

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 07.10.2014
Date of Reporting : 08.10.2014

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
42584	3183	45766	50.05	38439	4955	43394	49.95	928.7	105.71

* 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	71.07	13.73		84.80	70.47	70.50	0.03	155.30	7.97
Haryana	73.60	0.68		74.28	84.83	84.38	-0.45	158.66	0.05
Rajasthan	130.72	1.03	4.35	136.10	50.56	58.29	7.73	194.39	12.73
Delhi	27.34			27.34	68.35	70.39	2.04	97.73	0.00
UP	108.00	13.47	0.36	121.83	108.31	106.33	-1.98	228.16	80.70
Uttarakhand		13.13		13.13	16.10	17.87	1.77	30.99	4.27
HP		13.06		13.06	9.87	11.49	1.63	24.55	0.00
J & K		11.40	0.00	11.40	19.77	22.53	2.77	33.93	0.00
Chandigarh				0.00	4.17	5.01	0.84	5.01	0.00
Total	410.74	66.49	4.71	481.94	432.44	446.80	14.37	928.74	105.71

* 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	7441	123	6	442	6784	0	135	246	7441
Haryana	7707	0	-5	262	6737	0	146	269	7707
Rajasthan	8656	300	419	-339	8008	540	399	-90	8824
Delhi	4378	0	55	182	3851	0	58	-109	4540
UP	9991	2345	-124	411	9660	4345	213	1048	10467
Uttarakhand	1312	415	14	29	1234	70	98	197	1472
HP	1172	0	-38	-747	854	0	106	-257	1228
J&K	1688	0	-10	-174	1146	0	86	-444	1743
Chandigarh	239	0	7	0	166	0	27	0	248
Total	42584	3183	326	66	38439	4955	1267	859	42584

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

figures may not be at simultaneous hour.

