

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.11.2013
Date of Reporting : 30.11.2013

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
34394	2354	36748	50.15	28016	1030	29046	50.13	739.9	59.29

* 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	42.96	9.66		52.63	42.91	45.40	2.49	98.03	0.00
Haryana	69.61	0.60		70.22	31.83	33.11	1.28	103.32	0.18
Rajasthan	96.08	4.16	6.05	106.29	77.16	72.91	-4.25	179.19	0.00
Delhi	19.16			19.16	40.86	39.45	-1.40	58.61	0.00
UP	121.43	3.17	1.20	125.80	79.03	81.26	2.22	207.06	55.40
Uttarakhand		8.96		8.96	19.81	19.99	0.18	28.95	2.11
HP		5.77		5.77	17.00	17.90	0.90	23.67	0.00
J & K		7.45	0.00	7.45	28.82	30.33	1.51	37.78	1.60
Chandigarh				0.00	3.18	3.34	0.16	3.34	0.00
Total	349.25	39.77	7.25	396.26	340.60	343.69	3.09	739.95	59.29

* 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	STOA/PX transaction	
Punjab	4840	0	34	-598	3487	0	122	-558	-7.74	
Haryana	5353	69	266	-959	3644	0	109	-992	-23.65	
Rajasthan	7841	0	-399	1033	6772	0	-316	874	33.69	
Delhi	3114	0	-149	-513	1611	0	154	-1089	-20.18	
UP	8718	2160	-486	244	9138	1030	293	416	-1.99	
Uttarakhand	1530	35	-153	447	1043	0	-30	411	9.30	
HP	1174	0	93	71	714	0	-1	246	4.61	
J&K	1640	90	-152	509	1518	0	160	376	8.50	
Chandigarh	184	0	2	0	89	0	-11	0	0.00	
Total	34394	2354	-943	234	28016	1030	481	-316	2.56	

* 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	1945	2053	2082	47.02	1959	45.95	1.08
	Rihand I STPS	1000	817	977	769	19.42	809	18.99	0.44
	Rihand II STPS	1000	868	1034	717	20.89	871	19.88	1.01
	Rihand III STPS	1000	434	509	455	10.52	438	10.41	0.11
	Dadri I STPS	840	814	662	481	13.04	543	13.20	-0.16
	Dadri II STPS	980	985	985	712	21.14	881	21.30	-0.16
	Unchahar I TPS	420	401	430	394	8.87	370	9.22	-0.35
	Unchahar II TPS	420	376	434	343	8.34	348	8.26	0.08
	Unchahar III TPS	210	201	218	152	4.31	180	4.35	-0.04
	ISTPP (Jhajjar)	1500	1480	830	632	17.16	715	16.27	0.89
	Dadri GPS	830	823	357	352	8.79	366	9.02	-0.23
	Anta GPS	419	414	370	253	6.33	264	6.41	-0.08
	Auraiya GPS	663	657	159	161	3.67	153	3.89	-0.22
	Sub Total (A)	11282	10214	9018	7503	189.51	7896	187.15	2.36
	B. NPC	NAPS	440	317	357	355	7.64	318	7.61
RAPS- B		440	418	464	463	10.05	419	10.03	0.02
RAPS- C		440	430	476	472	10.35	431	10.32	0.03
Sub Total (B)		1320	1165	1297	1290	28.04	1168	27.96	0.08
C. NHPC	Chamera I HPS	540	541	450	0	2.01	84	1.93	0.08
	Chamera II HPS	300	300	0	0	1.13	47	1.26	-0.13
	Chamera III HPS	231	231	0	0	0.73	30	0.75	-0.02
	Bairasuil HPS	180	182	60	0	0.57	24	0.51	0.06
	Salal-HPS	690	116	307	115	3.07	128	2.79	0.28
	Tanakpur-HPS	94	34	47	30	0.84	35	0.81	0.03
	Uri-HPS	480	104	203	45	2.67	111	2.80	-0.13
	Uri-II HPS	120	69	101	36	1.65	69	1.65	-0.01
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	278	0	3.14	131	3.11	0.03
	Sewa-II HPS	120	119	101	0	0.31	13	0.30	0.00
	Sub Total (C)	3425	2083	1623	226	16.11	671	15.91	0.20
	D. NJPC	Nathpa Jhakri	1500	1605	1520	0	9.36	390	9.20
Sub Total (D)		1500	1605	1520	0	9.36	390	9.20	0.16
E. THDC	Tehri HPS	1000	1060	921	0	6.49	270	6.40	0.09
	Koteshwar HPS	400	92	101	91	2.08	87	2.20	-0.12
	Sub Total (E)	1400	1152	1022	91	8.57	357	8.60	-0.03
F. BBMB	Bhakra HPS	1497	632	1044	432	14.81	617	15.17	-0.36
	Dehar HPS	990	146	330	0	3.92	163	3.50	0.42
	Pong HPS	396	246	372	192	6.23	260	5.90	0.33
	Sub Total (F)	2883	1024	1746	624	24.96	1040	24.57	0.39
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	19	0	0.47	19	0.51	-0.04
	KWHEP HPS(IPP)	1000	0	220	0	4.81	200	4.92	-0.11
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	114	79	2.88	120	2.93	-0.04
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	353	79	8.16	340	8.35	-0.20
H. Total Regional Entities (A-G)	23472	17243	16579	9813	284.71	11863	281.74	2.96	

