

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 30.12.2013
Date of Reporting : 31.12.2013

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
36004	1580	37584	50.24	27421	0	27421	50.43	766.6	37.51

* 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	40.95	9.75		50.70	37.16	40.84	3.68	91.54	0.00
Haryana	66.23	0.43		66.65	40.71	41.67	0.96	108.32	0.00
Rajasthan	106.28	4.00	7.47	117.76	73.89	67.91	-5.98	185.66	0.00
Delhi	19.84			19.84	43.21	43.27	0.07	63.11	0.12
UP	125.85	3.66	14.40	143.91	73.64	72.92	-0.72	216.83	33.87
Uttarakhand		10.19		10.19	20.13	21.18	1.05	31.37	1.83
HP		4.59		4.59	18.96	20.55	1.59	25.13	0.00
J & K		6.55	0.00	6.55	31.33	34.54	3.21	41.09	1.70
Chandigarh				0.00	3.23	3.60	0.37	3.60	0.00
Total	359.15	39.15	21.87	420.17	342.25	346.47	4.22	766.64	37.51

* 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	4877	0	86	-491	2730	0	261	-234	-6.60
Haryana	5361	0	-144	-732	3861	0	-232	-824	-23.55
Rajasthan	7941	0	-594	1073	6771	0	230	613	33.10
Delhi	3312	0	31	-490	1390	0	-82	-1447	-19.79
UP	9611	1405	-183	161	9106	0	521	-169	-4.76
Uttarakhand	1610	75	38	488	1094	0	-19	382	9.31
HP	1251	0	-88	288	756	0	65	354	8.53
J&K	1841	100	24	615	1629	0	111	534	11.39
Chandigarh	200	0	4	0	85	0	-5	-10	-0.06
Total	36004	1580	-826	912	27421	0	850	-801	7.58

* 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	
										UI (OG:(+ve), UG: (-ve))
A. NTPC	Singrauli STPS	2000	1945	2037	1674	43.94	1831	43.79	0.15	
	Rihand I STPS	1000	876	1012	669	19.06	794	19.31	-0.25	
	Rihand II STPS	1000	930	1013	702	19.89	829	20.37	-0.48	
	Rihand III STPS	1000	460	519	461	10.49	437	10.74	-0.25	
	Dadri I STPS	840	815	600	451	12.40	517	12.83	-0.43	
	Dadri II STPS	980	985	900	730	20.74	864	21.39	-0.66	
	Unchahar I TPS	420	407	407	309	8.66	361	8.78	-0.12	
	Unchahar II TPS	420	404	361	309	8.28	345	8.44	-0.16	
	Unchahar III TPS	210	201	179	155	4.12	172	4.17	-0.05	
	ISTPP (Jhajjar)	1500	1480	801	625	14.86	619	15.17	-0.31	
	Dadri GPS	830	841	424	437	9.71	405	8.48	1.23	
	Anta GPS	419	427	235	247	5.85	244	6.01	-0.17	
	Auraiya GPS	663	672	155	166	3.75	156	3.77	-0.02	
	Sub Total (A)	11282	10443	8643	6935	181.74	7572	183.26	-1.53	
	B. NPC	NAPS	440	323	362	368	7.79	325	7.75	0.04
		RAPS- B	440	423	230	468	8.33	347	10.15	-1.83
RAPS- C		440	430	477	476	10.24	427	10.32	-0.08	
Sub Total (B)		1320	1176	1069	1312	26.36	1098	28.22	-1.87	
C. NHPC	Chamera I HPS	540	360	360	0	1.58	66	1.60	-0.03	
	Chamera II HPS	300	300	131	0	0.95	40	1.04	-0.09	
	Chamera III HPS	231	231	165	0	0.55	23	0.60	-0.05	
	Bairasuil HPS	180	182	120	0	0.43	18	0.46	-0.03	
	Salal-HPS	690	126	205	145	2.84	118	3.03	-0.19	
	Tanakpur-HPS	94	25	32	24	0.58	24	0.60	-0.01	
	Uri-HPS	480	91	149	12	2.16	90	2.32	-0.16	
	Uri-II HPS	120	59	73	33	1.38	58	1.43	-0.04	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	387	365	0	2.23	93	2.40	-0.17	
	Sewa-II HPS	120	119	116	0	0.31	13	0.35	-0.04	
	Sub Total (C)	3425	1880	1716	214	13.01	542	13.83	-0.82	
D. NJPC	Nathpa Jhakri	1500	1478	791	0	6.67	278	6.63	0.04	
	Sub Total (D)	1500	1478	791	0	6.67	278	6.63	0.04	
E. THDC	Tehri HPS	1000	1040	1043	0	8.74	364	8.70	0.04	
	Koteshwar HPS	400	125	199	90	3.01	125	3.00	0.01	
	Sub Total (E)	1400	1165	1242	90	11.75	489	11.70	0.05	
F. BBMB	Bhakra HPS	1497	703	1022	504	16.88	703	16.87	0.01	
	Dehar HPS	990	111	330	0	2.78	116	2.66	0.12	
	Pong HPS	396	282	372	120	6.65	277	6.77	-0.12	
	Sub Total (F)	2883	1096	1724	624	26.31	1096	26.30	0.01	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.46	19	0.44	0.02	
	KWHEP HPS(IPP)	1000	0	0	0	3.49	146	3.61	-0.11	
	Malana Stg-II HPS	100	0	0	0	0.17	7	0.15	0.01	
	Shree Cement TPS	300	0	270	132	5.21	217	5.30	-0.10	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	270	132	9.33	389	9.51	-0.18	
H. Total Regional Entities (A-G)	23472	17238	15455	9307	275.16	11465	279.45	-4.29		

