

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 23.09.2014
Date of Reporting : 24.09.2014

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
43607	4096	47703	50.01	40370	3096	43466	50.00	979.2	104.76

* 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	85.77	16.03		101.80	94.49	95.16	0.67	196.97	0.00
Haryana	87.45	0.73		88.17	78.22	78.03	-0.19	166.20	0.00
Rajasthan	107.74	0.76	24.98	133.48	58.97	63.48	4.51	196.95	3.65
Delhi	26.06			26.06	70.49	69.94	-0.55	96.01	0.35
UP	110.50	15.60	0.36	126.46	94.90	102.65	7.75	229.11	90.30
Uttarakhand		17.96		17.96	14.89	17.06	2.17	35.02	2.71
HP		18.42		18.42	5.55	6.47	0.92	24.89	7.76
J & K		12.60	0.00	12.60	14.67	16.21	1.54	28.81	0.00
Chandigarh				0.00	4.28	5.26	0.98	5.26	0.00
Total	417.52	82.11	25.34	524.96	436.46	454.27	17.81	979.23	104.76

* 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	8925	0	-7	1035	7984	0	-18	1281	9031
Haryana	7785	0	-62	1297	6978	0	67	1441	7785
Rajasthan	8539	0	253	212	7783	65	229	400	8703
Delhi	4359	21	65	262	3704	0	-80	-26	4542
UP	9815	3850	298	-372	10496	3005	485	1757	10656
Uttarakhand	1653	225	59	61	1395	0	108	181	1765
HP	1230	0	75	-797	904	26	111	-583	1230
J&K	1046	0	-495	-284	946	0	103	-624	1635
Chandigarh	255	0	20	0	180	0	29	0	265
Total	43607	4096	206	1414	40370	3096	1034	3827	43607

* 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	1304	1203	1192	34.50	1437	31.30	3.19
Rihand I STPS (2*500)	1000	405	463	443	9.96	415	9.72	0.23
Rihand II STPS (2*500)	1000	950	1038	1026	22.91	955	22.80	0.11
Rihand III STPS (2*500)	1000	626	928	507	15.42	643	15.02	0.40
Dadri I STPS (4*210)	840	813	730	783	20.06	836	19.46	0.60
Dadri II STPS (2*490)	980	968	958	940	23.05	960	23.10	-0.05
Unchahar I TPS (2*210)	420	199	219	217	5.22	218	4.78	0.45
Unchahar II TPS (2*210)	420	400	439	438	10.55	439	9.60	0.95
Unchahar III TPS (1*220)	210	198	216	219	5.22	218	4.75	0.47
I-STPP (Jhajhar) (3*500)	1500	983	958	955	20.71	863	22.58	-1.87
Dadri GPS (4*130.19+2*154.51)	830	749	189	191	3.82	159	4.15	-0.33
Anta GPS (3*88.71+1*153.2)	419	393	254	210	5.06	211	4.92	0.14
Auraiya GPS (4*111.19+2*109.30)	663	478	152	156	3.61	150	3.50	0.11
Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
Unchahar Solar	10	3	0	0	0.05	2	0.07	-0.02
Sub Total (A)	11297	8469	7747	7277	180	7507	176	4
B. NPC								
NAPS (2*220)	440	276	315	311	6.62	276	6.62	0.00
RAPS- B (2*220)	440	395	436	439	9.45	394	9.48	-0.03
RAPS- C (2*220)	440	0	0	0	-0.53	-22	0.00	-0.53
Sub Total (B)	1320	671	751	750	15.55	648	16.10	-0.56
C. NHPC								
Chamera I HPS (3*180)	540	534	545	0	6.44	268	6.30	0.14
Chamera II HPS (3*100)	300	267	303	104	4.55	190	4.40	0.15
Chamera III HPS (3*77)	231	229	227	85	3.21	134	3.10	0.11
Bairasuli HPS(3*60)	180	120	120	60	1.69	71	1.62	0.07
Salal-HPS (6*115)	690	533	670	514	13.36	556	12.79	0.57
Tanakpur-HPS (3*40)	94	57	92	0	1.44	60	1.36	0.09
Uri-I HPS (4*120)	480	429	444	457	10.76	448	10.30	0.46
Uri-II HPS (4*60)	240	117	241	173	3.00	125	2.94	0.06
Dhauliganga-HPS (4*70)	280	167	209	138	4.02	168	4.00	0.02
Dulhasti-HPS (3*130)	390	387	399	398	9.41	392	9.28	0.14
Sewa-II HPS (3*40)	120	119	131	42	1.32	55	1.10	0.22
Parbati 3 (4*130)	520	130	130	0	1.87	78	1.82	0.05
Sub Total ©	4065	3088	3511	1971	61	2545	59	2
D. SJVNL								
NJPC (6*250)	1500	1605	1613	530	22.03	918	21.53	0.50
Rampur HEP (4*68.67)	275	205	289	123	5.07	211	4.93	0.14
Sub Total (D)	1775	1810	1902	653	27.10	1129	26.46	0.64
E. THDC								
Tehri HPS (4*250)	1000	1060	1034	0	5.13	214	5.00	0.13
Koteshwar HPS (4*100)	400	91	101	0	1.79	75	1.75	0.04
Sub Total (E)	1400	1151	1135	0	6.92	288	6.75	0.17
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	896	1332	649	21.07	878	21.51	-0.44
Dehar HPS (6*165)	990	450	825	300	10.83	451	10.80	0.03
Pong HPS (6*66)	396	201	384	126	4.78	199	4.84	-0.05
Sub Total (F)	2900	1548	2541	1075	36.68	1529	37.15	-0.46
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	102	66	1.77	74	1.72	0.05
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1113	360	12.30	513	12.21	0.09
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	141	148	3.45	144	3.53	-0.08
Budhil HPS(IPP)	70	0	41	32	0.80	33	0.81	-0.01
Sub Total (G)	1662	0	1397	605	18.32	763	18.27	0.06
H. Total Regional Entities (A-G)	24419	16737	18984	12332	345.81	14409	339.51	6.30

