56
Pusauli-Sahupuri	132	146	153	0	3.15	0.00	3.15
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	1777	869			23.22	3.74	19.48
Total IR Exch	3398	1645			65.79	22.51	43.29

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
27.97	0.53	28.50	-5.54	-10.50	2.63	9.07	-6.05	6.05

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
19.54	32.23	51.77	19.48	23.81	43.29	-0.06	-8.42	-8.48

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	0.60	94.90	94.30	48.70	5.10

<----- 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				
50.44	17.03	49.61	5.41	50.00	0.13	0.11	50.34	49.81

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	413	13:14	404	17:09	0.0	0.0	0.0	0.0
Gorakhpur	400	428	17:20	408	5:42	0.0	0.0	47.0	0.0
Bareilly	400	426	17:26	405	5:40	0.0	0.0	0.0	0.0
Kanpur	400	420	18:16	402	5:42	0.0	0.0	0.0	0.0
Dadri	400	418	2:58	405	9:25	0.0	0.0	0.0	0.0
Balabhgarh	400	426	3:54	409	10:48	0.0	0.0	18.8	0.0
Bawana	400	420	2:30	406	10:54	0.0	0.0	0.0	0.0
Bassi	400	427	4:00	397	16:18	28.2	28.2	23.4	0.0
Hissar	400	416	17:03	397	5:39	0.0	0.0	0.0	0.0
Moga	400	419	2:31	403	10:24	0.0	0.0	0.0	0.0
Abdullapur	400	422	2:29	408	19:10	0.0	0.0	3.9	0.0
Nalagarh	400	422	2:30	402	9:57	0.0	0.0	7.0	0.0
Kishenpur	400	421	2:32	401	19:29	36.8	36.8	0.1	0.0
Wagoora	400	410	4:04	386	7:42	0.0	7.1	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	763	18:16	727	5:41	0.1	31.7	0.0	0.0
Balia	765	764	18:16	723	9:24	1.7	30.7	0.0	0.0
Moga	765	783	13:28	753	5:52	0.0	0.0	0.0	0.0
Agra	765	781	18:02	745	5:42	0.0	0.0	0.0	0.0
Bhiwani	765	793	13:29	762	5:40	0.0	0.0	0.0	0.0
Unnao	765	758	18:17	730	5:42	0.0	37.1	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	476.82	434.29	474.54	345.61	353.28	221.01
Pong	426.72	384.05	400.23	223.85	403.12	296.79	51.00	21.61
Tehri	829.79	740.04	765.95	170.00	818.65	982.26	64.40	181.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	134.57	152.16
Rihand	268.22	252.98	257.25	168.50	258.81	244.10	NA	NA
RPS	352.80	343.81	345.86	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.97	NA	NA	NA	NA	NA
RSD	527.91	487.91	505.91	NA	496.56	NA	137.56	164.46

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 17.04.2013 :

1. Normal weather.

XIII. Synchronisation of new generating units :

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

1. 765 KV Agra-Jhatikara line has been test charged at 18.06hrs. from Jhatikara to Loc. No. 64.

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Report for : 17.04.2013

पारी प्रभाती अश्विन्ता / SHIFT CHARGE ENGINEER