

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 08.10.2014
Date of Reporting : 09.10.2014

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
38499	3160	41659	50.15	36355	5538	41893	50.12	860.0	84.89

* 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	57.71	11.83		69.54	64.15	63.63	-0.52	133.17	1.03
Haryana	69.44	0.65		70.09	67.02	64.29	-2.74	134.38	0.23
Rajasthan	123.28	1.95	6.72	131.96	50.07	57.94	7.88	189.90	11.93
Delhi	21.39			21.39	60.28	61.44	1.16	82.83	0.00
UP	110.97	12.73	0.36	124.05	110.98	115.97	4.99	240.03	69.02
Uttarakhand		12.08		12.08	16.52	18.70	2.18	30.78	2.67
HP		12.27		12.27	9.32	9.84	0.52	22.11	0.00
J & K		11.85	0.00	11.85	13.96	10.62	-3.33	22.47	0.00
Chandigarh				0.00	3.78	4.38	0.61	4.38	0.00
Total	382.79	63.36	7.08	453.23	396.07	406.82	10.75	860.05	84.89

* 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	5779	0	-92	541	5402	0	153	246	6614
Haryana	6247	0	-584	241	6602	0	95	241	6653
Rajasthan	8110	0	-98	-127	7674	1978	407	-101	9022
Delhi	4182	0	-274	339	3867	0	-50	19	4321
UP	9708	2980	-253	261	10420	3410	162	1178	11061
Uttarakhand	1498	180	57	29	1199	150	97	221	1597
HP	1124	0	27	-656	645	0	-72	-129	1151
J&K	1654	0	29	-200	386	0	-297	-444	1654
Chandigarh	199	0	-32	0	160	0	25	0	214
Total	38499	3160	-1220	428	36355	5538	521	1230	38499

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

figures may not be at simultaneous hour.

Diversity is 1.10

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	1339	1477	1529	32.23	1343	31.95	0.27
Rihand I STPS (2*500)	1000	750	799	815	19.44	810	17.68	1.76
Rihand II STPS (2*500)	1000	732	856	851	18.49	770	17.26	1.23
Rihand III STPS (2*500)	1000	816	896	847	20.70	863	19.30	1.40
Dadri I STPS (4*210)	840	545	598	542	12.16	507	12.63	-0.47
Dadri II STPS (2*490)	980	544	445	835	12.46	519	12.59	-0.13
Unchahar I TPS (2*210)	420	400	417	429	9.29	387	9.37	-0.08
Unchahar II TPS (2*210)	420	399	442	435	9.05	377	9.14	-0.09
Unchahar III TPS (1*220)	210	198	206	211	4.43	185	4.46	-0.03
I-STPP (Jhajjar) (3*500)	1500	990	772	937	20.14	839	22.02	-1.88
Dadri GPS (4*130.19+2*154.51)	830	785	170	172	4.12	172	4.05	0.07
Anta GPS (3*88.71+1*153.2)	419	390	231	205	5.40	225	5.32	0.09
Auraiya GPS (4*111.19+2*109.30)	663	481	153	152	3.66	153	3.59	0.08
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	8373	7462	7960	172	7151	169	2
B. NPC								
NAPS (2*220)	440	274	316	314	6.63	276	6.58	0.06
RAPS-B (2*220)	440	396	440	439	9.43	393	9.50	-0.07
RAPS-C (2*220)	440	175	194	192	4.03	168	4.20	-0.17
Sub Total (B)	1320	845	950	945	20.10	837	20.28	-0.18
C. NHPC								
Chamera I HPS (3*180)	540	534	536	0	3.33	139	3.30	0.03
Chamera II HPS (3*100)	300	300	301	0	2.95	123	2.88	0.07
Chamera III HPS (3*77)	231	229	214	0	2.02	84	2.00	0.02
Bairasuli HPS(3*60)	180	120	123	0	1.78	74	1.58	0.20
Salal-HPS (6*115)	690	452	560	437	11.25	469	10.84	0.41
Tanakpur-HPS (3*40)	94	78	75	75	1.86	77	1.84	0.01
Uri-I HPS (4*120)	480	449	448	456	10.94	456	10.78	0.16
Uri-II HPS (4*60)	240	203	241	181	4.97	207	4.90	0.07
Dhauliganga-HPS (4*70)	280	111	208	82	2.74	114	2.66	0.08
Dulhasti-HPS (3*130)	390	387	403	0	4.54	189	4.49	0.05
Sewa-II HPS (3*40)	120	119	123	0	0.86	36	0.80	0.06
Parbati 3 (4*130)	520	130	133	0	1.24	52	1.20	0.04
Sub Total (C)	4065	3111	3364	1232	48	2020	47	1
D. SJVNL								
NJPC (6*250)	1500	1605	1485	406	15.43	643	15.45	-0.02
Rampur HEP (4*68.67)	275	172	350	123	4.20	175	4.06	0.14
Sub Total (D)	1775	1777	1835	529	19.64	818	19.51	0.13
E. THDC								
Tehri HPS (4*250)	1000	1060	1030	0	4.43	184	4.43	0.00
Koteshwar HPS (4*100)	400	91	100	90	1.78	74	1.75	0.03
Sub Total (E)	1400	1151	1130	90	6.21	259	6.18	0.03
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	824	1201	650	19.86	827	19.77	0.09
Dehar HPS (6*165)	990	315	660	280	7.70	321	7.56	0.14
Pong HPS (6*66)	396	168	324	132	4.06	169	4.03	0.03
Sub Total (F)	2900	1307	2185	1062	31.61	1317	31.36	0.25
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	107	0	1.22	51	1.19	0.03
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	850	240	8.64	360	8.88	-0.24
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	7.06	294	7.13	-0.07
Budhil HPS(IPP)	70	0	27	0	0.40	17	0.37	0.03
Sub Total (G)	1662	0	1282	539	17.32	722	17.56	-0.25
H. Total Regional Entities (A-G)	24419	16564	18208	12357	314.98	13124	311.59	3.38

