

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.09.2014
Date of Reporting : 15.09.2014

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
35673	3180	38853	50.09	35102	2563	37665	50.07	820.4	69.36

* 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	35.25	6.40		41.65	90.57	88.69	-1.88	130.34	0.00
Haryana	63.47	0.62		64.08	65.76	62.76	-3.00	126.85	0.00
Rajasthan	93.98	1.77	11.22	106.97	49.66	49.43	-0.23	156.40	0.00
Delhi	22.61			22.61	62.15	63.63	1.49	86.24	0.04
UP	108.62	15.44	0.36	124.41	107.89	112.55	4.67	236.97	69.32
Uttarakhand		20.00		20.00	13.73	13.84	0.11	33.83	0.00
HP		21.46		21.46	-0.05	1.86	1.91	23.32	0.01
J & K		10.50	0.00	10.50	11.78	11.81	0.02	22.31	0.00
Chandigarh				0.00	4.10	4.12	0.02	4.12	0.00
Total	323.92	76.18	11.58	411.68	405.59	408.69	3.11	820.37	69.36

* 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	5570	0	220	1212	5745	0	-96	1465	6462
Haryana	5607	0	-173	1417	5862	0	175	1555	6268
Rajasthan	6587	0	-150	243	6302	0	-74	-239	7031
Delhi	3788	0	-42	596	3455	0	136	30	3898
UP	9956	3180	210	-2	10614	2455	226	1342	10944
Uttarakhand	1618	0	75	99	1338	0	15	144	1618
HP	1120	0	31	-1123	781	108	49	-1034	1120
J&K	1226	0	6	-404	839	0	104	-615	1260
Chandigarh	201	0	-20	0	167	0	19	0	201
Total	35673	3180	157	2038	35102	2563	553	2649	35777

* 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	1300	1374	1377	33.36	1390	30.75	2.61
Rihand I STPS (2*500)	1000	385	423	415	10.13	422	9.12	1.00
Rihand II STPS (2*500)	1000	742	819	788	18.86	786	17.37	1.49
Rihand III STPS (2*500)	1000	742	794	746	18.59	775	17.29	1.30
Dadri I STPS (4*210)	840	642	609	540	15.09	629	15.24	-0.15
Dadri II STPS (2*490)	980	480	395	427	10.63	443	11.22	-0.59
Unchahar I TPS (2*210)	420	199	190	188	5.00	208	4.62	0.38
Unchahar II TPS (2*210)	420	199	175	180	4.96	207	4.55	0.41
Unchahar III TPS (1*220)	210	198	188	188	4.87	203	4.51	0.35
I-STPP (Jhajhar) (3*500)	1500	605	600	1000	13.45	560	14.51	-1.06
Dadri GPS (4*130.19+2*154.51)	830	771	151	310	5.00	208	5.13	-0.12
Anta GPS (3*88.71+1*153.2)	419	393	197	229	5.74	239	5.73	0.02
Auraiva GPS (4*111.19+2*109.30)	663	478	153	260	4.32	180	4.26	0.07
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.01	1	0.07	-0.06
Sub Total (A)	11297	7138	6068	6648	150	6251	144	6
B. NPC								
NAPS (2*220)	440	277	311	314	6.57	274	6.65	-0.07
RAPS- B (2*220)	440	392	438	437	9.46	394	9.41	0.06
RAPS- C (2*220)	440	175	186	188	3.90	163	4.20	-0.30
Sub Total (B)	1320	844	935	939	19.94	831	20.26	-0.32
C. NHPC								
Chamera I HPS (3*180)	540	534	547	182	8.18	341	8.22	-0.03
Chamera II HPS (3*100)	300	300	300	200	6.00	250	5.24	0.76
Chamera III HPS (3*77)	231	229	232	120	3.65	152	3.65	0.00
Bairasuli HPS(3*60)	180	124	0	122	1.19	50	1.18	0.01
Salal-HPS (6*115)	690	667	678	680	16.39	683	16.00	0.39
Tanakpur-HPS (3*40)	94	90	89	89	2.13	89	2.15	-0.02
Uri-I HPS (4*120)	480	307	330	330	7.92	330	7.37	0.55
Uri-II HPS (4*60)	240	189	231	168	4.54	189	4.53	0.02
Dhauliganga-HPS (4*70)	280	207	209	209	5.00	208	4.97	0.03
Dulhasti-HPS (3*130)	390	96	398	0	2.33	97	2.30	0.04
Sewa-II HPS (3*40)	120	119	122	121	2.88	120	2.86	0.02
Parbati 3 (4*130)	520	130	131	104	2.28	95	2.24	0.04
Sub Total ©	4065	2991	3268	2325	63	2604	61	2
D.SJVNL								
NJPC (6*250)	1500	1605	1604	817	25.56	1065	25.71	-0.15
Rampur HEP (4*68.67)	275	246	370	217	5.92	247	5.83	0.10
Sub Total (D)	1775	1851	1974	1034	31.48	1312	31.53	-0.05
E. THDC								
Tehri HPS (4*250)	1000	1060	1066	0	5.25	219	5.20	0.05
Koteshwar HPS (4*100)	400	91	101	0	1.77	74	1.75	0.02
Sub Total (E)	1400	1151	1167	0	7.02	293	6.95	0.07
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	640	1157	386	15.46	644	15.37	0.09
Dehar HPS (6*165)	990	567	825	560	13.82	576	13.60	0.22
Pong HPS (6*66)	396	39	198	0	0.93	39	0.94	-0.01
Sub Total (F)	2900	1246	2180	946	30.21	1259	29.91	0.30
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	147	119	2.41	100	2.66	-0.26
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1050	475	14.21	592	14.63	-0.42
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	149	149	3.50	146	3.54	-0.04
Budhil HPS(IPP)	70	0	35	35	0.83	35	0.85	-0.02
Sub Total (G)	1662	0	1380	778	20.94	873	21.68	-0.73
H. Total Regional Entities (A-G)	24419	15222	16972	12670	322.13	13422	315.42	6.71

