

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 17.09.2014
Date of Reporting : 18.09.2014

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
41677	3725	45402	50.02	38348	3765	42113	50.06	925.7	92.37

* 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	67.01	15.91		82.92	83.42	85.26	1.84	168.18	6.38
Haryana	73.81	0.64		74.45	81.47	82.62	1.15	157.07	0.00
Rajasthan	99.47	1.72	18.90	120.09	52.64	52.53	-0.11	172.62	0.00
Delhi	27.99			27.99	69.75	72.30	2.55	100.30	0.13
UP	120.30	17.10	0.36	137.76	92.49	99.33	6.84	237.09	85.07
Uttarakhand		18.28		18.28	13.87	15.50	1.63	33.77	0.79
HP		19.81		19.81	5.25	5.57	0.32	25.37	0.00
J & K		10.45	0.00	10.45	14.48	15.67	1.19	26.13	0.00
Chandigarh				0.00	4.05	5.15	1.10	5.15	0.00
Total	388.59	83.91	19.26	491.76	417.43	433.93	16.51	925.69	92.37

* 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	7907	350	-31	837	6805	0	109	943	7907
Haryana	7430	0	-129	1581	6897	0	152	1692	7566
Rajasthan	7495	0	118	253	7290	0	20	401	7780
Delhi	4502	0	119	520	3718	0	-67	165	4730
UP	9954	3300	356	-153	10357	3765	272	1258	10837
Uttarakhand	1645	75	91	104	1396	0	115	184	1655
HP	1172	0	-90	-846	906	0	15	-688	1226
J&K	1321	0	-23	-349	816	0	0	-597	1343
Chandigarh	252	0	28	0	163	0	29	0	266
Total	41677	3725	440	1947	38348	3765	646	3358	41677

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

figures may not be at simultaneous hour.

Diversity is 1.04

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	1439	1412	34.25	1427	31.20	3.05
Rihand I STPS (2*500)	1000	415	468	457	9.99	416	9.94	0.05
Rihand II STPS (2*500)	1000	950	1043	1036	22.76	949	22.79	-0.03
Rihand III STPS (2*500)	1000	460	505	492	11.03	460	11.04	-0.01
Dadri I STPS (4*210)	840	610	556	572	14.81	617	14.60	0.21
Dadri II STPS (2*490)	980	480	403	443	10.78	449	11.51	-0.73
Unchahar I TPS (2*210)	420	199	214	216	5.16	215	4.76	0.41
Unchahar II TPS (2*210)	420	198	218	217	5.16	215	4.72	0.43
Unchahar III TPS (1*220)	210	198	215	218	5.15	215	4.70	0.45
I-STPP (Jhajhar) (3*500)	1500	578	760	467	12.60	525	13.63	-1.03
Dadri GPS (4*130.19+2*154.51)	830	766	181	187	4.37	182	4.57	-0.20
Anta GPS (3*88.71+1*153.2)	419	393	255	241	5.98	249	5.92	0.06
Auraiva GPS (4*111.19+2*109.30)	663	478	152	156	3.70	154	3.55	0.14
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	7030	6409	6114	146	6075	143	3
B. NPC								
NAPS (2*220)	440	275	307	312	6.57	274	6.60	-0.03
RAPS- B (2*220)	440	392	436	438	9.46	394	9.41	0.05
RAPS- C (2*220)	440	175	185	185	3.85	161	4.20	-0.35
Sub Total (B)	1320	842	928	935	19.89	829	20.21	-0.32
C. NHPC								
Chamera I HPS (3*180)	540	534	546	0	5.84	243	5.75	0.09
Chamera II HPS (3*100)	300	300	300	207	4.64	193	4.55	0.09
Chamera III HPS (3*77)	231	229	232	77	3.23	135	3.20	0.03
Bairasuli HPS(3*60)	180	0	0	0	0.00	0	0.00	0.00
Salal-HPS (6*115)	690	577	665	569	14.30	596	13.85	0.44
Tanakpur-HPS (3*40)	94	87	88	89	2.10	87	2.08	0.02
Uri-I HPS (4*120)	480	410	444	422	10.14	422	9.84	0.30
Uri-II HPS (4*60)	240	186	233	180	4.58	191	4.47	0.12
Dhauliganga-HPS (4*70)	280	185	209	208	4.48	187	4.43	0.04
Dulhasti-HPS (3*130)	390	387	398	397	9.37	390	9.28	0.09
Sewa-II HPS (3*40)	120	119	130	46	1.18	49	1.10	0.08
Parbati 3 (4*130)	520	130	133	0	1.97	82	1.95	0.02
Sub Total ©	4065	3143	3376	2195	62	2576	60	1
D.SJVNL								
NJPC (6*250)	1500	1605	1617	722	23.23	968	22.88	0.35
Rampur HEP (4*68.67)	275	221	334	184	5.49	229	5.30	0.19
Sub Total (D)	1775	1826	1951	906	28.72	1197	28.18	0.54
E. THDC								
Tehri HPS (4*250)	1000	1060	1010	0	5.26	219	5.20	0.06
Koteshwar HPS (4*100)	400	91	100	0	1.76	73	1.75	0.01
Sub Total (E)	1400	1151	1110	0	7.03	293	6.95	0.08
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	718	1332	387	16.93	705	17.23	-0.31
Dehar HPS (6*165)	990	461	660	420	11.15	465	11.06	0.09
Pong HPS (6*66)	396	35	192	0	0.87	36	0.84	0.02
Sub Total (F)	2900	1214	2184	807	28.94	1206	29.13	-0.19
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	144	72	19.75	823	18.85	0.90
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1020	390	13.05	544	12.61	0.44
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	147	3.53	147	3.53	0.00
Budhil HPS(IPP)	70	0	32	28	0.68	28	0.68	0.00
Sub Total (G)	1662	0	1344	637	37.01	1542	35.68	1.34
H. Total Regional Entities (A-G)	24419	15206	17302	11595	329.20	13717	323.66	5.54

