

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.11.2013
Date of Reporting : 14.11.2013

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
33595	1895	35490	50.16	26756	750	27506	50.16	715.2	44.13

* 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:

UI (OD:(+ve), UD: (-ve))

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	26.86	11.11		37.97	45.65	48.19	2.54	86.16	0.00
Haryana	56.90	0.68		57.59	42.05	41.05	-1.00	98.64	0.00
Rajasthan	92.50	5.25	5.54	103.29	74.60	71.82	-2.79	175.10	0.00
Delhi	14.88			14.88	43.63	43.05	-0.58	57.93	0.00
UP	123.02	3.25	1.20	127.47	73.82	75.23	1.40	202.70	41.03
Uttarakhand		9.31		9.31	19.48	21.24	1.77	30.55	1.60
HP		7.41		7.41	14.42	16.72	2.30	24.13	0.00
J & K		7.77	0.00	7.77	28.44	28.94	0.50	36.71	1.50
Chandigarh				0.00	3.08	3.32	0.24	3.32	0.00
Total	314.15	44.79	6.74	365.68	345.16	349.55	4.39	715.24	44.13

* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

UI/OA/PX (OD/Import: (+ve), UD/Export: (-ve))

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	4374	0	37	-392	2835	0	74	-116	-3.46	
Haryana	5057	0	-392	-992	3731	0	141	-1018	-26.95	
Rajasthan	7596	0	-412	534	6698	0	-247	942	30.17	
Delhi	3100	0	-115	-605	1467	0	-30	-1190	-19.45	
UP	8791	1730	-241	-203	8642	750	185	-222	-6.39	
Uttarakhand	1553	75	-12	413	1056	0	54	446	9.92	
HP	1215	0	71	-275	758	0	68	138	1.19	
J&K	1734	90	-224	276	1481	0	95	309	7.11	
Chandigarh	175	0	-4	0	88	0	-7	0	0.00	
Total	33595	1895	-1292	-1244	26756	750	333	-711	-6.87	

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

UI (OG:(+ve), UG: (-ve))

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
	Rihand I STPS	1000	688	958	731	16.76	699	16.52	0.24
	Rihand II STPS	1000	706	1032	709	17.00	708	16.94	0.07
	Rihand III STPS	1000	389	518	390	9.37	390	9.24	0.13
	Dadri I STPS	840	812	642	488	12.86	536	13.02	-0.17
	Dadri II STPS	980	980	937	729	20.91	871	20.97	-0.06
	Unchahar I TPS	420	405	408	342	8.96	373	9.10	-0.14
	Unchahar II TPS	420	404	370	312	8.74	364	8.70	0.05
	Unchahar III TPS	210	201	180	154	4.26	178	4.27	-0.01
	ISTPP (Jhajjar)	1500	1445	325	321	13.67	570	14.21	-0.54
	Dadri GPS	830	817	596	505	13.09	545	13.34	-0.26
	Anta GPS	419	414	263	254	6.27	261	6.39	-0.12
	Auraiya GPS	663	491	318	302	7.38	307	7.59	-0.21
	Sub Total (A)	11282	9494	8427	7102	181.42	7559	182.06	-0.64
B. NPC	NAPS	440	315	354	358	7.63	318	7.56	0.07
	RAPS- B	440	418	461	461	10.07	419	10.03	0.04
	RAPS- C	440	430	476	476	10.24	427	10.32	-0.08
	Sub Total (B)	1320	1163	1291	1295	27.94	1164	27.91	0.02
C. NHPC	Chamera I HPS	540	540	540	0	2.51	104	2.40	0.11
	Chamera II HPS	300	300	284	0	1.68	70	1.65	0.03
	Chamera III HPS	231	176	143	0	0.92	38	0.87	0.06
	Bairasuil HPS	180	182	20	0	0.69	29	0.69	0.01
	Salal-HPS	690	173	265	230	4.08	170	4.10	-0.03
	Tanakpur-HPS	94	44	56	45	1.08	45	1.08	0.00
	Uri-HPS	480	145	146	103	3.49	145	3.41	0.08
	Uri-II HPS	120	79	120	51	2.05	86	1.92	0.14
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	368	0	3.31	138	3.32	0.00
	Sewa-II HPS	120	119	120	0	0.38	16	0.37	0.01
	Sub Total (C)	3425	2145	2062	429	20.20	842	19.80	0.40
D. NJPC	Nathpa Jhakri	1500	1605	1421	0	9.77	407	10.03	-0.26
	Sub Total (D)	1500	1605	1421	0	9.77	407	10.03	-0.26
E. THDC	Tehri HPS	1000	1060	788	0	5.63	235	5.50	0.13
	Koteshwar HPS	400	92	100	90	2.21	92	2.20	0.01
	Sub Total (E)	1400	1152	888	90	7.84	327	7.70	0.14
F. BBMB	Bhakra HPS	1497	552	999	297	13.68	570	13.25	0.43
	Dehar HPS	990	171	280	0	4.32	180	4.10	0.23
	Pong HPS	396	238	312	186	5.96	248	5.70	0.26
	Sub Total (F)	2883	960	1591	483	23.96	998	23.05	0.91
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	53	0	0.76	31	0.73	0.03
	KWHEP HPS(IPP)	1000	0	300	0	5.18	216	5.29	-0.11
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	120	82	2.63	109	2.65	-0.03
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	473	82	8.56	357	8.66	-0.11
H. Total Regional Entities (A-G)		23472	16519	16153	9481	279.69	11654	279.21	0.47

