

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.10.2013
Date of Reporting : 30.10.2013

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
33993	2275	36268	50.23	27182	750	27932	50.10	719.4	37.46

* 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	28.38	10.16		38.54	54.24	57.49	3.26	96.03	0.00
Haryana	48.57	0.70		49.26	58.51	58.64	0.13	107.90	0.70
Rajasthan	71.69	3.28	16.49	91.46	71.80	64.30	-7.49	155.76	0.00
Delhi	19.75			19.75	46.12	45.59	-0.54	65.34	0.04
UP	128.70	2.66	1.20	132.56	75.53	72.13	-3.40	204.69	35.01
Uttarakhand		9.75		9.75	17.83	19.41	1.58	29.16	0.00
HP		9.11		9.11	11.25	14.66	3.41	23.77	0.00
J & K		8.61	0.00	8.61	22.15	24.73	2.58	33.34	1.70
Chandigarh				0.00	3.56	3.44	-0.12	3.44	0.00
Total	297.09	44.25	17.69	359.03	360.99	360.39	-0.60	719.42	37.46

* 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
Punjab	4405	0	-63	120	3423	0	95	205	2.54
Haryana	5415	0	-123	-114	3868	0	-68	-423	-8.74
Rajasthan	7051	0	-363	1235	5894	0	-185	1409	36.01
Delhi	3310	0	-149	-727	1855	0	-44	-1185	-20.03
UP	9285	2100	-324	-109	9035	750	-239	358	-1.09
Uttarakhand	1429	75	18	335	1007	0	-2	351	7.98
HP	1133	0	103	-363	779	0	122	56	-1.37
J&K	1787	100	70	242	1223	0	100	150	3.73
Chandigarh	180	0	-5	-46	99	0	-5	-18	-0.35
Total	33993	2275	-837	574	27182	750	-226	904	18.67

* 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	2037	44.37	1849	44.47	-0.10
Rihand I STPS	1000	682	1006	662	15.67	653	15.35	0.32
Rihand II STPS	1000	701	1038	622	15.74	656	15.43	0.31
Rihand III STPS	1000	350	504	312	7.79	325	7.59	0.20
Dadri I STPS	840	811	851	627	18.94	789	16.99	1.95
Dadri II STPS	980	980	1016	714	20.32	847	20.44	-0.12
Unchahar I TPS	420	201	193	207	4.21	175	4.24	-0.04
Unchahar II TPS	420	404	430	373	8.11	338	8.05	0.05
Unchahar III TPS	210	201	209	183	3.93	164	3.95	-0.02
ISTPP (Jhajjar)	1500	1418	927	630	17.42	726	18.55	-1.13
Dadri GPS	830	808	586	567	15.52	647	15.71	-0.19
Anta GPS	419	405	388	269	8.66	361	8.85	-0.20
Auraiya GPS	663	645	155	160	3.65	152	3.65	0.00
Sub Total (A)	11282	9546	9386	7363	184.32	7680	183.28	1.05
B. NPC								
NAPS	440	305	346	348	7.40	308	7.32	0.08
RAPS- B	440	412	452	455	9.87	411	9.89	-0.01
RAPS- C	440	425	477	477	10.18	424	10.20	-0.02
Sub Total (B)	1320	1142	1275	1280	27.46	1144	27.41	0.05
C. NHPC								
Chamera I HPS	540	540	360	0	2.81	117	2.75	0.06
Chamera II HPS	300	300	201	0	2.06	86	1.99	0.07
Chamera III HPS	231	231	68	0	1.23	51	1.20	0.03
Bairasuil HPS	180	182	20	0	0.78	33	0.82	-0.04
Salal-HPS	690	188	330	152	4.37	182	4.50	-0.13
Tanakpur-HPS	94	59	70	50	1.37	57	1.43	-0.06
Uri-HPS	480	129	159	103	3.03	126	3.10	-0.07
Uri-II HPS	120	75	78	60	1.66	69	1.78	-0.12
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	390	12	4.72	197	4.62	0.10
Sewa-II HPS	120	119	41	0	0.50	21	0.46	0.04
Sub Total (C)	3425	2211	1717	377	22.52	938	22.65	-0.13
D. NJPC								
Nathpa Jhakri	1500	1605	924	160	12.57	524	12.53	0.04
Sub Total (D)	1500	1605	924	160	12.57	524	12.53	0.04
E. THDC								
Tehri HPS	1000	1060	920	0	6.65	277	6.50	0.15
Koteshwar HPS	400	92	100	90	2.22	93	2.20	0.02
Sub Total (E)	1400	1152	1020	90	8.87	370	8.70	0.17
F. BBMB								
Bhakra HPS	1497	486	1030	372	12.31	513	11.67	0.64
Dehar HPS	990	208	470	140	5.11	213	4.99	0.12
Pong HPS	396	282	312	186	6.94	289	6.76	0.18
Sub Total (F)	2883	976	1812	698	24.36	1015	23.42	0.94
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	74	27	0.77	32	0.75	0.03
KWHEP HPS(IPP)	1000	0	674	150	6.23	260	6.25	-0.02
Malana Stg-II HPS	100	0	50	0	0.35	15	0.33	0.02
Shree Cement TPS	300	0	266	151	5.14	214	5.05	0.09
Budhil HPS(IPP)	70	0	10	5	0.21	9	0.24	-0.03
Sub Total (G)	1662	0	1074	333	12.70	529	12.61	0.09
H. Total Regional Entities (A-G)	23472	16631	17208	10301	292.80	12200	290.59	2.21

