

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.11.2014
Date of Reporting : 12.11.2014

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
37268	1926	39194	50.19	29518	2165	31683	50.10	774.7	53.17

* 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	29.73	7.34		37.07	52.18	53.70	1.51	90.77	0.00
Haryana	54.33	0.52		54.85	47.94	47.77	-0.17	102.62	0.00
Rajasthan	122.77	4.09	4.32	131.18	67.03	69.76	2.72	200.94	0.00
Delhi	19.27			19.27	42.38	40.61	-1.77	59.87	0.00
UP	123.58	3.76	2.40	129.74	90.82	90.39	-0.43	220.13	51.52
Uttarakhand		8.34		8.34	21.57	25.44	3.87	33.78	1.65
HP		6.55		6.55	17.61	17.86	0.25	24.41	0.00
J & K		8.23	0.00	8.23	28.47	30.64	2.17	38.87	0.00
Chandigarh				0.00	3.35	3.37	0.02	3.37	0.00
Total	349.68	38.82	6.72	395.22	371.36	379.53	8.17	774.75	53.17

* 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	4384	0	162	86	3295	0	140	-125	4527
Haryana	5906	0	-82	-650	3722	0	3	-654	5906
Rajasthan	8790	0	-207	10	7957	0	-51	847	9200
Delhi	3121	1	-179	-528	1725	0	-260	-817	3204
UP	10028	1850	-369	148	9341	2165	312	91	10074
Uttarakhand	1753	75	148	424	1192	0	181	389	11652
HP	1255	0	25	22	773	0	18	324	1306
J&K	1852	0	-15	432	1423	0	0	274	1880
Chandigarh	180	0	-19	0	91	0	2	-31	180
Total	37268	1926	-537	-55	29518	2165	344	299	37268

* 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	1583	1620	1807	40.74	1697	38.00	2.74
Rihand I STPS (2*500)	1000	556	880	459	14.14	589	13.27	0.87
Rihand II STPS (2*500)	1000	970	1009	1041	24.18	1008	22.67	1.51
Rihand III STPS (2*500)	1000	470	479	504	11.77	490	10.98	0.79
Dadri I STPS (4*210)	840	779	525	548	15.86	661	14.94	0.91
Dadri II STPS (2*490)	980	980	817	675	19.80	825	19.97	-0.17
Unchahar I TPS (2*210)	420	391	350	357	9.40	392	8.60	0.79
Unchahar II TPS (2*210)	420	195	152	146	4.41	184	3.97	0.44
Unchahar III TPS (1*220)	210	195	160	147	4.25	177	3.88	0.37
I-STPP (Jhajjar) (3*500)	1500	1500	928	884	20.88	870	22.21	-1.33
Dadri GPS (4*130.19+2*154.51)	830	809	338	403	9.38	391	9.31	0.07
Anta GPS (3*88.71+1*153.2)	419	403	204	257	6.03	251	6.07	-0.04
Auraiva GPS (4*111.19+2*109.30)	663	434	155	161	3.78	158	3.69	0.09
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	9268	7617	7389	185	7694	178	7
B. NPC								
NAPS (2*220)	440	284	328	330	6.96	290	6.82	0.15
RAPS- B (2*220)	440	404	448	450	9.71	405	9.70	0.02
RAPS- C (2*220)	440	391	441	384	9.09	379	9.38	-0.29
Sub Total (B)	1320	1079	1217	1164	25.77	1074	25.89	-0.13
C. NHPC								
Chamera I HPS (3*180)	540	534	523	0	2.27	94	2.20	0.07
Chamera III HPS (3*100)	300	300	297	0	1.56	65	1.50	0.06
Chamera III HPS (3*77)	231	231	222	0	1.01	42	1.00	0.01
Bairasuli HPS(3*60)	180	178	181	0	0.82	34	0.76	0.06
Salal-HPS (6*115)	690	189	214	210	4.70	196	4.54	0.16
Tanakpur-HPS (3*40)	94	43	61	48	1.06	44	1.04	0.03
Uri-I HPS (4*120)	480	238	346	257	6.07	253	5.71	0.36
Uri-II HPS (4*60)	240	145	167	168	3.63	151	3.48	0.15
Dhauliganga-HPS (4*70)	280	207	209	0	1.45	60	1.50	-0.05
Dulhasti-HPS (3*130)	390	387	398	229	3.91	163	3.70	0.21
Sewa-II HPS (3*40)	120	119	110	0	0.39	16	0.38	0.01
Parbati 3 (4*130)	520	260	261	0	0.59	25	0.59	0.01
Sub Total (C)	4065	2832	2990	913	27	1144	26	1
D. SJVNL								
NJPC (6*250)	1500	1605	1609	0	10.08	420	9.99	0.09
Rampur HEP (4*68.67)	275	350	370	0	2.54	106	2.68	-0.15
Sub Total (D)	1775	1955	1979	0	12.61	526	12.67	-0.06
E. THDC								
Tehri HPS (4*250)	1000	1060	1057	0	6.87	286	6.80	0.07
Koteshwar HPS (4*100)	400	91	99	90	2.21	92	2.20	0.01
Sub Total (E)	1400	1151	1156	90	9.08	378	9.00	0.08
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	516	1069	363	12.37	515	12.39	-0.02
Dehar HPS (6*165)	990	156	495	0	3.97	166	3.75	0.22
Pong HPS (6*66)	396	220	318	126	5.23	218	5.28	-0.05
Sub Total (F)	2900	893	1882	489	21.57	899	21.42	0.15
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	72	0	0.60	25	0.59	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	860	0	5.38	224	5.40	-0.02
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	138	109	2.82	117	2.78	0.04
Budhil HPS(IPP)	70	0	70	0	0.21	9	0.21	0.00
Sub Total (G)	1662	0	1139	109	9.01	375	8.98	0.03
H. Total Regional Entities (A-G)	24419	17177	17981	10154	290.15	12089	282.00	8.14

