

पॉवर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 30.10.2013
Date of Reporting : 31.10.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Off Peak (03:00 Hrs) MW			Day Energy (Net MU)		
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
33011	2175	35186	50.12	27213	755	27968	50.09	718.0	36.74

* 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	27.31	9.90		37.21	57.68	59.23	1.56	96.44	0.00
Haryana	48.45	0.71		49.16	54.07	52.76	-1.31	101.92	0.02
Rajasthan	70.61	3.28	9.21	83.09	78.70	77.33	-1.37	160.42	0.77
Delhi	20.11			20.11	45.24	43.27	-1.98	63.37	0.00
UP	129.05	2.98	1.20	133.23	74.77	71.67	-3.09	204.90	32.62
Uttarakhand		10.08		10.08	17.65	19.16	1.52	29.24	1.41
HP		8.75		8.75	11.77	14.99	3.22	23.74	0.23
J & K		8.61	0.00	8.61	22.50	25.96	3.46	34.56	1.70
Chandigarh				0.00	3.48	3.43	-0.05	3.43	0.00
Total	295.52	44.29	10.41	350.22	365.85	367.80	1.95	718.02	36.74

* 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	STOA/PX transaction	STOA/PX transaction
Punjab	4388	0	-50	153	3370	0	5	238	7.34	
Haryana	4824	0	-174	-425	3696	0	-155	-436	-10.14	
Rajasthan	7255	0	29	1505	6267	0	-124	1354	36.17	
Delhi	3315	0	-126	-804	1653	5	-67	-1319	-21.62	
UP	8766	2000	-434	-143	9088	750	-118	344	-1.25	
Uttarakhand	1456	75	-11	336	1023	0	-5	350	8.09	
HP	1134	0	41	-368	780	0	132	61	-0.26	
J&K	1694	100	58	253	1248	0	212	161	3.99	
Chandigarh	180	0	-2	-46	89	0	-11	-20	-0.36	
Total	33011	2175	-668	461	27213	755	-130	732	21.97	

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

III. Regional Entities :

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	1940	2083	2082	47.35	1973	46.52	0.83
Rihand I STPS	1000	682	1013	663	16.33	680	15.92	0.40
Rihand II STPS	1000	701	1037	611	16.39	683	16.22	0.16
Rihand III STPS	1000	350	519	312	8.16	340	8.07	0.09
Dadri I STPS	840	811	862	621	17.84	743	17.94	-0.10
Dadri II STPS	980	980	1012	724	21.33	889	21.40	-0.08
Unchahar I TPS	420	201	217	208	4.72	197	4.72	0.00
Unchahar II TPS	420	404	433	372	9.27	386	9.29	-0.03
Unchahar III TPS	210	201	218	182	4.60	192	4.61	0.00
ISTPP (Jhajjar)	1500	1480	987	636	17.26	719	17.28	-0.02
Dadri GPS	830	810	583	430	12.61	526	12.95	-0.33
Anta GPS	419	407	406	289	8.78	366	8.91	-0.13
Auraiya GPS	663	644	155	160	3.66	153	3.69	-0.03
Sub Total (A)	11282	9609	9525	7290	188.29	7846	187.53	0.76
B. NPC								
NAPS	440	305	344	348	7.34	306	7.32	0.02
RAPS- B	440	411	455	458	9.88	412	9.86	0.02
RAPS- C	440	425	475	478	10.12	422	10.20	-0.08
Sub Total (B)	1320	1141	1274	1284	27.35	1139	27.38	-0.04
C. NHPC								
Chamera I HPS	540	540	360	0	1.67	70	1.60	0.07
Chamera II HPS	300	300	199	0	2.04	85	1.88	0.15
Chamera III HPS	231	231	65	0	1.27	53	1.21	0.06
Bairasuil HPS	180	182	60	0	0.71	30	0.78	-0.08
Salal-HPS	690	164	115	150	3.72	155	3.79	-0.07
Tanakpur-HPS	94	56	67	59	1.39	58	1.34	0.05
Uri-HPS	480	121	232	101	3.01	126	2.92	0.09
Uri-II HPS	120	70	103	61	1.76	73	1.69	0.07
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	404	30	4.81	200	4.72	0.09
Sewa-II HPS	120	119	32	0	0.41	17	0.38	0.03
Sub Total (C)	3425	2170	1637	401	20.78	866	20.31	0.48
D. NJPC								
Nathpa Jhakri	1500	1605	1262	248	12.23	510	11.97	0.26
Sub Total (D)	1500	1605	1262	248	12.23	510	11.97	0.26
E. THDC								
Tehri HPS	1000	1060	1036	0	6.45	269	6.30	0.15
Koteshwar HPS	400	92	100	90	2.22	93	2.20	0.02
Sub Total (E)	1400	1152	1136	90	8.67	361	8.50	0.17
F. BBMB								
Bhakra HPS	1497	497	1034	372	12.45	519	11.92	0.53
Dehar HPS	990	208	470	140	5.21	217	4.99	0.22
Pong HPS	396	282	312	192	6.98	291	6.76	0.21
Sub Total (F)	2883	986	1816	704	24.64	1027	23.68	0.96
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	74	26	0.77	32	0.75	0.02
KWHEP HPS(IPP)	1000	0	702	150	6.46	269	6.33	0.13
Malana Stg-II HPS	100	0	50	0	0.35	15	0.37	-0.02
Shree Cement TPS	300	0	266	156	5.82	242	5.48	0.34
Budhil HPS(IPP)	70	0	10	5	0.21	9	0.23	-0.02
Sub Total (G)	1662	0	1102	337	13.60	567	13.16	0.45
H. Total Regional Entities (A-G)	23472	16663	17752	10354	295.56	12315	292.53	3.03

