

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.09.2014
Date of Reporting : 14.09.2014

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
39382	3430	42812	50.10	33186	1780	34966	50.10	817.7	68.04

* 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	41.03	6.82		47.84	94.30	95.72	1.42	143.56	0.00
Haryana	68.85	0.65		69.50	65.43	64.08	-1.35	133.59	0.00
Rajasthan	89.48	2.38	12.39	104.25	49.48	49.04	-0.44	153.29	0.00
Delhi	21.43			21.43	66.54	67.67	1.13	89.10	0.03
UP	107.47	15.83	0.36	123.66	102.28	106.44	4.16	230.10	67.66
Uttarakhand		2.09		2.09	14.04	14.61	0.57	16.69	0.09
HP		22.07		22.07	1.23	2.91	1.67	24.97	0.27
J & K		10.50	0.00	10.50	12.86	11.24	-1.62	21.74	0.00
Chandigarh				0.00	4.41	4.68	0.27	4.68	0.00
Total	328.25	60.34	12.75	401.34	410.58	416.39	5.81	817.73	68.04

* 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	7041	0	100	1212	5755	0	62	1546	7041
Haryana	7193	0	-241	1367	5134	0	34	1549	7193
Rajasthan	7151	0	-30	225	5972	0	39	-123	7151
Delhi	4177	0	174	672	3258	0	-73	169	4257
UP	9608	3360	170	-417	10104	1780	224	929	11273
Uttarakhand	1660	70	44	105	1297	0	29	96	1710
HP	1211	0	34	-1084	863	0	29	-1077	1211
J&K	1114	0	-165	-425	640	0	-126	-695	1166
Chandigarh	228	0	2	0	163	0	10	0	228
Total	39382	3430	87	1655	33186	1780	229	2394	39382

* 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	1420	1722	1409	34.10	1421	34.05	0.05
Rihand I STPS (2*500)	1000	310	416	384	8.37	349	7.26	1.11
Rihand II STPS (2*500)	1000	797	863	872	20.47	853	18.81	1.67
Rihand III STPS (2*500)	1000	724	846	616	18.72	780	16.87	1.85
Dadri I STPS (4*210)	840	555	524	417	13.01	542	12.90	0.11
Dadri II STPS (2*490)	980	471	451	406	10.71	446	10.90	-0.19
Unchahar I TPS (2*210)	420	199	206	218	5.13	214	4.70	0.43
Unchahar II TPS (2*210)	420	199	219	216	5.10	213	4.65	0.45
Unchahar III TPS (1*220)	210	198	213	216	5.05	210	4.62	0.43
I-STPP (Jhajjar) (3*500)	1500	990	1023	891	18.02	751	18.67	-0.65
Dadri GPS (4*130.19+2*154.51)	830	772	326	363	8.23	343	8.19	0.05
Anta GPS (3*88.71+1*153.2)	419	393	242	254	5.97	249	5.94	0.03
Auraiva GPS (4*111.19+2*109.30)	663	478	286	309	7.10	296	7.02	0.08
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.07
Sub Total (A)	11297	7510	7337	6571	160	6667	155	5
B. NPC								
NAPS (2*220)	440	278	313	316	6.56	273	6.67	-0.11
RAPS- B (2*220)	440	390	436	435	9.42	392	9.36	0.06
RAPS- C (2*220)	440	175	187	187	3.88	162	4.20	-0.32
Sub Total (B)	1320	843	936	938	19.85	827	20.23	-0.38
C. NHPC								
Chamera I HPS (3*180)	540	534	538	183	10.20	425	10.00	0.20
Chamera II HPS (3*100)	300	300	302	206	5.83	243	5.70	0.13
Chamera III HPS (3*77)	231	229	230	150	3.97	165	3.95	0.02
Bairasuli HPS(3*60)	180	170	176	63	2.29	96	2.18	0.11
Salal-HPS (6*115)	690	635	570	675	15.59	650	15.24	0.36
Tanakpur-HPS (3*40)	94	90	92	92	2.20	92	2.17	0.03
Uri-I HPS (4*120)	480	300	344	329	7.77	324	7.21	0.56
Uri-II HPS (4*60)	240	180	240	173	4.45	185	4.32	0.13
Dhauliganga-HPS (4*70)	280	200	209	209	4.84	202	4.80	0.05
Dulhasti-HPS (3*130)	390	387	396	397	9.37	390	9.28	0.09
Sewa-II HPS (3*40)	120	119	130	121	2.94	123	2.86	0.08
Parbati 3 (4*130)	520	130	131	130	2.14	89	2.24	-0.09
Sub Total ©	4065	3274	3357	2729	72	2983	70	2
D.SJVNL								
NJPC (6*250)	1500	1605	1614	919	26.78	1116	26.56	0.22
Rampur HEP (4*68.67)	275	246	361	218	6.09	254	5.92	0.18
Sub Total (D)	1775	1851	1975	1137	32.87	1370	32.47	0.40
E. THDC								
Tehri HPS (4*250)	1000	1060	1064	0	5.05	210	5.00	0.05
Koteshwar HPS (4*100)	400	73	101	90	1.77	74	1.75	0.02
Sub Total (E)	1400	1133	1165	90	6.81	284	6.75	0.06
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	639	1189	394	15.68	653	15.35	0.33
Dehar HPS (6*165)	990	566	825	560	13.85	577	13.60	0.26
Pong HPS (6*66)	396	30	198	0	0.72	30	0.71	0.01
Sub Total (F)	2900	1235	2212	954	30.25	1260	29.65	0.60
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	135	165	2.84	118	2.78	0.06
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1055	500	14.82	617	14.88	-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	0	0	0.00	0	3.54	-3.54
Budhil HPS(IPP)	70	0	45	40	0.96	40	0.99	-0.04
Sub Total (G)	1662	0	1234	705	18.61	776	22.19	-3.58
H. Total Regional Entities (A-G)	24419	15846	18216	13124	340.01	14167	335.90	4.11

