

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.09.2014
Date of Reporting : 16.09.2014

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
39710	4483	44193	49.97	33387	1045	34432	50.14	852.8	69.86

* 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	40.55	11.28		51.83	87.08	88.66	1.58	140.49	0.00
Haryana	65.62	0.62		66.24	65.23	66.86	1.63	133.10	0.26
Rajasthan	99.32	1.98	7.68	108.97	57.11	56.96	-0.14	165.94	0.00
Delhi	23.76			23.76	67.62	67.91	0.29	91.67	0.16
UP	108.30	17.10	0.36	125.76	104.75	107.75	2.99	233.51	69.18
Uttarakhand		20.11		20.11	14.16	14.92	0.76	35.02	0.27
HP		20.43		20.43	1.53	4.29	2.77	24.72	0.00
J & K		10.46	0.00	10.46	12.75	13.27	0.52	23.73	0.00
Chandigarh				0.00	4.37	4.67	0.30	4.67	0.00
Total	337.55	81.99	8.04	427.57	414.60	425.28	10.68	852.85	69.86

* 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	7164	0	12	1212	4685	0	18	977	7164
Haryana	6919	708	41	1411	4837	0	108	1535	6966
Rajasthan	7601	0	98	225	6437	0	10	182	7601
Delhi	4320	10	76	678	3136	0	-64	111	4467
UP	9132	3610	161	-420	11297	1045	0	1639	11503
Uttarakhand	1688	155	99	104	1265	0	-33	116	1694
HP	1262	0	33	-870	823	0	104	-1026	1262
J&K	1397	0	160	-425	762	0	-30	-640	1397
Chandigarh	228	0	10	0	146	0	-4	0	233
Total	39710	4483	689	1917	33387	1045	109	2894	39710

