

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 23.11.2013
Date of Reporting : 24.11.2013

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
33550	2409	35959	50.14	27162	980	28142	50.09	725.1	58.24

* 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	46.45	9.93		56.38	32.54	35.64	3.10	92.02	0.39
Haryana	62.32	0.64		62.96	39.77	39.75	-0.02	102.71	0.00
Rajasthan	97.13	4.64	5.98	107.74	75.50	70.90	-4.60	178.64	0.00
Delhi	17.26			17.26	40.47	38.92	-1.55	56.18	0.01
UP	122.59	3.22	1.20	127.01	73.84	75.35	1.52	202.36	53.27
Uttarakhand		8.76		8.76	19.41	21.06	1.65	29.82	2.87
HP		6.44		6.44	16.97	17.07	0.10	23.51	0.00
J & K		6.77	0.00	6.77	28.21	29.89	1.68	36.66	1.70
Chandigarh				0.00	3.17	3.19	0.02	3.19	0.00
Total	345.76	40.38	7.18	393.32	329.88	331.78	1.90	725.10	58.24

* 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	4489	44	28	-459	3424	0	425	-541	-10.27
Haryana	5153	0	152	-966	3667	0	-48	-994	-23.79
Rajasthan	7753	0	-240	846	6768	0	-187	1079	35.58
Delhi	2981	0	-149	-568	1415	0	-134	-1139	-20.62
UP	8521	2190	-658	-211	8454	980	93	-235	-6.70
Uttarakhand	1585	75	36	466	1079	0	77	394	9.19
HP	1127	0	-33	38	755	0	49	251	4.58
J&K	1766	100	-22	466	1518	0	117	385	7.67
Chandigarh	175	0	2	0	84	0	-11	-5	-0.02
Total	33550	2409	-884	-388	27162	980	380	-804	-4.38

* 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	2065	2091	46.25	1927	46.68	-0.43	
	Rihand I STPS	1000	864	955	951	20.87	870	20.73	0.14	
	Rihand II STPS	1000	910	1041	964	21.92	913	21.84	0.08	
	Rihand III STPS	1000	446	509	487	10.84	452	10.71	0.13	
	Dadri I STPS	840	814	653	468	13.33	556	13.35	-0.02	
	Dadri II STPS	980	985	1025	739	21.57	899	21.78	-0.20	
	Unchahar I TPS	420	405	432	363	9.16	382	9.31	-0.14	
	Unchahar II TPS	420	404	436	332	9.14	381	9.00	0.13	
	Unchahar III TPS	210	201	216	159	4.52	188	4.52	0.00	
	ISTPP (Jhajjar)	1500	1480	868	632	16.65	694	16.65	0.00	
	Dadri GPS	830	818	325	388	6.49	270	6.83	-0.35	
	Anta GPS	419	414	258	255	6.20	258	6.23	-0.03	
	Auraiya GPS	663	656	153	159	3.73	155	3.86	-0.14	
	Sub Total (A)	11282	10342	8936	7988	190.66	7944	191.49	-0.83	
	B. NPC	NAPS	440	317	352	353	7.62	317	7.61	0.01
		RAPS- B	440	419	459	462	10.03	418	10.06	-0.03
		RAPS- C	440	430	478	475	10.21	425	10.32	-0.12
Sub Total (B)		1320	1166	1289	1290	27.85	1160	27.98	-0.13	
C. NHPC	Chamera I HPS	540	541	360	0	2.08	87	2.00	0.08	
	Chamera II HPS	300	300	144	0	1.24	52	1.38	-0.14	
	Chamera III HPS	231	231	124	0	0.80	33	0.80	0.00	
	Bairasuil HPS	180	182	10	0	0.58	24	0.57	0.01	
	Salal-HPS	690	116	177	90	2.50	104	2.79	-0.29	
	Tanakpur-HPS	94	37	45	33	0.90	38	0.88	0.02	
	Uri-HPS	480	105	209	44	2.51	105	2.55	-0.04	
	Uri-II HPS	120	76	123	60	1.69	70	1.83	-0.14	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	387	367	0	3.47	145	3.54	-0.06	
	Sewa-II HPS	120	119	62	0	0.35	14	0.42	-0.08	
	Sub Total (C)	3425	2095	1621	227	16.12	672	16.76	-0.64	
	D. NJPC	Nathpa Jhakri	1500	1605	1618	0	10.01	417	9.81	0.20
Sub Total (D)		1500	1605	1618	0	10.01	417	9.81	0.20	
E. THDC	Tehri HPS	1000	1060	918	0	6.58	274	6.40	0.18	
	Koteshwar HPS	400	92	100	91	2.23	93	2.20	0.03	
	Sub Total (E)	1400	1152	1018	91	8.81	367	8.60	0.21	
F. BBMB	Bhakra HPS	1497	584	1083	378	14.49	604	14.00	0.49	
	Dehar HPS	990	136	330	0	3.46	144	3.26	0.21	
	Pong HPS	396	226	306	120	5.55	231	5.41	0.14	
	Sub Total (F)	2883	945	1719	498	23.50	979	22.67	0.83	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.58	24	0.55	0.02	
	KWHEP HPS(IPP)	1000	0	230	0	5.51	230	5.52	-0.01	
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00	
	Shree Cement TPS	300	0	119	83	2.78	116	2.77	0.01	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	349	83	8.87	370	8.84	0.03	
H. Total Regional Entities (A-G)	23472	17304	16550	10177	285.82	11909	286.15	-0.34		