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	815	630	15.30	637	
	Guru Nanak Dev TPS(Bhatinda)	440	344	314	6.86	286	
	Guru Hargobind Singh TPS(L.mbt)	920	956	956	20.80	867	
	Goindwal(GVK)		0	0	0.00	0	
	Thermal (Total)	2620	2115	1900	42.96	1790	
	Total Hydro	1148	415	357	9.66	403	
	Total Punjab	3768	2530	2257	52.63	2193	
Haryana	Panipat TPS	1367	813	782	19.70	821	
	DCRTPP (Yamuna nagar)	600	268	249	6.21	259	
	Faridabad GPS (NTPC)	432	204	205	4.83	201	
	RGTPP (khedar) (IPP)	1200	594	502	12.94	539	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	1114	744	25.94	1081	
	Thermal (Total)	4944	2993	2482	69.61	2901	
	Total Hydro	62	26	25	0.60	25	
		Total Haryana	5006	3019	2507	70.22	2926
	Rajasthan	kota TPS	1240	1146	1129	27.01	1125
suratgarh TPS		1500	868	1040	23.11	963	
Chabra TPS		500	437	399	10.25	427	
Dholpur GPS		330	107	107	2.67	111	
Ramgarh GPS		111	60	61	1.61	67	
RAPS A (NPC)		300	175	175	4.03	168	
Barsingsar (NLC)		250	219	218	5.16	215	
Giral LTPS		250	0	0	0.00	0	
Rajwest LTPS (IPP)		1080	474	327	9.62	401	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	595	431	12.62	526	
Thermal (Total)		6956	4081	3887	96.08	4003	
Total Hydro		550	126	104	4.16	173	
Wind power		2191	127	364	4.63	193	
Biomass		91	26	26	0.63	26	
Solar		201	8	0	0.79	33	
Renewable/Others (Total)		2483	153	390	6.05	252	
		Total Rajasthan	9989	4360	4381	106.29	4429
UP		Anpara TPS	1630	1419	1409	30.20	1258
	Obra TPS	1288	323	336	7.20	300	
	Paricha TPS	1140	836	729	16.90	704	
	Panki TPS	210	80	85	1.70	71	
	Harduaganj TPS	665	486	468	10.30	429	
	Tanda TPS (NTPC)	440	400	399	9.76	407	
	Roza TPS (IPP)	1200	1080	1080	26.25	1094	
	Anpara-C (IPP)	1200	440	446	10.72	447	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	322	393	8.41	350	
	Thermal (Total)	8223	5386	5345	121.43	5060	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	126	128	3.17	132	
	Cogeneration	981	50	50	1.20	50	
		Total UP	10131	5562	5523	125.80	5242
	Uttarakhand	Total Hydro	1303	569	271	8.96	373
Total Uttarakhand		1303	569	271	8.96	373	
Delhi	Raighat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	83	80	1.92	80	
	Pragati Gas Turbine	330	312	266	7.17	299	
	Riithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	510	420	10.07	420	
	Thermal (Total)	2232	905	766	19.16	798	
		Total Delhi	2232	905	766	19.16	798
HP	Baspa HPS (IPP)	330	31	31	1.41	59	
	Malana HPS (IPP)	86	12	0	0.18	8	
	Other Hydro	589	166	116	4.18	174	
		Total HP	1005	209	147	5.77	240
J & K	Baglihar HPS (IPP)	450	296	148	4.89	204	
	Other Hydro	323	91	115	2.56	106	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	387	263	7.45	310
Total State Control Area Generation		34390	17541	16115	396.26	16511	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2444	3458	78.90	3288	
Total Regional Availability(Gross)		57862	36564	29386	759.88	31661	

