

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.09.2014
Date of Reporting : 12.09.2014

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
38471	3270	41741	50.09	34530	1645	36175	50.09	856.7	47.49

* 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	43.88	10.09		53.97	96.76	97.94	1.18	151.91	0.00
Haryana	75.73	0.62		76.34	57.17	55.67	-1.50	132.01	0.00
Rajasthan	97.41	1.75	5.64	104.80	44.85	43.35	-1.50	148.15	0.00
Delhi	22.21			22.21	70.28	69.93	-0.35	92.14	0.11
UP	102.90	15.30	0.36	118.56	127.47	128.01	0.54	246.57	47.03
Uttarakhand		20.78		20.78	15.35	15.29	-0.06	36.07	0.34
HP		24.09		24.09	1.41	1.95	0.54	26.04	0.01
J & K		8.80	0.00	8.80	11.90	9.78	-2.12	18.58	0.00
Chandigarh				0.00	4.75	5.28	0.53	5.28	0.00
Total	342.12	81.43	6.00	429.56	429.93	427.19	-2.75	856.75	47.49

* 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	7195	0	45	1040	5646	0	29	1114	7195
Haryana	6631	0	-342	1364	5468	0	-20	1426	6631
Rajasthan	6886	0	-210	122	6018	0	150	37	6886
Delhi	4120	0	-11	811	3463	0	-141	115	4207
UP	9445	3080	-104	-407	10759	1645	71	1735	11360
Uttarakhand	1579	190	2	99	1438	0	19	96	1579
HP	1231	0	-14	-1172	923	0	68	-1258	1272
J&K	1136	0	-119	-475	635	0	-67	-715	1136
Chandigarh	248	0	18	0	180	0	1	0	263
Total	38471	3270	-735	1383	34530	1645	110	2550	38471

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

figures may not be at simultaneous hour.

