

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 08.09.2014
Date of Reporting : 09.09.2014

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
37288	3521	40809	50.04	33028	1795	34823	50.01	831.4	72.07

* 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 \$						
Punjab	19.88	6.46		26.34	88.17	88.27	0.11	114.61	0.00
Haryana	56.59	0.60		57.18	71.37	70.41	-0.96	127.59	0.02
Rajasthan	100.09	0.29	4.57	104.96	57.16	56.54	-0.62	161.50	0.00
Delhi	30.91			30.91	71.85	72.14	0.29	103.05	0.46
UP	107.70	17.10	0.40	125.20	112.59	118.09	5.50	243.29	69.64
Uttarakhand		20.86		20.86	15.25	15.92	0.66	36.77	0.24
HP		25.16		25.16	-0.05	-0.84	-0.79	24.32	0.02
J & K		10.44	0.00	10.44	5.89	4.72	-1.17	15.16	1.70
Chandigarh				0.00	4.55	5.10	0.55	5.10	0.00
Total	315.17	80.89	4.97	401.04	426.76	430.34	3.58	831.38	72.07

* 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	5062	0	60	529	4460	0	1	693	5444
Haryana	6351	188	84	1185	5223	0	-49	1319	6449
Rajasthan	7290	0	-127	141	6411	0	-15	310	7319
Delhi	4390	93	131	347	3446	0	-268	-258	4624
UP	10235	3050	195	119	10615	1795	279	1618	11561
Uttarakhand	1741	70	73	172	1378	0	-35	174	1741
HP	1149	20	18	-1179	830	0	-143	-1095	1244
J&K	841	100	-101	-374	492	0	12	-670	874
Chandigarh	229	0	7	0	173	0	8	0	318
Total	37288	3521	340	939	33028	1795	-210	2091	37498

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

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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	2000	1558	1931	1516	37.24	1552	36.90	0.34
Rihand I STPS	1000	278	374	269	7.46	311	6.48	0.98
Rihand II STPS	1000	929	1040	933	23.97	999	21.79	2.18
Rihand III STPS	1000	918	991	836	22.95	956	21.19	1.76
Dadri I STPS	840	815	787	771	20.36	848	19.49	0.87
Dadri II STPS	980	980	965	872	23.32	972	23.21	0.11
Unchahar I TPS	420	13	0	0	0.38	16	0.30	0.08
Unchahar II TPS	420	400	431	410	10.27	428	9.33	0.94
Unchahar III TPS	210	198	216	195	5.05	210	4.59	0.46
I-STPP (Jhajhar)	1500	899	750	625	15.30	637	16.17	-0.87
Dadri GPS	830	771	285	186	5.27	220	5.50	-0.23
Anta GPS	419	393	229	47	5.00	208	4.77	0.23
Auraiva GPS	663	617	303	160	4.51	188	4.30	0.21
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
Sub Total (A)	11297	8772	8302	6820	181	7546	174	7
B. NPC								
NAPS	440	274	308	311	6.53	272	6.58	-0.04
RAPS- B	440	406	431	434	9.25	385	9.74	-0.49
RAPS- C	440	185	177	180	3.67	153	4.44	-0.77
Sub Total (B)	1320	865	916	925	19.45	810	20.76	-1.31
C. NHPC								
Chamera I HPS	540	540	545	548	13.20	550	12.96	0.24
Chamera II HPS	300	300	305	304	7.24	302	7.20	0.04
Chamera III HPS	231	229	235	237	5.64	235	5.50	0.14
Bairasuil HPS	180	178	180	120	3.19	133	3.03	0.16
Salal-HPS	690	54	0	0	1.64	68	1.44	0.21
Tanakpur-HPS	94	66	60	91	1.64	68	1.58	0.06
Uri-HPS	480	381	410	400	9.13	381	9.13	0.00
Uri-II HPS	240	169	241	60	4.08	170	4.06	0.02
Dhauliganga-HPS	280	200	210	209	4.85	202	4.80	0.05
Dulhasti-HPS	390	387	398	399	9.41	392	9.28	0.14
Sewa-II HPS	120	119	131	130	3.08	128	2.86	0.22
Parbati 3	520	73	132	0	1.78	74	1.76	0.02
Sub Total ©	4065	2696	2846	2499	65	2703	64	1
D.SJVNL								
NJPC	1500	1605	1613	1409	32.30	1346	31.83	0.46
Rampur HEP	275	289	360	360	7.25	302	6.93	0.32
Sub Total (D)	1775	1894	1973	1769	39.54	1648	38.76	0.79
E. THDC								
Tehri HPS	1000	1060	1063	0	5.08	212	5.00	0.08
Koteshwar HPS	400	73	101	90	1.78	74	1.75	0.03
Sub Total (E)	1400	1133	1164	90	6.86	286	6.75	0.11
F. BBMB								
Bhakra HPS	1514	493	1092	386	11.96	498	11.83	0.13
Dehar HPS	990	572	825	560	13.89	579	13.73	0.15
Pong HPS	396	59	258	0	1.41	59	1.41	0.00
Sub Total (F)	2900	1124	2175	946	27.26	1136	26.97	0.28
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	159	138	3.48	145	3.37	0.11
KWHEP HPS(IPP)	1000	0	1050	680	17.56	732	17.29	0.28
Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS	300	0	150	149	3.54	147	3.54	0.00
Budhil HPS(IPP)	70	0	59	59	1.39	58	1.27	0.11
Sub Total (G)	1662	0	1419	1027	25.97	1082	25.47	0.50
H. Total Regional Entities (A-G)	24419	16483	18795	14075	365.07	15211	356.40	8.67