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	810	630	15.85	661	
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	188	108	2.62	109	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	898	684	16.91	704	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	1385	1383	31.64	1318	
	Talwandi Saboo (1*660)	660	0	0	0.00	0	
	Thermal (Total)	4680	3281	2805	67.01	2792	
	Total Hydro	1148	660	567	15.91	663	
Total Punjab	5828	3941	3372	82.92	3455		
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	646	638	14.61	609	
	DCRTPP (Yamuna nagar) (2*300)	600	520	495	11.75	490	
	Faridabad GPS (NTPC)	432	0	0	0.00	0	
	RGTPP (khedar) (IPP) (2*600)	1200	1120	1138	25.01	1042	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	1096	1215	22.45	935	
	Thermal (Total)	4944	3382	3486	73.81	3076	
	Total Hydro	62	27	27	0.64	27	
	Total Haryana	5006	3409	3513	74.45	3102	
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	808	902	21.15	881
		suratgarh TPS (6*250)	1500	1364	1116	29.88	1245
Chabra TPS (3*250)		750	631	630	15.12	630	
Dholpur GPS (3*110)		330	104	104	2.66	111	
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	107	100	3.11	129	
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0	
Barsingsar (NLC) (2*125)		250	98	98	2.18	91	
Giral LTPS (2*125)		250	42	47	0.93	39	
Rajwest LTPS (IPP) (8*135)		1080	832	716	19.76	823	
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	0	426	4.68	195	
Thermal (Total)		8026	3986	4139	99	4145	
Total Hydro		550	100	45	1.72	72	
Wind power		2798	540	1047	17.58	733	
Biomass		99	33	33	0.78	33	
Solar		730	0	0	0.54	22	
Renewable/Others (Total)		3627	573	1080	18.90	788	
Total Rajasthan	12203	4659	5264	120.09	5004		
UP	Anpara TPS (3*210+2*500)	1630	826	878	20.60	858	
	Obra TPS (2*50+2*94+5*200)	1194	448	365	9.40	392	
	Paricha TPS (2*110+2*220+2*250)	1140	613	607	14.70	613	
	Panki TPS (2*105)	210	140	126	3.20	133	
	Harduaganj TPS (1*60+1*105+2*250)	665	463	418	10.40	433	
	Tanda TPS (NTPC) (4*110)	440	241	234	5.90	246	
	Roza TPS (IPP) (4*300)	1200	1107	1107	26.50	1104	
	Anpara-C (IPP) (2*600)	1200	1004	1004	23.70	988	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	233	234	5.90	246	
	Thermal (Total)	8129	5075	4973	120.30	5013	
	Vishnuparyag HPS (IPP)	400	436	436	10.10	421	
	Other Hydro	527	291	301	7.00	292	
	Cogeneration	981	15	15	0.36	15	
	Total UP	10037	5817	5725	137.76	5319	
	Uttarakhand	Total Hydro	1398	856	730	18.28	762
Total Uttarakhand		1398	856	730	18.28	762	
Delhi	Raighat TPS (2*67.5)	135	83	79	2.13	89	
	Delhi Gas Turbine (6x30 + 3x34)	282	146	148	3.54	148	
	Pragati Gas Turbine (2x104+ 1x122)	330	290	290	7.12	297	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (6*250)	1370	301	271	7.10	296	
	Badarpur TPS (NTPC) (3*95+2*210)	705	350	310	8.10	337	
	Thermal (Total)	2917	1170	1098	27.99	1166	
Total Delhi	2917	1170	1098	27.99	1166		
HP	Baspa HPS (IPP) (2*150)	300	200	230	5.21	217	
	Malana HPS (IPP) (2*43)	86	48	46	1.10	46	
	Other Hydro	728	568	605	13.50	562	
	Total HP	1114	816	881	19.81	825	
J & K	Baqilhar HPS (IPP) (3*150)	450	436	436	10.45	436	
	Other Hydro/IPP	436	0	0	0.00	0	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	436	436	10.45	436	
Total State Control Area Generation		39597	21104	21019	491.76	20069	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4051.33	6134	134.95	5623	
Total Regional Availability(Gross)		64017	42458	38748	955.90	39409	

