

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 10.09.2014
Date of Reporting : 11.09.2014

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
38097	3520	41617	50.12	35440	2140	37580	49.97	858.5	68.82

* 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	33.67	10.56		44.22	90.63	91.33	0.70	135.55	0.00
Haryana	67.50	0.62		68.11	69.68	67.93	-1.75	136.04	2.04
Rajasthan	98.14	2.07	7.41	107.61	48.55	46.36	-2.19	153.97	0.00
Delhi	23.40			23.40	74.50	75.65	1.15	99.05	0.44
UP	101.30	17.00	0.36	118.66	125.07	128.57	3.49	247.23	65.85
Uttarakhand		21.46		21.46	14.67	15.51	0.84	36.97	0.49
HP		25.05		25.05	0.56	0.45	-0.12	25.50	0.00
J & K		10.53	0.00	10.53	10.58	8.47	-2.11	19.00	0.00
Chandigarh				0.00	4.59	5.20	0.62	5.20	0.00
Total	324.00	87.28	7.77	419.05	438.81	439.46	0.65	858.50	68.82

* 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	6457	0	6	992	4841	0	-135	951	6732
Haryana	6693	0	-648	1319	5631	0	-116	1444	6693
Rajasthan	6881	0	-126	100	6618	0	-50	360	6881
Delhi	4307	0	52	508	3815	0	-50	21	4533
UP	9616	3355	1	-202	11458	2140	373	1579	11680
Uttarakhand	1648	165	21	105	1449	0	66	96	1754
HP	1213	0	-17	-1198	903	0	-20	-1255	1277
J&K	1034	0	-133	-450	559	0	-280	-720	1188
Chandigarh	248	0	17	0	166	0	-16	0	261
Total	38097	3520	-827	1174	35440	2140	-228	2477	38119

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

figures may not be at simultaneous hour.

Diversity is 1.08

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	1400	1503	1501	3.34	139	33.44	-30.09
Rihand I STPS (2*500)	1000	401	444	398	10.52	438	9.36	1.16
Rihand II STPS (2*500)	1000	901	964	999	23.00	958	21.12	1.88
Rihand III STPS (2*500)	1000	910	929	950	22.58	941	20.86	1.72
Dadri I STPS (4*210)	840	605	604	588	0.00	0	14.22	-14.22
Dadri II STPS (2*490)	980	978	901	938	0.00	0	23.04	-23.04
Unchahar I TPS (2*210)	420	199	201	219	5.05	211	4.69	0.37
Unchahar II TPS (2*210)	420	400	350	440	9.99	416	9.11	0.87
Unchahar III TPS (1*220)	210	198	200	209	4.93	206	4.52	0.42
I-STPP (Jhajjar) (3*500)	1500	969	948	632	17.96	748	18.58	-0.62
Dadri GPS (4*130.19+2*154.51)	830	767	383	322	0.00	0	8.73	-8.73
Anta GPS (3*88.71+1*153.2)	419	393	227	190	0.00	0	5.47	-5.47
Auraiya GPS (4*111.19+2*109.30)	663	618	312	239	0.00	0	6.57	-6.57
Dadri Solar	5	1	0	0	0.00	0	0.03	-0.03
Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
Sub Total (A)	11297	8743	7966	7625	97	4058	180	-82
B. NPC								
NAPS (2*220)	440	272	314	311	6.54	273	6.53	0.01
RAPS- B (2*220)	440	385	434	436	9.35	390	9.24	0.11
RAPS- C (2*220)	440	175	183	185	3.75	156	4.20	-0.45
Sub Total (B)	1320	832	931	932	19.65	819	19.97	-0.32
C. NHPC								
Chamera I HPS (3*180)	540	534	541	543	13.05	544	12.82	0.24
Chamera II HPS (3*100)	300	300	301	307	6.91	288	6.85	0.06
Chamera III HPS (3*77)	231	229	230	232	4.62	193	4.55	0.07
Bairasuli HPS(3*60)	180	178	180	124	2.67	111	2.54	0.13
Salal-HPS (6*115)	690	656	682	682	16.35	681	15.74	0.61
Tanakpur-HPS (3*40)	94	91	93	85	2.20	92	2.19	0.01
Uri-I HPS (4*120)	480	323	332	412	7.99	333	7.40	0.59
Uri-II HPS (4*60)	240	168	182	241	4.12	172	4.04	0.08
Dhauliganga-HPS (4*70)	280	207	209	210	5.02	209	4.97	0.05
Dulhasti-HPS (3*130)	390	387	397	397	9.37	390	9.28	0.09
Sewa-II HPS (3*40)	120	119	128	130	3.10	129	2.86	0.24
Parbati 3 (4*130)	520	123	131	132	2.74	114	2.70	0.05
Sub Total ©	4065	3315	3405	3495	78	3255	76	2
D.SJVNL								
NJPC (6*250)	1500	1605	1616	1611	31.69	1320	31.27	0.42
Rampur HEP (4*68.67)	275	281	358	368	7.06	294	6.76	0.30
Sub Total (D)	1775	1886	1974	1979	38.74	1614	38.02	0.72
E. THDC								
Tehri HPS (4*250)	1000	1060	1064	0	5.04	210	5.00	0.04
Koteshwar HPS (4*100)	400	73	100	90	1.78	74	1.75	0.03
Sub Total (E)	1400	1133	1164	90	6.82	284	6.75	0.07
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	581	1190	393	14.16	590	13.94	0.21
Dehar HPS (6*165)	990	567	825	560	13.79	575	13.61	0.19
Pong HPS (6*66)	396	44	198	66	1.05	44	1.05	0.00
Sub Total (F)	2900	1192	2213	1019	28.99	1208	28.60	0.40
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	150	142	3.00	125	3.19	-0.19
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1050	650	17.44	727	17.28	0.16
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	148	149	3.52	147	3.54	-0.02
Budhil HPS(IPP)	70	0	56	53	1.07	44	1.29	-0.22
Sub Total (G)	1662	0	1405	994	25.02	1043	25.29	-0.27
H. Total Regional Entities (A-G)	24419	17101	19058	16134	294.75	12281	374.35	-79.60