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	840	600	15.59	650
	Guru Nanak Dev TPS(Bhatinda)	440	342	250	6.46	269
	Guru Hargobind Singh TPS(L.mbt)	920	966	724	18.90	788
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2148	1574	40.95	1706
	Total Hydro	1148	456	290	9.75	406
Total Punjab		3768	2604	1864	50.70	2112
Haryana	Panipat TPS	1367	819	581	16.24	677
	DCRTPP (Yamuna nagar)	600	543	517	12.32	513
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP)	1200	542	471	12.44	518
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1199	744	25.22	1051
	Thermal (Total)	4944	3103	2313	66.23	2759
	Total Hydro	62	17	18	0.43	18
	Total Haryana	5006	3120	2331	66.65	2777
	Rajasthan	kota TPS	1240	1110	1111	26.38
suratgarh TPS		1500	975	983	23.87	994
Chabra TPS		500	441	497	12.28	512
Dholpur GPS		330	116	125	3.00	125
Ramgarh GPS		111	60	37	1.78	74
RAPS A (NPC)		300	175	175	4.07	170
Barsingsar (NLC)		250	214	215	5.03	210
Giral LTPS		250	53	35	1.33	55
Rajwest LTPS (IPP)		1080	510	476	13.70	571
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	619	621	14.84	618
Thermal (Total)		6956	4273	4275	106.28	4429
Total Hydro		550	80	103	4.00	167
Wind power		2191	522	180	5.87	244
Biomass		91	27	27	0.65	27
Solar		201	9	0	0.96	40
Renewable/Others (Total)		2483	549	207	7.47	311
Total Rajasthan		9989	4902	4585	117.76	4907
UP		Anpara TPS	1630	1647	1566	34.70
	Obra TPS	1288	513	493	10.90	454
	Paricha TPS	1140	773	724	15.20	633
	Panki TPS	210	80	80	1.70	71
	Harduaganj TPS	665	474	478	10.30	429
	Tanda TPS (NTPC)	440	399	401	9.75	406
	Roza TPS (IPP)	1200	594	577	16.37	682
	Anpara-C (IPP)	1200	876	734	19.15	798
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	281	281	7.78	324
	Thermal (Total)	8223	5637	5334	125.85	5244
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	120	167	3.66	152
	Cogeneration	981	600	600	14.40	600
	Total UP	10131	6357	6101	143.91	5996
	Uttarakhand	Total Hydro	1303	482	356	10.19
Total Uttarakhand		1303	482	356	10.19	425
Delhi	Raighat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	81	79	1.89	79
	Pragati Gas Turbine	330	323	265	7.54	314
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	495	425	10.41	434
	Thermal (Total)	2232	899	769	19.84	827
	Total Delhi	2232	899	769	19.84	827
HP	Baspa HPS (IPP)	330	28	0	1.09	45
	Malana HPS (IPP)	86	0	0	0.24	10
	Other Hydro	589	198	109	3.25	136
	Total HP	1005	226	109	4.59	191
J & K	Baglihar HPS (IPP)	450	298	120	3.96	165
	Other Hydro	323	90	124	2.58	108
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	388	244	6.55	273
Total State Control Area Generation		34390	18978	16359	420.17	17507
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2950	3464	71.52	2980
Total Regional Availability(Gross)		57862	37383	29130	766.85	31952