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9785	4371	159.31	6638
State Control Area Hydro	5684	3186	2987	83.91	3075
Total Regional Hydro	17116	12971	7358	243.21	9713

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	300	400	500	0	7.75	0.00	7.75
Gwalior-Agra (D/C)	810	1750	1930	0	36.95	0.00	36.95
Zerda-Kankroli	-150	-81	0	178	0.00	2.84	-2.84
Zerda-Bhinmal	-151	-94	0	223	0.00	2.91	-2.91
Malanpur-Auraiya	-85	-66	0	89	0.00	1.22	-1.22
Badod-Kota/Morak	-15	-3	30	31	0.57	0.00	0.57
Mundra-Mohindergarh(HVDC)	1998	2002	2008	0	48.36	0.00	48.36
Vindhychal - Rihand	478	362	478	0	11.45	0.00	11.45
Sub Total WR	3185	4270			105.08	6.96	98.12
Pusauli Bypass	400	400	400	0	9.53	0.00	9.53
MZP- GKP (D/C)	160	520	608	0	9.27	0.00	9.27
Patna-Balia(D/C)	256	449	454	0	8.64	0.00	8.64
B'Sharif-Balia (D/C)	29	300	300	0	4.38	0.00	4.38
Pusauli-Balia	-115	-45	0	119	0.00	1.88	-1.88
Gaya-Fatehpur (765 Kv)	150	195	357	0	4.73	0.00	4.73
Pusauli-Sahupuri	27	140	183	0	2.73	0.00	2.73
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-44	0	46	0.00	0.96	-0.96
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-1	-51	158	58	0.40	0.00	0.40
Sub Total ER	866	1864			39.67	2.84	36.83
Total IR Exch	4051	6134			144.75	9.80	134.95

