

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.12.2013
Date of Reporting : 16.12.2013

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
34705	2080	36785	50.20	28080	1185	29265	50.14	746.6	42.98

* 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	35.65	10.39		46.04	46.49	48.40	1.91	94.44	0.00
Haryana	64.63	0.41		65.04	35.69	37.42	1.73	102.46	0.05
Rajasthan	95.61	4.69	8.88	109.18	79.65	74.28	-5.37	183.46	0.00
Delhi	14.97			14.97	40.83	40.30	-0.54	55.26	0.02
UP	124.37	3.49	11.30	139.16	80.76	77.65	-3.12	216.81	39.91
Uttarakhand		10.07		10.07	19.07	18.82	-0.25	28.89	1.22
HP		5.05		5.05	17.53	18.20	0.67	23.25	0.07
J & K		5.21	0.00	5.21	30.48	33.79	3.31	39.00	1.70
Chandigarh				0.00	2.99	3.08	0.09	3.08	0.00
Total	335.24	39.30	20.18	394.72	353.50	351.93	-1.57	746.65	42.98

* 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	4349	0	-5	-198	3150	0	65	-283	-1.05	
Haryana	5145	0	-56	-787	3869	0	244	-1400	-24.86	
Rajasthan	7962	0	-288	-1743	6716	0	-335	1681	38.54	
Delhi	2873	0	-72	-741	1347	0	-14	-1358	-23.91	
UP	9802	1905	-359	-37	9443	1185	194	428	1.77	
Uttarakhand	1465	75	-77	412	1102	0	28	368	8.71	
HP	1098	0	27	139	795	0	36	320	5.83	
J&K	1851	100	156	648	1568	0	80	526	10.24	
Chandigarh	161	0	2	-8	90	0	1	-15	-0.26	
Total	34705	2080	-672	1171	28080	1185	298	266	15.02	

* 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)	UI (OG:(+ve), UG: (-ve))		
								Schedule Net MU	UI Net MU	
A. NTPC	Singrauli STPS	2000	1945	2090	1775	45.49	1895	45.25	0.24	
	Rihand I STPS	1000	847	988	780	19.02	793	19.09	-0.07	
	Rihand II STPS	1000	930	1023	836	20.82	868	20.89	-0.07	
	Rihand III STPS	1000	460	512	404	10.53	439	10.53	0.00	
	Dadri I STPS	840	815	640	487	11.95	498	13.19	-1.24	
	Dadri II STPS	980	985	960	711	20.81	867	21.10	-0.29	
	Unchahar I TPS	420	198	208	174	4.32	180	4.35	-0.03	
	Unchahar II TPS	420	404	285	312	8.23	343	8.43	-0.20	
	Unchahar III TPS	210	201	178	154	4.13	172	4.16	-0.03	
	ISTPP (Jhajjar)	1500	1480	654	650	15.38	641	15.57	-0.19	
	Dadri GPS	830	834	407	334	8.91	371	9.25	-0.34	
	Anta GPS	419	426	239	245	6.17	257	6.35	-0.18	
	Auraiya GPS	663	665	161	162	3.70	154	3.81	-0.11	
	Sub Total (A)	11282	10190	8345	7024	179.46	7477	181.96	-2.50	
	B. NPC	NAPS	440	323	355	363	7.76	324	7.75	0.01
		RAPS- B	440	419	462	462	10.10	421	10.06	0.04
RAPS- C		440	430	475	474	10.23	426	10.32	-0.09	
Sub Total (B)		1320	1172	1292	1299	28.10	1171	28.13	-0.03	
C. NHPC	Chamera I HPS	540	360	360	0	1.59	66	1.60	-0.01	
	Chamera II HPS	300	300	200	0	1.22	51	1.33	-0.11	
	Chamera III HPS	231	231	66	0	0.66	27	0.68	-0.02	
	Bairasuil HPS	180	182	10	0	0.45	19	0.49	-0.04	
	Salal-HPS	690	125	150	93	2.61	109	3.00	-0.39	
	Tanakpur-HPS	94	32	27	30	0.72	30	0.75	-0.03	
	Uri-HPS	480	93	307	45	2.32	97	2.30	0.02	
	Uri-II HPS	120	62	79	41	1.40	58	1.49	-0.09	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	387	402	0	2.77	115	2.80	-0.03	
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00	
	Sub Total (C)	3425	1772	1601	209	13.72	572	14.43	-0.70	
	D. NJPC	Nathpa Jhakri	1500	1148	1086	0	7.04	293	7.02	0.02
Sub Total (D)		1500	1148	1086	0	7.04	293	7.02	0.02	
E. THDC	Tehri HPS	1000	1060	1000	0	6.46	269	6.40	0.06	
	Koteshwar HPS	400	92	101	91	2.22	93	2.20	0.02	
	Sub Total (E)	1400	1152	1101	91	8.68	362	8.60	0.08	
F. BBMB	Bhakra HPS	1497	799	1009	666	19.15	798	19.17	-0.02	
	Dehar HPS	990	124	330	0	3.04	127	2.98	0.06	
	Pong HPS	396	317	372	186	7.77	324	7.62	0.15	
	Sub Total (F)	2883	1240	1711	852	29.96	1248	29.76	0.20	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.48	20	0.46	0.02	
	KWHEP HPS(IPP)	1000	0	349	0	3.60	150	3.60	0.00	
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00	
	Shree Cement TPS	300	0	266	146	5.45	227	5.43	0.02	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	615	146	9.53	397	9.49	0.04	
H. Total Regional Entities (A-G)	23472	16674	15751	9621	276.49	11520	279.38	-2.90		