* 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	1415	1618	1379	36.41	1517	33.73	2.69
Rihand I STPS (2*500)	1000	387	393	373	10.07	419	9.15	0.92
Rihand II STPS (2*500)	1000	722	739	756	18.90	788	17.24	1.66
Rihand III STPS (2*500)	1000	822	809	852	20.79	866	19.67	1.12
Dadri I STPS (4*210)	840	810	754	683	18.97	790	18.94	0.03
Dadri II STPS (2*490)	980	480	446	397	10.64	443	11.01	-0.37
Unchahar I TPS (2*210)	420	199	220	203	5.09	212	4.72	0.38
Unchahar II TPS (2*210)	420	199	219	198	5.05	210	4.65	0.40
Unchahar III TPS (1*220)	210	198	217	213	5.03	209	4.60	0.43
I-STPP (Jhajhar) (3*500)	1500	486	170	559	9.66	403	10.85	-1.19
Dadri GPS (4*130.19+2*154.51)	830	765	183	155	4.22	176	4.38	-0.16
Anta GPS (3*88.71+1*153.2)	419	394	258	256	6.04	252	5.88	0.16
Auraiva GPS (4*111.19+2*109.30)	663	478	154	155	3.65	152	3.55	0.10
Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
Unchahar Solar	10	3	0	0	0.01	1	0.07	-0.06
Sub Total (A)	11297	7359	6180	6179	155	6440	148	6
B. NPC								
NAPS (2*220)	440	274	309	317	6.62	276	6.58	0.04
RAPS- B (2*220)	440	392	439	436	9.41	392	9.41	0.01
RAPS- C (2*220)	440	175	184	185	3.87	161	4.20	-0.33
Sub Total (B)	1320	841	932	938	19.90	829	20.18	-0.28
C. NHPC								
Chamera I HPS (3*180)	540	534	549	176	8.65	361	8.50	0.15
Chamera II HPS (3*100)	300	300	305	206	4.87	203	4.80	0.07
Chamera III HPS (3*77)	231	229	232	115	3.34	139	3.27	0.07
Bairasuli HPS(3*60)	180	0	0	0	0.00	0	0.00	0.00
Salal-HPS (6*115)	690	582	675	580	14.20	592	13.94	0.26
Tanakpur-HPS (3*40)	94	87	89	92	2.15	89	2.09	0.05
Uri-I HPS (4*120)	480	324	330	325	7.79	324	7.92	-0.13
Uri-II HPS (4*60)	240	184	241	172	4.63	193	4.56	0.08
Dhauliganga-HPS (4*70)	280	207	209	209	5.00	208	4.97	0.03
Dulhasti-HPS (3*130)	390	387	398	401	9.38	391	9.28	0.10
Sewa-II HPS (3*40)	120	119	131	106	2.92	121	2.86	0.05
Parbati 3 (4*130)	520	130	132	0	1.91	80	1.88	0.03
Sub Total (C)	4065	3083	3292	2382	65	2702	64	1
D. SJVNL								
NJPC (6*250)	1500	1605	1612	807	24.29	1012	24.17	0.12
Rampur HEP (4*68.67)	275	232	371	214	5.67	236	5.57	0.11
Sub Total (D)	1775	1837	1983	1021	29.96	1248	29.73	0.23
E. THDC								
Tehri HPS (4*250)	1000	1060	1068	0	5.26	219	5.20	0.06
Koteshwar HPS (4*100)	400	91	100	0	1.77	74	1.75	0.02
Sub Total (E)	1400	1151	1168	0	7.04	293	6.95	0.09
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	648	1185	386	15.70	654	15.56	0.14
Dehar HPS (6*165)	990	503	825	560	12.47	520	12.08	0.39
Pong HPS (6*66)	396	86	324	0	2.14	89	2.05	0.08
Sub Total (F)	2900	1237	2334	946	30.31	1263	29.70	0.61
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	138	68	1.93	80	2.28	-0.35
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1030	450	13.38	557	13.44	-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	147	148	3.52	147	3.54	-0.01
Budhil HPS(IPP)	70	0	35	35	0.82	34	0.85	-0.03
Sub Total (G)	1662	0	1350	701	19.65	819	20.11	-0.46
H. Total Regional Entities (A-G)	24419	15508	17239	12166	326.25	13594	319.20	7.05

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	420	340	8.14	339
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	108	80	1.95	81
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	501	350	8.87	370
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1210	712	21.60	900
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	2239	1482	40.55	1690
	Total Hydro	1148	570	281	11.28	470
	Total Punjab	5828	2809	1763	51.83	2160
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	241	225	5.07
DCRTPP (Yamuna nagar) (2*300)		600	529	469	11.79	491
Faridabad GPS (NTPC)		432	192	161	4.34	181
RGTPP (khedar) (IPP) (2*600)		1200	1114	777	21.27	886
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	1230	742	23.14	964
Thermal (Total)		4944	3306	2374	65.62	2734
Total Hydro		62	27	28	0.62	26
Total Haryana		5006	3333	2402	66.24	2760
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	928	823	19.22
	suratgarh TPS (6*250)	1500	1277	1032	26.91	1121
	Chabra TPS (3*250)	750	597	597	15.17	632
	Dholpur GPS (3*110)	330	92	0	1.33	55
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	115	127	3.46	144
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	98	97	2.12	88
	Giral LTPS (2*125)	250	34	34	0.82	34
	Rajwest LTPS (IPP) (8*135)	1080	832	713	18.02	751
	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	566	161	12.27	511
	Thermal (Total)	8026	4539	3584	99	4138
	Total Hydro	550	145	81	1.98	83
	Wind power	2798	191	436	6.51	271
	Biomass	99	35	35	0.84	35
	Solar	730	0	0	0.32	13
	Renewable/Others (Total)	3627	226	471	7.68	320
	Total Rajasthan	12203	4910	4136	108.97	4541
	UP	Anpara TPS (3*210+2*500)	1630	849	910	20.60
Obra TPS (2*50+2*94+5*200)		1194	281	196	5.00	208
Paricha TPS (2*110+2*220+2*250)		1140	449	587	11.30	471
Panki TPS (2*105)		210	135	122	3.20	133
Harduaganj TPS (1*60+1*105+2*250)		665	376	456	10.30	429
Tanda TPS (NTPC) (4*110)		440	307	313	7.70	321
Roza TPS (IPP) (4*300)		1200	1098	1107	26.50	1104
Anpara-C (IPP) (2*600)		1200	434	803	17.00	708
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	282	321	6.70	279
Thermal (Total)		8129	4211	4815	108.30	4513
Vishnuparyag HPS (IPP)		400	436	436	10.00	417
Other Hydro		527	311	322	7.10	296
Cogeneration		981	15	15	0.36	15
Total UP		10037	4973	5588	125.76	4823
Uttarakhand		Total Hydro	1398	874	813	20.11
	Total Uttarakhand	1398	874	813	20.11	838
Delhi	Raighat TPS (2*67.5)	180	32	40	0.73	30
	Delhi Gas Turbine (6x30 + 3x34)	282	146	149	3.49	146
	Pragati Gas Turbine (2x104+ 1x122)	330	291	267	6.79	283
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	271	253	5.26	219
	Badarpur TPS (NTPC) (3*95+2*210)	705	309	302	7.50	312
	Thermal (Total)	2962	1049	1011	23.76	990
	Total Delhi	2962	1049	1011	23.76	990
HP	Baspa HPS (IPP) (2*150)	300	190	230	4.77	199
	Malana HPS (IPP) (2*43)	86	47	37	1.05	44
	Other Hydro	728	585	610	14.61	609
	Total HP	1114	822	877	20.43	851
J & K	Baqilhar HPS (IPP) (3*150)	450	450	450	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	450	450	10.46	436
Total State Control Area Generation		39642	19220	17040	427.57	17399
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4129	4666	116.46	4852
Total Regional Availability(Gross)		64062	40588	33872	870.27	35845

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9945	4867	147.46	6144
State Control Area Hydro	5684	3199	2852	81.99	2999
Total Regional Hydro	17116	13144	7719	229.44	9144

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	Import	Export	
Vindhychal B/B	500	400	500	0	10.61	0.00	10.61		
Gwalior-Agra (D/C)	905	1667	2048	0	37.97	0.00	37.97		
Zerda-Kankroli	-133	-33	17	133	0.00	1.42	-1.42		
Zerda-Bhinmal	-128	-27	68	144	0.00	1.04	-1.04		
Malanpur-Auraiya	-79	-38	0	108	0.00	1.18	-1.18		
Badod-Kota/Morak	-7	0	15	68	0.00	1.38	-1.38		
Mundra-Mohindergarh(HVDC)	1898	1198	1905	0	35.91	0.00	35.91		
Vindhychal - Rihand	458	297	477	0	10.38	0.00	10.38		
Sub Total WR	3414	3464			94.86	5.02	89.84		
Pusauli Bypass	200	200	200	0	4.81	0.00	4.81		
MZP- GKP (D/C)	218	464	540	0	8.91	0.00	8.91		
Patna-Balia(D/C)	55	155	210	0	2.68	0.00	2.68		
B'Sharif-Balia (D/C)	31	205	200	0	3.66	0.00	3.66		
Pusauli-Balia	-73	-19	0	73	0.00	1.04	-1.04		
Gaya-Fatehpur (765 Kv)	131	98	286	0	2.98	0.00	2.98		
Pusauli-Sahupuri	125	130	193	0	3.41	0.00	3.41		
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00		
Son Ngr-Rihand	-23	-35	0	47	0.00	0.75	-0.75		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	51	4	190	23	1.95	0.00	1.95		
Sub Total ER	715	1202			28.39	1.78	26.61		
Total IR Exch	4129	4666			123.25	6.80	116.46		

