

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.11.2014
Date of Reporting : 14.11.2014

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
36981	1356	38337	50.18	29194	2450	31644	50.13	782.8	44.90

* 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	36.90	7.85		44.75	51.78	52.61	0.83	97.36	0.00
Haryana	55.80	0.48		56.28	48.68	46.80	-1.87	103.08	0.00
Rajasthan	119.28	4.19	10.88	134.34	68.04	69.14	1.09	203.48	0.00
Delhi	20.23			20.23	39.37	37.41	-1.96	57.64	0.00
UP	125.71	3.80	2.40	131.91	91.56	90.40	-1.16	222.31	44.03
Uttarakhand		8.26		8.26	22.91	23.82	0.90	32.07	0.87
HP		6.20		6.20	17.60	18.15	0.55	24.35	0.00
J & K		7.53	0.00	7.53	28.53	31.64	3.11	39.17	0.00
Chandigarh				0.00	3.34	3.34	0.00	3.34	0.00
Total	357.91	38.30	13.28	409.49	371.81	373.32	1.51	782.81	44.90

† 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				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4410	0	11	-45	3245	0	4	-280	4994
Haryana	5880	0	-200	-637	3729	0	83	-645	5880
Rajasthan	8799	0	-134	-51	7832	0	-65	955	9644
Delhi	2842	0	-300	-524	1559	0	-211	-766	3113
UP	10167	1260	-393	148	9416	2450	324	91	10318
Uttarakhand	1646	95	-31	504	1098	0	31	410	1663
HP	1209	1	-38	38	779	0	25	324	1322
J&K	1845	0	-35	334	1448	0	22	282	1960
Chandigarh	183	0	-11	0	88	0	-3	-31	183
Total	36981	1356	-1131	-233	29194	2450	210	341	36981

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

figures may not be at simultaneous hour.

