

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 08.11.2014
Date of Reporting : 09.11.2014

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
37110	1700	38810	50.30	29791	1780	31571	50.12	782.7	54.60

* 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	30.46	6.78		37.24	54.56	55.69	1.14	92.93	0.00
Haryana	54.47	0.53		55.00	54.16	53.39	-0.77	108.39	0.00
Rajasthan	124.60	4.31	9.88	138.78	66.99	68.19	1.20	206.97	0.00
Delhi	23.39			23.39	39.75	38.14	-1.60	61.54	0.00
UP	120.90	5.10	2.40	128.40	87.29	90.30	3.01	218.70	52.70
Uttarakhand		8.49		8.49	21.29	22.80	1.51	31.29	1.91
HP		6.66		6.66	16.74	18.15	1.41	24.80	0.00
J & K		7.66	0.00	7.66	27.07	-0.81	-0.81	34.72	0.00
Chandigarh				0.00	3.23	3.38	0.15	3.38	0.00
Total	353.83	39.52	12.28	405.62	371.87	377.11	5.24	782.73	54.60

* 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	4357	0	-50	20	3371	0	-56	-103	4508
Haryana	5892	0	-357	-733	3966	0	-161	-737	5892
Rajasthan	8872	0	12	-95	8489	0	249	892	9395
Delhi	3160	0	-136	-532	1911	0	-79	-871	3194
UP	9865	1625	-233	124	9062	1780	159	86	9865
Uttarakhand	1689	75	92	418	1082	0	22	411	1689
HP	1274	0	82	16	803	0	67	300	1274
J&K	1817	0	26	349	1016	0	-252	297	1817
Chandigarh	184	0	-16	0	92	0	1	-30	184
Total	37110	1700	-580	-433	29791	1780	-51	244	37110

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

figures may not be at simultaneous hour.