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	270	320	7.96	332
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	214	170	4.48	187
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	465	365	9.81	409
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	700	320	11.43	476
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1649	1175	33.67	1403
	Total Hydro	1148	493	293	10.56	440
Total Punjab	5828	2142	1468	44.22	1843	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1085	1048	24.85	1036
	DCRTPP (Yamuna nagar) (2*300)	600	530	522	12.08	503
	Faridabad GPS (NTPC)	432	187	170	4.42	184
	RGTPP (khedar) (IPP) (2*600)	1200	857	893	15.38	641
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1217	0	10.77	449
	Thermal (Total)	4944	3876	2633	67.50	2812
	Total Hydro	62	26	26	0.62	26
	Total Haryana	5006	3902	2659	68.11	2838
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	837	973	21.10
suratgarh TPS (6*250)		1500	1067	985	23.85	994
Chabra TPS (3*250)		750	321	387	8.35	348
Dholpur GPS (3*110)		330	0	0	0.00	0
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	136	130	3.84	160
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0
Barsingsar (NLC) (2*125)		250	99	187	3.00	125
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	674	554	15.52	647
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	947	870	22.48	937
Thermal (Total)		8026	4081	4086	98	4089
Total Hydro		550	103	103	2.07	86
Wind power		2798	414	409	6.52	272
Biomass		99	28	28	0.67	28
Solar		730	0	0	0.22	9
Renewable/Others (Total)		3627	442	437	7.41	309
Total Rajasthan	12203	4626	4626	107.61	4484	
UP	Anpara TPS (3*210+2*500)	1630	459	824	13.30	554
	Obra TPS (2*50+2*94+5*200)	1194	476	425	10.60	442
	Paricha TPS (2*110+2*220+2*250)	1140	553	599	12.90	538
	Panki TPS (2*105)	210	72	72	1.60	67
	Harduaganj TPS (1*60+1*105+2*250)	665	482	439	11.10	463
	Tanda TPS (NTPC) (4*110)	440	351	360	8.70	363
	Roza TPS (IPP) (4*300)	1200	1008	824	22.50	938
	Anpara-C (IPP) (2*600)	1200	536	536	12.90	538
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	364	305	7.70	321
	Thermal (Total)	8129	4301	4384	101.30	4221
	Vishnuparyag HPS (IPP)	400	436	436	10.50	438
	Other Hydro	527	267	308	6.50	271
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5019	5143	118.66	4507
	Uttarakhand	Total Hydro	1398	885	893	21.46
Total Uttarakhand		1398	885	893	21.46	894
Delhi	Raighat TPS (2*67.5)	180	89	78	1.90	79
	Delhi Gas Turbine (6x30 + 3x34)	282	141	145	3.51	146
	Pragati Gas Turbine (2x104+ 1x122)	330	298	294	7.13	297
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	275	276	6.68	278
	Badarpur TPS (NTPC) (3*95+2*210)	705	149	159	4.18	174
	Thermal (Total)	2962	952	952	23.40	975
Total Delhi	2962	952	952	23.40	975	
HP	Baspa HPS (IPP) (2*150)	300	330	290	6.71	280
	Malana HPS (IPP) (2*43)	86	90	64	1.59	66
	Other Hydro	728	660	683	16.75	698
	Total HP	1114	1080	1037	25.05	1044
J & K	Baqilhar HPS (IPP) (3*150)	450	438	440	10.53	439
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	438	440	10.53	439
Total State Control Area Generation		39642	19044	17218	419.05	17023
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1619	4423	89.28	3720
Total Regional Availability(Gross)		64062	39721	37775	803.08	33024

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9956	7375	173.13	7214
State Control Area Hydro	5684	3292	3100	87.28	3199
Total Regional Hydro	17116	13248	10475	260.41	10413