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	1215	1100	26.24	1093
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	459	400	9.73	405
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	938	937	20.44	852
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1223	1403	29.36	1223
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	3835	3840	85.77	3574
	Total Hydro	1148	669	556	16.03	668
Total Punjab	5828	4504	4396	101.80	4242	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1129	1180	26.68	1112
	DCRTPP (Yamuna nagar) (2*300)	600	478	496	11.03	459
	Faridabad GPS (NTPC)	432	178	187	4.12	172
	RGTPP (khedar) (IPP) (2*600)	1200	1130	804	20.00	833
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	956	1180	25.62	1067
	Thermal (Total)	4944	3871	3847	87.45	3644
	Total Hydro	62	30	27	0.73	30
	Total Haryana	5006	3901	3874	88.17	3674
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	856	873	20.12
suratgarh TPS (6*250)		1500	1366	1349	30.75	1281
Chabra TPS (3*250)		750	529	561	13.59	566
Dholpur GPS (3*110)		330	115	112	2.77	116
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	151	148	3.77	157
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0
Barsingar (NLC) (2*125)		250	175	96	2.69	112
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	832	713	19.59	816
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	621	614	14.45	602
Thermal (Total)		8026	4645	4466	108	4489
Total Hydro		550	35	35	0.76	32
Wind power		2798	759	790	23.27	970
Biomass		99	41	41	0.98	41
Solar		730	0	0	0.72	30
Renewable/Others (Total)	3627	800	831	24.98	1041	
Total Rajasthan	12203	5480	5332	133.48	5562	
UP	Anpara TPS (3*210+2*500)	1630	870	887	19.50	813
	Obra TPS (2*50+2*94+5*200)	1194	380	284	7.20	300
	Paricha TPS (2*110+2*220+2*250)	1140	628	618	14.90	621
	Panki TPS (2*105)	210	131	113	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	259	259	5.90	246
	Tanda TPS (NTPC) (4*110)	440	177	174	4.40	183
	Roza TPS (IPP) (4*300)	1200	1098	1098	26.50	1104
	Anpara-C (IPP) (2*600)	1200	911	909	21.70	904
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	321	7.50	313
	Thermal (Total)	8129	4774	4663	110.50	4604
	Vishnuparyag HPS (IPP)	400	436	436	10.20	425
	Other Hydro	527	255	208	5.40	225
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5480	5322	126.46	4844
Uttarakhand	Total Hydro	1398	866	742	17.96	748
	Total Uttarakhand	1398	866	742	17.96	748
Delhi	Raighat TPS (2*67.5)	135	85	77	1.97	82
	Delhi Gas Turbine (6x30 + 3x34)	282	107	109	2.51	104
	Pragati Gas Turbine (2x104+ 1x122)	330	288	269	6.70	279
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	290	273	6.88	287
	Badarpur TPS (NTPC) (3*95+2*210)	705	335	325	8.01	334
	Thermal (Total)	2917	1105	1053	26.06	1086
Total Delhi	2917	1105	1053	26.06	1086	
HP	Baspa HPS (IPP) (2*150)	300	118	247	5.01	209
	Malana HPS (IPP) (2*43)	86	45	41	1.00	42
	Other Hydro	728	510	553	12.41	517
	Total HP	1114	673	841	18.42	768
J & K	Baqilhar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	75	75	1.80	75
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	525	525	12.60	525
Total State Control Area Generation		39597	22534	22085	524.96	21448
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3540	6389	126.21	5259
Total Regional Availability(Gross)		64017	45058	40806	996.98	41116

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10304	4125	145.86	6077
State Control Area Hydro	5684	3053	2934	82.11	2996
Total Regional Hydro	17116	13357	7059	227.96	9073