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	480	11.82	492
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	222	180	4.30	179
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	512	531	10.46	436
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	665	700	14.46	602
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	2029	1891	41.03	1709
	Total Hydro	1148	462	232	6.82	284
Total Punjab	5828	2491	2123	47.84	1993	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	463	443	9.94	414
	DCRTPP (Yamuna nagar) (2*300)	600	527	468	11.39	475
	Faridabad GPS (NTPC)	432	188	164	4.42	184
	RGTPP (khedar) (IPP) (2*600)	1200	1111	816	20.27	844
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1233	738	22.84	952
	Thermal (Total)	4944	3522	2629	68.85	2869
	Total Hydro	62	21	27	0.65	27
	Total Haryana	5006	3543	2656	69.50	2896
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	778	762	17.74
suratgarh TPS (6*250)		1500	1083	1116	25.38	1058
Chabra TPS (3*250)		750	321	242	6.76	281
Dholpur GPS (3*110)		330	121	114	2.76	115
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	127	114	3.38	141
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0
Barsingsar (NLC) (2*125)		250	98	100	2.15	90
Giral LTPS (2*125)		250	37	46	0.91	38
Rajwest LTPS (IPP) (8*135)		1080	713	713	16.95	706
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	589	562	13.45	560
Thermal (Total)		8026	3867	3769	89	3728
Total Hydro		550	229	45	2.38	99
Wind power		2798	410	659	11.23	468
Biomass		99	26	26	0.63	26
Solar		730	0	0	0.53	22
Renewable/Others (Total)		3627	436	685	12.39	516
Total Rajasthan	12203	4532	4499	104.25	4344	
UP	Anpara TPS (3*210+2*500)	1630	844	477	17.60	733
	Obra TPS (2*50+2*94+5*200)	1194	447	459	11.00	458
	Paricha TPS (2*110+2*220+2*250)	1140	542	643	11.40	475
	Panki TPS (2*105)	210	131	144	3.20	133
	Harduaganj TPS (1*60+1*105+2*250)	665	430	402	9.90	413
	Tanda TPS (NTPC) (4*110)	440	315	313	7.71	321
	Roza TPS (IPP) (4*300)	1200	1099	1101	26.42	1101
	Anpara-C (IPP) (2*600)	1200	538	506	12.82	534
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	320	7.42	309
	Thermal (Total)	8129	4666	4365	107.47	4478
	Vishnuparyag HPS (IPP)	400	436	436	9.16	382
	Other Hydro	527	177	350	6.67	278
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5294	5166	123.66	4771
Uttarakhand	Total Hydro	1398	883	818	2.09	87
	Total Uttarakhand	1398	883	818	2.09	87
Delhi	Raighat TPS (2*67.5)	180	43	30	0.91	38
	Delhi Gas Turbine (6x30 + 3x34)	282	148	149	3.51	146
	Pragati Gas Turbine (2x104+ 1x122)	330	295	294	6.60	275
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	301	241	6.32	263
	Badarpur TPS (NTPC) (3*95+2*210)	705	157	159	4.09	170
	Thermal (Total)	2962	944	873	21.43	893
Total Delhi	2962	944	873	21.43	893	
HP	Baspa HPS (IPP) (2*150)	300	239	298	5.63	235
	Malana HPS (IPP) (2*43)	86	71	55	1.43	60
	Other Hydro	728	635	631	15.01	625
	Total HP	1114	945	984	22.07	919
J & K	Baqilhar HPS (IPP) (3*150)	450	438	438	10.50	438
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	438	438	10.50	438
Total State Control Area Generation		39642	19070	17557	401.34	16341
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3325	4388	92.26	3844
Total Regional Availability(Gross)		64062	40611	35069	833.61	34352

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9899	5575	159.19	6633
State Control Area Hydro	5684	3155	2894	60.34	2132
Total Regional Hydro	17116	13054	8469	219.53	8765

