

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 28.09.2014
Date of Reporting : 29.09.2014

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
41374	-385	40989	50.07	40213	5140	45353	50.04	941.3	68.91

* 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	68.26	13.95		82.21	84.51	84.76	0.26	166.97	0.00
Haryana	88.63	0.72		89.35	69.63	68.07	-1.56	157.42	0.00
Rajasthan	119.07	1.06	14.96	135.09	64.63	67.60	2.98	202.69	3.01
Delhi	24.81			24.81	65.99	63.84	-2.15	88.65	0.11
UP	118.40	13.80	0.36	132.56	112.11	114.85	2.75	247.41	63.94
Uttarakhand		1.51		1.51	15.96	17.55	1.59	19.06	1.85
HP		15.31		15.31	7.78	8.48	0.69	23.79	0.00
J & K		12.46	0.00	12.46	17.45	18.50	1.05	30.96	0.00
Chandigarh				0.00	4.36	4.39	0.03	4.39	0.00
Total	419.16	58.82	15.32	493.30	442.41	448.05	5.63	941.35	68.91

* 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	7493	0	-38	597	7092	0	111	798	7493
Haryana	7156	5	-265	901	6803	0	22	990	7280
Rajasthan	8419	0	20	255	8710	0	60	717	9282
Delhi	4007	0	-129	151	3739	0	-91	-77	4357
UP	9830	-460	-436	-138	10524	5105	230	1405	10961
Uttarakhand	1556	70	108	109	1240	35	114	190	1585
HP	1080	0	-23	-753	881	0	4	-279	1160
J&K	1614	0	86	-255	1055	0	92	-556	1614
Chandigarh	219	0	-17	0	169	0	8	10	219
Total	41374	-385	-694	868	40213	5140	551	3198	41528

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

figures may not be at simultaneous hour.

Diversity is 1.06

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	1455	1715	1397	35.26	1469	34.91	0.35
Rihand I STPS (2*500)	1000	729	817	661	19.03	793	17.47	1.55
Rihand II STPS (2*500)	1000	950	1026	1035	24.67	1028	22.75	1.92
Rihand III STPS (2*500)	1000	958	1009	985	24.11	1005	22.87	1.24
Dadri I STPS (4*210)	840	600	640	575	14.61	609	14.34	0.27
Dadri II STPS (2*490)	980	975	958	977	22.67	945	23.25	-0.58
Unchahar I TPS (2*210)	420	198	222	220	5.22	217	4.74	0.48
Unchahar II TPS (2*210)	420	400	435	441	10.46	436	9.52	0.94
Unchahar III TPS (1*220)	210	198	216	217	5.18	216	4.73	0.45
I-STPP (Jhajhar) (3*500)	1500	920	968	520	19.22	801	21.35	-2.13
Dadri GPS (4*130.19+2*154.51)	830	786	295	237	7.12	297	7.02	0.09
Anta GPS (3*88.71+1*153.2)	419	393	205	194	5.24	218	5.08	0.17
Auraiva GPS (4*111.19+2*109.30)	663	479	147	155	3.65	152	3.52	0.13
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
Sub Total (A)	11297	9045	8653	7614	197	8188	192	5
B. NPC								
NAPS (2*220)	440	276	308	317	6.59	274	6.62	-0.04
RAPS- B (2*220)	440	394	432	434	9.20	383	9.46	-0.26
RAPS- C (2*220)	440	17	0	0	0.19	8	0.41	-0.23
Sub Total (B)	1320	687	740	751	15.97	666	16.49	-0.52
C. NHPC								
Chamera I HPS (3*180)	540	534	543	0	6.17	257	6.00	0.17
Chamera II HPS (3*100)	300	300	306	104	4.14	173	4.00	0.14
Chamera III HPS (3*77)	231	229	234	77	2.69	112	2.60	0.09
Bairasuli HPS(3*60)	180	120	120	20	1.46	61	1.30	0.16
Salal-HPS (6*115)	690	414	571	367	10.52	438	9.95	0.57
Tanakpur-HPS (3*40)	94	87	74	94	2.16	90	2.08	0.08
Uri-I HPS (4*120)	480	429	468	450	10.85	452	10.24	0.61
Uri-II HPS (4*60)	240	231	240	238	5.59	233	5.54	0.05
Dhauliganga-HPS (4*70)	280	144	210	209	3.55	148	3.47	0.08
Dulhasti-HPS (3*130)	390	387	401	394	9.35	390	9.28	0.07
Sewa-II HPS (3*40)	120	119	125	0	0.62	26	0.50	0.12
Parbati 3 (4*130)	520	130	130	0	1.36	57	1.43	-0.07
Sub Total ©	4065	3125	3422	1953	58	2436	56	2
D.SJVNL								
NJPC (6*250)	1500	1605	1605	500	19.32	805	18.89	0.43
Rampur HEP (4*68.67)	275	181	352	117	4.43	185	4.37	0.06
Sub Total (D)	1775	1786	1957	617	23.75	990	23.26	0.49
E. THDC								
Tehri HPS (4*250)	1000	1060	1000	0	4.56	190	4.50	0.06
Koteshwar HPS (4*100)	400	91	101	0	1.77	74	1.75	0.02
Sub Total (E)	1400	1151	1101	0	6.33	264	6.25	0.08
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	940	1327	807	22.55	939	22.55	-0.01
Dehar HPS (6*165)	990	340	660	280	8.53	355	8.16	0.37
Pong HPS (6*66)	396	255	384	192	6.14	256	6.13	0.01
Sub Total (F)	2900	1535	2371	1279	37.22	1551	36.84	0.38
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	59	67	1.51	63	1.52	-0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1000	260	10.13	422	9.85	0.28
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	299	297	7.07	294	7.12	-0.06
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.59	-0.59
Sub Total (G)	1662	0	1358	624	18.70	779	19.08	-0.38
H. Total Regional Entities (A-G)	24419	17330	19601	12838	356.93	14872	349.99	6.95