IV. Total Hydro Generation:

Regional Entities Hydro	10500	5473	928	61.86	2577
State Control Area Hydro	5368	1769	1287	39.15	1631
Total Regional Hydro	15868	7242	2215	101.01	4209

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	200	300	1.00	2.29	-1.29
Gwalior-Agra (D/C)	1025	1404	1645	0	29.27	0.00	29.27
Zerda-Kankroli	-156	-176	0	236	0.00	2.99	-2.99
Zerda-Bhinmal	-88	-78	158	201	0.00	0.60	-0.60
Malanpur-Auraiya	-65	-67	0	142	0.00	19.61	-19.61
Badod-Kota/Morak	-80	-155	0	172	0.00	2.72	-2.72
Mundra-Mohindergarh(HVDC)	1698	1301	1704	0	38.17	0.00	38.17
Sub Total WR	2234	2129			68.44	28.21	40.23
Pusauli Bypass	-394	-270	0	462	0.00	7.76	-7.76
MZP- GKP (D/C)	215	398	575	0	8.62	0.00	8.62
Patna-Balia(D/C)	421	550	688	0	12.88	0.00	12.88
B'Sharif-Balia (D/C)	124	238	313	0	4.98	0.00	4.98
Pusauli-Balia	-30	-2	14	54	0.00	0.60	-0.60
Gaya-Fatehpur (765 Kv)	22	46	285	39	2.56	0.00	2.56
Pusauli-Sahupuri	121	165	175	0	3.32	0.00	3.32
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)	269	240	556	0	8.13	0.00	8.13
Sub Total ER	716	1335			40.49	9.19	31.30
Total IR Exch	2950	3464			108.93	37.40	71.52

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
30.65	0.41	31.06	15.89	-15.40	8.02	-3.70	4.17	-4.17

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
59.15	33.62	92.77	31.30	40.23	71.52	-27.85	6.60	-21.25

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	0.00	67.40	0.30	67.40	80.00	32.60

<----- 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				
50.55	5.04	49.76	8.14	50.13	0.38	0.15	50.47	49.90

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	412	03:06	397	10:31	0.0	0.0	0.0	0.0
Gorakhpur	400	429	05:10	409	10:36	0.0	0.0	60.0	0.0
Bareilly	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kanpur	400	422	03:32	395	10:32	0.0	0.0	7.8	0.0
Dadri	400	427	23:31	399	10:31	0.0	0.0	33.0	0.0
Ballabgarh	400	433	23:56	401	10:31	0.0	0.0	45.0	8.8
Bawana	400	429	23:58	401	10:31	0.0	0.0	37.6	0.0
Bassi	400	424	19:57	384	10:32	0.0	9.0	13.3	0.0
Hissar	400	414	23:31	388	11:43	0.0	1.9	0.0	0.0
Moga	400	422	04:02	394	11:49	0.0	0.0	6.9	0.0
Abdullapur	400	426	23:31	407	18:12	0.0	0.0	14.3	0.0
Nalagarh	400	428	23:31	400	12:12	0.0	0.0	24.7	0.0
Kishenpur	400	412	23:31	390	11:48	0.0	0.0	0.0	0.0
Wagoora	400	404	14:35	369	20:52	31.2	94.3	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	789	19:57	741	10:32	0.0	0.2	0.0	0.0
Balia	765	768	05:07	723	10:31	6.8	24.5	0.0	0.0
Moga	765	789	04:03	738	11:43	0.0	4.2	0.0	0.0
Agra	765	817	19:56	762	09:12	0.0	0.0	39.0	0.0
Bhiwani	765	758	10:01	749	10:36	0.0	0.0	0.0	0.0
Unnao	765	776	19:57	728	11:18	0.0	12.5	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	502.63	1205.87	495.37	914.64	174.54	488.32
Pong	426.72	384.05	412.34	577.87	411.06	534.75	87.67	414.39
Tehri	829.79	740.04	813.15	826.27	818.65	982.26	41.77	198.00
Koteshwar	612.50	598.50	609.80	4.21	NA	NA	198.00	201.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	38.36	44.52
Rihand	268.22	252.98	260.88	353.80	261.76	404.60	NA	NA
RPS	352.80	343.81	349.28	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.28	NA	NA	NA	NA	NA
RSD	527.91	487.91	511.77	14.40	516.69	14.40	53.83	97.69

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 30.12.2013 :

1. Scattered rain in NCR area.

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 .