

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.10.2014
Date of Reporting : 14.10.2014

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
38064	1835	39899	50.15	34036	1835	35871	50.14	843.2	62.51

* 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	54.06	11.22		65.28	54.59	55.53	0.94	120.81	4.69
Haryana	66.00	0.61		66.60	68.09	67.77	-0.32	134.37	0.13
Rajasthan	131.59	4.60	10.75	146.93	42.96	44.46	1.50	191.40	0.45
Delhi	30.48			30.48	51.00	51.24	0.24	81.71	0.00
UP	111.50	9.70	0.40	121.60	105.92	102.80	-3.12	224.40	53.92
Uttarakhand		11.72		11.72	15.55	18.11	2.56	29.82	3.32
HP		9.59		9.59	12.87	14.18	1.32	23.77	0.00
J & K		10.46	0.00	10.46	19.44	22.36	2.92	32.82	0.00
Chandigarh				0.00	3.71	4.11	0.40	4.11	0.00
Total	393.61	57.90	11.15	462.66	374.12	380.55	6.43	843.22	62.51

* 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	5783	0	-51	223	4745	0	19	0	5783
Haryana	6653	0	-94	280	5090	0	50	206	6653
Rajasthan	7499	0	-260	-182	7823	0	-97	131	8700
Delhi	3808	0	-58	213	2886	0	-124	-208	3865
UP	9715	1760	195	441	10535	1835	290	2177	10535
Uttarakhand	1551	75	-33	183	1054	0	68	200	1551
HP	1185	0	89	-265	750	0	71	-10	1237
J&K	1664	0	150	-102	1032	0	139	-368	1672
Chandigarh	206	0	0	0	121	0	-3	0	217
Total	38064	1835	-62	791	34036	1835	412	2128	38064

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

figures may not be at simultaneous hour.

Diversity is 1.06

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	1370	1481	1497	32.76	1365	32.88	-0.12
Rihand I STPS (2*500)	1000	700	754	762	18.39	766	16.80	1.59
Rihand II STPS (2*500)	1000	700	746	750	18.29	762	16.80	1.49
Rihand III STPS (2*500)	1000	700	734	742	18.05	752	16.80	1.25
Dadri I STPS (4*210)	840	708	730	490	16.45	685	16.19	0.26
Dadri II STPS (2*490)	980	483	430	386	10.66	444	11.05	-0.39
Unchahar I TPS (2*210)	420	394	406	412	9.92	413	9.31	0.60
Unchahar II TPS (2*210)	420	367	360	398	9.39	391	8.52	0.87
Unchahar III TPS (1*220)	210	199	177	197	5.00	208	4.60	0.40
I-STPP (Jhajhar) (3*500)	1500	990	964	623	17.65	735	18.90	-1.25
Dadri GPS (4*130.19+2*154.51)	830	785	180	202	4.64	193	4.74	-0.10
Anta GPS (3*88.71+1*153.2)	419	390	0	0	0.00	0	0.00	0.00
Auraiya GPS (4*111.19+2*109.30)	663	482	163	166	3.92	163	3.80	0.13
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.01	0	0.07	-0.06
Sub Total (A)	11297	8272	7125	6625	165	6881	160	5
B. NPC								
NAPS (2*220)	440	281	319	325	6.72	280	6.74	-0.03
RAPS-B (2*220)	440	398	440	446	9.56	398	9.55	0.01
RAPS-C (2*220)	440	185	203	204	4.32	180	4.44	-0.12
Sub Total (B)	1320	864	962	975	20.60	858	20.74	-0.14
C. NHPC								
Chamera I HPS (3*180)	540	534	355	0	3.35	139	3.30	0.05
Chamera II HPS (3*100)	300	300	309	0	2.40	100	2.35	0.05
Chamera III HPS (3*77)	231	229	226	0	1.52	63	1.50	0.02
Bairasuli HPS(3*60)	180	120	120	0	1.00	41	0.94	0.06
Salal-HPS (6*115)	690	299	456	346	7.68	320	7.17	0.51
Tanakpur-HPS (3*40)	94	61	94	94	2.27	94	1.47	0.79
Uri-I HPS (4*120)	480	420	428	411	10.76	448	10.08	0.68
Uri-II HPS (4*60)	240	235	240	228	5.69	237	5.63	0.06
Dhauliganga-HPS (4*70)	280	95	209	67	2.30	96	2.23	0.08
Dulhasti-HPS (3*130)	390	387	402	261	6.58	274	6.50	0.08
Sewa-II HPS (3*40)	120	119	124	0	0.54	23	0.50	0.04
Parbati 3 (4*130)	520	260	0	0	0.76	31	0.72	0.04
Sub Total (C)	4065	3059	2963	1408	45	1868	42	2
D.SJVNL								
NJPC (6*250)	1500	1605	1015	250	12.92	539	12.78	0.14
Rampur HEP (4*68.67)	275	146	289	72	3.72	155	3.56	0.16
Sub Total (D)	1775	1751	1304	322	16.64	693	16.34	0.30
E. THDC								
Tehri HPS (4*250)	1000	1060	1000	0	5.43	226	5.40	0.03
Koteshwar HPS (4*100)	400	91	101	92	1.77	74	1.75	0.02
Sub Total (E)	1400	1151	1101	92	7.20	300	7.15	0.05
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	717	1176	543	17.21	717	17.21	0.00
Dehar HPS (6*165)	990	210	660	140	5.26	219	5.04	0.22
Pong HPS (6*66)	396	197	324	126	4.74	198	4.73	0.02
Sub Total (F)	2900	1124	2160	809	27.21	1134	26.98	0.23
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	92	0	1.01	42	0.98	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	735	181	6.98	291	6.98	0.00
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	274	296				