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	520	8.08	337
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	170	170	3.77	157
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	177	360	7.20	300
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1260	1382	29.86	1244
	Talwandi Saboo (1*660)	660	344	426	8.81	367
	Thermal (Total)	4680	2111	2858	57.71	2405
	Total Hydro	1148	367	295	11.83	493
Total Punjab	5828	2478	3153	69.54	2897	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	785	778	17.68	737
	DCRTPP (Yamuna nagar) (2*300)	600	240	277	5.73	239
	Faridabad GPS (NTPC)	432	179	148	4.08	170
	RGTPP (khedar) (IPP) (2*600)	1200	718	712	17.66	736
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1119	1144	24.29	1012
	Thermal (Total)	4944	3041	3059	69.44	2893
	Total Hydro	62	25	30	0.65	27
	Total Haryana	5006	3066	3089	70.09	2920
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	964	956	22.34
suratgarh TPS (6*250)		1500	1304	1271	30.91	1288
Chabra TPS (3*250)		750	643	626	15.68	653
Dholpur GPS (3*110)		330	125	125	2.79	116
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	168	171	5.21	217
RAPS A (NPC) (1*100+1*200)		300	180	180	4.38	183
Barsingar (NLC) (2*125)		250	99	98	2.14	89
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	832	630	18.61	776
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	1171	593	21.21	884
Thermal (Total)		8026	5486	4650	123	5137
Total Hydro		550	22	33	1.95	81
Wind power		2798	48	521	5.76	240
Biomass		99	34	34	0.82	34
Solar		730	0	0	0.15	6
Renewable/Others (Total)		3627	82	555	6.72	280
Total Rajasthan		12203	5590	5238	131.96	5498
UP	Anpara TPS (3*210+2*500)	1630	812	867	20.50	854
	Obra TPS (2*50+2*94+5*200)	1194	494	448	11.70	488
	Paricha TPS (2*110+2*220+2*250)	1140	397	421	9.50	396
	Panki TPS (2*105)	210	140	149	3.20	133
	Harduaganj TPS (1*60+1*105+2*250)	665	465	481	11.30	471
	Tanda TPS (NTPC) (4*110)	440	270	270	6.64	277
	Roza TPS (IPP) (4*300)	1200	824	824	19.83	826
	Anpara-C (IPP) (2*600)	1200	833	889	20.68	862
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	325	7.61	317
	Thermal (Total)	8129	4555	4674	110.97	4624
	Vishnuparyag HPS (IPP)	400	318	347	7.64	318
	Other Hydro	527	260	232	5.09	212
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5148	5268	124.05	4851
	Uttarakhand	Total Hydro	1398	661	466	12.08
Total Uttarakhand		1398	661	466	12.08	503
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	110	111	2.56	107
	Pragati Gas Turbine (2x104+ 1x122)	330	297	296	7.08	295
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	517	313	10.72	447
	Badarpur TPS (NTPC) (3*95+2*210)	705	420	435	1.03	43
	Thermal (Total)	2917	1344	1155	21.39	891
	Total Delhi	2917	1344	1155	21.39	891
HP	Baspa HPS (IPP) (2*150)	300	87	87	3.34	139
	Malana HPS (IPP) (2*43)	86	69	12	0.64	27
	Other Hydro	728	366	331	8.29	345
	Total HP	1114	522	430	12.27	511
J & K	Baqilhar HPS (IPP) (3*150)	450	450	450	10.05	419
	Other Hydro/IPP	436	75	75	1.80	75
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	525	525	11.85	494
Total State Control Area Generation		39597	19334	19324	453.23	18566
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2530	5697	107.39	4474
Total Regional Availability(Gross)		64017	40072	37378	875.59	36165

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9471	3153	115.79	4825
State Control Area Hydro	5684	2382	2011	63.36	2322
Total Regional Hydro	17116	11853	5164	179.15	7146