Diversity is 1.03

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	1556	1797	1433	40.69	1695	37.35	3.34
Rihand I STPS (2*500)	1000	750	821	832	19.85	827	17.95	1.89
Rihand II STPS (2*500)	1000	800	878	873	21.04	877	19.14	1.91
Rihand III STPS (2*500)	1000	825	866	917	21.37	890	19.75	1.62
Dadri I STPS (4*210)	840	603	607	623	14.90	621	14.46	0.45
Dadri II STPS (2*490)	980	980	1005	991	23.59	983	23.50	0.09
Unchahar I TPS (2*210)	420	400	434	434	10.37	432	9.57	0.79
Unchahar II TPS (2*210)	420	400	438	437	10.52	438	9.55	0.97
Unchahar III TPS (1*220)	210	199	211	214	5.21	217	4.75	0.45
I-STPP (Jhajhar) (3*500)	1500	990	981	957	21.70	904	23.72	-2.02
Dadri GPS (4*130.19+2*154.51)	830	785	188	191	4.53	189	4.69	-0.17
Anta GPS (3*88.71+1*153.2)	419	390	241	224	6.01	250	5.93	0.08
Auraiva GPS (4*111.19+2*109.30)	663	481	149	161	3.63	151	3.53	0.10
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
Sub Total (A)	11297	9163	8616	8287	203	8478	194	9
B. NPC								
NAPS (2*220)	440	274	311	312	6.55	273	6.58	-0.03
RAPS- B (2*220)	440	395	438	444	9.45	394	9.48	-0.03
RAPS- C (2*220)	440	175	193	191	4.04	168	4.20	-0.17
Sub Total (B)	1320	844	942	947	20.04	835	20.26	-0.22
C. NHPC								
Chamera I HPS (3*180)	540	534	537	0	3.37	140	3.30	0.07
Chamera II HPS (3*100)	300	300	307	100	3.26	136	3.18	0.08
Chamera III HPS (3*77)	231	229	230	0	2.17	90	2.10	0.07
Bairasuli HPS(3*60)	180	120	122	0	1.14	48	1.06	0.08
Salal-HPS (6*115)	690	385	446	375	9.95	415	9.24	0.71
Tanakpur-HPS (3*40)	94	77	73	81	1.95	81	1.85	0.10
Uri-I HPS (4*120)	480	453	467	465	10.72	447	10.87	-0.14
Uri-II HPS (4*60)	240	227	236	237	5.29	220	5.45	-0.16
Dhauliganga-HPS (4*70)	280	116	209	75	2.90	121	2.79	0.11
Dulhasti-HPS (3*130)	390	387	403	397	8.59	358	9.29	-0.71
Sewa-II HPS (3*40)	120	119	128	19	0.77	32	0.55	0.22
Parbati 3 (4*130)	520	130	132	0	1.10	46	1.07	0.03
Sub Total (C)	4065	3078	3290	1750	51	2133	51	0
D. SJVNL								
NJPC (6*250)	1500	1605	1492	428	17.62	734	17.51	0.11
Rampur HEP (4*68.67)	275	188	375	83	4.68	195	4.52	0.16
Sub Total (D)	1775	1793	1867	511	22.30	929	22.03	0.27
E. THDC								
Tehri HPS (4*250)	1000	1060	1067	0	5.40	225	5.30	0.10
Koteshwar HPS (4*100)	400	91	101	92	1.77	74	1.75	0.02
Sub Total (E)	1400	1151	1168	92	7.17	299	7.05	0.12
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	866	1212	650	20.76	865	20.78	-0.02
Dehar HPS (6*165)	990	334	660	290	8.44	352	8.01	0.43
Pong HPS (6*66)	396	122	264	66	2.86	119	2.92	-0.06
Sub Total (F)	2900	1321	2136	1006	32.06	1336	31.71	0.35
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	115	0	1.28	53	1.32	-0.04
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	900	280	9.66	402	9.60	0.06
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	298	301	7.10	296	7.14	-0.03
Budhil HPS(IPP)	70	0	10	24	0.45	19	0.61	-0.16
Sub Total (G)	1662	0	1323	606	18.49	770	18.67	-0.18
H. Total Regional Entities (A-G)	24419	17351	19342	13198	354.71	14779	344.45	10.26

