

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पॉवरसिड की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.10.2014
Date of Reporting : 10.10.2014

I. Regional Availability/Demand:

Evening Peak (20:00 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
40115	1796	41911	50.07	34141	2450	36591	50.12	868.9	73.38

* 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	51.21	13.72		64.93	66.28	66.79	0.50	131.72	1.00
Haryana	62.68	0.67		63.35	63.45	63.85	0.40	127.20	1.13
Rajasthan	127.73	0.52	5.47	133.73	46.58	53.70	7.12	187.42	2.28
Delhi	29.61			29.61	59.68	57.74	-1.94	87.35	0.00
UP	110.20	12.40	0.36	122.96	114.77	120.75	5.98	243.71	66.24
Uttarakhand		11.70		11.70	17.16	18.98	1.81	30.68	2.67
HP		12.04		12.04	10.24	11.72	1.48	23.76	0.06
J & K		12.60	0.00	12.60	19.41	20.19	0.78	32.79	0.00
Chandigarh				0.00	3.80	4.28	0.48	4.28	0.00
Total	381.43	63.66	5.83	450.92	401.38	417.98	16.60	868.90	73.38

* 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 (20:00 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	6254	0	-178	546	4980	0	-31	49	6254
Haryana	6956	0	-113	279	4504	0	140	277	6956
Rajasthan	8217	136	237	-225	7402	0	130	-126	8297
Delhi	4030	0	-156	208	3221	0	-90	221	4167
UP	10035	1390	-361	1120	10958	2450	301	1952	11184
Uttarakhand	1494	270	240	35	1166	0	-8	279	1494
HP	1165	0	27	-706	789	0	6	-109	1220
J&K	1752	0	153	-174	977	0	-121	-444	1752
Chandigarh	212	0	-11	0	143	0	4	0	222
Total	40115	1796	-161	1082	34141	2450	331	2098	40115

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

figures may not be at simultaneous hour.

