

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 16.11.2013
Date of Reporting : 17.11.2013

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
33414	1605	35019	50.21	27587	750	28337	50.28	714.5	46.51

* 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	47.79	10.44		58.23	27.00	29.69	2.69	87.92	0.88
Haryana	64.53	0.65		65.18	36.54	37.48	0.93	102.66	0.17
Rajasthan	92.31	4.62	6.68	103.61	70.15	69.39	-0.76	173.00	0.00
Delhi	15.07			15.07	40.06	41.02	0.96	56.09	0.02
UP	118.62	2.65	1.20	122.46	78.74	76.71	-2.03	199.17	41.86
Uttarakhand		10.02		10.02	18.81	20.21	1.40	30.23	1.90
HP		6.91		6.91	17.08	17.11	0.02	24.02	0.00
J & K		7.00	0.00	7.00	27.87	31.20	3.34	38.20	1.70
Chandigarh				0.00	3.02	3.21	0.19	3.21	0.00
Total	338.32	42.29	7.88	388.49	319.28	326.02	6.75	714.51	46.51

* 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	4449	0	83	-668	3156	0	163	-688	-14.77
Haryana	4983	0	-238	-972	4198	0	259	-995	-25.46
Rajasthan	7633	0	-231	710	6727	0	-18	684	27.01
Delhi	2952	0	-3	-746	1428	0	-29	-1108	-19.26
UP	8574	1430	-615	-48	8622	750	-128	758	0.56
Uttarakhand	1590	75	44	387	1075	0	108	330	8.73
HP	1192	0	-28	-59	752	0	-24	270	4.22
J&K	1861	100	57	374	1543	0	189	309	7.21
Chandigarh	181	0	7	0	86	0	-3	0	-0.01
Total	33414	1605	-924	-1022	27587	750	518	-439	-11.77

* 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	
										UI (OG:(+ve), UG: (-ve))
A. NTPC	Singrauli STPS	2000	1883	2092	1961	44.86	1869	45.18	-0.32	
	Rihand I STPS	1000	734	963	780	17.59	733	17.62	-0.03	
	Rihand II STPS	1000	752	1034	751	18.08	753	18.04	0.04	
	Rihand III STPS	1000	413	500	405	9.84	410	9.91	-0.07	
	Dadri I STPS	840	814	648	469	12.94	539	13.22	-0.28	
	Dadri II STPS	980	985	1026	715	21.28	887	22.40	-1.12	
	Unchahar I TPS	420	405	435	427	9.48	395	9.71	-0.23	
	Unchahar II TPS	420	404	423	395	9.38	391	9.63	-0.25	
	Unchahar III TPS	210	201	213	212	4.74	197	4.81	-0.07	
	ISTPP (Jhajjar)	1500	1480	991	641	18.61	776	18.15	0.46	
	Dadri GPS	830	818	554	535	12.99	541	13.11	-0.11	
	Anta GPS	419	414	263	276	6.43	268	6.55	-0.12	
	Auraiya GPS	663	493	157	153	3.57	149	3.70	-0.13	
	Sub Total (A)	11282	9795	9299	7720	189.80	7908	192.02	-2.22	
	B. NPC	NAPS	440	318	351	362	7.60	317	7.63	-0.04
		RAPS- B	440	419	463	465	10.09	420	10.06	0.03
RAPS- C		440	430	477	478	10.23	426	10.32	-0.09	
Sub Total (B)		1320	1167	1291	1305	27.92	1163	28.01	-0.09	
C. NHPC	Chamera I HPS	540	540	180	0	2.35	98	2.30	0.05	
	Chamera II HPS	300	300	286	0	1.36	57	1.34	0.02	
	Chamera III HPS	231	231	115	0	0.82	34	0.80	0.01	
	Bairasuil HPS	180	182	182	10	0.62	26	0.59	0.02	
	Salal-HPS	690	139	302	130	3.26	136	3.33	-0.07	
	Tanakpur-HPS	94	41	48	42	1.01	42	0.98	0.03	
	Uri-HPS	480	134	238	45	3.21	134	3.31	-0.10	
	Uri-II HPS	120	76	96	61	1.72	72	1.83	-0.11	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	387	344	0	3.33	139	3.31	0.01	
	Sewa-II HPS	120	119	79	0	0.39	16	0.38	0.00	
	Sub Total (C)	3425	2149	1870	288	18.06	753	18.19	-0.13	
	D. NJPC	Nathpa Jhakri	1500	1605	1630	0	10.23	426	9.75	0.48
Sub Total (D)		1500	1605	1630	0	10.23	426	9.75	0.48	
E. THDC	Tehri HPS	1000	1060	755	0	6.36	265	6.20	0.16	
	Koteshwar HPS	400	92	100	90	2.22	92	2.20	0.01	
	Sub Total (E)	1400	1152	855	90	8.57	357	8.40	0.17	
F. BBMB	Bhakra HPS	1497	590	1078	374	14.99	625	14.15	0.84	
	Dehar HPS	990	214	330	0	5.03	210	5.15	-0.12	
	Pong HPS	396	186	312	66	4.62	193	4.47	0.15	
	Sub Total (F)	2883	990	1720	440	24.64	1027	23.77	0.87	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	72	0	0.65	27	0.62	0.03	
	KWHEP HPS(IPP)	1000	0	293	0	4.75	198	5.46	-0.70	
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00	
	Shree Cement TPS	300	0	122	85	2.68	112	2.73	-0.05	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	487	85	8.09	337	8.81	-0.72	
H. Total Regional Entities (A-G)	23472	16858	17152	9928	287.31	11971	288.95	-1.64		