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	690	770	16.66	694
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	228	228	4.38	182
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	454	643	10.36	432
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1388	1381	31.74	1323
	Talwandi Saboo (1*660)	660	357	390	7.93	331
	Thermal (Total)	4680	3117	3412	71.07	2961
	Total Hydro	1148	604	592	13.73	572
Total Punjab	5828	3721	4004	84.80	3534	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	857	773	18.44	768
	DCRTPP (Yamuna nagar) (2*300)	600	255	233	5.84	243
	Faridabad GPS (NTPC)	432	148	183	3.73	155
	RGTPP (khedar) (IPP) (2*600)	1200	1067	719	18.83	785
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1145	1147	26.77	1115
	Thermal (Total)	4944	3472	3055	73.60	3067
	Total Hydro	62	27	30	0.68	28
	Total Haryana	5006	3499	3085	74.28	3095
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	866	872	20.32
suratgarh TPS (6*250)		1500	1396	1374	32.62	1359
Chabra TPS (3*250)		750	632	408	14.79	616
Dholpur GPS (3*110)		330	125	125	2.68	111
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	163	172	5.18	216
RAPS A (NPC) (1*100+1*200)		300	180	180	4.35	181
Barsingsar (NLC) (2*125)		250	98	98	2.07	86
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	832	832	19.88	829
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	1163	1180	28.85	1202
Thermal (Total)		8026	5455	5241	131	5447
Total Hydro		550	102	88	1.03	43
Wind power		2798	19	320	3.35	139
Biomass		99	35	35	0.83	35
Solar		730	0	0	0.17	7
Renewable/Others (Total)		3627	54	355	4.35	181
Total Rajasthan		12203	5611	5684	136.10	5671
UP		Anpara TPS (3*210+2*500)	1630	889	895	21.30
	Obra TPS (2*50+2*94+5*200)	1194	466	462	11.20	467
	Paricha TPS (2*110+2*220+2*250)	1140	433	448	10.00	417
	Panki TPS (2*105)	210	140	113	3.10	129
	Harduaganj TPS (1*60+1*105+2*250)	665	483	488	11.20	467
	Tanda TPS (NTPC) (4*110)	440	285	271	6.77	282
	Roza TPS (IPP) (4*300)	1200	743	531	15.53	647
	Anpara-C (IPP) (2*600)	1200	899	900	21.63	901
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	321	363	7.27	303
	Thermal (Total)	8129	4659	4471	108.00	4500
	Vishnuparyag HPS (IPP)	400	357	357	8.16	340
	Other Hydro	527	252	234	5.31	221
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5283	5077	121.83	4736
	Uttarakhand	Total Hydro	1398	560	483	13.13
Total Uttarakhand		1398	560	483	13.13	547
Delhi	Raighat TPS (2*67.5)	135	0	0	0.03	1
	Delhi Gas Turbine (6x30 + 3x34)	282	109	110	2.57	107
	Pragati Gas Turbine (2x104+ 1x122)	330	293	296	7.04	293
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	297	300	7.02	293
	Badarpur TPS (NTPC) (3*95+2*210)	705	427	425	10.68	445
	Thermal (Total)	2917	1126	1131	27.34	1139
Total Delhi	2917	1126	1131	27.34	1139	
HP	Baspa HPS (IPP) (2*150)	300	192	152	3.67	153
	Malana HPS (IPP) (2*43)	86	58	14	0.79	33
	Other Hydro	728	358	368	8.60	358
	Total HP	1114	608	534	13.06	544
J & K	Baqilhar HPS (IPP) (3*150)	450	436	436	9.59	399
	Other Hydro/IPP	436	75	75	1.81	75
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	511	511	11.40	475
Total State Control Area Generation		39597	20919	20509	481.94	19741
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3747.48	5409.25	122.38	5099
Total Regional Availability(Gross)		64017	44008	39117	959.03	39620

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9476	3639	123.66	5153
State Control Area Hydro	5684	2664	2472	66.49	2430
Total Regional Hydro	17116	12140	6111	190.15	7583

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	300	200	400	0	5.11	0.00	5.11
Gwalior-Agra (D/C)	1132	1724	1945	0	38.69	0.00	38.69
Zerda-Kankroli	-169	-182	0	301	0.00	4.45	-4.45
Zerda-Bhinmal	-151	-164	9	326	0.00	3.16	-3.16
Malanpur-Auraiya	30	47	0	50	0.00	0.64	-0.64
Badod-Kota/Morark	3	20	20	72	0.00	3.02	-3.02
Mundra-Mohindergarh(HVDC)	1998	2004	2004	0	48.38	0.00	48.38
Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	3143	3649			92.18	11.27	80.91
Pusauli Bypass	200	200	200	0	4.83	0.00	4.83
MZP- GKP (D/C)	120	476	662	0	10.82	0.00	10.82
Patna-Balia(D/C)	76	326	396	0	7.03	0.00	7.03
B'Sharif-Balia (D/C)	45	249	344	0	5.46	0.00	5.46
Pusauli-Balia	-71	-33	0	79	0.00	1.01	-1.01
Gaya-Fatehpur (765 Kv)	93	277	441	0	8.15	0.00	8.15
Pusauli-Sahupuri	194	180	198	0	3.51	0.00	3.51
K'nasa-Sahupuri	-20	-24	0	36	0.00	0.57	-0.57
Son Ngr-Rihand	-34	-40	0	44	0.00	0.94	-0.94
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	1	149	314	0	4.19	0.00	4.19
Sub Total ER	604	1760			43.99	2.52	41.48
Total IR Exch	3747	5409			136.17	13.79	122.38