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6150	941	64.28	2678
State Control Area Hydro	5368	1858	1295	39.77	1657
Total Regional Hydro	15868	8008	2236	104.05	4335

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	-100	-100	50	300	0.04	3.52	-3.48
Gwalior-Agra (D/C)	957	1120	1394	0	21.52	0.00	21.52
Zerda-Kankroli	-41	-113	0	175	0.00	2.09	-2.09
Zerda-Bhinmal	36	15	126	116	0.60	0.00	0.60
Malanpur-Auraiya	-117	-75	0	137	0.00	2.47	-2.47
Badod-Kota/Morak	-76	-122	0	180	0.00	2.59	-2.59
Mundra-Mohindergarh(HVDC)	898	1199	1203	0	25.09	0.00	25.09
Sub Total WR	1557	1924			47.25	10.67	36.58
Pusauli Bypass	-200	-200	0	200	0.00	4.81	-4.81
MZP- GKP (D/C)	278	500	703	0	12.63	0.00	12.63
Patna-Balia(D/C)	389	539	797	0	14.52	0.00	14.52
B'Sharif-Balia (D/C)	178	323	597	0	9.34	0.00	9.34
Pusauli-Balia	20	77	192	0	2.32	0.00	2.32
Gaya-Fatehpur (765 Kv)	129	206	382	0	6.39	0.00	6.39
Pusauli-Sahupuri	125	119	155	0	2.80	0.00	2.80
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	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	887	1534			47.99	5.66	42.32
Total IR Exch	2444	3458			95.23	16.33	78.90

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
37.67	0.91	38.58	5.57	-29.41	16.89	4.13	2.95	-2.95

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
63.98	11.26	75.24	42.32	36.58	78.90	-21.66	25.32	3.66

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	0.60	96.00	4.50	95.40	40.90	4.00

<----- 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				
50.33	21.55	49.65	5.48	49.98	0.14	0.12	50.34	49.86

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	02:07	406	08:19	0.0	0.0	0.0	0.0
Gorakhpur	400	429	23:03	416	08:55	0.0	0.0	58.1	0.0
Barailly	400	423	20:44	135	10:35	19.9	19.9	1.9	0.0
Kanpur	400	426	04:05	405	07:32	0.0	0.0	18.7	0.0
Dadri	400	424	04:02	403	11:38	0.0	0.0	10.6	0.0
Ballabgarh	400	434	04:02	409	11:12	0.0	0.0	44.0	5.0
Bawana	400	428	04:04	405	11:19	0.0	0.0	25.7	0.0
Bassi	400	427	04:04	392	08:35	0.0	0.0	7.5	0.0
Hissar	400	418	04:04	392	11:38	0.0	0.0	0.0	0.0
Moga	400	424	04:03	398	11:12	0.0	0.0	3.4	0.0
Abdullapur	400	424	04:02	403	11:18	0.0	0.0	7.0	0.0
Nalagarh	400	429	04:03	402	08:34	34.1	34.1	27.7	0.0
Kishenpur	400	421	04:01	396	15:00	0.0	0.0	0.3	0.0
Wagoora	400	407	09:41	376	18:20	6.9	46.9	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	786	03:00	758	10:00	0.0	0.0	0.0	0.0
Balia	765	764	21:49	740	07:32	0.0	0.9	0.0	0.0
Moga	765	795	04:05	746	11:38	0.0	0.0	0.0	0.0
Agra	765	816	04:04	765	10:50	0.0	0.0	27.2	0.0
Bhiwani	765	803	04:05	756	11:40	0.0	0.0	1.1	0.0
Unnao	765	764	22:05	743	12:19	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	508.34	1470.42	500.82	1127.29	204.90	386.78
Pong	426.72	384.05	417.36	768.49	415.97	718.14	59.49	371.97
Tehri	829.79	740.04	820.65	1012.00	818.65	982.26	71.55	145.00
Koteswar	612.50	598.50	609.00	4.50	NA	NA	145.00	152.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	54.60	61.64
Rihand	268.22	252.98	261.64	397.40	262.80	466.80	NA	NA
RPS	352.80	343.81	350.29	NA	NA	NA	253.12	NA
Jawahar Sagar	298.70	295.78	297.79	NA	NA	NA	241.12	NA
RSD	527.91	487.91	515.12	144.00	520.54	144.00	61.28	165.31

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 29.11.2013 :

1. Normal weather in Northern Region.

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 .