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	810	18.33	764
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	260	260	5.64	235
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	566	615	12.57	524
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1385	1385	31.73	1322
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	3021	3070	68.26	2844
	Total Hydro	1148	578	575	13.95	581
Total Punjab	5828	3599	3645	82.21	3425	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1079	1113	24.54	1023
	DCRTPP (Yamuna nagar) (2*300)	600	484	482	10.83	451
	Faridabad GPS (NTPC)	432	179	169	4.13	172
	RGTPP (khedar) (IPP) (2*600)	1200	1087	1108	24.93	1039
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	957	1133	24.19	1008
	Thermal (Total)	4944	3786	4005	88.63	3693
	Total Hydro	62	30	29	0.72	30
	Total Haryana	5006	3816	4034	89.35	3723
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	941	960	21.95
suratgarh TPS (6*250)		1500	1365	1365	31.08	1295
Chabra TPS (3*250)		750	607	616	15.10	629
Dholpur GPS (3*110)		330	124	111	3.07	128
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	65	72	1.71	71
RAPS A (NPC) (1*100+1*200)		300	165	165	3.75	156
Barsingsar (NLC) (2*125)		250	199	203	4.59	191
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	950	950	23.40	975
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	606	594	14.41	600
Thermal (Total)		8026	5022	5036	119	4961
Total Hydro		550	14	68	1.06	44
Wind power		2798	348	714	13.51	563
Biomass		99	33	33	0.79	33
Solar		730	0	0	0.66	27
Renewable/Others (Total)		3627	381	747	14.96	623
Total Rajasthan		12203	5417	5851	135.09	5629
UP	Anpara TPS (3*210+2*500)	1630	735	782	17.10	713
	Obra TPS (2*50+2*94+5*200)	1194	491	438	11.10	463
	Paricha TPS (2*110+2*220+2*250)	1140	622	512	14.40	600
	Panki TPS (2*105)	210	72	68	1.70	71
	Harduaganj TPS (1*60+1*105+2*250)	665	443	355	9.90	413
	Tanda TPS (NTPC) (4*110)	440	179	258	6.20	258
	Roza TPS (IPP) (4*300)	1200	1098	1110	26.50	1104
	Anpara-C (IPP) (2*600)	1200	997	995	23.90	996
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	322	7.60	317
	Thermal (Total)	8129	4957	4840	118.40	4933
	Vishnuparyag HPS (IPP)	400	436	376	9.00	375
	Other Hydro	527	139	252	4.80	200
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5547	5483	132.56	5148
Uttarakhand	Total Hydro	1398	672	504	1.51	63
	Total Uttarakhand	1398	672	504	1.51	63
Delhi	Raighat TPS (2*67.5)	135	29	0	0.74	31
	Delhi Gas Turbine (6x30 + 3x34)	282	108	107	2.61	109
	Pragati Gas Turbine (2x104+ 1x122)	330	263	294	6.68	278
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	274	293	6.90	287
	Badarpur TPS (NTPC) (3*95+2*210)	705	306	325	7.89	329
	Thermal (Total)	2917	980	1019	24.81	1034
Total Delhi	2917	980	1019	24.81	1034	
HP	Baspa HPS (IPP) (2*150)	300	60	120	3.98	166
	Malana HPS (IPP) (2*43)	86	41	35	0.92	38
	Other Hydro	728	436	396	10.41	434
	Total HP	1114	537	551	15.31	638
J & K	Baqilhar HPS (IPP) (3*150)	450	436	436	10.46	436
	Other Hydro/IPP	436	85	78	2.00	83
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	521	514	12.46	519
Total State Control Area Generation		39597	21089	21601	493.30	20179
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2041	7081	116.41	4850
Total Regional Availability(Gross)		64017	42731	41520	966.64	39902

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9909	4176	137.39	5725
State Control Area Hydro	5684	2491	2493	58.82	2076
Total Regional Hydro	17116	12400	6669	196.21	7800

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	300	4.74	2.11	2.63
Gwalior-Agra (D/C)	247	2062	2111	0	26.81	0.00	26.81
Zerda-Kankroli	-304	-28	0	339	0.00	4.38	-4.38
Zerda-Bhinmal	-277	-11	29	341	0.00	3.61	-3.61
Malanpur-Auraiya	-28	-22	0	49	0.00	2.42	-2.42
Badod-Kota/Morak	-96	20	22	110	0.00	1.35	-1.35
Mundra-Mohindergarh(HVDC)	1998	1697	2005	0	45.90	0.00	45.90
Vindhychal - Rihand	0	0	0	0	0.42	0.00	0.42
Sub Total WR	1240	4118			77.86	13.87	63.99
Pusauli Bypass	400	400	400	0	9.66	0.00	9.66
MZP- GKP (D/C)	150	850	910	0	13.22	0.00	13.22
Patna-Balia(D/C)	19	437	489	0	6.91	0.00	6.91
B'Sharif-Balia (D/C)	117	434	482	0	7.58	0.00	7.58
Pusauli-Balia	64	34	86	0	3.36	0.00	3.36
Gaya-Fatehpur (765 Kv)	22	480	505	99	5.68	0.00	5.68
Pusauli-Sahupuri	156	64	195	0	3.54	0.00	3.54
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-40	0	48	0.00	0.92	-0.92
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-92	304	311	92	3.40	0.00	3.40
Sub Total ER	801	2963			53.34	0.92	52.42
Total IR Exch	2041	7081			131.20	14.79	116.41

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
26.82	3.79	30.61	12.54	4.84	7.79	12.36	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
50.94	57.32	108.26	52.42	63.99	116.41	1.48	6.67	8.15

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	1.61	12.25	44.26	79.36	45.81	6.16	2.97	0.80	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	7.01	49.59	18.41	49.92	0.18	0.11	50.28	49.77

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	00:39	404	02:58	81.7	81.7	0.0	0.0
Gorakhpur	400	425	17:02	388	01:10	0.0	4.2	0.3	0.0
Bareilly	400	418	17:06	396	02:09	0.0	0.0	0.0	0.0
Kanpur	400	420	17:05	394	13:57	0.0	0.0	0.0	0.0
Dadri	400	412	17:05	397	10:36	0.7	0.7	0.0	0.0
Ballabgarh	400	420	17:05	403	11:39	0.0	0.0	0.0	0.0
Bawana	400	415	17:05	400	10:36	33.3	33.3	0.0	0.0
Bassi	400	426	18:02	402	10:36	0.0	0.0	7.0	0.0
Hissar	400	408	17:04	391	11:41	0.0	0.0	0.0	0.0
Moga	400	410	17:03	396	11:38	0.0	0.0	0.0	0.0
Abdullapur	400	420	17:05	396	11:36	0.0	0.0	0.0	0.0
Nalagarh	400	421	05:02	408	11:36	0.0	0.0	0.6	0.0
Kishenpur	400	221	03:58	214	19:10	100.0	100.0	0.0	0.0
Wagoora	400	415	07:00	394	18:58	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	766	07:00	749	10:22	100.0	100.0	0.0	0.0
Balia	765	768	07:02	754	10:56	5.4	40.5	0.0	0.0
Moga	765	782	17:04	753	11:40	0.0	0.0	0.0	0.0
Agra	765	798	17:04	756	09:46	0.3	0.3	0.0	0.0
Bhiwani	765	784	17:18	748	00:00	100.0	100.0	0.0	0.0
Unnao	765	766	17:07	735	02:02	0.0	14.4	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	510.78	1590.18	511.16	1605.30	436.11	673.09
Pong	426.72	384.05	416.55	743.22	422.98	1035.89	140.80	370.72
Tehri	829.79	740.04	823.75	1080.00	824.40	1091.00	159.68	99.00
Koteshwar	612.50	598.50	609.12	4.15	610.10	4.69	99.00	117.00
Chamera-I	760.00	748.75	754.82	0.00	0.00	0.00	132.00	167.50
Rihand	268.22	252.98	856.90	371.10	855.40	345.30	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	515.39	3.69	518.93	3.97	156.00	198.00

* 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	798	0	0	749	-152	0	18.37	-0.81	17.56
Delhi	-36	-21	-20	369	-198	-20	5.33	-2.55	2.78
Haryana	975	16	0	891	10	0	23.39	-1.89	21.51
HP	-561	281	0	-546	-208	0	-12.82	1.11	-11.70
J&K	-538	-18	0	-336	81	0	-9.22	0.77	-8.45
CHD	0	10	0	0	0	0	0.07	0.08	0.16
Rajasthan	174	541	2	258	-3	0	5.01	5.23	10.24
UP	72	1315	18	-429	271	20	-7.19	21.65	14.46
Uttarakhand	32	158	0	32	77	0	0.77	3.28	4.05
Total	917	2282	-1	990	-121	-1	23.72	26.87	50.60

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	798	749	0	-152	0	0
Delhi	468	-36	239	-362	0	-20
Haryana	1013	891	19	-598	0	0
HP	-471	-647	281	-251	0	0
J&K	-336	-538	180	-18	0	0
CHD	15	0	20	0	0	0
Rajasthan	258	173	984	-10	2	0
UP	72	-549	1857	0	20	0
Uttarakhand	32	32	188	20	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 28.09.2014 :**

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 :**