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	22.87	953
	Guru Nanak Dev TPS(Bhatinda)	440	230	180	4.56	190
	Guru Hargobind Singh TPS(L.mbt)	920	949	886	20.36	848
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2229	2116	47.79	1991
	Total Hydro	1148	413	354	10.44	435
	Total Punjab	3768	2642	2470	58.23	2426
Haryana	Panipat TPS	1367	458	608	11.82	492
	DCRTPP (Yamuna nagar)	600	565	559	13.06	544
	Faridabad GPS (NTPC)	432	185	158	4.21	175
	RGTPP (khedar) (IPP)	1200	557	466	12.64	526
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	944	869	22.82	951
	Thermal (Total)	4944	2709	2660	64.53	2689
	Total Hydro	62	25	29	0.65	27
	Total Haryana	5006	2734	2689	65.18	2716
	Rajasthan	kota TPS	1240	1158	1092	27.20
suratgarh TPS		1500	1122	1010	26.12	1088
Chabra TPS		500	455	398	10.64	443
Dholpur GPS		330	129	129	3.21	134
Ramgarh GPS		111	145	153	3.78	158
RAPS A (NPC)		300	175	175	3.96	165
Barsingsar (NLC)		250	111	134	2.68	112
Giral LTPS		250	0	26	0.24	10
Rajwest LTPS (IPP)		1080	0	0	0.00	0
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	601	593	14.48	604
Thermal (Total)		6956	3896	3710	92.31	3846
Total Hydro		550	163	192	4.62	193
Wind power		2191	173	376	5.56	232
Biomass		91	28	28	0.68	28
Solar		201	4	0	0.44	18
Renewable/Others (Total)		2483	201	404	6.68	278
Total Rajasthan		9989	4260	4306	103.61	4317
UP		Anpara TPS	1630	1290	898	22.00
	Obra TPS	1288	515	536	11.40	475
	Paricha TPS	1140	659	689	14.30	596
	Panki TPS	210	80	85	1.80	75
	Harduaganj TPS	665	444	509	10.50	438
	Tanda TPS (NTPC)	440	401	400	9.78	408
	Roza TPS (IPP)	1200	972	810	24.63	1026
	Anpara-C (IPP)	1200	762	752	16.06	669
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	280	282	8.14	339
	Thermal (Total)	8223	5403	4961	118.62	4942
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	133	83	2.65	110
	Cogeneration	981	50	50	1.20	50
	Total UP	10131	5586	5094	122.46	5103
	Uttarakhand	Total Hydro	1303	565	268	10.02
Total Uttarakhand		1303	565	268	10.02	418
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	83	82	1.92	80
	Pragati Gas Turbine	330	316	266	7.13	297
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	305	260	6.03	251
	Thermal (Total)	2232	704	608	15.07	628
	Total Delhi	2232	704	608	15.07	628
HP	Baspa HPS (IPP)	330	31	0	1.53	64
	Malana HPS (IPP)	86	9	0	0.28	12
	Other Hydro	589	243	181	5.10	212
	Total HP	1005	283	181	6.91	288
J & K	Baglihar HPS (IPP)	450	292	146	4.52	189
	Other Hydro	323	86	119	2.48	103
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	378	265	7.00	292
Total State Control Area Generation		34390	17152	15881	388.49	16187
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2161	2574	55.14	2298
Total Regional Availability(Gross)		57862	36465	28383	730.94	30456