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	13.98	583
	Guru Nanak Dev TPS(Bhatinda)	440	250	160	4.64	193
	Guru Hargobind Singh TPS(L.mbt)	920	643	655	17.04	710
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	1493	1415	35.65	1486
	Total Hydro	1148	333	454	10.39	433
Total Punjab	3768	1826	1869	46.04	1918	
Haryana	Panipat TPS	1367	636	774	15.29	637
	DCRTPP (Yamuna nagar)	600	570	521	12.53	522
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP)	1200	592	486	12.52	522
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1120	744	24.29	1012
	Thermal (Total)	4944	2918	2525	64.63	2693
	Total Hydro	62	15	21	0.41	17
	Total Haryana	5006	2933	2546	65.04	2710
	Rajasthan	kota TPS	1240	1090	1073	26.51
suratgarh TPS		1500	822	792	20.21	842
Chabra TPS		500	463	475	12.07	503
Dholpur GPS		330	104	104	2.59	108
Ramgarh GPS		111	128	121	3.24	135
RAPS A (NPC)		300	175	175	4.02	168
Barsingsar (NLC)		250	219	219	5.16	215
Giral LTPS		250	55	55	1.25	52
Rajwest LTPS (IPP)		1080	382	283	8.49	354
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	463	469	12.07	503
Thermal (Total)		6956	3901	3766	95.61	3984
Total Hydro		550	252	74	4.69	195
Wind power		2191	152	418	7.54	314
Biomass		91	21	21	0.50	21
Solar		201	8	0	0.84	35
Renewable/Others (Total)		2483	173	439	8.88	370
Total Rajasthan		9989	4326	4279	109.18	4549
UP		Anpara TPS	1630	1406	1357	28.90
	Obra TPS	1288	342	340	7.40	308
	Paricha TPS	1140	858	579	15.60	650
	Panki TPS	210	75	65	1.50	63
	Harduaganj TPS	665	501	466	10.60	442
	Tanda TPS (NTPC)	440	296	401	8.34	347
	Roza TPS (IPP)	1200	810	810	18.94	789
	Anpara-C (IPP)	1200	1053	972	24.70	1029
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	404	406	8.40	350
	Thermal (Total)	8223	5745	5396	124.37	5182
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	105	144	3.49	145
	Cogeneration	981	470	470	11.30	471
	Total UP	10131	6320	6010	139.16	5798
	Uttarakhand	Total Hydro	1303	560	325	10.07
Total Uttarakhand		1303	560	325	10.07	419
Delhi	Raighat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	82	80	1.95	81
	Pragati Gas Turbine	330	318	268	7.00	292
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	290	255	6.02	251
	Thermal (Total)	2232	690	603	14.97	624
	Total Delhi	2232	690	603	14.97	624
HP	Baspa HPS (IPP)	330	29	0	1.20	50
	Malana HPS (IPP)	86	0	0	0.22	9
	Other Hydro	589	176	115	3.63	151
	Total HP	1005	205	115	5.05	210
J & K	Baglihar HPS (IPP)	450	94	118	2.67	111
	Other Hydro	323	102	120	2.54	106
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	196	238	5.21	217
Total State Control Area Generation		34390	17056	15985	394.72	16446
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3155	3559	79.78	3324
Total Regional Availability(Gross)		57862	35962	29165	750.98	31291