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	630	530	13.22	551
	Guru Nanak Dev TPS(Bhatinda)	440	120	92	2.39	100
	Guru Hargobind Singh TPS(L.mbt)	920	503	500	11.24	468
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	1253	1122	26.86	1119
	Total Hydro	1148	430	435	11.11	463
Total Punjab	3768	1683	1557	37.97	1582	
Haryana	Panipat TPS	1367	225	211	5.22	217
	DCRTPP (Yamuna nagar)	600	558	508	12.23	510
	Faridabad GPS (NTPC)	432	186	165	4.03	168
	RGTPP (khedar) (IPP)	1200	564	460	12.09	504
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1111	744	23.33	972
	Thermal (Total)	4944	2644	2088	56.90	2371
	Total Hydro	62	28	30	0.68	28
	Total Haryana	5006	2672	2118	57.59	2399
	Rajasthan	kota TPS	1240	1154	1149	27.29
suratgarh TPS		1500	1105	1120	26.13	1089
Chabra TPS		500	455	389	9.80	408
Dholpur GPS		330	128	103	3.00	125
Ramgarh GPS		111	133	162	3.49	146
RAPS A (NPC)		300	180	180	4.00	167
Barsingsar (NLC)		250	222	223	5.24	219
Giral LTPS		250	24	48	0.72	30
Rajwest LTPS (IPP)		1080	0	0	0.00	0
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	585	474	12.82	534
Thermal (Total)		6956	3986	3848	92.50	3854
Total Hydro		550	269	142	5.25	219
Wind power		2191	171	118	3.89	162
Biomass		91	31	31	0.75	31
Solar		201	0	0	0.90	38
Renewable/Others (Total)		2483	202	149	5.54	231
Total Rajasthan		9989	4457	4139	103.29	4304
UP		Anpara TPS	1630	908	887	19.40
	Obra TPS	1288	509	522	11.10	463
	Paricha TPS	1140	841	662	15.80	658
	Panki TPS	210	75	100	1.90	79
	Harduaganj TPS	665	492	504	10.80	450
	Tanda TPS (NTPC)	440	392	398	9.79	408
	Roza TPS (IPP)	1200	810	1076	24.25	1010
	Anpara-C (IPP)	1200	766	1060	21.59	900
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	278	402	8.39	350
	Thermal (Total)	8223	5071	5611	123.02	5126
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	135	143	3.25	135
	Cogeneration	981	50	50	1.20	50
	Total UP	10131	5256	5804	127.47	5311
	Uttarakhand	Total Hydro	1303	531	215	9.31
Total Uttarakhand		1303	531	215	9.31	388
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	83	84	1.87	78
	Pragati Gas Turbine	330	315	263	7.07	295
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	305	250	5.94	248
	Thermal (Total)	2232	703	597	14.88	620
	Total Delhi	2232	703	597	14.88	620
HP	Baspa HPS (IPP)	330	30	30	1.75	73
	Malana HPS (IPP)	86	40	0	0.33	14
	Other Hydro	589	185	191	5.34	222
	Total HP	1005	255	221	7.41	309
J & K	Baglihar HPS (IPP)	450	294	144	5.30	221
	Other Hydro	323	86	119	2.48	103
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	380	263	7.77	324
Total State Control Area Generation		34390	15937	14914	365.68	15237
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2098	2838	77.91	3246
Total Regional Availability(Gross)		57862	34188	27233	723.28	30137