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	-200	500	500	500	5.85	2.42	3.43
Gwalior-Agra (D/C)	684	1944	1997	0	34.96	0.00	34.96
Zerda-Kankroli	-260	-163	0	392	0.00	5.62	-5.62
Zerda-Bhinmal	-119	-113	1	333	0.00	3.92	-3.92
Malanpur-Auraiya	39	28	0	66	0.00	0.67	-0.67
Badod-Kota/Morak	-108	-56	0	108	0.00	1.04	-1.04
Mundra-Mohindergarh(HVDC)	2001	1998	2005	0	47.56	0.00	47.56
Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	2037	4138			88.38	13.67	74.71
Pusauli Bypass	200	200	200	0	4.84	0.00	4.84
MZP- GKP (D/C)	109	432	688	0	9.31	0.00	9.31
Patna-Balia(D/C)	13	305	500	26	7.24	0.00	7.24
B'Sharif-Balia (D/C)	51	222	387	15	5.38	0.00	5.38
Pusauli-Balia	-83	-45	0	95	0.00	1.38	-1.38
Gaya-Fatehpur (765 Kv)	31	231	351	22	1.24	0.00	1.24
Pusauli-Sahupuri	178	195	197	0	4.05	0.00	4.05
K'nasa-Sahupuri	-36	-40	0	-40	0.00	0.83	-0.83
Son Ngr-Rihand	-34	-43	0	-43	0.00	0.88	-0.88
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	64	102	374	0	3.72	0.00	3.72
Sub Total ER	493	1559			35.77	3.10	32.68
Total IR Exch	2530	5697			124.15	16.76	107.39

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
27.71	2.79	30.50	6.74	7.90	-6.36	7.71	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
30.88	68.69	99.57	32.68	74.71	107.39	1.79	6.02	7.81

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	1.02	4.37	13.96	47.41	55.24	18.22	11.01	1.62	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				
50.31	6.08	49.59	10.15	50.00	0.10	0.10	50.30	49.86

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	416	21:54	407	08:23	0.3	0.3	0.0	0.0
Gorakhpur	400	416	13:04	390	09:45	0.0	0.0	0.0	0.0
Bareilly	400	423	13:04	396	00:10	0.0	0.0	1.0	0.0
Kanpur	400	420	12:51	402	09:38	0.0	0.0	0.0	0.0
Dadri	400	420	20:45	401	18:38	0.7	0.7	0.0	0.0
Ballabgarh	400	426	21:27	405	18:39	0.0	0.0	9.7	0.0
Bawana	400	419	06:11	402	00:05	0.0	0.0	0.0	0.0
Bassi	400	429	21:43	402	08:41	0.0	0.0	23.1	0.0
Hissar	400	415	20:34	400	00:09	0.0	0.0	0.0	0.0
Moga	400	419	06:08	290	20:47	11.8	11.8	0.0	0.0
Abdullapur	400	423	06:17	396	18:43	0.0	0.0	8.6	0.0
Nalagarh	400	432	06:11	411	14:42	0.0	0.0	51.0	1.0
Kishenpur	400	427	06:09	404	18:39	0.0	0.0	23.1	0.0
Wagoora	400	418	06:07	388	19:54	0.0	3.1	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	782	20:33	742	09:39	0.0	0.0	0.0	0.0
Balia	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Moga	765	794	06:08	765	18:40	0.0	0.0	0.0	0.0
Agra	765	798	20:33	760	09:43	0.0	0.0	0.0	0.0
Bhiwani	765	801	06:09	774	00:11	0.0	0.0	0.0	0.0
Unnao	765	777	13:06	744	09:38	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	509.47	1515.08	510.76	1590.18	409.26	574.58
Pong	426.72	384.05	416.08	718.14	422.16	990.81	90.33	248.58
Tehri	829.79	740.04	824.55	1100.00	824.90	1107.95	135.00	96.00
Koteshwar	612.50	598.50	608.51	3.98	610.75	4.95	96.00	118.00
Chamera-I	760.00	748.75	757.10	7.62	0.00	0.00	111.15	90.92
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	512.48	0.80	518.68	4.50	78.86	173.64

* 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	541	0	0	9.44	0.37	9.81
Delhi	-221	260	-20	151	188	0	-0.52	4.10	3.58
Haryana	231	10	0	231	11	0	5.64	-2.73	2.92
HP	0	-129	0	0	-656	0	0.00	-6.53	-6.53
J&K	-146	-298	0	-180	-19	0	-3.93	-2.12	-6.05
CHD	0	0	0	0	0	0	0.00	0.00	0.00
Rajasthan	-18	-83	0	-18	-109	0	-0.43	1.50	1.07
UP	369	790	20	133	127	0	4.77	14.61	19.37
Uttarakhand	49	172	0	49	-20	0	1.18	2.61	3.79
Total	509	721	-1	907	-478	0	16.14	11.81	27.95

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	541	148	246	0	0	0
Delhi	151	-231	511	-261	0	-20
Haryana	248	231	16	-598	0	0
HP	0	0	35	-742	0	0
J&K	-146	-197	-19	-349	0	0
CHD	0	0	0	0	0	0
Rajasthan	-18	-18	894	-120	0	0
UP	384	123	1967	0	20	0
Uttarakhand	49	49	184	-23	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 08.10.2014 :****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 :**