Diversity is 1.05

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	1426	1519	1392	33.28	1387	32.57	0.72
Rihand I STPS (2*500)	1000	405	445	376	10.35	431	9.33	1.02
Rihand II STPS (2*500)	1000	900	1025	839	22.81	950	20.94	1.86
Rihand III STPS (2*500)	1000	911	990	829	22.41	934	21.10	1.31
Dadri I STPS (4*210)	840	668	590	593	15.80	658	15.30	0.51
Dadri II STPS (2*490)	980	641	440	718	12.73	530	12.82	-0.09
Unchahar I TPS (2*210)	420	199	217	202	4.89	204	4.53	0.36
Unchahar II TPS (2*210)	420	269	185	371	6.28	262	5.74	0.55
Unchahar III TPS (1*220)	210	198	196	160	4.48	187	4.11	0.38
I-STPP (Jhajhar) (3*500)	1500	973	886	637	17.48	728	18.26	-0.78
Dadri GPS (4*130.19+2*154.51)	830	771	360	367	8.89	371	8.90	-0.01
Anta GPS (3*88.71+1*153.2)	419	394	216	248	5.89	245	5.74	0.15
Auraiya GPS (4*111.19+2*109.30)	663	617	401	307	7.85	327	7.60	0.25
Dadri Solar	5	1	0	0	0.01	0	0.02	-0.01
Unchahar Solar	10	3	0	0	0.01	0	0.07	-0.06
Sub Total (A)	11297	8376	7470	7039	173	7216	167	6
B. NPC								
NAPS (2*220)	440	271	316	316	6.67	278	6.50	0.17
RAPS- B (2*220)	440	388	437	436	9.39	391	9.31	0.07
RAPS- C (2*220)	440	175	186	181	3.85	161	4.20	-0.35
Sub Total (B)	1320	834	939	933	19.91	830	20.02	-0.11
C. NHPC								
Chamera I HPS (3*180)	540	534	427	500	12.79	533	12.72	0.07
Chamera II HPS (3*100)	300	300	308	201	6.02	251	5.95	0.07
Chamera III HPS (3*77)	231	229	229	153	4.11	171	4.10	0.01
Bairasuli HPS(3*60)	180	178	177	122	2.56	107	2.43	0.13
Salal-HPS (6*115)	690	644	681	665	15.77	657	15.45	0.31
Tanakpur-HPS (3*40)	94	91	93	92	2.20	92	2.19	0.01
Uri-I HPS (4*120)	480	299	347	312	7.63	318	7.17	0.46
Uri-II HPS (4*60)	240	163	183	166	4.06	169	3.91	0.16
Dhauliganga-HPS (4*70)	280	162	210	140	3.79	158	3.90	-0.11
Dulhasti-HPS (3*130)	390	387	396	396	9.36	390	9.28	0.08
Sewa-II HPS (3*40)	120	119	130	131	3.07	128	2.86	0.21
Parbati 3 (4*130)	520	130	132	131	2.66	111	2.63	0.02
Sub Total ©	4065	3236	3313	3009	74	3084	73	1
D.SJVNL								
NJPC (6*250)	1500	1605	1605	1201	31.20	1300	30.98	0.23
Rampur HEP (4*68.67)	275	286	368	291	7.18	299	6.87	0.31
Sub Total (D)	1775	1891	1973	1492	38.39	1599	37.85	0.54
E. THDC								
Tehri HPS (4*250)	1000	1060	1060	0	5.04	210	5.00	0.04
Koteshwar HPS (4*100)	400	73	102	0	1.78	74	1.75	0.03
Sub Total (E)	1400	1133	1162	0	6.82	284	6.75	0.07
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	640	1189	396	15.51	646	15.36	0.14
Dehar HPS (6*165)	990	562	825	560	13.87	578	13.49	0.38
Pong HPS (6*66)	396	35	264	0	0.91	38	0.85	0.06
Sub Total (F)	2900	1237	2278	956	30.28	1262	29.70	0.58
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	159	129	2.65	111	2.69	-0.04
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1120	650	16.99	708	17.28	-0.29
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	147	148	3.51	146	3.54	-0.03
Budhil HPS(IPP)	70	0	39	35	0.86	36	0.85	0.02
Sub Total (G)	1662	0	1465	962	24.01	1001	24.36	-0.34
H. Total Regional Entities (A-G)	24419	16708	18600	14391	366.61	15275	358.26	8.35