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)	1260	320	320	8.11	338	
	Guru Nanak Dev TPS(Bhatinda)	440	170	175	3.87	161	
	Guru Hargobind Singh TPS(L.mbt)	920	369	286	7.90	329	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	1400	0	0	0.00	0	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	4680	859	781	19.88	828	
	Total Hydro	1148	413	219	6.46	269	
	Total Punjab	5828	1272	1000	26.34	1097	
	Haryana	Panipat TPS	1367	872	659	16.94	706
DCRTPP (Yamuna nagar)		600	521	495	11.63	485	
Faridabad GPS (NTPC)		432	191	183	4.50	188	
RGTPP (khedar) (IPP)		1200	1105	898	23.51	980	
Magnum Diesel (IPP)		25	0	0	0.00	0	
Jhajjar(CLP)		1320	0	0	0.00	0	
Thermal (Total)		4944	2689	2235	56.59	2358	
Total Hydro		62	24	26	0.60	25	
Total Haryana		5006	2713	2261	57.18	2383	
Rajasthan		kota TPS	1240	873	810	19.29	804
	suratgarh TPS	1500	1067	993	18.40	767	
	Chabra TPS	750	396	376	9.76	406	
	Dholpur GPS	330	0	0	0.00	0	
	Ramgarh GPS	271	130	130	3.50	146	
	RAPS A (NPC)	300	0	0	0.00	0	
	Barsingar (NLC)	250	185	183	4.07	170	
	Giral LTPS	250	0	0	0.00	0	
	Rajwest LTPS (IPP)	1080	832	616	19.32	805	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	0	0	0.00	0	
	Kawai(Adani)	1320	1148	944	25.75	1073	
	Thermal (Total)	8026	4631	4052	100	4171	
	Total Hydro	550	0	9	0.29	12	
	Wind power	2798	49	305	3.63	151	
	Biomass	99	21	21	0.49	21	
	Solar	730	0	0	0.46	19	
	Renewable/Others (Total)	3627	70	326	4.57	191	
	Total Rajasthan	12203	4701	4387	104.96	4373	
	UP	Anpara TPS	1630	689	667	16.90	704
Obra TPS		1194	364	317	8.40	350	
Paricha TPS		1140	431	555	12.20	508	
Panki TPS		210	126	144	3.20	133	
Harduaganj TPS		665	418	442	10.00	417	
Tanda TPS (NTPC)		440	373	379	9.10	379	
Roza TPS (IPP)		1200	824	829	19.80	825	
Anpara-C (IPP)		1200	770	864	19.60	817	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	364	363	8.50	354	
Thermal (Total)		8129	4359	4560	107.70	4488	
Vishnuparyag HPS (IPP)		400	436	436	10.50	438	
Other Hydro		527	290	305	6.60	275	
Cogeneration		981	15	15	0.40	17	
Total UP		10037	5100	5316	125.20	4779	
Uttarakhand		Total Hydro	1398	869	871	20.86	869
		Total Uttarakhand	1398	869	871	20.86	869
Delhi	Raighat TPS	135	78	0	0.00	0	
	Delhi Gas Turbine	282	70	548	13.20	550	
	Pragati Gas Turbine	330	292	304	7.24	302	
	Rithala GPS	95	0	237	5.64	235	
	Bawana GPS	1370	302	120	3.19	133	
	Badarpur TPS (NTPC)	705	297	0	1.64	68	
	Thermal (Total)	2917	1039	1209	30.91	1288	
	Total Delhi	2917	1039	1209	30.91	1288	
HP	Baspa HPS (IPP)	300	330	307	7.57	316	
	Malana HPS (IPP)	86	60	60	1.45	60	
	Other Hydro	728	661	648	16.14	672	
	Total HP	1114	1051	1015	25.16	1048	
J & K	Baqilhar HPS (IPP)	450	436	434	10.44	435	
	Other Hydro/IPP	436	0	0	0.00	0	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	436	434	10.44	435	
Total State Control Area Generation		39597	17181	16493	401.04	16272	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3713	5173	102.73	4281	
Total Regional Availability(Gross)		64017	39689	35741	868.84	35764	