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6315	1002	67.71	2821
State Control Area Hydro	5368	2028	1449	44.79	1866
Total Regional Hydro	15868	8343	2451	112.50	4687

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	-500	0	500	0.00	9.53	-9.53
Gwalior-Agra (D/C)	146	830	1205	0	16.39	0.00	16.39
Zerda-Kankroli	-183	-273	13	303	0.00	3.60	-3.60
Zerda-Bhinmal	75	-138	186	205	0.00	0.37	-0.37
Malanpur-Auraiya	-165	-129	0	190	0.00	3.69	-3.69
Badod-Kota/Morak	-148	-32	0	180	0.00	1.53	-1.53
Mundra-Mohindergarh(HVDC)	1503	1502	1504	0	36.24	0.00	36.24
Sub Total WR	978	1260			52.63	18.71	33.92
Pusauli Bypass	200	200	200	0	4.80	0.00	4.80
MZP- GKP (D/C)	314	415	769	0	11.91	0.00	11.91
Patna-Balia(D/C)	304	476	762	0	12.67	0.00	12.67
B'Sharif-Balia (D/C)	173	277	516	0	7.99	0.00	7.99
Pusauli-Balia	-25	25	101	28	0.88	0.00	0.88
Gaya-Fatehpur (765 Kv)	58	116	324	0	4.17	0.00	4.17
Pusauli-Sahupuri	131	101	134	0	2.53	0.00	2.53
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-32	0	38	0.00	0.96	-0.96
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	1120	1578			44.95	0.96	43.99
Total IR Exch	2098	2838			97.58	19.67	77.91

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
36.10	1.23	37.33	1.57	-28.44	10.74	3.60	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
52.59	30.94	83.53	43.99	33.92	77.91	-8.60	2.98	-5.62

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	0.80	96.30	2.50	95.50	53.90	3.70

<----- 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				
50.30	17.48	49.61	20.18	50.01	0.12	0.11	50.28	49.89

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	01:00	407	18:22	0.0	0.0	0.0	0.0
Gorakhpur	400	424	22:07	410	14:10	0.0	0.0	0.0	0.0
Barailly	400	423	21:46	402	06:51	0.0	0.0	2.3	0.0
Kanpur	400	424	04:01	406	06:41	0.0	0.0	8.7	0.0
Dadri	400	427	03:12	409	06:40	0.0	0.0	25.7	0.0
Ballabgarh	400	437	04:04	414	09:10	0.0	0.0	66.4	21.1
Bawana	400	429	03:06	411	06:41	0.0	0.0	36.6	0.0
Bassi	400	426	20:44	389	06:43	0.0	0.1	12.6	0.0
Hissar	400	421	03:03	400	18:10	0.0	0.0	1.4	0.0
Moga	400	426	02:02	402	09:07	0.0	0.0	22.2	0.0
Abdullapur	400	425	03:20	404	12:08	0.0	0.0	0.0	0.0
Nalagarh	400	432	03:02	406	11:37	0.0	0.0	36.5	5.5
Kishenpur	400	426	02:53	394	18:11	0.0	0.0	18.9	0.0
Wagoora	400	411	02:59	375	18:13	5.1	23.3	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	777	04:04	739	06:42	0.0	1.2	0.0	0.0
Balia	765	768	13:10	736	09:10	0.0	6.7	0.0	0.0
Moga	765	797	02:03	755	09:09	0.0	0.0	0.0	0.0
Agra	765	813	04:05	766	06:41	0.0	0.0	24.8	0.0
Bhiwani	765	786	16:02	776	14:14	0.0	0.0	0.0	0.0
Unnao	765	766	04:04	741	06:52	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	510.02	1545.02	503.22	1232.31	247.21	423.53
Pong	426.72	384.05	418.90	848.35	377.24	821.34	110.86	377.24
Tehri	829.79	740.04	822.95	1065.64	818.65	982.26	71.76	142.00
Koteshwar	612.50	598.50	611.60	5.50	NA	NA	142.00	146.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	64.37	72.29
Rihand	268.22	252.98	261.85	410.00	263.07	484.00	NA	NA
RPS	352.80	343.81	351.55	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.61	NA	NA	NA	NA	NA
RSD	527.91	487.91	516.68	144.00	520.83	144.00	90.81	156.54

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 13.11.2013 :

1. Normal weather in NR.

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 : 13.11.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER