

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.09.2014
Date of Reporting : 27.09.2014

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
42060	3091	45151	50.12	41074	2715	43789	50.02	959.5	73.01

* 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	77.02	13.43		90.45	83.90	83.30	-0.60	173.75	0.00
Haryana	90.38	0.73		91.11	72.72	72.89	0.17	164.00	0.00
Rajasthan	124.01	1.04	11.14	136.19	58.20	64.51	6.31	200.69	5.73
Delhi	25.29			25.29	70.08	71.99	1.91	97.27	0.25
UP	118.26	15.37	0.36	133.99	107.59	109.50	1.91	243.49	63.32
Uttarakhand		16.31		16.31	14.70	16.79	2.09	33.10	3.71
HP		0.00		0.00	7.72	9.73	2.02	9.73	0.00
J & K		12.74	0.00	12.74	16.81	19.75	2.93	32.49	0.00
Chandigarh				0.00	4.20	5.01	0.81	5.01	0.00
Total	434.96	59.61	11.50	506.07	435.90	453.46	17.56	959.53	73.01

* 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	7371	0	-178	729	8027	0	148	739	8027
Haryana	7488	0	-139	1045	6459	0	170	1133	7488
Rajasthan	8499	271	246	215	8401	0	340	241	8827
Delhi	4366	12	-48	433	3713	0	14	14	4488
UP	9563	2670	-348	-389	11005	2715	0	2015	11507
Uttarakhand	1629	130	121	48	1383	0	116	181	1703
HP	1191	8	58	-768	875	0	83	-455	1281
J&K	1711	0	170	-270	1044	0	146	-642	1711
Chandigarh	242	0	14	0	167	0	19	0	252
Total	42060	3091	-104	1044	41074	2715	1036	3226	42464

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

figures may not be at simultaneous hour.

Diversity is 1.07

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	1442	1753	1424	37.90	1579	34.61	3.29
Rihand I STPS (2*500)	1000	393	443	437	10.44	435	9.44	0.99
Rihand II STPS (2*500)	1000	950	1013	1034	24.80	1033	22.80	2.00
Rihand III STPS (2*500)	1000	960	1000	1013	24.20	1008	23.04	1.16
Dadri I STPS (4*210)	840	671	515	714	16.16	673	15.84	0.31
Dadri II STPS (2*490)	980	629	818	402	13.89	579	14.86	-0.97
Unchahar I TPS (2*210)	420	199	185	196	5.19	216	4.76	0.43
Unchahar II TPS (2*210)	420	400	333	401	10.48	437	9.55	0.94
Unchahar III TPS (1*220)	210	198	190	198	5.18	216	4.74	0.45
I-STPP (Jhajhar) (3*500)	1500	918	957	502	19.13	797	20.98	-1.86
Dadri GPS (4*130.19+2*154.51)	830	769	388	382	9.02	376	9.03	-0.01
Anta GPS (3*88.71+1*153.2)	419	393	0	0	0.00	0	0.11	-0.11
Auraiya GPS (4*111.19+2*109.30)	663	476	147	155	3.69	154	3.59	0.10
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.05	2	0.07	-0.02
Sub Total (A)	11297	8403	7742	6858	180	7506	173	7
B. NPC								
NAPS (2*220)	440	275	313	320	6.61	276	6.60	0.01
RAPS- B (2*220)	440	392	436	438	9.15	381	9.42	-0.27
RAPS- C (2*220)	440	170	196	190	3.88	162	4.08	-0.20
Sub Total (B)	1320	837	945	948	19.64	818	20.10	-0.46
C. NHPC								
Chamera I HPS (3*180)	540	534	544	0	6.47	270	6.30	0.17
Chamera II HPS (3*100)	300	300	302	102	4.05	169	4.00	0.05
Chamera III HPS (3*77)	231	229	225	78	2.63	110	2.60	0.03
Bairasuli HPS(3*60)	180	120	120	0	1.47	61	1.39	0.08
Salal-HPS (6*115)	690	493	451	547	12.22	509	11.84	0.38
Tanakpur-HPS (3*40)	94	88	64	94	2.16	90	2.12	0.04
Uri-I HPS (4*120)	480	432	465	433	10.98	457	10.38	0.60
Uri-II HPS (4*60)	240	231	241	237	5.64	235	5.54	0.09
Dhauliganga-HPS (4*70)	280	142	210	140	3.48	145	3.42	0.07
Dulhasti-HPS (3*130)	390	387	400	400	9.41	392	9.28	0.13
Sewa-II HPS (3*40)	120	119	121	0	0.64	27	0.60	0.04
Parbati 3 (4*130)	520	130	130	0	1.36	57	1.33	0.03
Sub Total ©	4065	3206	3274	2031	61	2521	59	2
D.SJVNL								
NJPC (6*250)	1500	1605	1558	510	21.41	892	21.22	0.20
Rampur HEP (4*68.67)	275	205	300	112	5.08	212	4.92	0.16
Sub Total (D)	1775	1810	1858	622	26.50	1104	26.13	0.36
E. THDC								
Tehri HPS (4*250)	1000	1060	1002	0	4.55	190	4.50	0.05
Koteshwar HPS (4*100)	400	117	100	0	2.28	95	2.25	0.03
Sub Total (E)	1400	1177	1102	0	6.84	285	6.75	0.09
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	954	1337	806	22.83	951	22.90	-0.08
Dehar HPS (6*165)	990	406	660	435	9.59	400	9.75	-0.16
Pong HPS (6*66)	396	119	384	0	2.90	121	2.86	0.04
Sub Total (F)	2900	1480	2381	1241	35.32	1472	35.51	-0.19
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	87	65	1.67	70	1.79	-0.12
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1100	360	11.78	491	11.76	0.02
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	298	298	7.02	293	6.98	0.05
Budhil HPS(IPP)	70	0	31	27	0.56	23	0.73	-0.18
Sub Total (G)	1662	0	1517	751	21.03	876	21.27	-0.24
H. Total Regional Entities (A-G)	24419	16913	18819	12451	349.96	14582	341.99	7.97

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	990	1240	24.86	1036
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	260	456	7.17	299
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	543	716	14.02	584
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1397	1399	30.97	1290
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	3190	3811	77.02	3209
	Total Hydro	1148	503	745	13.43	559
	Total Punjab	5828	3693	4556	90.45	3769
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1111	1033	24.69
DCRTPP (Yamuna nagar) (2*300)		600	513	473	11.65	485
Faridabad GPS (NTPC)		432	195	191	4.60	192
RGTPP (khedar) (IPP) (2*600)		1200	1147	937	24.78	1032
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	1183	924	24.66	1028
Thermal (Total)		4944	4149	3558	90.38	3766
Total Hydro		62	29	29	0.73	30
Total Haryana		5006	4178	3587	91.11	3796
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	947	951	22.11
	suratgarh TPS (6*250)	1500	1359	1364	32.37	1349
	Chabra TPS (3*250)	750	606	591	14.62	609
	Dholpur GPS (3*110)	330	116	116	2.77	115
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	80	156	2.78	116
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	201	200	4.56	190
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	950	950	23.95	998
	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	576	1063	20.85	869
	Thermal (Total)	8026	4835	5391	124	5167
	Total Hydro	550	24	24	1.04	43
	Wind power	2798	373	392	9.91	413
	Biomass	99	39	39	0.94	39
	Solar	730	0	0	0.29	12
	Renewable/Others (Total)	3627	412	431	11.14	464
	Total Rajasthan	12203	5271	5846	136.19	5674
UP	Anpara TPS (3*210+2*500)	1630	774	846	20.30	846
	Obra TPS (2*50+2*94+5*200)	1194	490	476	11.20	467
	Paricha TPS (2*110+2*220+2*250)	1140	552	553	13.30	554
	Panki TPS (2*105)	210	77	153	2.70	113
	Harduaganj TPS (1*60+1*105+2*250)	665	398	356	9.80	408
	Tanda TPS (NTPC) (4*110)	440	254	255	6.34	264
	Roza TPS (IPP) (4*300)	1200	1098	1112	25.44	1060
	Anpara-C (IPP) (2*600)	1200	887	918	21.60	900
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	321	7.58	316
	Thermal (Total)	8129	4850	4990	118.26	4928
	Vishnuparyag HPS (IPP)	400	436	436	9.36	390
	Other Hydro	527	182	293	6.01	250
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5483	5734	133.99	5193
Uttarakhand	Total Hydro	1398	768	698	16.31	680
	Total Uttarakhand	1398	768	698	16.31	680
Delhi	Raighat TPS (2*67.5)	135	33	79	1.17	49
	Delhi Gas Turbine (6x30 + 3x34)	282	105	108	2.53	106
	Pragati Gas Turbine (2x104+ 1x122)	330	293	291	7.03	293
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	275	283	6.83	285
	Badarpur TPS (NTPC) (3*95+2*210)	705	319	331	7.72	322
	Thermal (Total)	2917	1025	1092	25.29	1054
Total Delhi	2917	1025	1092	25.29	1054	
HP	Baspa HPS (IPP) (2*150)	300	0	0	0.00	0
	Malana HPS (IPP) (2*43)	86	0	0	0.00	0
	Other Hydro	728	0	0	0.00	0
	Total HP	1114	0	0	0.00	0
J & K	Baqilhar HPS (IPP) (3*150)	450	438	436	10.50	438
	Other Hydro/IPP	436	100	110	2.24	93
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	538	546	12.74	531
Total State Control Area Generation		39597	20956	22059	506.07	20696
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2459.64	5315.58	112.81	4700
Total Regional Availability(Gross)		64017	42234	39826	968.84	39978

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9802	4320	142.61	5942
State Control Area Hydro	5684	2044	2335	59.61	2094
Total Regional Hydro	17116	11846	6655	202.22	8036

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	-250	250	300	2.42	1.42	1.00
Gwalior-Agra (D/C)	769	1917	1958	0	29.93	0.00	29.93
Zerda-Kankroli	-255	-123	0	332	0.00	5.58	-5.58
Zerda-Bhinmal	-225	-98	0	360	0.00	4.45	-4.45
Malanpur-Auraiya	105	73	0	143	0.00	2.29	-2.29
Badod-Kota/Morak	-39	-39	7	-100	0.00	1.20	-1.20
Mundra-Mohindergarh(HVDC)	1698	1996	2005	0	44.95	0.00	44.95
Vindhychal - Rihand	-506	-461	-506	0	11.62	0.00	11.62
Sub Total WR	1597	3015			88.92	14.95	73.97
Pusauli Bypass	400	400	400	0	9.65	0.00	9.65
MZP- GKP (D/C)	200	690	796	0	12.81	0.00	12.81
Patna-Balia(D/C)	125	498	548	0	8.61	0.00	8.61
B'Sharif-Balia (D/C)	168	472	503	0	4.13	0.00	4.13
Pusauli-Balia	-49	12	16	75	0.00	4.24	-4.24
Gaya-Fatehpur (765 Kv)	11	224	357	28	4.48	0.00	4.48
Pusauli-Sahupuri	136	125	208	0	3.52	0.00	3.52
K'nasa-Sahupuri	0	0	0	0	0.00	0.48	-0.48
Son Ngr-Rihand	-23	-43	0	52	0.00	0.94	-0.94
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 Kv)	-105	-77	204	127	1.30	0.00	1.30
Sub Total ER	863	2301			44.50	5.66	38.84
Total IR Exch	2460	5316			133.42	20.61	112.81

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
21.19	3.94	25.14	11.95	6.28	9.38	10.94	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
46.46	62.92	109.38	38.84	73.97	112.81	-7.62	11.04	3.42

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	1.46	15.90	47.78	81.53	43.13	5.69	3.18	0.56	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				
50.32	6.03	49.65	5.14	49.91	0.39	0.10	50.23	49.83

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	411	06:02	403	01:50	70.9	70.9	0.0	0.0
Gorakhpur	400	424	18:19	391	17:37	0.0	0.0	3.1	0.0
Bareilly	400	414	18:06	394	04:48	0.0	0.0	0.0	0.0
Kanpur	400	416	06:02	398	14:51	0.0	0.0	0.0	0.0
Dadri	400	415	06:02	395	14:50	0.0	0.0	0.0	0.0
Ballabgarh	400	421	06:02	399	14:51	0.0	0.0	0.2	0.0
Bawana	400	410	18:02	399	14:50	61.3	61.3	0.0	0.0
Bassi	400	420	21:28	395	09:37	0.0	0.0	0.0	0.0
Hissar	400	410	06:04	391	11:37	0.0	0.0	0.0	0.0
Moga	400	412	06:03	395	11:26	0.0	0.0	0.0	0.0
Abdullapur	400	419	06:03	396	11:29	0.0	0.0	0.0	0.0
Nalagarh	400	424	06:03	405	18:44	0.0	0.0	0.7	0.0
Kishenpur	400	220	04:04	212	18:45	100.0	100.0	0.0	0.0
Wagoora	400	407	04:02	388	19:09	0.0	6.5	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	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Balia	765	762	23:45	726	05:13	0.6	40.6	0.0	0.0
Moga	765	784	06:03	752	11:28	0.0	0.0	0.0	0.0
Agra	765	792	06:02	0	12:09	1.1	1.1	0.0	0.0
Bhiwani	765	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Unnao	765	761	23:45	735	14:52	0.0	17.0	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	511.06	1605.30	511.23	1605.30	470.20	679.60
Pong	426.72	384.05	416.72	743.22	423.02	1035.89	151.38	173.70
Tehri	829.79	740.04	823.40	1075.00	824.05	1087.00	176.22	99.00
Koteshwar	612.50	598.50	610.22	4.69	610.35	4.69	99.00	151.00
Chamera-I	760.00	748.75	755.65	0.00	0.00	0.00	150.77	0.00
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	515.40	5.79	519.05	9.03	158.00	250.00

* 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	739	0	0	729	0	0	17.45	0.00	17.45
Delhi	66	-31	-20	409	24	0	6.58	1.39	7.96
Haryana	1112	21	0	1028	17	0	26.18	-1.01	25.17
HP	-573	118	0	-546	-223	0	-12.89	-0.26	-13.15
J&K	-538	-104	0	-336	66	0	-9.22	-0.34	-9.56
CHD	0	0	0	0	0	0	0.07	0.01	0.09
Rajasthan	107	135	0	258	-43	0	4.19	0.99	5.18
UP	75	1920	20	-389	0	0	-6.49	23.82	17.34
Uttarakhand	32	148	0	32	16	0	0.77	2.10	2.87
Total	1020	2207	-1	1186	-142	0	26.65	26.72	53.36

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	779	690	0	0	0	0
Delhi	527	66	384	-395	0	-20
Haryana	1112	1028	22	-388	0	0
HP	-460	-628	123	-248	0	0
J&K	-336	-538	66	-104	0	0
CHD	15	0	39	0	0	0
Rajasthan	258	95	387	-50	0	0
UP	75	-505	1920	0	20	0
Uttarakhand	32	32	229	13	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 26.09.2014 :**
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 :**