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	490	480	11.78	491
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.84	77
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	374	378	8.80	367
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1372	1382	31.64	1318
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	2316	2320	54.06	2252
	Total Hydro	1148	470	452	11.22	468
Total Punjab	5828	2786	2772	65.28	2720	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	657	617	14.42	601
	DCRTPP (Yamuna nagar) (2*300)	600	263	235	5.97	249
	Faridabad GPS (NTPC)	432	195	189	4.60	192
	RGTPP (khedar) (IPP) (2*600)	1200	1101	713	21.04	877
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	894	741	19.97	832
	Thermal (Total)	4944	3110	2495	66.00	2750
	Total Hydro	62	20	22	0.61	25
	Total Haryana	5006	3130	2517	66.60	2775
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	963	973	21.96
suratgarh TPS (6*250)		1500	1297	1361	30.72	1280
Chabra TPS (3*250)		750	659	640	15.56	648
Dholpur GPS (3*110)		330	115	114	2.67	111
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	50	118	2.49	104
RAPS A (NPC) (1*100+1*200)		300	180	180	4.39	183
Barsingsar (NLC) (2*125)		250	184	184	4.10	171
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	832	690	19.70	821
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	414	414	10.60	442
Kawai(Adani) (2*660)		1320	0	1109	19.40	808
Thermal (Total)		8026	4694	5783	132	5483
Total Hydro		550	224	184	4.60	192
Wind power		2798	506	357	9.68	403
Biomass		99	39	39	0.92	39
Solar		730	0	0	0.15	6
Renewable/Others (Total)		3627	545	396	10.75	448
Total Rajasthan		12203	5463	6363	146.93	6122
UP	Anpara TPS (3*210+2*500)	1630	908	870	21.00	875
	Obra TPS (2*50+2*94+5*200)	1194	338	325	7.80	325
	Paricha TPS (2*110+2*220+2*250)	1140	626	627	14.70	613
	Panki TPS (2*105)	210	140	149	3.50	146
	Harduaganj TPS (1*60+1*105+2*250)	665	415	434	10.40	433
	Tanda TPS (NTPC) (4*110)	440	240	240	5.90	246
	Roza TPS (IPP) (4*300)	1200	810	824	19.80	825
	Anpara-C (IPP) (2*600)	1200	855	846	20.40	850
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	247	361	8.00	333
	Thermal (Total)	8129	4579	4676	111.50	4646
	Vishnuparyag HPS (IPP)	400	247	238	5.50	229
	Other Hydro	527	138	124	4.20	175
	Cogeneration	981	15	15	0.40	17
	Total UP	10037	4979	5053	121.60	4838
Uttarakhand	Total Hydro	1398	632	421	11.72	488
	Total Uttarakhand	1398	632	421	11.72	488
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	111	118	2.70	112
	Pragati Gas Turbine (2x104+ 1x122)	330	282	263	6.51	271
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	446	500	11.62	484
	Badarpur TPS (NTPC) (3*95+2*210)	705	382	367	9.64	402
	Thermal (Total)	2917	1221	1248	30.48	1270
Total Delhi	2917	1221	1248	30.48	1270	
HP	Baspa HPS (IPP) (2*150)	300	60	60	2.33	97
	Malana HPS (IPP) (2*43)	86	40	0	0.49	20
	Other Hydro	728	305	247	6.77	282
	Total HP	1114	405	307	9.59	400
J & K	Baqilhar HPS (IPP) (3*150)	450	420	420	10.46	436
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	420	420	10.46	436
Total State Control Area Generation		39597	19036	19101	462.66	19048
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1908	4329	104.67	4361
Total Regional Availability(Gross)		64017	37687	34137	864.24	35781

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8356	2811	103.87	4328
State Control Area Hydro	5684	2309	1930	57.90	2183
Total Regional Hydro	17116	10665	4741	161.77	6511