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
16.45	3.83	20.28	16.04	24.51	-3.48	14.36	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
32.84	77.52	110.36	26.61	89.84	116.46	-6.23	12.32	6.09

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	0.07	4.46	21.62	56.15	60.02	15.49	2.92	0.01	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				
50.20	17.02	49.69	18.54	49.97	0.09	0.09	50.19	49.85

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	413	00:00	408	08:33	0.0	0.0	0.0	0.0
Gorakhpur	400	414	17:03	402	14:36	0.0	0.0	0.0	0.0
Bareilly	400	415	13:52	401	11:30	0.0	0.0	0.0	0.0
Kanpur	400	417	04:03	406	10:15	0.0	0.0	0.0	0.0
Dadri	400	417	06:04	400	14:42	0.0	0.0	0.0	0.0
Ballabgarh	400	424	04:03	405	14:42	0.0	0.0	17.3	0.0
Bawana	400	421	04:37	402	14:42	0.0	0.0	0.1	0.0
Bassi	400	431	04:00	410	09:17	0.0	0.0	38.4	0.7
Hissar	400	414	02:54	394	18:43	0.0	0.0	0.0	0.0
Moga	400	416	03:26	397	14:42	0.0	0.0	0.0	0.0
Abdullapur	400	422	06:04	396	18:44	0.0	0.0	3.3	0.0
Nalagarh	400	418	23:59	405	18:46	0.0	0.0	0.0	0.0
Kishenpur	400	416	03:24	402	19:20	0.0	0.0	0.0	0.0
Wagoora	400	415	02:32	400	19:41	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	775	00:00	751	10:12	0.0	0.0	0.0	0.0
Balia	765	764	00:00	748	04:39	0.0	0.0	0.0	0.0
Moga	765	791	03:25	755	18:44	0.0	0.0	0.0	0.0
Agra	765	794	04:03	763	14:44	0.0	0.0	0.0	0.0
Bhiwani	765	798	06:38	767	14:43	0.0	0.0	0.0	0.0
Unnao	765	757	00:00	745	09:30	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	511.53	1620.46	511.59	1620.46	545.10	407.31
Pong	426.72	384.05	416.76	743.22	423.80	1066.19	157.95	128.19
Tehri	829.79	740.04	820.65	1023.38	821.85	1044.51	225.40	116.00
Koteshwar	612.50	598.50	611.68	5.46	610.85	4.95	116.00	117.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	0.00	0.00
Rihand	268.22	252.98	856.40	362.30	854.50	329.80	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	518.35	5.44	520.88	7.97	217.50	232.85

* 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	1261	-284	0	1212	0	0	31.45	-1.64	29.81
Delhi	159	-12	-35	442	236	0	10.41	5.07	15.49
Haryana	1418	117	0	1335	76	0	33.53	-2.49	31.04
HP	-918	-108	0	-668	-202	0	-18.14	-2.91	-21.06
J&K	-584	-56	0	-412	-13	0	-10.85	-0.98	-11.83
CHD	0	0	0	0	0	0	0.07	0.30	0.37
Rajasthan	192	-13	2	244	-19	0	5.24	4.51	9.74
UP	278	1329	32	-420	0	0	-5.28	12.20	6.92
Uttarakhand	85	31	0	85	20	0	2.03	1.58	3.62
Total	1891	1003	-1	1819	98	0	48.47	15.63	64.10

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1409	1212	100	-355	0	0
Delhi	835	159	523	-114	0	-35
Haryana	1418	1335	137	-786	0	0
HP	-614	-972	0	-202	0	0
J&K	-381	-614	0	-106	0	0
CHD	15	0	49	0	0	0
Rajasthan	244	192	401	-132	2	0
UP	278	-530	1329	0	32	0
Uttarakhand	85	85	139	13	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 15.09.2014 :**

1. Partial load interruption in J&K due to 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 :**