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
27.07	3.83	30.91	14.14	21.44	1.89	21.39	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
46.94	78.87	125.81	36.83	98.12	134.95	-10.11	19.24	9.14

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	0.98	13.10	59.79	65.50	16.16	4.69	0.59	0.00

Frequency (Hz)				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.25	6.02	49.73	22.19	49.98	0.06	0.08	50.22	49.90

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	409	20:28	404	13:50	0.0	0.0	0.0	0.0
Gorakhpur	400	410	18:03	392	14:26	0.0	0.0	0.0	0.0
Bareilly	400	413	06:04	394	14:28	0.0	0.0	0.0	0.0
Kanpur	400	416	03:36	403	14:26	0.0	0.0	0.0	0.0
Dadri	400	414	06:02	396	14:26	0.0	0.0	0.0	0.0
Ballabgarh	400	420	06:02	401	14:14	0.0	0.0	0.0	0.0
Bawana	400	414	06:02	399	14:13	0.0	0.0	0.0	0.0
Bassi	400	428	18:02	412	09:40	0.0	0.0	25.9	0.0
Hissar	400	407	06:02	393	14:26	0.0	0.0	0.0	0.0
Moga	400	412	06:05	397	18:52	0.0	0.0	0.0	0.0
Abdullapur	400	417	06:05	396	19:20	0.0	0.0	0.0	0.0
Nalagarh	400	422	06:02	406	18:52	0.0	0.0	1.8	0.0
Kishenpur	400	415	06:04	401	19:21	0.0	0.0	0.0	0.0
Wagoora	400	414	03:37	399	19:23	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	18:01	743	14:26	0.0	0.0	0.0	0.0
Balia	765	766	06:03	733	14:26	0.0	10.8	0.0	0.0
Moga	765	783	06:04	754	19:23	0.0	0.0	0.0	0.0
Agra	765	791	18:02	765	10:41	0.0	0.0	0.0	0.0
Bhiwani	765	791	06:03	761	14:26	0.0	0.0	0.0	0.0
Unnao	765	740	00:00	740	00:00	0.0	100.0	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	511.58	1620.46	511.61	1635.65	496.31	468.76
Pong	426.72	384.05	416.83	755.83	423.74	1066.19	162.91	51.31
Tehri	829.79	740.04	821.20	1027.60	822.30	1050.84	199.44	116.00
Koteshwar	612.50	598.50	611.91	5.46	610.75	4.95	116.00	117.00
Chamera-I	760.00	748.75	755.74	7.58	0.00	0.00	161.12	158.48
Rihand	268.22	252.98	856.70	367.60	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	517.71	1076.00	520.78	7.28	195.10	452.59

* 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	887	57	0	837	0	0	20.49	0.25	20.75
Delhi	139	79	-53	448	128	-56	10.02	2.98	13.00
Haryana	1579	113	0	1554	27	0	37.62	0.70	38.32
HP	-614	-73	0	-612	-234	0	-14.28	-0.65	-14.93
J&K	-538	-59	0	-336	-13	0	-9.33	-0.80	-10.13
CHD	0	0	0	0	0	0	0.07	0.12	0.19
Rajasthan	192	207	2	264	-11	0	5.34	2.99	8.32
UP	77	1132	49	-423	221	49	-6.94	18.23	11.29
Uttarakhand	85	100	0	85	19	0	2.03	1.72	3.76
Total	1805	1555	-2	1818	137	-7	45.03	25.53	70.56

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	887	837	156	0	0	0
Delhi	949	139	368	-69	-3	-56
Haryana	1579	1495	116	-398	0	0
HP	-472	-713	161	-234	0	0
J&K	-336	-538	-10	-64	0	0
CHD	15	0	49	0	0	0
Rajasthan	264	177	345	-38	2	0
UP	77	-524	1151	0	49	0
Uttarakhand	85	85	106	14	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 17.09.2014 :****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 :**