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	1050	800	21.49	895
	Guru Nanak Dev TPS(Bhatinda)	440	230	170	4.46	186
	Guru Hargobind Singh TPS(L.mbt)	920	927	946	20.51	854
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2207	1916	46.45	1936
	Total Hydro	1148	404	440	9.93	414
Total Punjab	3768	2611	2356	56.38	2349	
Haryana	Panipat TPS	1367	462	436	10.55	440
	DCRTPP (Yamuna nagar)	600	385	251	7.50	313
	Faridabad GPS (NTPC)	432	192	154	4.43	185
	RGTPP (khedar) (IPP)	1200	567	478	12.88	537
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1045	865	26.97	1124
	Thermal (Total)	4944	2651	2184	62.32	2597
	Total Hydro	62	25	29	0.64	26
	Total Haryana	5006	2676	2213	62.96	2623
	Rajasthan	kota TPS	1240	1146	1091	26.93
suratgarh TPS		1500	1110	1019	25.32	1055
Chabra TPS		500	194	187	4.98	208
Dholpur GPS		330	103	102	2.54	106
Ramgarh GPS		111	161	163	3.62	151
RAPS A (NPC)		300	175	175	3.98	166
Barsingsar (NLC)		250	224	222	5.45	227
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	495	396	10.59	441
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	620	488	13.72	572
Thermal (Total)		6956	4228	3843	97.13	4047
Total Hydro		550	157	171	4.64	193
Wind power		2191	74	294	4.55	189
Biomass		91	37	37	0.89	37
Solar		201	0	0	0.55	23
Renewable/Others (Total)		2483	111	331	5.98	249
Total Rajasthan		9989	4496	4345	107.74	4489
UP		Anpara TPS	1630	1258	1274	29.80
	Obra TPS	1288	176	271	5.50	229
	Paricha TPS	1140	662	655	15.50	646
	Panki TPS	210	77	63	1.70	71
	Harduaganj TPS	665	451	359	10.10	421
	Tanda TPS (NTPC)	440	402	400	9.76	407
	Roza TPS (IPP)	1200	1080	1081	26.09	1087
	Anpara-C (IPP)	1200	585	613	14.96	623
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	404	404	9.18	383
	Thermal (Total)	8223	5095	5120	122.59	5108
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	139	147	3.22	134
	Cogeneration	981	50	50	1.20	50
	Total UP	10131	5284	5317	127.01	5292
	Uttarakhand	Total Hydro	1303	508	212	8.76
Total Uttarakhand		1303	508	212	8.76	365
Delhi	Raighat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	83	82	1.75	73
	Pragati Gas Turbine	330	312	271	7.08	295
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	410	370	8.43	351
	Thermal (Total)	2232	805	723	17.26	719
Total Delhi	2232	805	723	17.26	719	
HP	Baspa HPS (IPP)	330	29	29	1.37	57
	Malana HPS (IPP)	86	0	0	0.26	11
	Other Hydro	589	237	142	4.81	200
	Total HP	1005	266	171	6.44	268
J & K	Baglihar HPS (IPP)	450	294	126	4.19	175
	Other Hydro	323	90	115	2.58	107
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	384	241	6.77	282
Total State Control Area Generation		34390	17030	15578	393.32	16388
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1882	2143	59.59	2483
Total Regional Availability(Gross)		57862	35462	27898	738.72	30780