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9367	6122	159.59	6649
State Control Area Hydro	5684	3083	2879	80.89	2933
Total Regional Hydro	17116	12450	9001	240.48	9583

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	100	150	350	100	3.93	0.43	3.50
Gwalior-Agra (D/C)	1135	1756	2115	0	35.85	0.00	35.85
Zerda-Kankroli	0	-53	0	164	0.00	1.74	-1.74
Zerda-Bhinmal	-64	-48	-80	183	0.00	1.68	-1.68
Malanpur-Auraiya	67	36	0	98	0.00	1.12	-1.12
Badod-Kota/Morak	3	50	50	30	0.00	0.74	-0.74
Mundra-Mohindergarh(HVDC)	1405	1203	1412	0	32.92	0.00	32.92
Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	2646	3094			72.70	5.71	66.98
Pusauli Bypass	200	200	200	0	4.89	0.00	4.89
MZP- GKP (D/C)	246	680	716	0	11.94	0.00	11.94
Patna-Balia(D/C)	113	326	396	0	5.69	0.00	5.69
B'Sharif-Balia (D/C)	116	332	378	0	5.70	0.00	5.70
Pusauli-Balia	75	24	0	-85	0.00	1.90	-1.90
Gaya-Fatehpur (765 Kv)	109	236	321	0	4.63	0.00	4.63
Pusauli-Sahupuri	149	155	201	0	3.31	0.00	3.31
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	43	40	0	46	0.00	0.96	-0.96
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	16	86	158	25	1.98	0.00	1.98
Sub Total ER	1067	2079			38.61	2.86	35.75
Total IR Exch	3713	5173			111.31	8.58	102.73

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
24.24	3.81	28.05	2.12	15.36	0.30	4.49	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
30.46	55.60	86.06	35.75	66.98	102.73	5.29	11.38	16.68