Diversity is 1.06

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 (5*200+2*500)	2000	1726	1829	1839	44.01	1834	41.42	2.59
Rihand I STPS (2*500)	1000	870	937	701	21.71	904	20.07	1.64
Rihand II STPS (2*500)	1000	970	1037	904	23.33	972	22.03	1.29
Rihand III STPS (2*500)	1000	470	482	406	11.30	471	10.68	0.62
Dadri I STPS (4*210)	840	770	583	575	14.68	612	13.61	1.07
Dadri II STPS (2*490)	980	980	745	695	19.25	802	19.47	-0.22
Unchahar I TPS (2*210)	420	400	358	333	9.27	386	8.65	0.62
Unchahar II TPS (2*210)	420	200	164	148	4.44	185	4.07	0.38
Unchahar III TPS (1*220)	210	200	160	152	4.35	181	4.03	0.32
I-STPP (Jhajhar) (3*500)	1500	1500	872	899	20.39	850	21.60	-1.21
Dadri GPS (4*130.19+2*154.51)	830	819	305	366	7.88	328	7.85	0.03
Anta GPS (3*88.71+1*153.2)	419	404	235	238	5.65	235	5.74	-0.09
Auraiya GPS (4*111.19+2*109.30)	663	432	146	123	3.31	138	3.29	0.02
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
Sub Total (A)	11297	9745	7853	7379	190	7900	183	7
B. NPC								
NAPS (2*220)	440	290	327	332	7.06	294	6.96	0.10
RAPS- B (2*220)	440	404	448	451	9.68	403	9.70	-0.02
RAPS- C (2*220)	440	410	437	447	9.58	399	9.38	0.20
Sub Total (B)	1320	1104	1212	1230	26.31	1096	26.04	0.27
C. NHPC								
Chamera I HPS (3*180)	540	534	537	0	2.27	94	2.20	0.07
Chamera II HPS (3*100)	300	298	200	0	1.57	65	1.60	-0.03
Chamera III HPS (3*77)	231	231	223	0	1.03	43	1.00	0.03
Bairasuli HPS(3*60)	180	178	181	0	0.74	31	0.70	0.04
Salal-HPS (6*115)	690	156	230	205	3.90	163	3.74	0.16
Tanakpur-HPS (3*40)	94	39	62	35	0.98	41	0.93	0.05
Uri-I HPS (4*120)	480	235	239	232	5.96	248	5.63	0.33
Uri-II HPS (4*60)	240	145	177	143	3.52	147	3.49	0.03
Dhauliganga-HPS (4*70)	280	204	205	0	1.30	54	1.38	-0.08
Dulhasti-HPS (3*130)	390	387	396	226	3.87	161	3.70	0.17
Sewa-II HPS (3*40)	120	119	121	0	0.37	16	0.38	0.00
Parbati 3 (4*130)	520	23	259	0	0.45	19	0.55	-0.10
Sub Total (C)	4065	2549	2829	841	26	1082	25	1
D.SJVNL								
NJPC (6*250)	1500	1605	1610	0	9.53	397	9.50	0.03
Rampur HEP (4*68.67)	275	350	371	0	2.57	107	2.54	0.02
Sub Total (D)	1775	1955	1981	0	12.10	504	12.04	0.06
E. THDC								
Tehri HPS (4*250)	1000	1060	1058	0	6.87	286	6.80	0.07
Koteshwar HPS (4*100)	400	91	101	90	2.21	92	2.20	0.01
Sub Total (E)	1400	1151	1159	90	9.08	378	9.00	0.08
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	559	1051	348	13.14	547	13.42	-0.28
Dehar HPS (6*165)	990	130	495	0	3.20	133	3.12	0.08
Pong HPS (6*66)	396	183	318	66	4.44	185	4.39	0.05
Sub Total (F)	2900	872	1864	414	20.78	866	20.93	-0.15
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	142	0	0.63	26	0.61	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	860	0	5.24	218	5.28	-0.04
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	136	103	2.96	123	2.97	-0.01
Budhil HPS(IPP)	70	0	69	0	0.18	7	0.18	0.00
Sub Total (G)	1662	0	1207	103	9.00	375	9.04	-0.04
H. Total Regional Entities (A-G)	24419	17376	18105	10057	292.84	12202	284.95	7.89