Diversity is 1.02

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	1472	1402	1649	31.91	1330	35.29	-3.38
Rihand I STPS (2*500)	1000	870	952	864	22.22	926	20.61	1.61
Rihand II STPS (2*500)	1000	970	1003	894	24.18	1007	22.77	1.41
Rihand III STPS (2*500)	1000	470	499	430	11.78	491	11.02	0.76
Dadri I STPS (4*210)	840	815	718	541	16.20	675	15.73	0.47
Dadri II STPS (2*490)	980	980	756	654	18.83	785	18.74	0.09
Unchahar I TPS (2*210)	420	383	416	377	9.62	401	8.84	0.77
Unchahar II TPS (2*210)	420	192	200	178	4.64	193	4.28	0.36
Unchahar III TPS (1*220)	210	192	197	172	4.64	193	4.26	0.38
I-STPP (Jhajhar) (3*500)	1500	1500	1161	873	21.34	889	22.71	-1.37
Dadri GPS (4*130.19+2*154.51)	830	809	183	178	4.55	190	4.56	-0.01
Anta GPS (3*88.71+1*153.2)	419	403	224	241	5.93	247	5.97	-0.04
Auraiya GPS (4*111.19+2*109.30)	663	647	158	163	3.77	157	3.71	0.06
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	9708	7869	7215	180	7485	179	1
B. NPC								
NAPS (2*220)	440	286	318	328	6.86	286	6.86	-0.01
RAPS- B (2*220)	440	403	447	451	9.68	403	9.67	0.01
RAPS- C (2*220)	440	363	443	446	8.59	358	8.70	-0.11
Sub Total (B)	1320	1052	1208	1225	25.13	1047	25.24	-0.11
C. NHPC								
Chamera I HPS (3*180)	540	534	515	0	1.58	66	1.60	-0.02
Chamera II HPS (3*100)	300	300	299	0	1.63	68	1.60	0.03
Chamera III HPS (3*77)	231	231	202	0	1.05	44	1.05	0.00
Bairasuli HPS(3*60)	180	178	180	0	1.09	45	1.07	0.02
Salal-HPS (6*115)	690	198	182	260	5.06	211	4.74	0.32
Tanakpur-HPS (3*40)	94	43	47	35	1.07	44	1.03	0.04
Uri-I HPS (4*120)	480	287	314	320	7.19	300	6.89	0.30
Uri-II HPS (4*60)	240	178	171	198	4.40	183	4.26	0.14
Dhauliganga-HPS (4*70)	280	189	207	0	1.30	54	1.30	0.00
Dulhasti-HPS (3*130)	390	387	380	224	4.52	188	4.30	0.22
Sewa-II HPS (3*40)	120	119	119	0	0.38	16	0.38	0.01
Parbati 3 (4*130)	520	260	256	0	0.56	23	0.55	0.01
Sub Total (C)	4065	2904	2873	1036	30	1243	29	1
D. SJVNL								
NJPC (6*250)	1500	1605	1467	0	9.92	413	10.00	-0.08
Rampur HEP (4*68.67)	275	280	278	0	2.59	108	2.51	0.08
Sub Total (D)	1775	1885	1745	0	12.50	521	12.51	0.00
E. THDC								
Tehri HPS (4*250)	1000	1060	1027	0	5.37	224	5.40	-0.03
Koteshwar HPS (4*100)	400	91	100	0	1.78	74	1.75	0.03
Sub Total (E)	1400	1151	1127	0	7.15	298	7.15	0.00
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	596	1068	496	14.57	607	14.30	0.26
Dehar HPS (6*165)	990	150	495	0	3.68	153	3.61	0.07
Pong HPS (6*66)	396	262	318	126	6.38	266	6.29	0.08
Sub Total (F)	2900	1009	1881	622	24.62	1026	24.21	0.41
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	59	0	0.68	28	0.66	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	800	0	5.40	225	5.52	-0.12
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	148	102	3.07	128	3.11	-0.04
Budhil HPS(IPP)	70	0	70	0	0.20	8	0.21	-0.01
Sub Total (G)	1662	0	1077	102	9.34	389	9.50	-0.16
H. Total Regional Entities (A-G)	24419	17708	17780	10200	288.22	12009	285.95	2.27