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	500	10.33	430
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	180	3.08	128
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	495	358	8.48	353
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	440	699	13.38	557
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1455	1737	35.25	1469
	Total Hydro	1148	271	278	6.40	267
Total Punjab	5828	1726	2015	41.65	1735	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	432	421	9.37	391
	DCRTPP (Yamuna nagar) (2*300)	600	482	487	11.07	461
	Faridabad GPS (NTPC)	432	161	182	4.25	177
	RGTPP (khedar) (IPP) (2*600)	1200	835	809	19.06	794
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	742	738	19.72	822
	Thermal (Total)	4944	2652	2637	63.47	2645
	Total Hydro	62	25	25	0.62	26
	Total Haryana	5006	2677	2662	64.08	2670
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	678	852	18.40
suratgarh TPS (6*250)		1500	1118	1143	26.95	1123
Chabra TPS (3*250)		750	531	327	12.66	528
Dholpur GPS (3*110)		330	0	121	2.01	84
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	127	125	3.40	142
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0
Barsingsar (NLC) (2*125)		250	98	100	2.17	90
Giral LTPS (2*125)		250	34	37	0.63	26
Rajwest LTPS (IPP) (8*135)		1080	606	713	16.65	694
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	472	657	11.10	463
Thermal (Total)		8026	3664	4075	94	3916
Total Hydro		550	90	45	1.77	74
Wind power		2798	281	567	10.01	417
Biomass		99	33	33	0.80	33
Solar		730	0	0	0.40	17
Renewable/Others (Total)		3627	314	600	11.22	467
Total Rajasthan		12203	4068	4720	106.97	4457
UP	Anpara TPS (3*210+2*500)	1630	925	832	21.30	888
	Obra TPS (2*50+2*94+5*200)	1194	383	367	8.00	333
	Paricha TPS (2*110+2*220+2*250)	1140	564	616	13.90	579
	Panki TPS (2*105)	210	77	126	3.10	129
	Harduaganj TPS (1*60+1*105+2*250)	665	348	347	8.50	354
	Tanda TPS (NTPC) (4*110)	440	305	316	7.68	320
	Roza TPS (IPP) (4*300)	1200	1098	1101	26.42	1101
	Anpara-C (IPP) (2*600)	1200	522	540	12.27	511
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	322	322	7.45	310
	Thermal (Total)	8129	4544	4567	108.62	4526
	Vishnuparyag HPS (IPP)	400	436	327	9.34	389
	Other Hydro	527	319	257	6.10	254
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5314	5166	124.41	4795
Uttarakhand	Total Hydro	1398	855	792	20.00	833
	Total Uttarakhand	1398	855	792	20.00	833
Delhi	Raighat TPS (2*67.5)	180	38	36	0.92	38
	Delhi Gas Turbine (6x30 + 3x34)	282	145	148	3.48	145
	Pragati Gas Turbine (2x104+ 1x122)	330	262	283	6.51	271
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	225	302	6.75	281
	Badarpur TPS (NTPC) (3*95+2*210)	705	302	160	4.94	206
	Thermal (Total)	2962	972	929	22.61	942
Total Delhi	2962	972	929	22.61	942	
HP	Baspa HPS (IPP) (2*150)	300	246	226	4.77	199
	Malana HPS (IPP) (2*43)	86	46	61	1.20	50
	Other Hydro	728	640	671	15.49	645
	Total HP	1114	932	958	21.46	894
J & K	Baqilhar HPS (IPP) (3*150)	450	436	436	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	436	436	10.50	438
Total State Control Area Generation		39642	16980	17678	411.68	16764
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3395	5554	115.77	4824
Total Regional Availability(Gross)		64062	37347	35902	849.58	35010

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9785	4899	147.83	6160
State Control Area Hydro	5684	2928	2791	76.18	2785
Total Regional Hydro	17116	12713	7690	224.01	8945