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	630	490	12.86	536
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	213	170	4.47	186
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	625	371	10.61	442
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	700	702	15.95	664
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	2168	1733	43.88	1828
	Total Hydro	1148	615	254	10.09	420
Total Punjab	5828	2783	1987	53.97	2249	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	840	1036	21.43	893
	DCRTPP (Yamuna nagar) (2*300)	600	535	472	11.20	467
	Faridabad GPS (NTPC)	432	198	186	4.45	186
	RGTPP (khedar) (IPP) (2*600)	1200	1014	826	19.43	810
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1115	738	19.21	801
	Thermal (Total)	4944	3702	3258	75.73	3155
	Total Hydro	62	26	26	0.62	26
	Total Haryana	5006	3728	3284	76.34	3181
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	791	841	18.76
suratgarh TPS (6*250)		1500	954	1103	23.88	995
Chabra TPS (3*250)		750	541	361	12.23	510
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	130	133	3.78	158
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0
Barsingsar (NLC) (2*125)		250	99	99	2.13	89
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwst LTPS (IPP) (8*135)		1080	626	647	14.65	611
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	860	942	21.98	916
Thermal (Total)		8026	4001	4126	97	4059
Total Hydro		550	93	47	1.75	73
Wind power		2798	347	329	4.65	194
Biomass		99	27	27	0.66	27
Solar		730	0	0	0.33	14
Renewable/Others (Total)		3627	374	356	5.64	235
Total Rajasthan	12203	4468	4529	104.80	4367	
UP	Anpara TPS (3*210+2*500)	1630	473	485	11.40	475
	Obra TPS (2*50+2*94+5*200)	1194	452	449	10.20	425
	Paricha TPS (2*110+2*220+2*250)	1140	545	230	12.30	513
	Panki TPS (2*105)	210	135	50	2.20	92
	Harduaganj TPS (1*60+1*105+2*250)	665	482	490	11.30	471
	Tanda TPS (NTPC) (4*110)	440	348	360	8.60	358
	Roza TPS (IPP) (4*300)	1200	1099	1044	26.00	1083
	Anpara-C (IPP) (2*600)	1200	538	536	12.80	533
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	363	364	8.10	338
	Thermal (Total)	8129	4435	4008	102.90	4288
	Vishnuparyag HPS (IPP)	400	436	436	10.50	438
	Other Hydro	527	170	267	4.80	200
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5056	4726	118.56	4503
Uttarakhand	Total Hydro	1398	839	847	20.78	866
	Total Uttarakhand	1398	839	847	20.78	866
Delhi	Raighat TPS (2*67.5)	180	27	73	1.46	61
	Delhi Gas Turbine (6x30 + 3x34)	282	149	131	3.58	149
	Pragati Gas Turbine (2x104+ 1x122)	330	259	291	6.72	280
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	253	272	6.55	273
	Badarpur TPS (NTPC) (3*95+2*210)	705	152	156	3.90	162
	Thermal (Total)	2962	840	923	22.21	925
Total Delhi	2962	840	923	22.21	925	
HP	Baspa HPS (IPP) (2*150)	300	300	290	6.38	266
	Malana HPS (IPP) (2*43)	86	85	44	1.42	59
	Other Hydro	728	678	672	16.29	679
	Total HP	1114	1063	1006	24.09	1004
J & K	Baqilhar HPS (IPP) (3*150)	450	440	440	8.80	367
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	440	440	8.80	367
Total State Control Area Generation		39642	19217	17742	429.56	17461
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2604	3936	87.31	3638
Total Regional Availability(Gross)		64062	40421	36069	883.48	36374

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10005	6235	169.15	7048
State Control Area Hydro	5684	3246	2887	81.43	2955
Total Regional Hydro	17116	13251	9122	250.59	10004

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	-500	-300	0	500	0.00	9.20	-9.20
Gwalior-Agra (D/C)	1115	1712	1952	0	33.71	0.00	33.71
Zerda-Kankroli	-90	-91	0	153	0.00	2.53	-2.53
Zerda-Bhinmal	-97	-103	0	218	0.00	2.39	-2.39
Malanpur-Auraiya	52	16	0	52	0.00	1.44	-1.44
Badod-Kota/Morak	-35	-33	0	80	0.00	0.99	-0.99
Mundra-Mohindergarh(HVDC)	1398	1402	1405	0	33.89	0.00	33.89
Vindhychal - Rihand	473	307	481	0	9.12	0.00	9.12
Sub Total WR	2316	2910			76.71	16.55	60.17
Pusauli Bypass	200	200	200	0	4.88	0.00	4.88
MZP- GKP (D/C)	70	436	572	0	9.51	0.00	9.51
Patna-Balia(D/C)	46	195	380	0	4.84	0.00	4.84
B'Sharif-Balia (D/C)	26	201	290	0	4.46	0.00	4.46
Pusauli-Balia	-91	-39	0	95	0.00	1.11	-1.11
Gaya-Fatehpur (765 Kv)	2	14	159	0	1.65	0.00	1.65
Pusauli-Sahupuri	164	150	195	0	3.65	0.00	3.65
K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96
Son Ngr-Rihand	-33	-40	0	46	0.00	0.92	-0.92
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-96	-91	0	124	0.00	0.78	-0.78
Sub Total ER	288	1026			29.95	2.81	27.14
Total IR Exch	2604	3936			106.67	19.36	87.31

