

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 16.09.2014
Date of Reporting : 17.09.2014

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
40028	5383	45411	50.13	36012	2925	38937	50.06	887.8	128.44

* 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	52.74	14.39		67.13	78.28	79.66	1.38	146.79	16.05
Haryana	74.65	0.64		75.28	68.89	70.45	1.55	145.73	30.05
Rajasthan	109.20	2.11	11.34	122.65	53.29	51.48	-1.81	174.13	0.00
Delhi	25.19			25.19	68.38	72.12	3.74	97.32	1.37
UP	116.70	16.80	0.36	133.86	91.29	98.52	7.23	232.38	79.39
Uttarakhand		19.48		19.48	13.40	15.48	2.08	34.96	1.59
HP		19.66		19.66	2.84	6.52	3.67	26.18	0.00
J & K		10.80	0.00	10.80	13.90	14.62	0.72	25.42	0.00
Chandigarh				0.00	4.22	4.89	0.67	4.89	0.00
Total	378.48	83.88	11.70	474.06	394.50	413.74	19.24	887.80	128.44

* 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	6914	1175	45	387	5994	0	-11	1014	6924
Haryana	6996	707	56	1515	6231	0	-55	1506	7120
Rajasthan	7764	0	-29	239	7023	0	-184	-70	7764
Delhi	4432	106	220	216	3610	0	-85	21	4524
UP	9500	3325	43	-23	10162	2845	350	1531	10253
Uttarakhand	1648	70	88	99	1301	80	32	96	1735
HP	1055	0	6	-800	743	0	191	-728	1094
J&K	1482	0	185	-399	795	0	9	-609	1482
Chandigarh	236	0	18	0	154	0	21	0	246
Total	40028	5383	633	1233	36012	2925	268	2759	40028

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

figures may not be at simultaneous hour.

Diversity is 1.03

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	1450	1685	1428	34.95	1456	34.80	0.15
Rihand I STPS (2*500)	1000	380	465	405	10.19	424	9.13	1.06
Rihand II STPS (2*500)	1000	781	1010	723	20.50	854	18.74	1.76
Rihand III STPS (2*500)	1000	611	504	797	15.42	642	14.67	0.75
Dadri I STPS (4*210)	840	791	719	727	19.27	803	18.99	0.28
Dadri II STPS (2*490)	980	480	458	435	11.01	459	11.45	-0.44
Unchahar I TPS (2*210)	420	199	215	216	4.72	197	4.76	-0.04
Unchahar II TPS (2*210)	420	199	218	217	4.71	196	4.74	-0.02
Unchahar III TPS (1*220)	210	198	218	221	4.69	195	4.72	-0.03
I-STPP (Jhajhar) (3*500)	1500	161	80	303	3.68	153	3.87	-0.19
Dadri GPS (4*130.19+2*154.51)	830	767	160	186	4.22	176	4.19	0.03
Anta GPS (3*88.71+1*153.2)	419	393	226	257	5.83	243	5.64	0.19
Auraiva GPS (4*111.19+2*109.30)	663	478	153	154	3.68	153	3.53	0.15
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	6893	6111	6069	143	5955	139	4
B. NPC								
NAPS (2*220)	440	274	314	314	6.56	273	6.58	-0.02
RAPS- B (2*220)	440	394	435	440	9.47	394	9.46	0.01
RAPS- C (2*220)	440	175	185	187	3.89	162	4.20	-0.31
Sub Total (B)	1320	843	934	941	19.92	830	20.23	-0.31
C. NHPC								
Chamera I HPS (3*180)	540	534	535	0	5.86	244	5.75	0.11
Chamera II HPS (3*100)	300	300	301	203	4.51	188	4.40	0.11
Chamera III HPS (3*77)	231	229	228	118	3.12	130	3.05	0.07
Bairasuli HPS(3*60)	180	0	0	0	0.00	0	0.00	0.00
Salal-HPS (6*115)	690	587	675	660	14.74	614	14.09	0.65
Tanakpur-HPS (3*40)	94	86	88	87	2.08	87	2.05	0.03
Uri-I HPS (4*120)	480	336	335	331	8.33	347	8.05	0.28
Uri-II HPS (4*60)	240	182	237	175	4.48	187	4.36	0.12
Dhauliganga-HPS (4*70)	280	183	208	209	4.12	172	4.05	0.07
Dulhasti-HPS (3*130)	390	387	397	397	9.37	390	9.28	0.09
Sewa-II HPS (3*40)	120	119	129	121	2.94	123	2.86	0.08
Parbati 3 (4*130)	520	119	132	0	1.78	74	1.76	0.02
Sub Total ©	4065	3061	3265	2302	61	2555	60	2
D.SJVNL								
NJPC (6*250)	1500	1605	1580	721	22.50	937	22.39	0.11
Rampur HEP (4*68.67)	275	217	364	183	5.32	222	5.22	0.10
Sub Total (D)	1775	1822	1944	904	27.82	1159	27.61	0.21
E. THDC								
Tehri HPS (4*250)	1000	1060	1005	0	5.27	220	5.20	0.07
Koteshwar HPS (4*100)	400	91	101	0	1.77	74	1.75	0.02
Sub Total (E)	1400	1151	1106	0	7.04	293	6.95	0.09
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	640	1188	392	15.47	645	15.37	0.10
Dehar HPS (6*165)	990	441	660	420	10.95	456	10.58	0.37
Pong HPS (6*66)	396	71	264	66	1.75	73	1.72	0.03
Sub Total (F)	2900	1153	2112	878	28.17	1174	27.66	0.51
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	142	71	1.97	82	1.93	0.04
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1000	410	12.44	518	12.48	-0.04
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	148	148	3.53	147	3.54	-0.01
Budhil HPS(IPP)	70	0	32	32	0.75	31	0.78	-0.03
Sub Total (G)	1662	0	1322	661	18.69	779	18.72	-0.04
H. Total Regional Entities (A-G)	24419	14923	16793	11755	305.87	12744	300.18	5.68

