

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.12.2013
Date of Reporting : 12.12.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 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
35731	2050	37781	50.12	28316	0	28316	50.16	762.6	49.01

* 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	44.07	11.04		55.11	43.81	46.94	3.13	102.05	0.00
Haryana	60.50	0.45		60.95	43.89	44.17	0.28	105.12	0.00
Rajasthan	100.87	5.36	2.22	108.45	77.87	75.76	-2.11	184.21	0.00
Delhi	17.79			17.79	40.83	40.82	-0.01	58.61	0.00
UP	125.13	3.47	4.80	133.40	82.51	83.30	0.79	216.71	44.81
Uttarakhand		11.02		11.02	19.15	19.01	-0.14	30.03	2.50
HP		5.58		5.58	17.70	19.31	1.62	24.89	0.00
J & K		5.89	0.00	5.89	29.09	31.76	2.67	37.64	1.70
Chandigarh				0.00	3.14	3.35	0.21	3.35	0.00
Total	348.37	42.80	7.02	398.18	357.99	364.43	6.43	762.61	49.01

* 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	4822	0	60	-250	3306	0	244	-399	-4.37
Haryana	5471	0	-129	-723	3624	0	191	-759	-20.36
Rajasthan	8179	0	-201	680	6766	0	17	501	29.74
Delhi	3116	0	78	-647	1381	0	-8	-1328	-23.63
UP	9731	1875	148	-160	9751	0	29	786	3.70
Uttarakhand	1556	75	-38	421	1080	0	-5	367	8.83
HP	1182	0	55	173	754	0	10	320	6.02
J&K	1497	100	-167	555	1566	0	74	463	9.36
Chandigarh	178	0	-9	0	88	0	8	-25	-0.19
Total	35731	2050	-203	50	28316	0	559	-73	9.09

* 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	1945	2086	2091	46.97	1957	46.68	0.29
Rihand I STPS	1000	817	991	825	19.53	814	19.46	0.07
Rihand II STPS	1000	925	1025	815	22.06	919	21.74	0.32
Rihand III STPS	1000	447	514	443	10.67	444	10.62	0.05
Dadri I STPS	840	815	650	493	13.25	552	13.44	-0.20
Dadri II STPS	980	985	1024	727	21.51	896	21.74	-0.23
Unchahar I TPS	420	381	346	342	8.44	352	8.68	-0.24
Unchahar II TPS	420	396	402	314	8.82	367	8.87	-0.06
Unchahar III TPS	210	201	213	153	4.51	188	4.51	-0.01
ISTPP (Jhajjar)	1500	1480	1017	624	15.02	626	15.01	0.01
Dadri GPS	830	835	391	344	8.69	362	8.76	-0.07
Anta GPS	419	424	268	240	6.29	262	6.36	-0.07
Auraiya GPS	663	664	160	164	3.76	157	3.84	-0.07
Sub Total (A)	11282	10314	9087	7575	189.50	7896	189.72	-0.22
B. NPC								
NAPS	440	319	356	363	7.69	320	7.66	0.03
RAPS- B	440	420	464	464	10.08	420	10.08	0.00
RAPS- C	440	430	477	477	10.29	429	10.32	-0.03
Sub Total (B)	1320	1169	1297	1304	28.05	1169	28.06	-0.01
C. NHPC								
Chamera I HPS	540	407	360	0	1.76	73	1.70	0.06
Chamera II HPS	300	300	292	0	1.31	55	1.24	0.07
Chamera III HPS	231	231	68	0	0.70	29	0.67	0.03
Bairasuil HPS	180	182	10	0	0.44	18	0.45	-0.01
Salal-HPS	690	99	220	148	2.40	100	2.37	0.03
Tanakpur-HPS	94	32	32	32	0.75	31	0.76	-0.01
Uri-HPS	480	97	213	30	2.36	99	2.40	-0.03
Uri-II HPS	120	59	120	42	1.37	57	1.42	-0.05
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	258	171	0	3.02	126	2.99	0.03
Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	3425	1665	1486	252	14.12	588	14.00	0.12
D. NJPC								
Nathpa Jhakri	1500	1080	1089	0	8.54	356	8.21	0.33
Sub Total (D)	1500	1080	1089	0	8.54	356	8.21	0.33
E. THDC								
Tehri HPS	1000	1060	1001	0	6.44	268	6.40	0.04
Koteshwar HPS	400	92	90	90	2.23	93	2.20	0.03
Sub Total (E)	1400	1152	1091	90	8.67	361	8.60	0.07
F. BBMB								
Bhakra HPS	1497	785	989	482	18.80	783	18.83	-0.03
Dehar HPS	990	124	330	0	3.25	135	2.98	0.28
Pong HPS	396	319	372	186	7.88	328	7.66	0.22
Sub Total (F)	2883	1228	1691	668	29.93	1247	29.46	0.47
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	0	0	0.51	21	0.49	0.02
KWHEP HPS(IPP)	1000	0	360	0	4.67	195	4.67	0.00
Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS	300	0	275	153	5.51	229	5.56	-0.06
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	635	153	10.69	445	10.72	-0.04
H. Total Regional Entities (A-G)	23472	16606	16376	10042	289.49	12062	288.76	0.73