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	350	350	200	6.64	0.52	6.11
Gwalior-Agra (D/C)	1192	1924	1967	0	37.86	0.00	37.86
Zerda-Kankroli	-43	-86	35	169	0.00	2.07	-2.07
Zerda-Bhinmal	-62	-124	34	181	0.00	2.28	-2.28
Malanpur-Auraiya	-29	-52	0	-74	0.00	1.23	-1.23
Badod-Kota/Morak	3	9	30	29	0.07	0.00	0.07
Mundra-Mohindergarh(HVDC)	998	1798	1805	0	37.28	0.00	37.28
Vindhychal - Rihand	778	362	478	0	13.00	0.00	13.00
Sub Total WR	3037	4181			94.84	6.09	88.75
Pusauli Bypass	200	200	200	0	4.98	0.00	4.98
MZP- GKP (D/C)	92	460	570	0	8.03	0.00	8.03
Patna-Balia(D/C)	-29	237	283	37	3.35	0.00	3.35
B'Sharif-Balia (D/C)	38	250	271	0	3.79	0.00	3.79
Pusauli-Balia	-67	-29	0	79	0.00	1.22	-1.22
Gaya-Fatehpur (765 Kv)	42	156	260	11	3.18	0.00	3.18
Pusauli-Sahupuri	138	122	174	0	3.13	0.00	3.13
K'nasa-Sahupuri	0	0	0	0	1.44	0.00	1.44
Son Ngr-Rihand	-26	-30	0	-46	0.00	0.60	-0.60
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 Kv)	-30	7	179	64	0.95	0.00	0.95
Sub Total ER	358	1373			28.85	1.82	27.02
Total IR Exch	3395	5554			123.69	7.91	115.77

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
17.73	3.81	21.55	16.08	23.00	-1.58	9.04	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
36.05	68.99	105.03	27.02	88.75	115.77	-9.02	19.76	10.74

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	0.63	7.64	40.68	57.38	21.89	11.46	1.69	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					
50.32	13.02	49.71	0.08	50.02	0.07	0.08	50.33	49.93

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	416	00:28	412	22:20	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	423	17:07	407	19:07	0.0	0.0	0.4	0.0
Kanpur	400	424	17:05	407	19:09	0.0	0.0	8.5	0.0
Dadri	400	422	17:02	408	11:49	0.0	0.0	0.7	0.0
Ballabgarh	400	427	17:06	411	18:58	0.0	0.0	33.7	0.0
Bawana	400	424	17:09	407	18:51	0.0	0.0	1.4	0.0
Bassi	400	437	17:09	416	11:43	0.0	0.0	86.0	5.4
Hissar	400	420	17:02	401	11:47	0.0	0.0	0.0	0.0
Moga	400	421	15:29	401	18:55	0.0	0.0	1.6	0.0
Abdullapur	400	427	17:02	396	19:09	0.0	0.0	6.6	0.0
Nalagarh	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kishenpur	400	420	14:06	406	18:53	0.0	0.0	0.0	0.0
Wagoora	400	418	00:36	405	19:21	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	787	17:07	748	18:54	0.0	0.0	0.0	0.0
Balia	765	780	17:07	753	19:09	0.0	0.0	0.0	0.0
Moga	765	809	17:07	764	19:08	0.0	0.0	9.7	0.0
Agra	765	807	17:07	767	19:09	0.0	0.0	0.5	0.0
Bhiwani	765	812	17:07	770	18:53	0.0	0.0	10.1	0.0
Unnao	765	764	06:03	748	11:49	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	511.46	1620.46	511.54	1620.46	586.13	398.79
Pong	426.72	384.05	416.75	743.22	423.81	1066.19	205.44	56.66
Tehri	829.79	740.04	820.35	1009.00	821.55	1033.00	230.13	116.00
Koteshwar	612.50	598.50	611.65	5.20	610.65	4.95	116.00	117.00
Chamera-I	760.00	748.75	755.97	0.00	0.00	0.00	232.54	276.52
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	518.28	2.09	521.08	10.79	263.01	94.83

* 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	204	0	1212	0	0	31.46	3.47	34.93
Delhi	65	-10	-25	423	199	-25	8.46	1.55	10.00
Haryana	1418	137	0	1335	82	0	33.54	-2.37	31.17
HP	-918	-116	0	-668	-455	0	-18.25	-5.36	-23.61
J&K	-564	-51	0	-391	-13	0	-10.17	-0.89	-11.06
CHD	0	0	0	0	0	0	0.07	0.06	0.13
Rajasthan	193	-434	2	245	-1	0	5.36	-0.36	5.00
UP	283	1034	25	-445	443	0	-5.88	15.92	10.03
Uttarakhand	85	59	0	85	14	0	2.04	1.59	3.63
Total	1824	823	2	1795	268	-25	46.62	13.60	60.22

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1409	1212	336	-327	0	0
Delhi	747	65	387	-142	0	-25
Haryana	1418	1335	138	-888	0	0
HP	-641	-971	-85	-582	0	0
J&K	-361	-594	0	-106	0	0
CHD	15	0	20	0	0	0
Rajasthan	245	193	347	-743	2	0
UP	283	-582	1034	249	25	0
Uttarakhand	85	85	119	14	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 14.09.2014 :**

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 :**