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	420	12.12	505
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	108	108	2.26	94
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	505	503	10.87	453
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1382	1382	27.49	1145
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	2625	2413	52.74	2197
	Total Hydro	1148	553	345	14.39	600
Total Punjab	5828	3178	2758	67.13	2797	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	502	237	7.29	304
	DCRTPP (Yamuna nagar) (2*300)	600	515	520	12.10	504
	Faridabad GPS (NTPC)	432	0	192	1.70	71
	RGTPP (khedar) (IPP) (2*600)	1200	1122	1142	25.80	1075
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1231	1231	27.75	1156
	Thermal (Total)	4944	3370	3322	74.65	3110
	Total Hydro	62	26	29	0.64	27
	Total Haryana	5006	3396	3351	75.28	3137
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	956	942	21.36
suratgarh TPS (6*250)		1500	1350	1284	30.25	1260
Chabra TPS (3*250)		750	440	632	14.24	593
Dholpur GPS (3*110)		330	116	116	2.72	113
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	111	103	3.16	132
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0
Barsingsar (NLC) (2*125)		250	98	96	2.18	91
Giral LTPS (2*125)		250	45	34	1.01	42
Rajwest LTPS (IPP) (8*135)		1080	832	818	20.23	843
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	583	608	14.07	586
Thermal (Total)		8026	4531	4633	109	4550
Total Hydro		550	128	151	2.11	88
Wind power		2798	458	436	10.28	428
Biomass		99	31	31	0.74	31
Solar		730	0	0	0.32	13
Renewable/Others (Total)		3627	489	467	11.34	472
Total Rajasthan	12203	5148	5251	122.65	5110	
UP	Anpara TPS (3*210+2*500)	1630	868	870	20.90	871
	Obra TPS (2*50+2*94+5*200)	1194	417	267	8.00	333
	Paricha TPS (2*110+2*220+2*250)	1140	604	538	14.60	608
	Panki TPS (2*105)	210	131	131	3.20	133
	Harduaganj TPS (1*60+1*105+2*250)	665	293	365	8.30	346
	Tanda TPS (NTPC) (4*110)	440	237	242	5.90	246
	Roza TPS (IPP) (4*300)	1200	1098	1107	26.40	1100
	Anpara-C (IPP) (2*600)	1200	969	923	22.70	946
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	282	6.70	279
	Thermal (Total)	8129	4937	4725	116.70	4863
	Vishnuparyag HPS (IPP)	400	436	436	9.70	404
	Other Hydro	527	310	322	7.10	296
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5698	5498	133.86	5173
	Uttarakhand	Total Hydro	1398	855	808	19.48
Total Uttarakhand		1398	855	808	19.48	812
Delhi	Raighat TPS (2*67.5)	180	42	28	0.35	14
	Delhi Gas Turbine (6x30 + 3x34)	282	148	149	3.44	144
	Pragati Gas Turbine (2x104+ 1x122)	330	290	264	6.77	282
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	291	284	6.67	278
	Badarpur TPS (NTPC) (3*95+2*210)	705	344	311	7.97	332
	Thermal (Total)	2962	1115	1036	25.19	1050
Total Delhi	2962	1115	1036	25.19	1050	
HP	Baspa HPS (IPP) (2*150)	300	181	171	4.47	186
	Malana HPS (IPP) (2*43)	86	48	43	1.01	42
	Other Hydro	728	573	597	14.17	591
	Total HP	1114	802	811	19.66	819
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	450	450	10.80	450
Total State Control Area Generation		39642	20642	19963	474.06	19348
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2944	5083	104.36	4348
Total Regional Availability(Gross)		64062	40379	36801	884.28	36441

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9568	4565	138.77	5782
State Control Area Hydro	5684	3124	2916	83.88	3091
Total Regional Hydro	17116	12692	7481	222.65	8873