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6440	818	66.91	2788
State Control Area Hydro	5368	1960	1372	42.29	1762
Total Regional Hydro	15868	8400	2190	109.20	4550

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	-400	-500	0	500	0.00	11.16	-11.16
Gwalior-Agra (D/C)	504	784	1063	0	10.16	0.00	10.16
Zerda-Kankroli	-125	-180	0	292	0.00	4.78	-4.78
Zerda-Bhinmal	-8	-56	69	166	0.00	1.35	-1.35
Malanpur-Auraiya	-135	-98	0	210	0.00	3.24	-3.24
Badod-Kota/Morak	-67	-100	0	150	0.00	2.94	-2.94
Mundra-Mohindergarh(HVDC)	1100	1001	1503	0	27.96	0.00	27.96
Sub Total WR	869	851			38.12	23.47	14.66
Pusauli Bypass	300	300	300	0	7.20	0.00	7.20
MZP- GKP (D/C)	288	522	625	0	10.85	0.00	10.85
Patna-Balia(D/C)	315	445	535	0	9.99	0.00	9.99
B'Sharif-Balia (D/C)	211	257	386	0	6.39	0.00	6.39
Pusauli-Balia	-58	-26	23	82	0.00	0.59	-0.59
Gaya-Fatehpur (765 Kv)	149	153	377	0	5.14	0.00	5.14
Pusauli-Sahupuri	122	104	126	0	2.46	0.00	2.46
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-32	0	38	0.00	0.96	-0.96
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1292	1723			42.04	1.55	40.49
Total IR Exch	2161	2574			80.16	25.02	55.14

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
34.97	1.03	36.00	1.91	-26.84	11.80	-4.38	2.92	-2.92

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
52.63	-4.97	47.66	40.49	14.66	55.14	-12.15	19.62	7.48

VI. Frequency Profile <----- % of Time Frequency ----->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.10	86.40	2.20	86.30	61.80	13.60

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.38	23.44	49.70	7.50	50.05	0.18	0.13	50.41	49.87

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	00:00	407	12:05	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Barilly	400	423	04:03	406	17:52	0.0	0.0	3.3	0.0
Kanpur	400	425	04:03	406	10:14	0.0	0.0	13.6	0.0
Dadri	400	427	04:02	408	10:11	0.0	0.0	36.4	0.0
Ballabgarh	400	437	04:03	414	10:13	0.0	0.0	55.1	16.1
Bawana	400	429	04:02	410	18:12	0.0	0.0	44.3	0.0
Bassi	400	425	04:04	389	07:05	0.0	0.1	9.8	0.0
Hissar	400	420	04:03	399	10:17	0.0	0.0	0.0	0.0
Moga	400	424	04:01	405	10:15	0.0	0.0	12.8	0.0
Abdullapur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Nalagarh	400	430	21:29	409	10:15	0.0	0.0	31.9	0.0
Kishenpur	400	422	04:04	396	18:24	0.0	0.0	1.9	0.0
Wagoora	400	417	13:03	376	18:24	1.6	17.1	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	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Balia	765	761	05:04	737	10:14	0.0	10.1	0.0	0.0
Moga	765	796	04:02	759	10:15	0.0	0.0	0.0	0.0
Agra	765	814	04:04	771	10:13	0.0	0.0	31.4	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	767	04:02	741	17:52	0.0	0.5	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	509.52	1530.03	502.53	1205.87	207.82	422.74
Pong	426.72	384.05	418.55	821.34	417.64	781.19	87.07	267.28
Tehri	829.79	740.04	822.40	1052.96	818.65	982.26	81.93	139.00
Koteshwar	612.50	598.50	611.60	5.50	NA	NA	142.00	146.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	58.37	63.65
Rihand	268.22	252.98	261.82	407.50	262.98	478.20	NA	NA
RPS	352.80	343.81	352.88	NA	NA	NA	243.01	12.15
Jawahar Sagar	298.70	295.78	298.61	NA	NA	NA	253.41	163.81
RSD	527.91	487.91	516.48	144.00	520.95	144.00	86.28	222.34

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 16.11.2013 :

1. Normal weather in NR.

XIII. Synchronisation of new generating units :

0.00

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 :

Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.

Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood
Vishnuprayag and Dhauliganga expected by Mar, 2014 .