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	690	630	16.39	683	
	Guru Nanak Dev TPS(Bhatinda)	440	80	80	2.05	85	
	Guru Hargobind Singh TPS(L.mbt)	920	501	341	9.94	414	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	1271	1051	28.38	1182	
	Total Hydro	1148	301	403	10.16	423	
	Total Punjab	3768	1572	1454	38.54	1606	
Haryana	Panipat TPS	1367	526	496	12.52	522	
	DCRTPP (Yamuna nagar)	600	283	269	6.53	272	
	Faridabad GPS (NTPC)	432	197	152	4.50	187	
	RGTPP (khedar) (IPP)	1200	565	374	11.67	486	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	525	530	13.36	556	
	Thermal (Total)	4944	2096	1821	48.57	2024	
	Total Hydro	62	30	29	0.70	29	
		Total Haryana	5006	2126	1850	49.26	2053
	Rajasthan	kota TPS	1240	1124	1099	26.37	1099
suratgarh TPS		1500	1034	952	23.41	975	
Chabra TPS		500	447	398	9.84	410	
Dholpur GPS		330	103	98	2.55	106	
Ramgarh GPS		111	135	114	2.93	122	
RAPS A (NPC)		300	179	179	4.00	167	
Barsingsar (NLC)		250	111	113	2.60	108	
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	3133	2953	71.69	2987	
Total Hydro		550	175	71	3.28	137	
Wind power		2191	505	628	14.77	615	
Biomass		91	37	34	0.81	34	
Solar		201	0	0	0.91	38	
Renewable/Others (Total)		2483	542	662	16.49	687	
		Total Rajasthan	9989	3850	3686	91.46	3811
UP		Anpara TPS	1630	1389	1381	32.80	1367
	Obra TPS	1288	354	347	8.60	358	
	Paricha TPS	1140	699	725	17.30	721	
	Panki TPS	210	63	72	1.50	63	
	Harduaganj TPS	665	268	463	7.50	313	
	Tanda TPS (NTPC)	440	395	396	9.56	398	
	Roza TPS (IPP)	1200	1053	1080	23.30	971	
	Anpara-C (IPP)	1200	1013	831	21.79	908	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	274	252	6.36	265	
	Thermal (Total)	8223	5508	5547	128.70	5363	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	99	122	2.66	111	
	Cogeneration	981	50	50	1.20	50	
		Total UP	10131	5657	5719	132.56	5523
	Uttarakhand	Total Hydro	1303	507	346	9.75	406
Total Uttarakhand		1303	507	346	9.75	406	
Delhi	Rajghat TPS	135	103	102	2.42	101	
	Delhi Gas Turbine	282	79	83	1.90	79	
	Pragati Gas Turbine	330	261	263	6.40	267	
	Riithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	465	415	9.03	376	
	Thermal (Total)	2232	908	863	19.75	823	
	Total Delhi	2232	908	863	19.75	823	
HP	Baspa HPS (IPP)	330	60	30	2.21	92	
	Malana HPS (IPP)	86	96	0	0.40	16	
	Other Hydro	589	278	249	6.51	271	
		Total HP	1005	434	279	9.11	380
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	15410	14553	359.03	14960	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1967	3395	79.84	3326	
Total Regional Availability(Gross)		57862	34585	28249	731.67	30486	