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	1005	780	20.24	843
	Guru Nanak Dev TPS(Bhatinda)	440	220	160	4.12	172
	Guru Hargobind Singh TPS(L.mbt)	920	958	768	19.71	821
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2183	1708	44.07	1836
	Total Hydro	1148	492	438	11.04	460
Total Punjab		3768	2675	2146	55.11	2296
Haryana	Panipat TPS	1367	794	792	18.92	788
	DCRTPP (Yamuna nagar)	600	281	255	6.19	258
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP)	1200	588	504	12.53	522
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1226	744	22.86	952
	Thermal (Total)	4944	2889	2295	60.50	2521
	Total Hydro	62	21	20	0.45	19
	Total Haryana	5006	2910	2315	60.95	2539
	Rajasthan	kota TPS	1240	1131	1102	27.29
suratgarh TPS		1500	1121	1020	26.06	1086
Chabra TPS		500	462	488	11.40	475
Dholpur GPS		330	105	105	1.89	79
Ramgarh GPS		111	148	141	3.08	128
RAPS A (NPC)		300	175	175	4.04	168
Barsingsar (NLC)		250	213	219	5.17	215
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	381	314	8.78	366
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	597	461	13.16	548
Thermal (Total)		6956	4333	4025	100.87	4203
Total Hydro		550	208	120	5.36	223
Wind power		2191	18	28	1.37	57
Biomass		91	21	21	0.50	21
Solar		201	5	0	0.35	15
Renewable/Others (Total)		2483	39	49	2.22	92
Total Rajasthan		9989	4580	4194	108.45	4519
UP		Anpara TPS	1630	1259	1268	29.50
	Obra TPS	1288	301	308	7.50	313
	Paricha TPS	1140	657	779	18.80	783
	Panki TPS	210	72	77	1.70	71
	Harduaganj TPS	665	445	454	10.40	433
	Tanda TPS (NTPC)	440	403	387	9.61	401
	Roza TPS (IPP)	1200	844	811	18.97	790
	Anpara-C (IPP)	1200	1082	855	19.92	830
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	405	243	8.73	364
	Thermal (Total)	8223	5468	5182	125.13	5214
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	147	149	3.47	145
	Cogeneration	981	200	200	4.80	200
	Total UP	10131	5815	5531	133.40	5559
	Uttarakhand	Total Hydro	1303	623	342	11.02
Total Uttarakhand		1303	623	342	11.02	459
Delhi	Raighat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	83	81	1.92	80
	Pragati Gas Turbine	330	315	267	7.32	305
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	405	360	8.55	356
	Thermal (Total)	2232	803	708	17.79	741
	Total Delhi	2232	803	708	17.79	741
HP	Baspa HPS (IPP)	330	31	0	1.56	65
	Malana HPS (IPP)	86	0	0	0.24	10
	Other Hydro	589	182	115	3.78	158
	Total HP	1005	213	115	5.58	232
J & K	Baglihar HPS (IPP)	450	246	116	3.45	144
	Other Hydro	323	90	116	2.44	102
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	336	232	5.89	245
Total State Control Area Generation		34390	17955	15583	398.18	16591
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3243	3349	86.54	3606
Total Regional Availability(Gross)		57862	37574	28974	774.21	32259