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) (6*210)	1260	160	160	4.54	189
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	80	2.11	88
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	363	368	9.85	410
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	685	698	20.40	850
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1328	1306	36.90	1538
	Total Hydro	1148	381	287	7.85	327
Total Punjab	5828	1709	1593	44.75	1865	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	208	209	4.87	203
	DCRTPP (Yamuna nagar) (2*300)	600	276	237	5.78	241
	Faridabad GPS (NTPC)	432	175	173	4.05	169
	RGTPP (khedar) (IPP) (2*600)	1200	1152	732	18.57	774
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1221	741	22.52	938
	Thermal (Total)	4944	3032	2092	55.80	2325
	Total Hydro	62	19	24	0.48	20
	Total Haryana	5006	3051	2116	56.28	2345
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	624	774	18.28
suratgarh TPS (6*250)		1500	1081	976	23.99	999
Chabra TPS (3*250)		750	378	414	9.40	391
Dholpur GPS (3*110)		330	110	121	2.93	122
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	159	174	4.75	198
RAPS A (NPC) (1*100+1*200)		300	183	166	4.42	184
Barsingar (NLC) (2*125)		250	190	185	4.43	185
Giral LTPS (2*125)		250	50	69	1.14	48
Rajwest LTPS (IPP) (8*135)		1080	720	386	15.20	633
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	480	241	10.90	454
Kawai(Adani) (2*660)		1320	1058	884	23.84	994
Thermal (Total)		8026	5033	4390	119	4970
Total Hydro		550	149	158	4.19	174
Wind power		2798	240	892	9.74	406
Biomass		99	39	39	0.94	39
Solar		730	2	0	0.20	8
Renewable/Others (Total)		3627	281	931	10.88	453
Total Rajasthan		12203	5463	5479	134.34	5598
UP		Anpara TPS (3*210+2*500)	1630	922	921	22.20
	Obra TPS (2*50+2*94+5*200)	1194	464	456	10.90	454
	Paricha TPS (2*110+2*220+2*250)	1140	652	645	15.50	646
	Panki TPS (2*105)	210	144	86	2.80	117
	Harduaganj TPS (1*60+1*105+2*250)	665	482	488	11.70	488
	Tanda TPS (NTPC) (4*110)	440	283	280	6.85	285
	Roza TPS (IPP) (4*300)	1200	1040	1071	24.61	1025
	Anpara-C (IPP) (2*600)	1200	971	955	22.19	925
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	401	361	8.96	373
	Thermal (Total)	8129	5359	5263	125.71	5238
	Vishnuparyag HPS (IPP)	400	118	114	2.71	113
	Other Hydro	527	29	35	1.09	45
	Cogeneration	981	100	100	2.40	100
	Total UP	10037	5606	5512	131.91	5383
	Uttarakhand	Total Hydro	1398	520	229	8.26
Total Uttarakhand		1398	520	229	8.26	344
Delhi	Raighat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	76	76	1.76	73
	Pragati Gas Turbine (2x104+ 1x122)	330	143	145	3.54	147
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	312	245	6.98	291
	Badarpur TPS (NTPC) (3*95+2*210)	705	350	307	7.97	332
	Thermal (Total)	2917	882	774	20.23	843
Total Delhi	2917	882	774	20.23	843	
HP	Baspa HPS (IPP) (2*150)	300	29	0	1.35	56
	Malana HPS (IPP) (2*43)	86	74	0	0.30	12
	Other Hydro	728	201	184	4.55	190
	Total HP	1114	304	184	6.20	258
J & K	Baqilhar HPS (IPP) (3*150)	450	296	148	5.01	209
	Other Hydro/IPP	436	105	105	2.52	105
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	401	253	7.53	314
Total State Control Area Generation		39597	17936	16140	409.49	16949
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3119.09	4195.44	113.31	4721
Total Regional Availability(Gross)		64017	39160	30392	815.64	33872

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8835	1345	73.80	3075
State Control Area Hydro	5684	1803	1170	38.30	1483
Total Regional Hydro	17116	10638	2515	112.10	4558

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	-350	-200	0	450	0.00	8.41	-8.41
Gwalior-Agra (D/C)	623	1065	1749	0	30.55	0.00	30.55
Zerda-Kankroli	-221	-270	0	329	0.00	4.40	-4.40
Zerda-Bhinmal	-84	-181	81	281	0.00	2.27	-2.27
Malanpur-Auraiya	-58	-145	0	176	0.00	2.09	-2.09
Badod-Kota/Morak	-90	-188	0	193	0.00	3.48	-3.48
Mundra-Mohindergarh(HVDC)	2202	2198	2205	0	53.21	0.00	53.21
Vindhychal - Rihand	488	460	507	0	11.26	0.00	11.26
Sub Total WR	2510	2739			95.03	20.65	74.38
Pusauli Bypass	50	200	200	0	2.64	0.00	2.64
MZP- GKP (D/C)	84	180	432	0	4.97	0.00	4.97
Patna-Balia(D/C)	577	745	1083	0	19.42	0.00	19.42
B'Sharif-Balia (D/C)	-14	53	386	18	3.06	0.00	3.06
Pusauli-Balia	-72	-95	0	117	0.00	1.35	-1.35
Gaya-Fatehpur (765 Kv)	10	222	405	0	6.13	0.00	6.13
Pusauli-Sahupuri	91	134	164	0	2.40	0.00	2.40
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-46	0	46	0.00	0.91	-0.91
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-76	63	212	76	2.57	0.00	2.57
Sub Total ER	609	1456			41.19	2.26	38.94
Total IR Exch	3119	4195			136.22	22.90	113.31