Diversity is 1.04

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	1366	1496	1486	33.17	1382	32.78	0.39
Rihand I STPS (2*500)	1000	750	829	815	19.96	832	17.90	2.06
Rihand II STPS (2*500)	1000	800	886	869	21.08	878	18.97	2.11
Rihand III STPS (2*500)	1000	850	925	908	21.84	910	20.16	1.68
Dadri I STPS (4*210)	840	603	618	468	13.42	559	13.28	0.14
Dadri II STPS (2*490)	980	480	495	345	10.24	427	10.03	0.21
Unchahar I TPS (2*210)	420	399	438	422	10.22	426	9.39	0.83
Unchahar II TPS (2*210)	420	400	439	399	10.18	424	9.24	0.94
Unchahar III TPS (1*220)	210	198	216	193	5.02	209	4.58	0.44
I-STPP (Jhajhar) (3*500)	1500	983	470	297	19.57	815	21.21	-1.64
Dadri GPS (4*130.19+2*154.51)	830	785	194	155	4.12	172	4.10	0.23
Anta GPS (3*88.71+1*153.2)	419	390	-3	211	3.54	148	3.29	0.05
Auraiva GPS (4*111.19+2*109.30)	663	481	156	155	3.64	152	3.55	0.09
Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
Sub Total (A)	11297	8489	7159	6723	176	7336	169	7
B. NPC								
NAPS (2*220)	440	273	315	323	6.72	280	6.55	0.17
RAPS-B (2*220)	440	394	440	444	9.47	395	9.46	0.01
RAPS-C (2*220)	440	175	198	199	4.18	174	4.20	-0.02
Sub Total (B)	1320	842	953	966	20.37	849	20.21	0.16
C. NHPC								
Chamera I HPS (3*180)	540	534	549	0	3.39	141	3.30	0.09
Chamera II HPS (3*100)	300	300	309	0	2.93	122	2.85	0.08
Chamera III HPS (3*77)	231	229	230	0	1.92	80	1.84	0.08
Bairasuli HPS(3*60)	180	120	125	0	1.33	55	1.27	0.06
Salal-HPS (6*115)	690	394	361	501	9.89	412	9.46	0.42
Tanakpur-HPS (3*40)	94	71	71	72	1.75	73	1.72	0.04
Uri-I HPS (4*120)	480	431	446	345	10.67	445	10.35	0.32
Uri-II HPS (4*60)	240	237	242	240	5.75	240	5.70	0.06
Dhauliganga-HPS (4*70)	280	98	208	73	2.48	103	2.36	0.11
Dulhasti-HPS (3*130)	390	387	401	399	9.42	393	9.29	0.13
Sewa-II HPS (3*40)	120	119	122	0	0.61	25	0.50	0.11
Parbati 3 (4*130)	520	130	133	0	1.11	46	1.07	0.04
Sub Total (C)	4065	3052	3198	1630	51	2135	50	2
D. SJVNL								
NJPC (6*250)	1500	1605	1308	407	15.02	626	14.93	0.09
Rampur HEP (4*68.67)	275	165	350	115	4.04	168	3.95	0.09
Sub Total (D)	1775	1770	1658	522	19.05	794	18.87	0.18
E. THDC								
Tehri HPS (4*250)	1000	1060	1067	0	6.14	256	6.00	0.14
Koteshwar HPS (4*100)	400	91	100	90	1.78	74	1.75	0.03
Sub Total (E)	1400	1151	1167	90	7.92	330	7.75	0.17
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	771	1200	651	18.40	766	18.50	-0.11
Dehar HPS (6*165)	990	296	660	280	7.37	307	7.11	0.26
Pong HPS (6*66)	396	203	324	198	4.92	205	4.87	0.06
Sub Total (F)	2900	1270	2184	1129	30.69	1279	30.48	0.21
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	101	0	1.10	46	1.07	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	850	210	8.35	348	8.16	0.19
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	297	299	7.07	294	7.14	-0.07
Budhil HPS(IPP)	70	0	26	10	0.45	19	0.46	0.00
Sub Total (G)	1662	0	1274	519	16.96	707	16.83	0.13
H. Total Regional Entities (A-G)	24419	16574	17592	11579	322.31	13430	312.42	9.89