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	400	500	100	7.97	0.07	7.90
Gwalior-Agra (D/C)	997	1605	1941	0	35.21	0.00	35.21
Zerda-Kankroli	-168	-91	0	178	0.00	2.46	-2.46
Zerda-Bhinmal	-167	-113	31	202	0.00	2.36	-2.36
Malanpur-Auraiya	82	44	0	84	0.00	1.34	-1.34
Badod-Kota/Morak	-33	-6	-37	45	0.03	0.03	0.00
Mundra-Mohindergarh(HVDC)	2001	1905	2004	0	45.31	0.00	45.31
Vindhychal - Rihand	-479	-322	-482	0	-10.48	0.00	-10.48
Sub Total WR	2433	3422			78.04	6.26	71.78
Pusauli Bypass	200	200	200	0	4.87	0.00	4.87
MZP- GKP (D/C)	110	542	564	0	9.65	0.00	9.65
Patna-Balia(D/C)	133	239	335	0	5.88	0.00	5.88
B'Sharif-Balia (D/C)	48	253	268	0	3.73	0.00	3.73
Pusauli-Balia	-118	-28	0	118	0.00	1.46	-1.46
Gaya-Fatehpur (765 Kv)	61	235	336	0	5.17	0.00	5.17
Pusauli-Sahupuri	116	142	161	0	2.70	0.00	2.70
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-34	0	40	0.00	0.83	-0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-9	112	260	9	2.87	0.00	2.87
Sub Total ER	511	1661			34.87	2.29	32.59
Total IR Exch	2944	5083			112.91	8.55	104.36

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
25.87	3.83	29.70	15.35	17.17	-4.25	13.58	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
40.80	68.56	109.35	32.59	71.78	104.36	-8.21	3.22	-4.99

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	0.45	6.04	28.55	65.85	57.52	10.81	2.56	0.59	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				
50.26	13.05	49.65	0.08	49.95	0.11	0.09	50.22	49.88

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	10:04	405	15:00	0.0	0.0	0.0	0.0
Gorakhpur	400	412	06:03	397	00:08	0.0	0.0	0.0	0.0
Bareilly	400	414	06:04	393	14:52	0.0	0.0	0.0	0.0
Kanpur	400	416	01:27	400	14:52	0.0	0.0	0.0	0.0
Dadri	400	416	06:06	394	15:00	0.0	0.0	0.0	0.0
Ballabgarh	400	420	03:57	399	14:52	0.0	0.0	0.0	0.0
Bawana	400	416	06:08	397	14:54	0.0	0.0	0.0	0.0
Bassi	400	428	04:00	408	14:52	0.0	0.0	25.9	0.0
Hissar	400	409	06:08	395	14:51	0.0	0.0	0.0	0.0
Moga	400	411	06:02	398	14:53	0.0	0.0	0.0	0.0
Abdullapur	400	421	07:05	396	19:04	0.0	0.0	0.2	0.0
Nalagarh	400	424	06:09	407	19:03	0.0	0.0	18.6	0.0
Kishenpur	400	415	01:28	403	19:02	0.0	0.0	0.0	0.0
Wagoora	400	416	01:23	400	19:06	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	776	13:05	741	14:52	0.0	0.6	0.0	0.0
Balia	765	762	13:04	742	14:52	0.0	0.0	0.0	0.0
Moga	765	783	06:02	756	14:54	0.0	0.0	0.0	0.0
Agra	765	791	06:09	756	14:53	0.0	0.0	0.0	0.0
Bhiwani	765	792	06:03	759	14:55	0.0	0.0	0.0	0.0
Unnao	765	750	00:00	736	11:34	0.0	66.4	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	511.57	1620.46	511.62	1635.65	469.89	412.09
Pong	426.72	384.05	416.78	743.22	423.78	1066.19	50.21	103.95
Tehri	829.79	740.04	820.95	1023.38	822.15	1044.51	207.83	116.00
Koteshwar	612.50	598.50	611.75	5.46	610.70	4.90	116.00	117.00
Chamera-I	760.00	748.75	755.59	7.20	0.00	0.00	166.83	158.91
Rihand	268.22	252.98	856.50	364.10	854.40	328.10	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	51.08	8.99	520.90	4.37	221.55	374.23

* 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	892	121	0	843	-456	0	20.63	-2.67	17.96
Delhi	83	-10	-52	468	-222	-30	10.08	-1.74	8.34
Haryana	1382	124	0	1485	29	0	33.41	-3.01	30.40
HP	-644	-84	0	-617	-183	0	-14.48	-2.76	-17.24
J&K	-559	-51	0	-386	-13	0	-10.20	-0.95	-11.14
CHD	0	0	0	0	0	0	0.07	0.40	0.47
Rajasthan	172	-245	2	244	-7	2	4.90	3.43	8.34
UP	153	1329	49	-400	357	19	-6.21	19.12	12.91
Uttarakhand	85	11	0	85	14	0	2.03	1.18	3.22
Total	1564	1196	-1	1722	-480	-9	40.24	13.00	53.24

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	892	843	161	-456	0	0
Delhi	851	83	224	-434	-1	-54
Haryana	1485	1298	125	-906	0	0
HP	-501	-718	-79	-183	0	0
J&K	-356	-589	0	-101	0	0
CHD	15	0	49	0	0	0
Rajasthan	244	150	405	-447	2	1
UP	153	-512	1329	0	49	0
Uttarakhand	85	85	95	11	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 16.09.2014 :**

1. Parial load intrusion 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 :**