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	300	50	500	0.19	6.98	-6.80
Gwalior-Agra (D/C)	874	1252	2247	0	31.33	0.00	31.33
Zerda-Kankroli	-93	-126	0	156	0.00	2.12	-2.12
Zerda-Bhinmal	-105	-165	9	232	0.00	2.57	-2.57
Malanpur-Auraiya	55	31	0	84	0.00	1.85	-1.85
Badod-Kota/Morak	3	-33	30	38	0.00	0.21	-0.21
Mundra-Mohindergarh(HVDC)	1602	1398	1605	0	35.66	0.00	35.66
Vindhychal - Rihand	478	362	478	0	9.69	0.00	9.69
Sub Total WR	3014	3019			76.87	13.74	63.13
Pusauli Bypass	200	200	200	0	4.76	0.00	4.76
MZP- GKP (D/C)	44	482	590	0	8.83	0.00	8.83
Patna-Balia(D/C)	10	205	371	0	4.05	0.00	4.05
B'Sharif-Balia (D/C)	8	217	261	0	4.02	0.00	4.02
Pusauli-Balia	-80	-46	0	86	0.00	1.38	-1.38
Gaya-Fatehpur (765 Kv)	46	151	253	0	3.50	0.00	3.50
Pusauli-Sahupuri	132	134	174	0	2.86	0.00	2.86
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-13	-24	0	-40	0.00	-0.41	0.41
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-36	50	140	36	1.61	0.00	1.61
Sub Total ER	311	1369			30.11	0.98	29.13
Total IR Exch	3325	4388			106.98	14.71	92.26

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
19.19	3.76	22.95	16.04	24.58	-4.18	4.60	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
34.81	55.16	89.98	29.13	63.13	92.26	-5.68	7.97	2.29

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	0.00	2.09	13.98	58.27	70.07	13.00	2.72	0.23	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				
50.25	18.01	49.71	14.35	49.98	0.06	0.08	50.18	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	417	00:00	412	13:14	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	419	03:52	402	14:25	0.0	0.0	0.0	0.0
Kanpur	400	423	03:55	408	11:34	0.0	0.0	3.8	0.0
Dadri	400	422	03:46	401	14:26	0.0	0.0	11.8	0.0
Ballabgarh	400	427	03:47	405	14:21	0.0	0.0	32.1	0.0
Bawana	400	422	03:55	402	19:08	0.0	0.0	7.6	0.0
Bassi	400	434	03:46	411	14:31	0.0	0.0	53.9	3.5
Hissar	400	417	03:55	396	19:05	0.0	0.0	0.0	0.0
Moga	400	420	03:55	401	19:05	0.0	0.0	0.0	0.0
Abdullapur	400	423	06:11	396	18:47	0.0	0.0	12.1	0.0
Nalagarh	400	427	03:59	411	11:34	0.0	0.0	74.3	0.0
Kishenpur	400	418	08:01	402	19:02	0.0	0.0	0.0	0.0
Wagoora	400	420	02:54	405	19:12	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	03:55	753	18:41	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	805	03:55	769	19:10	0.0	0.0	10.1	0.0
Agra	765	809	03:59	772	18:41	0.0	0.0	5.6	0.0
Bhiwani	765	807	03:49	771	19:08	0.0	0.0	19.9	0.0
Unnao	765	762	23:52	740	14:32	0.0	2.3	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	511.35	1620.46	511.53	1620.46	595.02	402.16
Pong	426.72	384.05	416.68	743.22	423.79	1066.19	191.48	42.67
Tehri	829.79	740.04	820.00	1002.27	821.25	1023.38	243.29	112.00
Koteshwar	612.50	598.50	611.55	5.20	610.90	4.95	112.00	117.00
Chamera-I	760.00	748.75	756.25	0.00	0.00	0.00	249.74	301.64
Rihand	268.22	252.98	856.30	360.60	854.50	329.80	0.00	0.00
RPS	352.80	343.81	1156.71	0.00	1157.26	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	518.15	3.23	521.39	10.77	260.66	138.04

* 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	1262	285	0	1212	0	0	31.46	3.57	35.03
Delhi	169	0	0	442	240	-10	10.76	4.83	15.59
Haryana	1418	130	0	1335	32	0	33.54	-5.65	27.89
HP	-951	-126	0	-668	-417	0	-18.43	-4.98	-23.41
J&K	-594	-101	0	-412	-13	0	-11.21	-1.81	-13.02
CHD	0	0	0	0	0	0	0.07	0.16	0.23
Rajasthan	225	-350	2	245	-22	2	5.53	-0.77	4.76
UP	287	640	3	-420	0	3	-5.30	10.23	4.93
Uttarakhand	85	11	0	85	20	0	2.04	1.16	3.20
Total	1900	489	5	1820	-160	-5	48.46	6.73	55.20

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1409	1212	285	0	0	0
Delhi	860	169	472	-58	0	-10
Haryana	1418	1335	136	-744	0	0
HP	-625	-987	-97	-543	0	0
J&K	-391	-640	-5	-152	0	0
CHD	15	0	25	0	0	0
Rajasthan	245	203	413	-896	2	0
UP	287	-537	935	0	3	0
Uttarakhand	85	85	106	11	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 13.09.2014 :**

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 :**