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	50		350		350	50	2.14	0.69	1.46
Gwalior-Agra (D/C)	1146		1938		2023	0	34.55	0.00	34.55
Zerda-Kankroli	-172		-169		0	262	0.00	4.32	-4.32
Zerda-Bhinmal	-146		-170		0	257	0.00	4.00	-4.00
Malanpur-Auraiya	-89		-65		0	106	0.00	1.80	-1.80
Badod-Kota/Morak	-23		30		39	84	0.00	0.07	-0.07
Mundra-Mohindergarh(HVDC)	1797		1802		1810	0	43.30	0.00	43.30
Vindhychal - Rihand	488		496		511	0	11.81	0.00	11.81
Sub Total WR	3051		4212				91.80	10.87	80.93
Pusauli Bypass	400		400		400	0	9.69	0.00	9.69
MZP- GKP (D/C)	212		708		888	0	14.05	0.00	14.05
Patna-Balia(D/C)	-23		456		472	0	7.42	0.00	7.42
B'Sharif-Balia (D/C)	34		339		424	0	7.08	0.00	7.08
Pusauli-Balia	-59		-51		0	81	0.00	1.26	-1.26
Gaya-Fatehpur (765 Kv)	-10		177		228	10	3.52	0.00	3.52
Pusauli-Sahupuri	24		114		160	0	2.68	0.00	2.68
K'nasa-Sahupuri	0		0		0	0	0.96	0.00	0.96
Son Ngr-Rihand	-36		-53		0	53	0.00	1.01	-1.01
Garhwa-Rihand	0		0		0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-53		87		191	95	2.16	0.00	2.16
Sub Total ER	489		2177				47.55	2.27	45.28
Total IR Exch	3540		6389				139.35	13.14	126.21

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
14.91	3.99	18.89	10.41	22.44	10.62	15.91	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
39.92	72.10	112.02	45.28	80.93	126.21	5.36	8.83	14.19

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	1.42	16.69	57.70	88.63	37.65	3.74	0.96	0.12	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				
50.22	6.03	49.62	0.06	49.89	0.21	0.09	50.15	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	413	12:26	407	00:09	0.0	0.0	0.0	0.0
Gorakhpur	400	411	12:34	392	00:09	0.0	0.0	0.0	0.0
Bareilly	400	413	23:56	399	04:49	0.0	0.0	0.0	0.0
Kanpur	400	418	12:34	404	00:06	0.0	0.0	0.0	0.0
Dadri	400	412	03:54	398	18:51	0.0	0.0	0.0	0.0
Ballabgarh	400	418	06:02	404	18:53	0.0	0.0	0.0	0.0
Bawana	400	414	06:03	401	18:51	0.0	0.0	0.0	0.0
Bassi	400	419	04:00	399	09:32	0.0	0.0	0.0	0.0
Hissar	400	404	02:01	391	18:53	0.0	0.0	0.0	0.0
Moga	400	411	03:54	395	18:37	0.0	0.0	0.0	0.0
Abdullapur	400	413	08:47	396	18:43	0.0	0.0	0.0	0.0
Nalagarh	400	420	03:55	403	11:30	0.0	0.0	0.0	0.0
Kishenpur	400	413	03:49	399	19:15	0.0	0.0	0.0	0.0
Wagoora	400	411	13:01	392	19:11	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	778	12:30	749	00:07	0.0	0.0	0.0	0.0
Balia	765	768	21:01	735	00:06	0.0	2.9	0.0	0.0
Moga	765	787	03:54	752	18:42	0.0	0.0	0.0	0.0
Agra	765	792	12:32	760	19:22	0.0	0.0	0.0	0.0
Bhiwani	765	787	23:56	765	18:42	0.0	0.0	0.0	0.0
Unnao	765	765	12:33	745	04:52	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	511.37	1620.46	511.42	1620.46	482.86	626.14
Pong	426.72	384.05	416.79	743.22	423.32	1051.02	125.75	289.43
Tehri	829.79	740.04	822.80	1065.64	823.45	1065.64	194.63	112.00
Koteshwar	612.50	598.50	611.79	5.46	611.00	5.10	112.00	119.00
Chamera-I	760.00	748.75	756.40	0.00	0.00	0.00	162.52	174.84
Rihand	268.22	252.98	857.30	378.10	855.60	348.70	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	516.15	6.45	519.46	6.10	179.22	364.18

* 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	1035	246	0	788	246	0	24.16	5.91	30.07
Delhi	66	-61	-30	369	-77	-30	7.98	-0.60	7.38
Haryana	1358	83	0	1274	23	0	32.09	-0.34	31.75
HP	-561	-22	0	-546	-251	0	-12.94	-1.86	-14.80
J&K	-538	-86	0	-336	51	0	-9.22	-0.66	-9.88
CHD	0	0	0	0	0	0	0.07	0.00	0.07
Rajasthan	95	302	2	228	-16	0	3.90	5.89	9.79
UP	90	1640	27	-401	0	29	-6.55	18.94	12.39
Uttarakhand	32	149	0	32	28	0	0.77	3.58	4.35
Total	1576	2252	-1	1410	4	-1	40.27	30.84	71.11

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1182	788	246	246	0	0
Delhi	694	66	337	-229	0	-30
Haryana	1358	1274	83	-378	0	0
HP	-469	-636	0	-304	0	0
J&K	-336	-538	76	-99	0	0
CHD	15	0	0	0	0	0
Rajasthan	235	94	1002	-19	2	0
UP	90	-512	1822	0	30	0
Uttarakhand	32	32	214	28	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 23.09.2014 :**

Normal

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 :**