IV. Total Hydro Generation:

Regional Entities Hydro	10500	5717	1010	66.44	2768
State Control Area Hydro	5368	2040	1416	42.80	1783
Total Regional Hydro	15868	7757	2426	109.23	4551

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	0	300	0.00	3.76	-3.76
Gwalior-Agra (D/C)	886	1088	1747	0	27.45	0.00	27.45
Zerda-Kankroli	-56	-141	50	222	0.00	0.94	-0.94
Zerda-Bhinmal	57	-23	246	154	1.81	0.00	1.81
Malanpur-Auraiya	-124	-75	0	131	0.00	2.48	-2.48
Badod-Kota/Morak	-100	-129	0	179	0.00	2.90	-2.90
Mundra-Mohinderghar(HVDC)	1699	1602	1704	0	39.40	0.00	39.40
Sub Total WR	2262	2222			68.66	10.07	58.59
Pusauli Bypass	76	200	200	356	1.74	1.78	-0.04
MZP- GKP (D/C)	158	196	537	0	6.39	0.00	6.39
Patna-Balia(D/C)	390	485	639	0	11.58	0.00	11.58
B'Sharif-Balia (D/C)	157	157	419	0	4.91	0.00	4.91
Pusauli-Balia	-16	-55	52	84	0.00	0.27	-0.27
Gaya-Fatehpur (765 Kv)	125	68	268	0	3.60	0.00	3.60
Pusauli-Sahupuri	123	106	124	0	2.62	0.00	2.62
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	0	37	0.00	0.84	-0.84
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	981	1127			30.83	2.89	27.95
Total IR Exch	3243	3349			99.50	12.96	86.54

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
29.05	0.61	29.65	16.68	-14.52	3.63	-3.39	3.97	-3.97

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
53.93	33.57	87.50	27.95	58.59	86.54	-25.98	25.02	-0.96

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	1.50	93.30	7.50	91.80	45.80	6.70

<----- 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				
50.34	20.58	49.50	7.22	49.99	0.18	0.13	50.33	49.77

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	415	03:03	404	18:07	0.0	0.0	0.0	0.0
Gorakhpur	400	430	20:59	407	12:14	0.0	0.0	45.2	0.0
Barailly	400	424	04:04	401	18:09	0.0	0.0	15.9	0.0
Kanpur	400	425	03:03	403	10:10	0.0	0.0	15.2	0.0
Dadri	400	427	04:01	402	10:24	0.0	0.0	20.4	0.0
Ballabgarh	400	435	04:03	406	10:24	0.0	0.0	41.7	6.9
Bawana	400	430	04:02	405	10:19	0.0	0.0	31.4	0.0
Bassi	400	423	04:03	390	10:38	0.0	0.0	1.0	0.0
Hissar	400	418	04:03	391	10:38	0.0	0.0	0.0	0.0
Moga	400	425	03:04	396	10:21	0.0	0.0	12.5	0.0
Abdullapur	400	426	20:55	402	11:18	0.0	0.0	10.6	0.0
Nalagarh	400	427	20:34	393	12:32	0.0	0.0	10.7	0.0
Kishenpur	400	421	01:57	397	07:19	0.0	0.0	0.8	0.0
Wagoora	400	407	01:57	374	18:52	6.3	31.7	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	765	05:02	723	12:14	3.3	31.7	0.0	0.0
Moga	765	795	03:04	744	10:10	0.0	0.0	0.0	0.0
Agra	765	816	04:03	770	08:48	0.0	0.0	29.8	0.0
Bhiwani	765	804	04:03	756	10:19	0.0	0.0	1.4	0.0
Unnao	765	766	04:04	736	17:53	0.0	18.2	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	505.96	1352.81	498.14	1018.16	174.18	579.68
Pong	426.72	384.05	415.21	680.86	413.67	622.00	68.19	477.36
Tehri	829.79	740.04	818.20	962.25	818.65	982.26	46.44	143.00
Koteshwar	612.50	598.50	610.05	4.55	NA	NA	143.00	148.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	43.84	47.36
Rihand	268.22	252.98	261.52	390.50	262.65	457.50	NA	NA
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	514.28	144.00	520.13	144.00	63.74	122.36

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 11.12.2013 :

1. Mild Fog reported in some part of punjab near Patiala , Malerkotla , Amritshar, Kishenpur, Rest is Normal.

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 .