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	3.69	154
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.73	72
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	372	365	8.61	359
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	702	695	15.69	654
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1314	1300	29.73	1239
	Total Hydro	1148	371	218	7.34	306
Total Punjab	5828	1685	1518	37.07	1545	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	225	210	4.89	204
	DCRTPP (Yamuna nagar) (2*300)	600	276	232	6.12	255
	Faridabad GPS (NTPC)	432	198	194	4.53	189
	RGTPP (khedar) (IPP) (2*600)	1200	1041	726	17.72	738
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1222	742	21.07	878
	Thermal (Total)	4944	2962	2104	54.33	2264
	Total Hydro	62	18	23	0.52	21
	Total Haryana	5006	2980	2127	54.85	2285
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	810	812	19.68
suratgarh TPS (6*250)		1500	1130	1015	25.21	1050
Chabra TPS (3*250)		750	452	429	10.81	450
Dholpur GPS (3*110)		330	115	122	2.91	121
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	171	123	4.09	170
RAPS A (NPC) (1*100+1*200)		300	189	170	4.40	183
Barsingsar (NLC) (2*125)		250	170	170	4.42	184
Giral LTPS (2*125)		250	77	75	1.61	67
Rajwest LTPS (IPP) (8*135)		1080	648	649	15.34	639
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	335	406	7.51	313
Kawai(Adani) (2*660)		1320	1167	1168	26.80	1117
Thermal (Total)		8026	5264	5139	123	5115
Total Hydro		550	171	228	4.09	170
Wind power		2798	173	84	2.87	120
Biomass		99	43	43	1.02	43
Solar		730	0	0	0.43	18
Renewable/Others (Total)		3627	216	127	4.32	180
Total Rajasthan	12203	5651	5494	131.18	5466	
UP	Anpara TPS (3*210+2*500)	1630	918	941	22.30	929
	Obra TPS (2*50+2*94+5*200)	1194	282	174	5.50	229
	Paricha TPS (2*110+2*220+2*250)	1140	746	766	18.40	767
	Panki TPS (2*105)	210	131	131	3.00	125
	Harduaganj TPS (1*60+1*105+2*250)	665	465	474	11.30	471
	Tanda TPS (NTPC) (4*110)	440	292	282	6.92	288
	Roza TPS (IPP) (4*300)	1200	1031	991	24.21	1009
	Anpara-C (IPP) (2*600)	1200	963	990	23.49	979
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	361	361	8.46	352
	Thermal (Total)	8129	5189	5110	123.58	5149
	Vishnuparyag HPS (IPP)	400	123	118	2.74	114
	Other Hydro	527	41	32	1.02	42
	Cogeneration	981	100	100	2.40	100
	Total UP	10037	5453	5360	129.74	5292
Uttarakhand	Total Hydro	1398	490	225	8.34	347
	Total Uttarakhand	1398	490	225	8.34	347
Delhi	Raighat TPS (2*67.5)	135	0	0	0.02	1
	Delhi Gas Turbine (6x30 + 3x34)	282	76	78	1.90	79
	Pragati Gas Turbine (2x104+ 1x122)	330	142	139	3.38	141
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	312	296	6.21	259
	Badarpur TPS (NTPC) (3*95+2*210)	705	327	325	7.76	323
	Thermal (Total)	2917	857	838	19.27	803
Total Delhi	2917	857	838	19.27	803	
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.43	60
	Malana HPS (IPP) (2*43)	86	44	0	0.32	13
	Other Hydro	728	193	198	4.80	200
	Total HP	1114	267	198	6.55	273
J & K	Baqilhar HPS (IPP) (3*150)	450	296	214	5.71	238
	Other Hydro/IPP	436	105	105	2.52	105
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	401	319	8.23	343
Total State Control Area Generation		39597	17784	16079	395.22	16353
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3796	4708	121.47	5061
Total Regional Availability(Gross)		64017	39561	30941	806.84	33504

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8939	1492	76.69	3196
State Control Area Hydro	5684	1759	1243	38.82	1503
Total Regional Hydro	17116	10699	2735	115.51	4699