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	600	600	15.68	653
	Guru Nanak Dev TPS(Bhatinda)	440	80	80	1.92	80
	Guru Hargobind Singh TPS(L.mbt)	920	428	349	9.70	404
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	1108	1029	27.31	1138
	Total Hydro	1148	311	427	9.90	412
Total Punjab	3768	1419	1456	37.21	1550	
Haryana	Panipat TPS	1367	512	497	12.49	520
	DCRTPP (Yamuna nagar)	600	277	241	6.22	259
	Faridabad GPS (NTPC)	432	191	185	4.44	185
	RGTPP (khedar) (IPP)	1200	563	419	12.06	502
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	557	557	13.24	552
	Thermal (Total)	4944	2100	1899	48.45	2019
	Total Hydro	62	29	29	0.71	30
	Total Haryana	5006	2129	1928	49.16	2048
	Rajasthan	kota TPS	1240	949	1081	23.48
suratgarh TPS		1500	1105	956	24.62	1026
Chabra TPS		500	450	397	10.28	428
Dholpur GPS		330	105	102	2.53	105
Ramgarh GPS		111	138	132	3.17	132
RAPS A (NPC)		300	179	179	3.92	163
Barsingsar (NLC)		250	112	110	2.62	109
Giral LTPS		250	0	0	0.00	0
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	0	0	0.00	0
Thermal (Total)		6956	3038	2957	70.61	2942
Total Hydro		550	175	71	3.28	137
Wind power		2191	194	640	7.70	321
Biomass		91	35	35	0.83	35
Solar		201	0	0	0.68	28
Renewable/Others (Total)		2483	229	675	9.21	384
Total Rajasthan		9989	3442	3703	83.09	3462
UP		Anpara TPS	1630	1384	1373	32.30
	Obra TPS	1288	346	349	8.50	354
	Paricha TPS	1140	662	738	15.80	658
	Panki TPS	210	72	63	1.70	71
	Harduaganj TPS	665	243	231	4.80	200
	Tanda TPS (NTPC)	440	400	398	9.69	404
	Roza TPS (IPP)	1200	882	1080	24.80	1033
	Anpara-C (IPP)	1200	846	1075	24.74	1031
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	228	363	6.72	280
	Thermal (Total)	8223	5063	5670	129.05	5377
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	103	165	2.98	124
	Cogeneration	981	50	50	1.20	50
	Total UP	10131	5216	5885	133.23	5551
Uttarakhand	Total Hydro	1303	541	371	10.08	420
	Total Uttarakhand	1303	541	371	10.08	420
Delhi	Rajghat TPS	135	55	102	2.03	85
	Delhi Gas Turbine	282	77	80	1.90	79
	Pragati Gas Turbine	330	265	263	6.52	272
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	480	410	9.65	402
	Thermal (Total)	2232	877	855	20.11	838
Total Delhi	2232	877	855	20.11	838	
HP	Baspa HPS (IPP)	330	83	31	2.11	88
	Malana HPS (IPP)	86	91	0	0.44	18
	Other Hydro	589	308	242	6.20	258
	Total HP	1005	482	273	8.75	364
J & K	Baglihar HPS (IPP)	450	246	240	5.81	242
	Other Hydro	323	110	116	2.80	117
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	356	356	8.61	359
Total State Control Area Generation		34390	14462	14827	350.22	14592
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3086	3782	98.62	4109
Total Regional Availability(Gross)		57862	35300	28963	744.40	31017