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	150	400	300	4.19	1.35	2.84
Gwalior-Agra (D/C)	786	1774	2129	0	32.81	0.00	32.81
Zerda-Kankroli	-160	-62	0	197	0.00	3.09	-3.09
Zerda-Bhinmal	-178	-53	0	283	0.00	3.20	-3.20
Malanpur-Auraiya	27	7	0	34	0.00	1.74	-1.74
Badod-Kota/Morak	-65	-50	0	102	0.00	1.51	-1.51
Mundra-Mohindergarh(HVDC)	1403	1393	1417	0	33.89	0.00	33.89
Vindhychal - Rihand	0	0	0	0	1.83	0.00	1.83
Sub Total WR	1513	3159			72.71	10.89	61.82
Pusauli Bypass	200	200	200	0	4.78	0.00	4.78
MZP- GKP (D/C)	64	482	630	0	9.49	0.00	9.49
Patna-Balia(D/C)	-17	241	316	17	4.21	0.00	4.21
B'Sharif-Balia (D/C)	10	229	290	3	4.27	0.00	4.27
Pusauli-Balia	-91	-43	0	91	0.00	1.29	-1.29
Gaya-Fatehpur (765 Kv)	-37	82	217	37	2.51	0.00	2.51
Pusauli-Sahupuri	139	145	181	0	3.07	0.00	3.07
K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
Son Ngr-Rihand	-36	-46	0	46	0.00	0.93	-0.93
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-126	-26	143	126	0.39	0.00	0.39
Sub Total ER	106	1264			29.68	2.22	27.46
Total IR Exch	1619	4423			102.39	13.11	89.28

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
17.28	3.82	21.10	5.90	19.11	-4.01	7.41	0.00	0.00

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
22.99	57.94	80.93	27.46	61.82	89.28	4.47	3.88	8.35

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	10.04	30.28	65.40	55.08	10.44	4.02	0.00	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				
50.18	13.00	49.64	6.19	49.95	3.03	0.11	50.18	49.79

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	412	12:38	406	04:48	0.0	0.0	0.0	0.0
Gorakhpur	400	415	12:51	386	04:48	0.0	2.2	0.0	0.0
Bareilly	400	417	13:00	398	04:55	0.0	0.0	0.0	0.0
Kanpur	400	420	12:52	407	04:52	0.0	0.0	0.0	0.0
Dadri	400	417	06:03	405	09:52	0.0	0.0	0.0	0.0
Ballabgarh	400	424	06:02	411	09:48	0.0	0.0	5.1	0.0
Bawana	400	418	06:02	406	19:02	0.0	0.0	0.0	0.0
Bassi	400	426	23:58	410	09:48	0.0	0.0	45.8	0.0
Hissar	400	413	06:03	400	19:03	0.0	0.0	0.0	0.0
Moga	400	416	06:01	403	19:04	0.0	0.0	0.0	0.0
Abdullapur	400	419	07:55	396	19:03	0.0	0.0	0.0	0.0
Nalagarh	400	423	06:02	408	14:20	0.0	0.0	4.3	0.0
Kishenpur	400	413	06:02	404	11:35	0.0	0.0	0.0	0.0
Wagoora	400	417	18:02	408	20:36	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	783	09:01	755	22:12	0.0	0.0	0.0	0.0
Balia	765	777	12:52	732	04:54	0.0	4.0	0.0	0.0
Moga	765	796	06:02	771	19:06	0.0	0.0	0.0	0.0
Agra	765	797	13:04	773	04:56	0.0	0.0	0.0	0.0
Bhiwani	765	801	06:03	777	19:06	0.0	0.0	0.2	0.0
Unnao	765	748	00:00	747	23:56	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	510.97	1590.18	511.42	1620.46	662.13	375.57
Pong	426.72	384.05	416.50	730.66	423.72	1066.19	278.67	62.92
Tehri	829.79	740.04	818.75	977.25	820.40	1015.00	241.63	112.00
Koteshwar	612.50	598.50	611.66	5.46	610.95	4.95	112.00	118.00
Chamera-I	760.00	748.75	758.25	42.84	752.80	18.48	283.00	354.00
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	517.59	6.72	522.22	9.99	371.09	295.26

* 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	943	8	0	992	0	0	22.54	0.41	22.94
Delhi	115	-41	-53	467	41	0	10.39	-0.26	10.13
Haryana	1317	127	0	1234	86	0	31.11	-6.11	25.00
HP	-931	-324	0	-779	-419	0	-18.01	-8.10	-26.11
J&K	-614	-106	0	-437	-13	0	-12.37	-1.97	-14.34
CHD	0	0	0	0	0	0	0.07	0.07	0.15
Rajasthan	186	172	2	84	16	0	3.85	1.90	5.75
UP	250	1329	0	-411	209	0	-5.32	23.76	18.44
Uttarakhand	85	11	0	85	20	0	2.04	0.89	2.92
Total	1350	1177	-51	1235	-61	0	34.29	10.59	44.88

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1091	746	158	0	0	0
Delhi	857	115	172	-308	0	-53
Haryana	1317	1234	131	-905	0	0
HP	-627	-946	-165	-611	0	0
J&K	-412	-690	-13	-157	0	0
CHD	15	0	25	0	0	0
Rajasthan	186	84	382	-351	2	0
UP	250	-530	1329	27	0	0
Uttarakhand	85	85	120	11	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 10.09.2014 :**

1. Partial load Interruption in J&K due to inclement weather and flood.

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 :**