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	3.79	158
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.86	77
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	366	190	8.24	343
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	710	696	16.58	691
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1316	1126	30.46	1269
	Total Hydro	1148	261	248	6.78	282
Total Punjab	5828	1577	1374	37.24	1552	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	225	213	4.91	204
	DCRTPP (Yamuna nagar) (2*300)	600	261	234	5.73	239
	Faridabad GPS (NTPC)	432	196	92	4.12	172
	RGTPP (khedar) (IPP) (2*600)	1200	1073	707	18.84	785
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1111	742	20.87	870
	Thermal (Total)	4944	2866	1988	54.47	2270
	Total Hydro	62	19	24	0.53	22
	Total Haryana	5006	2885	2012	55.00	2292
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	788	760	19.69
suratgarh TPS (6*250)		1500	967	1057	24.92	1038
Chabra TPS (3*250)		750	441	446	10.54	439
Dholpur GPS (3*110)		330	93	120	2.78	116
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	0	88	1.08	45
RAPS A (NPC) (1*100+1*200)		300	183	173	4.39	183
Barsingar (NLC) (2*125)		250	170	170	4.43	185
Giral LTPS (2*125)		250	70	70	1.49	62
Rajwest LTPS (IPP) (8*135)		1080	817	717	18.07	753
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	461	420	11.48	478
Kawai(Adani) (2*660)		1320	1141	943	25.74	1072
Thermal (Total)		8026	5131	4964	125	5192
Total Hydro		550	166	200	4.31	179
Wind power		2798	680	271	8.96	373
Biomass		99	34	34	0.81	34
Solar		730	1	0	0.11	5
Renewable/Others (Total)		3627	715	305	9.88	412
Total Rajasthan		12203	6012	5469	138.78	5782
UP		Anpara TPS (3*210+2*500)	1630	943	942	22.80
	Obra TPS (2*50+2*94+5*200)	1194	450	353	8.70	363
	Paricha TPS (2*110+2*220+2*250)	1140	782	773	19.00	792
	Panki TPS (2*105)	210	149	144	3.50	146
	Harduaganj TPS (1*60+1*105+2*250)	665	461	465	11.10	463
	Tanda TPS (NTPC) (4*110)	440	289	270	6.90	288
	Roza TPS (IPP) (4*300)	1200	765	792	18.30	763
	Anpara-C (IPP) (2*600)	1200	988	987	23.60	983
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	226	361	7.00	292
	Thermal (Total)	8129	5053	5087	120.90	5038
	Vishnuparyag HPS (IPP)	400	129	124	2.90	121
	Other Hydro	527	41	233	2.20	92
	Cogeneration	981	100	100	2.40	100
	Total UP	10037	5323	5544	128.40	5229
	Uttarakhand	Total Hydro	1398	495	216	8.49
Total Uttarakhand		1398	495	216	8.49	354
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	91	78	1.96	82
	Pragati Gas Turbine (2x104+ 1x122)	330	257	266	6.38	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	301	316	7.25	302
	Badarpur TPS (NTPC) (3*95+2*210)	705	313	308	7.81	325
	Thermal (Total)	2917	962	968	23.39	975
Total Delhi	2917	962	968	23.39	975	
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.52	63
	Malana HPS (IPP) (2*43)	86	29	0	0.34	14
	Other Hydro	728	234	185	4.81	200
	Total HP	1114	293	185	6.66	277
J & K	Baqilhar HPS (IPP) (3*150)	450	215	216	5.14	214
	Other Hydro/IPP	436	105	105	2.52	105
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	320	321	7.66	319
Total State Control Area Generation		39597	17867	16089	405.62	16780
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2756	4706	114.75	4781
Total Regional Availability(Gross)		64017	38403	30995	808.60	33571

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8485	1658	80.18	3341
State Control Area Hydro	5684	1595	1427	39.52	1526
Total Regional Hydro	17116	10080	3085	119.70	4867

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	Import	Export	
Vindhychal B/B	-200	-100	300	300	0.56	3.57	-3.01		
Gwalior-Agra (D/C)	890	1212	2242	0	34.77	0.00	34.77		
Zerda-Kankroli	-193	-85	35	193	0.00	2.20	-2.20		
Zerda-Bhinmal	-176	4	109	186	0.00	0.47	-0.47		
Malanpur-Auraiya	-92	-145	0	146	0.00	2.58	-2.58		
Badod-Kota/Morak	-177	-200	0	123	0.00	4.87	-4.87		
Mundra-Mohindergarh(HVDC)	1900	2198	2205	0	49.97	0.00	49.97		
Vindhychal - Rihand	437	426	502	0	10.75	0.00	10.75		
Sub Total WR	2389	3310			96.05	13.68	82.36		
Pusauli Bypass	200	200	200	0	4.82	0.00	4.82		
MZP- GKP (D/C)	130	300	400	130	5.47	0.00	5.47		
Patna-Balia(D/C)	226	318	539	0	8.80	0.00	8.80		
B'Sharif-Balia (D/C)	-57	141	279	57	3.24	0.00	3.24		
Pusauli-Balia	-101	-53	0	106	0.00	1.34	-1.34		
Gaya-Fatehpur (765 Kv)	21	306	406	0	6.76	0.00	6.76		
Pusauli-Sahupuri	91	57	141	0	2.48	0.00	2.48		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-42	-43	0	44	0.00	0.97	-0.97		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	-101	170	255	101	3.14	0.00	3.14		
Sub Total ER	367	1396			34.71	2.32	32.39		
Total IR Exch	2756	4706			130.75	16.00	114.75		