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	-250	-400	0	400	0.00	7.39	-7.39
Gwalior-Agra (D/C)	517	1544	1961	0	28.23	0.00	28.23
Zerda-Kankroli	-461	-258	0	469	0.00	7.29	-7.29
Zerda-Bhinmal	-476	-179	22	531	0.00	5.77	-5.77
Malanpur-Auraiya	-103	-106	0	124	0.00	2.25	-2.25
Badod-Kota/Morak	-166	-253	0	253	0.00	4.31	-4.31
Mundra-Mohindergarh(HVDC)	1802	1498	1805	0	40.75	0.00	40.75
Vindhychal - Rihand	-434	-459	500	0	11.48	0.00	11.48
Sub Total WR	429	1387			80.46	27.01	53.45
Pusauli Bypass	400	400	400	0	9.73	0.00	9.73
MZP- GKP (D/C)	260	700	700	0	10.73	0.00	10.73
Patna-Balia(D/C)	258	556	572	0	9.29	0.00	9.29
B'Sharif-Balia (D/C)	132	415	415	0	5.73	0.00	5.73
Pusauli-Balia	-86	-28	0	96	0.00	1.39	-1.39
Gaya-Fatehpur (765 Kv)	239	472	544	0	9.83	0.00	9.83
Pusauli-Sahupuri	203	202	171	0	4.03	0.00	4.03
K'nasa-Sahupuri	0	0	0	0	0.00	0.53	-0.53
Son Ngr-Rihand	23	34	0	40	0.00	0.67	-0.67
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	50	191	326	0	4.47	0.00	4.47
Sub Total ER	1479	2942			53.81	2.59	51.21
Total IR Exch	1908	4329			134.27	29.60	104.67

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
28.87	2.31	31.18	8.97	2.72	5.94	14.69	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
46.09	53.81	99.90	51.21	53.45	104.67	5.13	-0.35	4.77

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	0.25	4.31	22.44	53.54	52.29	14.49	10.93	0.39	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				
50.23	21.56	49.64	17.14	49.98	0.10	0.10	50.25	49.84

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	415	21:58	409	09:38	0.0	0.0	0.0	0.0
Gorakhpur	400	414	10:01	396	03:24	0.0	0.0	0.0	0.0
Bareilly	400	419	21:51	399	13:38	0.0	0.0	0.0	0.0
Kanpur	400	420	23:00	404	10:19	0.0	0.0	0.0	0.0
Dadri	400	419	04:03	398	10:45	0.0	0.0	0.0	0.0
Ballabgarh	400	424	03:58	403	10:44	0.0	0.0	11.7	0.0
Bawana	400	419	03:58	398	12:41	0.0	0.0	0.0	0.0
Bassi	400	428	20:51	404	05:50	0.0	0.0	24.6	0.0
Hissar	400	414	04:03	394	12:04	0.0	0.0	0.0	0.0
Moga	400	420	03:58	401	10:17	0.0	0.0	0.0	0.0
Abdullapur	400	423	01:04	396	11:53	0.0	0.0	3.0	0.0
Nalagarh	400	429	03:03	400	12:05	0.0	0.0	32.2	0.0
Kishenpur	400	426	03:59	407	10:18	0.0	0.0	23.0	0.0
Wagoora	400	416	03:58	390	19:23	0.0	0.0	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	21:52	749	05:54	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	796	03:58	737	12:06	0.0	3.3	0.0	0.0
Agra	765	792	21:52	759	12:42	0.0	0.0	0.0	0.0
Bhiwani	765	800	04:02	0	20:19	33.3	33.3	0.0	0.0
Unnao	765	774	21:53	749	10:19	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	508.92	1500.16	510.90	1590.18	274.59	495.03
Pong	426.72	384.05	415.72	705.67	422.08	990.81	82.20	290.50
Tehri	829.79	740.04	824.60	1098.00	825.00	1107.95	110.55	117.00
Koteshwar	612.50	598.50	609.20	4.21	610.40	4.69	117.00	117.00
Chamera-I	760.00	748.75	756.88	0.00	0.00	0.00	90.00	90.88
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	511.69	3.61	518.63	3.16	96.30	160.90

* 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	0	0	0	196	27	0	2.46	0.09	2.54
Delhi	-231	43	-20	-2	215	0	-0.67	3.56	2.89
Haryana	165	41	0	241	39	0	4.85	0.65	5.50
HP	0	-10	0	0	-265	0	0.00	-1.41	-1.41
J&K	-191	-178	0	-98	-4	0	-2.70	-1.14	-3.84
CHD	0	0	0	0	0	0	0.00	0.24	0.24
Rajasthan	-18	149	0	-18	-164	0	-0.43	2.20	1.77
UP	684	1473	20	441	0	0	12.24	17.03	29.28
Uttarakhand	220	-20	0	49	134	0	2.57	2.96	5.53
Total	630	1498	-1	810	-19	0	18.32	24.18	42.49

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	196	0	27	0	0	0
Delhi	293	-231	422	-112	0	-20
Haryana	241	89	52	8	0	0
HP	0	0	199	-305	0	0
J&K	-89	-191	0	-203	0	0
CHD	0	0	34	0	0	0
Rajasthan	-18	-18	872	-307	0	0
UP	689	436	1473	0	20	0
Uttarakhand	220	49	299	-21	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 13.10.2014 :**

Partial rains in some parts of Haryana.

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 :**