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	180	4.10	171
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	80	1.87	78
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	188	181	4.06	169
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1382	1381	31.65	1319
	Talwandi Saboo (1*660)	660	470	381	9.53	397
	Thermal (Total)	4680	2290	2203	51.21	2134
	Total Hydro	1148	490	526	13.72	572
Total Punjab	5828	2780	2729	64.93	2706	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	650	607	13.88	579
	DCRTPP (Yamuna nagar) (2*300)	600	276	220	5.58	232
	Faridabad GPS (NTPC)	432	194	191	4.30	179
	RGTPP (khedar) (IPP) (2*600)	1200	1071	707	17.77	740
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1148	740	21.16	881
	Thermal (Total)	4944	3339	2465	62.68	2612
	Total Hydro	62	26	29	0.67	28
	Total Haryana	5006	3365	2494	63.35	2640
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	955	956	22.66
suratgarh TPS (6*250)		1500	1369	1169	31.10	1296
Chabra TPS (3*250)		750	636	635	15.44	643
Dholpur GPS (3*110)		330	105	105	2.79	116
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	177	165	5.06	211
RAPS A (NPC) (1*100+1*200)		300	180	180	4.38	183
Barsingar (NLC) (2*125)		250	100	98	2.18	91
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	554	832	17.14	714
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	0	0	0.00	0
Kawai(Adani) (2*660)		1320	1177	851	26.99	1125
Thermal (Total)		8026	5253	4991	128	5322
Total Hydro		550	165	22	0.52	22
Wind power		2798	188	396	4.49	187
Biomass		99	29	29	0.69	29
Solar		730	0	0	0.29	12
Renewable/Others (Total)		3627	217	425	5.47	228
Total Rajasthan	12203	5635	5438	133.73	5572	
UP	Anpara TPS (3*210+2*500)	1630	846	841	20.20	842
	Obra TPS (2*50+2*94+5*200)	1194	362	367	8.80	367
	Paricha TPS (2*110+2*220+2*250)	1140	630	523	13.60	567
	Panki TPS (2*105)	210	135	131	3.10	129
	Harduaganj TPS (1*60+1*105+2*250)	665	457	472	10.10	421
	Tanda TPS (NTPC) (4*110)	440	267	270	6.60	275
	Roza TPS (IPP) (4*300)	1200	824	815	19.90	829
	Anpara-C (IPP) (2*600)	1200	855	846	20.30	846
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	820	7.60	317
	Thermal (Total)	8129	4696	5085	110.20	4592
	Vishnuparyag HPS (IPP)	400	297	297	6.90	288
	Other Hydro	527	223	243	5.50	229
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5231	5640	122.96	4836
Uttarakhand	Total Hydro	1398	544	441	11.70	488
	Total Uttarakhand	1398	544	441	11.70	488
Delhi	Raighat TPS (2*67.5)	135	0	0	-0.03	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	111	112	2.64	110
	Pragati Gas Turbine (2x104+ 1x122)	330	298	268	6.52	272
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	463	441	10.75	448
	Badarpur TPS (NTPC) (3*95+2*210)	705	426	366	9.73	405
	Thermal (Total)	2917	1298	1187	29.61	1234
Total Delhi	2917	1298	1187	29.61	1234	
HP	Baspa HPS (IPP) (2*150)	300	80	80	3.29	137
	Malana HPS (IPP) (2*43)	86	67	0	0.57	24
	Other Hydro	728	351	327	8.19	341
	Total HP	1114	498	407	12.04	502
J & K	Baqilhar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	75	75	1.80	75
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	525	525	12.60	525
Total State Control Area Generation		39597	19876	18861	450.92	18501
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3516	5175	117.60	4900
Total Regional Availability(Gross)		64017	40984	35615	890.83	36831

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9158	3581	118.36	4932
State Control Area Hydro	5684	2471	2193	63.66	2365
Total Regional Hydro	17116	11629	5774	182.01	7296

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 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	400	500	5.08	0.71	4.36
Gwalior-Agra (D/C)	880	1856	2017	0	36.41	0.00	36.41
Zerda-Kankroli	-234	-184	0	305	0.00	5.19	-5.19
Zerda-Bhinmal	-179	-112	0	209	0.00	3.01	-3.01
Malanpur-Auraiya	-40	-12	0	58	0.00	0.67	-0.67
Badod-Kota/Morak	-63	-77	0	119	0.00	1.47	-1.47
Mundra-Mohindergarh(HVDC)	1998	1998	2004	0	48.09	0.00	48.09
Vindhychal - Rihand	0	0	190	0	0.22	0.00	0.22
Sub Total WR	2462	3769			89.80	11.06	78.74
Pusauli Bypass	400	200	400	0	7.21	0.00	7.21
MZP- GKP (D/C)	271	374	622	0	10.42	0.00	10.42
Patna-Balia(D/C)	166	262	409	0	7.34	0.00	7.34
B'Sharif-Balia (D/C)	138	226	369	0	6.29	0.00	6.29
Pusauli-Balia	-95	-32	0	128	0.00	1.34	-1.34
Gaya-Fatehpur (765 Kv)	0	225	298	0	2.55	0.00	2.55
Pusauli-Sahupuri	193	101	206	0	3.58	0.00	3.58
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-43	-30	0	43	0.00	0.86	-0.86
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	24	80	342	0	3.68	0.00	3.68
Sub Total ER	1054	1406			41.06	2.20	38.86
Total IR Exch	3516	5175			130.86	13.26	117.60

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
28.05	2.83	30.87	6.59	9.08	0.40	12.82	0.00	0.00