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6206	816	64.53	2689
State Control Area Hydro	5368	1883	1411	40.38	1683
Total Regional Hydro	15868	8089	2227	104.91	4371

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	-250	-150	0	250	0.00	4.18	-4.18
Gwalior-Agra (D/C)	400	254	882	0	7.63	0.00	7.63
Zerda-Kankroli	-168	-260	0	335	0.00	4.88	-4.88
Zerda-Bhinmal	-68	-146	27	288	0.00	2.31	-2.31
Malanpur-Auraiya	-173	-98	0	173	0.00	3.35	-3.35
Badod-Kota/Morak	-87	-172	0	227	0.00	3.72	-3.72
Mundra-Mohindergarh(HVDC)	1102	1301	1303	0	28.92	0.00	28.92
Sub Total WR	756	729			36.55	18.44	18.11
Pusauli Bypass	-200	-200	0	200	0.00	4.76	-4.76
MZP- GKP (D/C)	289	461	702	0	11.99	0.00	11.99
Patna-Balia(D/C)	478	546	806	0	15.04	0.00	15.04
B'Sharif-Balia (D/C)	292	249	622	0	9.64	0.00	9.64
Pusauli-Balia	32	44	177	0	1.93	0.00	1.93
Gaya-Fatehpur (765 Kv)	144	241	368	0	6.07	0.00	6.07
Pusauli-Sahupuri	125	102	142	0	2.52	0.00	2.52
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-34	-29	0	38	0.00	0.95	-0.95
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	1126	1414			47.19	5.71	41.48
Total IR Exch	1882	2143			83.74	24.15	59.59

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
35.17	0.91	36.08	3.18	-28.78	11.46	4.03	2.92	-2.92

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
53.65	5.05	58.70	41.48	18.11	59.59	-12.17	13.06	0.89

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	1.40	92.80	6.50	91.40	47.80	7.20

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.38	2.02	49.59	15.28	50.00	0.18	0.13	50.31	49.80

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	411	01:58	401	11:38	0.0	0.0	0.0	0.0
Gorakhpur	400	431	20:54	416	09:46	0.0	0.0	53.2	0.8
Barailly	400	424	20:56	403	09:10	0.0	0.0	3.8	0.0
Kanpur	400	424	20:40	404	09:08	0.0	0.0	7.2	0.0
Dadri	400	425	00:00	406	09:08	0.0	0.0	25.4	0.0
Ballabgarh	400	432	03:56	411	09:08	0.0	0.0	49.0	2.1
Bawana	400	427	04:01	408	11:31	0.0	0.0	29.4	0.0
Bassi	400	424	04:02	391	06:52	0.0	0.0	5.4	0.0
Hissar	400	415	03:54	395	09:12	0.0	0.0	0.0	0.0
Moga	400	421	03:56	400	09:05	0.0	0.0	0.1	0.0
Abdullapur	400	422	20:56	403	09:10	0.0	0.0	1.5	0.0
Nalagarh	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kishenpur	400	421	13:02	395	09:05	0.0	0.0	0.0	0.0
Wagoora	400	407	00:00	375	18:30	8.6	38.4	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	768	20:41	733	09:10	0.0	15.9	0.0	0.0
Moga	765	788	00:00	750	09:06	0.0	0.0	0.0	0.0
Agra	765	812	20:37	766	09:08	0.0	0.0	23.4	0.0
Bhiwani	765	798	03:57	761	09:10	0.0	0.0	0.0	0.0
Unnao	765	762	20:38	747	19:12	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	509.42	1515.08	502.38	1192.70	241.46	417.79
Pong	426.72	384.05	418.46	821.32	417.48	781.19	77.73	312.79
Tehri	829.79	740.04	822.25	1050.00	818.65	982.26	79.47	137.00
Koteshwar	612.50	598.50	610.50	4.50	NA	NA	137.00	148.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	58.37	63.65
Rihand	268.22	252.98	261.82	407.50	262.98	478.20	NA	NA
RPS	352.80	343.81	352.88	NA	NA	NA	243.01	12.15
Jawahar Sagar	298.70	295.78	298.61	NA	NA	NA	253.41	163.81
RSD	527.91	487.91	516.48	144.00	520.95	144.00	86.28	222.34

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 23.11.2013 :

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 .