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	3.18	19.68	47.70	83.06	47.59	3.58	0.86	0.29	NA

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				
50.23	13.04	49.58	19.14	49.90	0.22	0.11	50.21	0.00

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	08:04	407	16:37	0.0	0.0	0.0	0.0
Gorakhpur	400	413	21:50	390	04:35	0.0	0.0	0.0	0.0
Bareilly	400	415	07:35	401	09:40	0.0	0.0	0.0	0.0
Kanpur	400	420	07:36	406	09:42	0.0	0.0	0.0	0.0
Dadri	400	420	06:03	403	19:09	0.0	0.0	0.0	0.0
Ballabgarh	400	424	06:03	407	19:11	0.0	0.0	14.6	0.0
Bawana	400	421	07:36	403	19:11	0.0	0.0	1.3	0.0
Bassi	400	424	02:40	406	19:15	0.0	0.0	12.3	0.0
Hissar	400	415	07:43	400	19:04	0.0	0.0	0.0	0.0
Moga	400	417	02:30	403	09:42	0.0	0.0	0.0	0.0
Abdullapur	400	422	07:44	396	19:06	0.0	0.0	4.9	0.0
Nalagarh	400	424	06:02	407	09:42	0.0	0.0	15.5	0.0
Kishenpur	400	416	01:55	404	19:11	0.0	0.0	0.0	0.0
Wagoora	400	419	00:46	407	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	779	08:05	756	09:41	0.0	0.0	0.0	0.0
Balia	765	767	21:33	739	04:36	0.0	2.4	0.0	0.0
Moga	765	799	06:02	771	09:42	0.0	0.0	0.0	0.0
Agra	765	794	06:03	769	09:43	0.0	0.0	0.0	0.0
Bhiwani	765	803	07:36	757	14:19	0.0	0.0	5.2	0.0
Unnao	765	749	06:33	739	10:51	0.0	25.0	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	510.59	1575.10	511.34	1620.46	796.35	338.95
Pong	426.72	384.05	416.32	730.66	423.58	1066.19	427.30	85.06
Tehri	829.79	740.04	817.95	962.00	819.90	1000.00	260.84	114.00
Koteshwar	612.50	598.50	611.72	5.46	610.90	4.69	113.00	118.00
Chamera-I	760.00	748.75	759.46	0.00	752.72	0.00	341.64	357.47
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	517.24	3.46	522.69	10.80	512.02	152.66

* 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	578	115	0	529	0	0	14.81	1.67	16.48
Delhi	-10	-192	-55	393	-41	-5	7.62	-4.17	3.45
Haryana	1195	124	0	1112	73	0	28.18	1.29	29.47
HP	-977	-118	0	-977	-202	0	-21.35	-4.25	-25.60
J&K	-564	-106	0	-361	-13	0	-10.03	-1.47	-11.50
CHD	0	0	0	0	0	0	0.07	0.14	0.22
Rajasthan	157	153	0	157	-16	0	2.85	5.85	8.70
UP	338	1231	49	-286	404	0	-2.90	16.79	13.89
Uttarakhand	85	89	0	85	87	0	2.04	2.19	4.23
Total	801	1296	-6	651	293	-5	21.28	18.04	39.32

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	775	529	229	0	0	0
Delhi	714	-10	44	-463	-5	-55
Haryana	1195	1112	146	-270	0	0
HP	-689	-1078	-67	-384	0	0
J&K	-361	-564	-5	-157	0	0
CHD	15	0	34	0	0	0
Rajasthan	157	-46	367	-97	0	0
UP	338	-388	1329	72	49	0
Uttarakhand	85	85	157	50	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 08.09.2014 :**

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 :

1. 80MVR bus reactor charged first time at 19.15 hrs. on 08/09/2014 at Kothputli.

XVI. Tripping of lines in pooling stations :**XVII. Complete generation loss in a generating station :**