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6677	1619	73.90	3079
State Control Area Hydro	5368	1997	1692	44.29	1845
Total Regional Hydro	15868	8674	3311	118.19	4924

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	-300	-300	200	500	1.21	4.72	-3.51
Gwalior-Agra (D/C)	736	1210	1330	0	21.16	0.00	21.16
Zerda-Kankroli	-39	-154	46	277	0.00	2.32	-2.32
Zerda-Bhinmal	67	-73	133	150	0.00	0.12	-0.12
Malanpur-Auraiya	-133	-71	0	133	0.00	2.32	-2.32
Badod-Kota/Morak	-87	-115	0	170	0.00	2.52	-2.52
Mundra-Mohindergarh(HVDC)	1500	1200	1503	0	35.00	0.00	35.00
Sub Total WR	1744	1697			57.37	12.00	45.37
Pusauli Bypass	-100	-100	350	100	2.05	0.85	1.20
MZP- GKP (D/C)	476	762	896	0	15.85	0.00	15.85
Patna-Balia(D/C)	440	541	854	0	14.90	0.00	14.90
B'Sharif-Balia (D/C)	232	410	724	0	11.24	0.00	11.24
Pusauli-Balia	-36	67	142	59	1.23	0.00	1.23
Gaya-Fatehpur (765 Kv)	237	329	395	0	6.89	0.00	6.89
Pusauli-Sahupuri	128	109	140	0	2.79	0.00	2.79
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-33	0	37	0.00	0.85	-0.85
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	1342	2085			54.95	1.70	53.25
Total IR Exch	3086	3782			112.32	13.70	98.62

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
31.10	2.26	33.36	8.76	-9.76	4.57	7.75	0.94	-0.94

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
47.64	40.92	88.57	53.25	45.37	98.62	5.61	4.45	10.05

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	0.20	2.80	98.90	9.90	96.30	29.90	0.90

<----- 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)
50.33	13.05	49.42	17.38	49.93	0.18	0.11	50.37	49.80

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	410	04:03	402	08:31	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	418	21:51	398	08:39	0.0	0.0	0.0	0.0
Kanpur	400	418	21:51	400	12:11	0.0	0.0	0.0	0.0
Dadri	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Ballabgarh	400	423	00:00	410	10:07	0.0	0.0	40.6	0.0
Bawana	400	427	03:03	405	18:39	0.0	0.0	27.3	0.0
Bassi	400	427	04:01	393	08:39	0.0	0.0	11.4	0.0
Hissar	400	419	04:03	397	18:22	0.0	0.0	0.0	0.0
Moga	400	423	04:03	400	08:36	0.0	0.0	5.0	0.0
Abdullapur	400	423	03:03	399	18:13	0.0	0.0	16.9	0.0
Nalagarh	400	424	00:01	402	18:14	0.0	0.0	18.3	0.0
Kishenpur	400	430	23:53	396	18:38	0.0	0.0	24.3	0.0
Wagoora	400	428	23:53	378	18:40	0.2	10.3	4.7	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	775	21:52	723	09:13	2.0	22.0	0.0	0.0
Balia	765	761	21:50	725	09:15	0.7	36.8	0.0	0.0
Moga	765	797	04:03	755	08:39	0.0	0.0	0.0	0.0
Agra	765	805	21:56	744	08:39	0.0	0.0	1.1	0.0
Bhiwani	765	808	04:22	768	18:22	0.0	0.0	11.8	0.0
Unnao	765	758	21:50	730	09:13	0.0	36.5	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	510.95	1590.18	504.10	1272.00	255.25	304.83
Pong	426.72	384.05	420.40	902.94	420.01	889.20	74.59	395.81
Tehri	829.79	740.04	NA	NA	818.65	982.26	NA	NA
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	753.60	NA	NA	NA	70.83	76.11
Rihand	268.22	252.98	261.82	407.50	263.56	516.00	NA	196.65
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	518.14	144.00	520.80	144.00	76.88	122.13

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 30.10.2013 :

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 .