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
37.86	66.20	104.07	38.86	78.74	117.60	1.00	12.53	13.54

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	2.20	13.80	37.90	79.80	54.40	5.90	1.90	0.00	NA

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				
50.19	6.03	49.55	18.15	49.92	0.17	0.10	50.15	49.78

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	00:23	405	12:17	0.2	0.2	0.0	0.0
Gorakhpur	400	414	06:05	391	20:30	0.0	0.0	0.0	0.0
Bareilly	400	418	06:04	400	22:36	1.1	1.1	0.0	0.0
Kanpur	400	417	06:02	399	12:25	0.0	0.0	0.0	0.0
Dadri	400	417	06:02	400	18:38	0.0	0.0	0.0	0.0
Ballabgarh	400	422	06:01	404	14:37	0.0	0.0	0.8	0.0
Bawana	400	417	06:01	401	18:37	0.0	0.0	0.0	0.0
Bassi	400	426	04:02	397	12:22	0.0	0.0	18.8	0.0
Hissar	400	413	04:02	396	18:38	0.0	0.0	0.0	0.0
Moga	400	415	23:52	125	08:42	45.9	45.9	0.0	0.0
Abdullapur	400	420	02:01	396	18:36	0.0	0.0	0.0	0.0
Nalagarh	400	430	04:02	408	18:34	0.0	0.0	41.1	0.0
Kishenpur	400	421	02:01	403	18:44	0.0	0.0	1.5	0.0
Wagoora	400	415	02:50	384	19:21	0.0	11.1	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	776	06:03	741	18:40	0.0	0.1	0.0	0.0
Balia	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Moga	765	791	04:02	765	18:38	0.0	0.0	0.0	0.0
Agra	765	786	06:02	757	14:29	0.0	0.0	0.0	0.0
Bhiwani	765	792	23:55	770	14:39	0.0	0.0	0.0	0.0
Unnao	765	774	00:00	751	20:36	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	509.38	1515.08	510.76	1590.18	356.06	532.38
Pong	426.72	384.05	416.01	718.14	422.18	990.81	114.46	300.47
Tehri	829.79	740.04	824.60	1100.00	824.95	1106.00	134.28	133.00
Koteshwar	612.50	598.50	609.01	4.21	610.65	4.80	133.00	118.00
Chamera-I	760.00	748.75	757.28	7.58	0.00	0.00	111.73	92.38
Rihand	268.22	252.98	855.30	343.60	856.70	367.60	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	512.35	5.03	518.71	3.95	112.22	217.02

* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	49	0	0	541	5	0	8.26	0.02	8.28
Delhi	-205	447	-20	-2	210	0	0.18	8.47	8.66
Haryana	269	8	0	269	11	0	6.30	0.22	6.52
HP	0	-109	0	0	-706	0	0.00	-5.91	-5.91
J&K	-146	-298	0	-155	-19	0	-3.56	-2.11	-5.67
CHD	0	0	0	0	0	0	0.00	0.00	0.00
Rajasthan	-18	-108	0	-119	-106	0	-1.01	-0.57	-1.58
UP	393	1539	20	168	952	0	5.55	19.32	24.87
Uttarakhand	49	230	0	49	-14	0	1.42	3.69	5.11
Total	391	1708	-1	750	332	0	17.14	23.14	40.28

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	541	49	5	0	0	0
Delhi	293	-231	635	-72	0	-20
Haryana	286	218	19	6	0	0
HP	0	0	30	-706	0	0
J&K	-146	-155	-14	-349	0	0
CHD	0	0	10	0	0	0
Rajasthan	-18	-119	472	-177	0	0
UP	409	157	1967	0	20	0
Uttarakhand	98	49	248	-18	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 09.10.2014 :****XIV. Synchronisation of new generating units :**
0.00**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**
1.400 kV Talwandi sabo-Muktsar line first time charged at 20.48 hrs on date 08.10.14**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**