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	-300	200	300	0.89	3.79	-2.91
Gwalior-Agra (D/C)	1238	1436	1902	0	34.10	0.00	34.10
Zerda-Kankroli	-252	-72	56	252	0.00	2.25	-2.25
Zerda-Bhinmal	-118	72	-201	227	-0.01	0.00	-0.01
Malanpur-Auraiya	-86	-146	0	156	0.00	2.47	-2.47
Badod-Kota/Morak	-148	-211	0	249	0.00	3.87	-3.87
Mundra-Mohindergarh(HVDC)	2199	2099	2204	0	52.17	0.00	52.17
Vindhychal - Rihand	461	363	506	0	10.64	0.00	10.64
Sub Total WR	3194	3241			97.79	12.38	85.40
Pusauli Bypass	200	200	200	0	4.83	0.00	4.83
MZP- GKP (D/C)	170	300	372	170	5.32	0.00	5.32
Patna-Balia(D/C)	250	484	687	0	10.75	0.00	10.75
B'Sharif-Balia (D/C)	90	158	316	0	3.58	0.00	3.58
Pusauli-Balia	-115	-61	0	115	0.00	1.59	-1.59
Gaya-Fatehpur (765 Kv)	25	261	450	0	7.05	0.00	7.05
Pusauli-Sahupuri	111	94	220	0	2.42	0.00	2.42
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-47	0	-47	0.00	-0.94	0.94
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-89	78	250	89	2.77	0.00	2.77
Sub Total ER	602	1467			36.72	0.65	36.07
Total IR Exch	3796	4708			134.51	13.03	121.47

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
23.24	1.07	24.31	4.42	-7.24	0.53	13.52	4.54	-4.54

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mdra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
33.80	74.52	108.31	36.07	85.40	121.47	2.28	10.89	13.16

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	0.70	5.60	20.00	50.70	49.00	15.90	13.20	1.90	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				
50.28	13.04	49.63	17.17	49.99	0.12	0.11	50.30	49.81

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	01:15	404	18:12	0.3	0.3	0.0	0.0
Gorakhpur	400	233	21:13	224	09:25	100.0	100.0	0.0	0.0
Bareilly	400	421	21:13	402	06:21	0.0	0.0	1.1	0.0
Kanpur	400	422	21:11	399	12:37	0.0	0.0	4.2	0.0
Dadri	400	418	04:02	401	09:29	0.1	0.1	0.0	0.0
Ballabgarh	400	426	21:01	407	09:25	0.0	0.0	24.9	0.0
Bawana	400	424	21:42	406	05:54	0.0	0.0	5.9	0.0
Bassi	400	426	19:55	392	07:13	0.0	0.0	11.3	0.0
Hissar	400	416	21:40	396	05:50	0.0	0.0	0.0	0.0
Moga	400	423	13:02	404	06:37	0.0	0.0	4.9	0.0
Abdullapur	400	426	20:56	396	05:52	0.0	0.0	15.7	0.0
Nalagarh	400	431	21:40	409	18:25	0.0	0.0	40.5	0.3
Kishenpur	400	428	13:42	401	18:27	0.0	0.0	27.5	0.0
Wagoora	400	416	13:42	381	20:06	0.0	15.8	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	780	21:51	743	05:54	0.0	0.0	0.0	0.0
Balia	765	771	21:49	743	17:53	0.0	0.0	0.0	0.0
Moga	765	800	21:40	764	06:40	0.0	0.0	0.0	0.0
Agra	765	793	21:30	753	05:55	0.0	0.0	0.0	0.0
Bhiwani	765	788	00:00	788	00:00	0.0	0.0	0.0	0.0
Unnao	765	775	21:45	749	06:40	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	505.67	1339.30	510.02	1545.02	109.10	382.39
Pong	426.72	384.05	412.27	577.87	418.98	848.35	72.83	331.48
Tehri	829.79	740.04	822.35	1050.00	823.10	1065.00	67.21	150.00
Koteshwar	612.50	598.50	609.17	4.21	611.80	5.50	150.00	146.00
Chamera-I	760.00	748.75	759.72	0.00	0.00	0.00	61.01	61.01
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	510.39	1.71	516.88	3.59	67.13	78.74

* 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	-137	13	0	-112	198	0	-2.89	4.17	1.27
Delhi	-817	0	0	-586	59	0	-14.41	0.59	-13.82
Haryana	-794	140	0	-786	136	0	-19.01	1.62	-17.39
HP	324	0	0	300	-277	0	7.38	-1.32	6.07
J&K	274	0	0	334	98	0	6.57	0.27	6.84
CHD	-31	0	0	0	0	0	-0.24	0.24	0.00
Rajasthan	490	357	0	490	-479	0	11.75	7.18	18.93
UP	91	0	0	148	0	0	2.80	0.00	2.80
Uttarakhand	244	145	0	244	180	0	5.86	4.40	10.26
Total	-356	655	0	31	-86	0	-2.20	17.16	14.96

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-112	-137	368	6	0	0
Delhi	-485	-817	122	-71	0	0
Haryana	-786	-794	143	-499	0	0
HP	324	300	113	-505	0	0
J&K	343	236	98	-10	0	0
CHD	0	-31	29	0	0	0
Rajasthan	490	490	766	-669	0	0
UP	158	91	0	0	0	0
Uttarakhand	244	244	298	136	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 11.11.2014 :**

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 :**