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
29.11	3.08	32.19	6.17	4.67	-7.26	2.64	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
31.09	73.03	104.12	41.48	80.91	122.38	10.39	7.88	18.27

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	2.96	21.27	58.52	84.43	35.54	5.01	0.95	0.03	NA

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)		
50.21	13.04	49.53	18.26	49.88	0.25	0.11	50.13	49.76

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	01:28	408	00:02	0.0	0.0	0.0	0.0
Gorakhpur	400	412	06:10	394	23:05	0.0	0.0	0.0	0.0
Bareilly	400	415	03:06	394	22:24	0.0	0.0	0.0	0.0
Kanpur	400	419	03:05	401	23:07	0.0	0.0	0.0	0.0
Dadri	400	414	01:45	400	10:12	0.1	0.1	0.0	0.0
Ballabgarh	400	419	03:04	404	22:24	0.0	0.0	0.0	0.0
Bawana	400	413	15:09	401	22:16	0.0	0.0	0.0	0.0
Bassi	400	423	02:59	402	10:15	0.0	0.0	3.8	0.0
Hissar	400	403	13:04	395	19:14	0.0	0.0	0.0	0.0
Moga	400	413	01:41	400	19:11	0.0	0.0	0.0	0.0
Abdullapur	400	415	01:33	396	19:08	0.0	0.0	0.0	0.0
Nalagarh	400	425	03:04	406	19:11	0.0	0.0	25.1	0.0
Kishenpur	400	427	22:28	404	18:59	0.0	0.0	2.2	0.0
Wagoora	400	422	23:30	140	22:54	2.3	3.1	0.6	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	775	03:05	747	23:07	0.0	0.0	0.0	0.0
Balia	765	764	06:02	734	23:08	0.0	7.8	0.0	0.0
Moga	765	784	03:04	759	19:14	0.0	0.0	0.0	0.0
Agra	765	788	03:05	760	10:12	0.0	0.0	0.0	0.0
Bhiwani	765	791	03:05	767	10:12	0.0	0.0	0.0	0.0
Unnao	765	760	17:05	740	23:07	0.0	1.4	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	509.56	1530.03	510.78	1590.18	382.28	591.68
Pong	426.72	384.05	416.15	718.14	422.22	990.81	92.00	173.84
Tehri	829.79	740.04	824.45	1096.00	824.90	1107.95	149.29	117.00
Koteshwar	612.50	598.50	609.28	3.98	610.55	4.80	117.00	117.00
Chamera-I	760.00	748.75	756.88	7.62	0.00	0.00	91.48	91.48
Rihand	268.22	252.98	855.50	347.00	856.60	365.90	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	512.61	6.15	518.78	4.01	114.00	389.00

* 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	246	0	0	442	0	0	6.78	0.26	7.04
Delhi	-221	132	-20	-2	183	0	-1.72	4.18	2.46
Haryana	248	21	0	248	14	0	5.98	0.35	6.33
HP	0	-257	0	0	-747	0	-0.25	-7.65	-7.90
J&K	-146	-298	0	-155	-19	0	-3.56	-2.12	-5.69
CHD	0	0	0	0	0	0	0.00	0.02	0.02
Rajasthan	-18	-74	2	-18	-321	0	-0.43	-3.26	-3.69
UP	367	664	18	156	255	0	4.90	11.81	16.71
Uttarakhand	49	148	0	49	-20	0	1.18	2.67	3.85
Total	525	335	-1	721	-655	0	12.88	6.25	19.13

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	442	147	223	0	0	0
Delhi	18	-231	452	-257	0	-20
Haryana	286	248	21	10	0	0
HP	0	-142	-111	-747	0	0
J&K	-146	-155	-19	-349	0	0
CHD	0	0	39	0	0	0
Rajasthan	-18	-18	31	-594	2	0
UP	383	126	1180	0	20	0
Uttarakhand	49	49	204	-22	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 07.10.2014 :**

1. Abnormal weather condition was reported in J&K.

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 :**