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6271	1502	75.68	3153
State Control Area Hydro	5368	1902	1606	44.25	1844
Total Regional Hydro	15868	8173	3108	119.93	4997

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	100	300	0.77	4.14	-3.37
Gwalior-Agra (D/C)	516	805	1112	0	16.86	0.00	16.86
Zerda-Kankroli	-98	-257	0	296	0.00	2.26	-2.26
Zerda-Bhinmal	-104	-204	83	438	0.00	3.19	-3.19
Malanpur-Auraiya	-132	-91	0	148	0.00	2.44	-2.44
Badod-Kota/Morak	-151	-193	0	285	0.00	4.15	-4.15
Mundra-Mohindergarh(HVDC)	1200	1500	1504	0	33.36	0.00	33.36
Sub Total WR	931	1260			50.99	16.18	34.82
Pusauli Bypass	-100	-100	0	100	0.00	2.42	-2.42
MZP- GKP (D/C)	347	853	876	0	15.62	0.00	15.62
Patna-Balia(D/C)	299	485	688	0	11.61	0.00	11.61
B'Sharif-Balia (D/C)	257	423	648	0	10.55	0.00	10.55
Pusauli-Balia	14	70	158	0	1.84	0.00	1.84
Gaya-Fatehpur (765 Kv)	143	317	389	0	5.92	0.00	5.92
Pusauli-Sahupuri	111	120	137	0	2.75	0.00	2.75
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	1036	2135			48.29	3.27	45.02
Total IR Exch	1967	3395			99.28	19.45	79.84

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
32.89	2.03	34.92	8.79	-9.58	6.64	2.59	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
51.29	34.49	85.78	45.02	34.82	79.84	-6.27	0.33	-5.95

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	0.80	96.20	2.30	95.40	49.40	3.80

<----- 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				
50.31	19.59	49.59	18.41	50.00	0.12	0.11	50.27	49.94

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	00:00	405	19:05	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Barailly	400	419	04:06	400	09:25	0.0	0.0	0.0	0.0
Kanpur	400	419	04:01	401	08:50	0.0	0.0	0.0	0.0
Dadri	400	424	04:01	403	09:38	0.0	0.0	15.1	0.0
Ballabgarh	400	430	04:25	423	20:29	0.0	0.0	100.0	0.0
Bawana	400	428	03:01	406	18:41	0.0	0.0	35.5	0.0
Bassi	400	429	04:02	397	08:52	0.0	0.0	15.4	0.0
Hissar	400	419	03:01	395	09:13	0.0	0.0	0.0	0.0
Moga	400	423	03:01	399	08:50	0.0	0.0	9.1	0.0
Abdullapur	400	424	03:09	400	18:06	0.0	0.0	4.9	0.0
Nalagarh	400	427	03:01	401	18:06	0.0	0.0	33.5	0.0
Kishenpur	400	428	02:49	397	18:23	0.0	0.0	19.8	0.0
Wagoora	400	423	02:48	377	18:24	0.6	11.4	5.7	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	767	17:29	729	18:43	0.0	4.8	0.0	0.0
Balia	765	755	04:02	728	18:25	0.0	14.1	0.0	0.0
Moga	765	798	03:02	754	09:10	0.0	0.0	0.0	0.0
Agra	765	809	04:02	759	08:37	0.0	0.0	11.2	0.0
Bhiwani	765	801	20:57	767	18:40	0.0	0.0	0.3	0.0
Unnao	765	760	17:30	730	18:40	0.0	11.3	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 29.10.2013 :

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 .