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
23.17	0.93	24.09	5.87	-11.98	1.38	11.58	4.54	-4.54

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
35.87	69.72	105.59	38.94	74.38	113.31	3.06	4.66	7.72

VI. Frequency Profile ←----- % of Time Frequency ----->

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	0.10	1.60	12.40	42.50	52.60	17.40	15.60	2.00	0.00

←----- 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)		
50.28	10.02	49.68	15.19	50.01	0.09	0.09	50.28	0.00

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	02:13	400	17:25	0.0	0.0	0.0	0.0
Gorakhpur	400	232	04:03	222	06:35	100.0	100.0	0.0	0.0
Bareilly	400	420	04:06	401	06:22	0.0	0.0	0.0	0.0
Kanpur	400	421	03:02	404	06:20	0.0	0.0	0.8	0.0
Dadri	400	419	04:03	401	12:26	0.0	0.0	0.0	0.0
Ballabgarh	400	428	03:03	409	12:39	0.0	0.0	33.4	0.0
Bawana	400	425	03:03	407	18:08	0.0	0.0	32.5	0.0
Bassi	400	428	20:46	392	06:26	0.0	0.0	10.2	0.0
Hissar	400	416	03:02	398	06:21	0.0	0.0	0.0	0.0
Moga	400	424	02:30	404	09:38	0.0	0.0	18.7	0.0
Abdullapur	400	426	03:01	396	06:24	0.0	0.0	25.5	0.0
Nalagarh	400	430	23:44	410	06:34	0.0	0.0	36.5	0.0
Kishenpur	400	425	23:36	396	18:08	0.0	0.0	13.3	0.0
Wagoora	400	405	15:03	376	18:09	10.6	35.7	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	777	04:05	742	06:35	0.0	0.0	0.0	0.0
Balia	765	770	03:03	744	12:47	0.0	0.0	0.0	0.0
Moga	765	803	03:03	765	09:48	0.0	0.0	0.8	0.0
Agra	765	792	20:46	753	06:25	0.0	0.0	0.0	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	773	04:04	742	22:26	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	505.33	1325.82	509.85	1545.02	107.66	391.08
Pong	426.72	384.05	412.06	566.84	418.79	834.82	57.14	281.78
Tehri	829.79	740.04	822.00	1044.51	822.90	1063.00	66.80	150.00
Koteshwar	612.50	598.50	609.45	4.21	610.70	4.95	150.00	147.00
Chamera-I	760.00	748.75	759.68	0.00	0.00	0.00	0.00	0.00
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	510.22	2.37	516.67	3.51	59.00	105.00

* NA: Not Available

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (19:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-290	10	0	-265	220	0	-6.56	2.36	-4.20
Delhi	-766	0	0	-586	63	0	-14.16	0.74	-13.41
Haryana	-802	157	0	-786	149	0	-20.31	1.32	-18.99
HP	324	0	0	300	-262	0	7.38	-1.52	5.86
J&K	282	0	0	334	0	0	6.65	-0.08	6.57
CHD	-31	0	0	0	0	0	-0.24	0.17	-0.07
Rajasthan	490	465	1	490	-541	1	11.75	8.83	20.57
UP	91	0	0	148	0	0	2.78	0.00	2.78
Uttarakhand	293	117	0	293	211	0	7.03	4.45	11.47
Total	-409	749	1	-73	-161	1	-5.68	16.27	10.59

X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-265	-290	294	2	0	0
Delhi	-485	-766	169	-132	0	0
Haryana	-786	-1005	158	-247	0	0
HP	324	300	122	-581	0	0
J&K	351	236	0	-10	0	0
CHD	0	-31	25	0	0	0
Rajasthan	490	490	958	-840	1	1
UP	153	85	0	0	0	0
Uttarakhand	293	293	312	90	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 13.11.2014 :**

Normal

XIV. Synchronisation of new generating units :

0.00

XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**