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
29.27	1.07	30.35	5.76	-13.12	3.88	4.19	0.94	-0.94

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
40.93	61.94	102.87	32.39	82.36	114.75	-8.53	20.42	11.88

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	0.00	1.13	9.42	43.00	60.54	16.82	10.31	2.91	0.00

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				
50.34	19.01	49.73	14.52	50.01	0.08	0.09	50.31	49.88

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	413	02:53	409	22:12	0.0	0.0	0.0	0.0
Gorakhpur	400	412	21:00	403	15:00	100.0	100.0	0.0	0.0
Bareilly	400	420	21:53	397	08:03	0.0	0.0	0.0	0.0
Kanpur	400	420	20:43	404	09:18	0.0	0.0	0.0	0.0
Dadri	400	418	03:07	403	09:23	0.0	0.0	0.0	0.0
Ballabgarh	400	425	04:00	409	09:42	0.0	0.0	26.2	0.0
Bawana	400	423	03:11	408	18:12	0.0	0.0	14.2	0.0
Bassi	400	426	20:43	398	09:40	0.0	0.0	8.8	0.0
Hissar	400	415	04:01	400	18:10	0.0	0.0	0.0	0.0
Moga	400	423	03:02	405	09:40	0.0	0.0	11.9	0.0
Abdullapur	400	423	20:43	396	18:16	0.0	0.0	7.1	0.0
Nalagarh	400	432	03:02	412	09:23	0.0	0.0	55.5	2.5
Kishenpur	400	426	03:04	366	16:30	0.3	0.3	20.0	0.0
Wagoora	400	415	04:01	376	18:06	1.4	18.8	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	774	20:40	743	09:16	0.0	0.0	0.0	0.0
Balia	765	771	20:54	750	14:52	0.0	0.0	0.0	0.0
Moga	765	800	03:08	768	09:19	0.0	0.0	0.0	0.0
Agra	765	795	20:43	758	09:11	0.0	0.0	0.0	0.0
Bhiwani	765	793	03:40	770	09:24	0.0	0.0	0.0	0.0
Unnao	765	768	20:41	749	09:11	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	506.13	1367.40	510.30	1560.04	138.41	419.46
Pong	426.72	384.05	412.63	588.94	419.28	861.93	90.05	403.15
Tehri	829.79	740.04	822.75	1060.00	823.40	1066.00	86.71	117.00
Koteshwar	612.50	598.50	608.96	4.21	611.65	5.90	117.00	118.00
Chamera-I	760.00	748.75	759.53	0.00	0.00	0.00	59.38	42.67
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	210.36	0.43	517.10	2.91	35.61	19.37

* 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	-239	136	0	-213	234	0	-5.32	2.89	-2.44
Delhi	-830	-20	-21	-600	88	-21	-14.83	0.25	-14.58
Haryana	-873	136	0	-855	122	0	-22.24	2.86	-19.37
HP	325	-25	0	300	-285	0	7.41	-2.86	4.54
J&K	297	0	0	349	0	0	7.02	-0.09	6.93
CHD	-30	0	0	0	0	0	-0.24	0.11	-0.14
Rajasthan	491	400	1	491	-587	1	11.78	5.69	17.47
UP	86	0	0	124	0	0	2.50	0.00	2.50
Uttarakhand	294	117	0	294	125	0	7.05	3.21	10.26
Total	-479	744	-20	-110	-303	-20	-6.88	12.05	5.17

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-213	-239	325	7	0	0
Delhi	-498	-830	122	-102	-21	-21
Haryana	-855	-1003	139	96	0	0
HP	325	300	87	-623	0	0
J&K	366	251	0	-10	0	0
CHD	0	-30	20	0	0	0
Rajasthan	491	491	756	-744	1	1
UP	124	86	0	0	0	0
Uttarakhand	294	294	255	84	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 08.11.2014 :**
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 :**