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
20.86	3.85	24.71	14.26	22.33	-5.22	7.03	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
33.74	54.20	87.94	27.14	60.17	87.31	-6.60	5.97	-0.63

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	0.14	0.68	12.19	49.12	64.32	16.93	6.60	0.00	0.00

Frequency (Hz)				Average Frequency (Hz)	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time					
50.18	0.00	49.62	18.43	49.99	0.06	0.08	50.21	49.89

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	03:21	405	09:02	0.0	0.0	0.0	0.0
Gorakhpur	400	411	20:30	397	04:51	0.0	0.0	0.0	0.0
Bareilly	400	417	18:03	405	10:54	0.0	0.0	0.0	0.0
Kanpur	400	419	02:48	408	09:27	0.0	0.0	0.0	0.0
Dadri	400	420	03:23	405	19:13	0.0	0.0	0.0	0.0
Ballabgarh	400	425	02:57	409	19:14	0.0	0.0	26.6	0.0
Bawana	400	419	03:25	405	19:09	0.0	0.0	0.0	0.0
Bassi	400	429	02:57	410	09:55	0.0	0.0	66.5	0.0
Hissar	400	413	02:59	398	19:14	0.0	0.0	0.0	0.0
Moga	400	416	02:50	400	19:10	0.0	0.0	0.0	0.0
Abdullapur	400	418	07:31	396	19:05	0.0	0.0	0.0	0.0
Nalagarh	400	424	03:26	407	19:13	0.0	0.0	18.4	0.0
Kishenpur	400	414	02:33	404	10:10	0.0	0.0	0.0	0.0
Wagoora	400	416	02:32	407	19:07	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	782	13:04	758	09:27	0.0	0.0	0.0	0.0
Balia	765	769	20:58	748	04:51	0.0	0.0	0.0	0.0
Moga	765	797	03:47	769	19:14	0.0	0.0	0.0	0.0
Agra	765	798	03:40	775	09:27	0.0	0.0	0.0	0.0
Bhiwani	765	801	03:02	775	19:17	0.0	0.0	2.5	0.0
Unnao	765	757	18:17	742	10:55	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	511.11	1605.30	511.44	1620.46	664.96	411.47
Pong	426.72	384.05	416.56	743.22	423.74	1066.19	201.87	53.09
Tehri	829.79	740.04	819.15	984.00	820.65	1012.00	237.83	112.00
Koteshwar	612.50	598.50	611.62	5.40	610.90	4.95	112.00	118.00
Chamera-I	760.00	748.75	757.29	0.00	0.00	0.00	266.57	346.61
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	517.66	63.70	521.98	10.78	350.42	274.33

* 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	1089	25	0	1040	0	0	26.44	0.09	26.53
Delhi	115	0	0	501	310	0	10.14	4.51	14.65
Haryana	1418	8	0	1335	29	0	33.54	-5.52	28.02
HP	-927	-331	0	-627	-545	0	-17.80	-7.13	-24.93
J&K	-614	-101	0	-462	-13	0	-12.13	-1.93	-14.06
CHD	0	0	0	0	0	0	0.07	0.15	0.23
Rajasthan	265	-231	2	269	-147	0	6.45	-7.10	-0.65
UP	299	1428	8	-407	0	0	-5.05	25.25	20.20
Uttarakhand	85	11	0	85	15	0	2.04	1.72	3.75
Total	1731	809	10	1734	-352	0	43.70	10.04	53.74

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1237	1040	65	0	0	0
Delhi	832	115	546	-127	0	0
Haryana	1418	1335	128	-1011	0	0
HP	-622	-946	-161	-647	0	0
J&K	-412	-665	-13	-157	0	0
CHD	15	0	49	0	0	0
Rajasthan	269	249	147	-924	2	0
UP	299	-530	1477	0	8	0
Uttarakhand	85	85	119	11	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 11.09.2014 :**

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 :**