IV. Total Hydro Generation:

Regional Entities Hydro	10500	5848	1152	63.48	2645
State Control Area Hydro	5368	1666	1371	39.30	1637
Total Regional Hydro	15868	7514	2523	102.78	4283

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	-50	-250	150	250	0.27	3.67	-3.40
Gwalior-Agra (D/C)	1252	1372	1658	0	30.41	0.00	30.41
Zerda-Kankroli	-31	-183	84	232	0.00	1.55	-1.55
Zerda-Bhinmal	72	-101	206	198	0.63	0.00	0.63
Malanpur-Auraiya	-123	-73	0	136	0.00	2.35	-2.35
Badod-Kota/Morak	-93	-144	0	218	0.00	3.13	-3.13
Mundra-Mohindergarh(HVDC)	1249	1698	1703	0	26.05	0.00	26.05
Sub Total WR	2276	2319			57.36	10.69	46.67
Pusauli Bypass	-210	-161	0	262	0.00	3.53	-3.53
MZP- GKP (D/C)	263	369	565	0	9.04	0.00	9.04
Patna-Balia(D/C)	437	543	811	0	14.28	0.00	14.28
B'Sharif-Balia (D/C)	143	226	425	0	6.23	0.00	6.23
Pusauli-Balia	-4	23	64	4	0.60	0.76	-0.16
Gaya-Fatehpur (765 Kv)	147	149	390	0	5.03	0.00	5.03
Pusauli-Sahupuri	135	121	165	0	3.07	0.00	3.07
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	879	1240			38.24	5.13	33.11
Total IR Exch	3155	3559			95.60	15.82	79.78

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
32.48	0.57	33.05	15.84	-15.53	6.01	3.14	4.11	-4.11

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
59.01	32.87	91.88	33.11	46.67	79.78	-25.90	13.80	-12.10

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	0.28	87.26	0.52	86.98	85.69	12.74

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.51	23.59	49.75	15.48	50.14	0.36	0.11	50.41	49.92

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	23:53	404	11:12	0.0	0.0	0.0	0.0
Gorakhpur	400	429	21:19	411	11:51	0.0	0.0	67.4	0.0
Barilly	400	430	23:59	407	12:23	0.0	0.0	21.8	0.0
Kanpur	400	424	03:03	405	12:16	0.0	0.0	13.0	0.0
Dadri	400	427	04:02	407	12:15	0.0	0.0	32.4	0.0
Ballabgarh	400	435	04:02	409	12:21	0.0	0.0	59.4	8.1
Bawana	400	430	04:04	407	12:22	0.0	0.0	40.1	0.0
Bassi	400	421	04:02	392	10:23	0.0	0.0	0.9	0.0
Hissar	400	418	04:04	393	12:14	0.0	0.0	0.0	0.0
Moga	400	424	04:04	398	12:15	0.0	0.0	3.3	0.0
Abdullapur	400	426	20:51	405	12:16	0.0	0.0	15.2	0.0
Nalagarh	400	431	04:04	400	12:22	0.0	0.0	36.9	0.2
Kishenpur	400	416	02:58	393	08:28	0.0	0.0	0.0	0.0
Wagoora	400	405	16:15	361	18:13	37.1	66.9	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	776	04:00	749	09:00	0.0	0.0	0.0	0.0
Balia	765	766	20:47	727	12:21	0.2	12.4	0.0	0.0
Moga	765	793	04:04	746	12:21	0.0	0.0	0.0	0.0
Agra	765	816	04:03	769	12:22	0.0	0.0	18.9	0.0
Bhiwani	765	795	23:59	780	22:10	0.0	0.0	0.0	0.0
Unnao	765	766	20:47	738	12:17	0.0	2.5	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	505.29	1325.82	497.66	1006.54	189.33	558.78
Pong	426.72	384.05	414.72	668.52	413.14	600.05	69.18	470.94
Tehri	829.79	740.04	817.60	955.00	818.65	982.26	43.99	144.00
Koteshwar	612.50	598.50	610.10	4.60	NA	NA	145.00	148.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	44.01	44.01
Rihand	268.22	252.98	261.31	378.10	262.34	439.10	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	513.26	144.00	518.91	144.00	46.50	123.04

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 15.12.2013 :

1. As reported , Fog persist in some part of 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 .

Report for : 15.12.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER