

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.09.2014

Date of Reporting : 23.09.2014

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
43796	4056	47852	50.05	39544	2455	41999	50.07	970.3	102.53

* 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	84.25	14.97	96	99.22	7668	97.54	1.09	196.76	0.00
Haryana	80.44	0.74		81.18	78.92	79.05	0.13	160.23	8.50
Rajasthan	103.22	1.81	19.59	124.62	56.69	62.39	5.71	187.01	8.47
Delhi	23.84			23.84	75.03	74.01	-1.02	97.85	0.04
UP	111.00	16.60	0.36	127.96	101.59	108.16	6.57	236.12	82.87
Uttarakhand		18.62		18.62	14.02	15.65	1.64	34.27	2.17
HP		18.35		18.35	5.48	6.54	1.07	24.89	0.48
J & K		10.80	0.00	10.80	15.37	17.25	1.88	28.05	0.00
Chandigarh				0.00	4.22	5.17	0.94	5.17	0.00
Total	402.75	81.88	19.95	504.58	447.77	465.76	17.99	970.33	102.53

* 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	9334	0	96	1079	7668	0	6	1358	9334
Haryana	7616	286	36	1315	6638	0	85	1399	7631
Rajasthan	8197	285	343	238	7708	0	-17	459	8197
Delhi	4462	0	19	651	3732	0	-144	393	4775
UP	9594	3240	98	-366	10571	2455	117	1637	10624
Uttarakhand	1606	245	136	55	1313	0	87	104	1812
HP	1206	0	-9	-830	837	0	37	-744	1231
J&K	1539	0	90	-294	908	0	60	-634	1539
Chandigarh	243	0	12	0	169	0	23	0	253
Total	43796	4056	821	1848	39544	2455	254	3971	43796

* 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	1348	1660	1208	35.40	1475	32.36	3.03
Rihand I STPS (2*500)	1000	420	459	458	10.16	423	10.08	0.08
Rihand II STPS (2*500)	1000	950	1031	1035	23.03	960	22.80	0.24
Rihand III STPS (2*500)	1000	467	502	502	11.29	470	11.21	0.08
Dadri I STPS (4*210)	840	813	842	809	19.61	817	19.12	0.48
Dadri II STPS (2*490)	980	974	1014	954	23.31	971	23.27	0.04
Unchahar I TPS (2*210)	420	199	212	209	5.19	216	4.74	0.45
Unchahar II TPS (2*210)	420	399	439	379	10.37	432	9.47	0.90
Unchahar III TPS (1*220)	210	198	216	186	5.14	214	4.69	0.44
I-STPP (Jhajhar) (3*500)	1500	951	924	796	20.03	835	22.20	-2.17
Dadri GPS (4*130.19+2*154.51)	830	767	188	371	5.45	227	5.75	-0.30
Anta GPS (3*88.71+1*153.2)	419	393	214	43	4.56	190	4.42	0.14
Auraiva GPS (4*111.19+2*109.30)	663	478	152	154	3.68	154	3.61	0.08
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	8361	7853	7104	177	7386	174	3
B. NPC								
NAPS (2*220)	440	273	313	317	6.58	274	6.55	0.03
RAPS- B (2*220)	440	395	440	442	9.46	394	9.48	-0.02
RAPS- C (2*220)	440	115	0	187	1.97	82	2.76	-0.79
Sub Total (B)	1320	783	753	946	18.01	751	18.79	-0.77
C. NHPC								
Chamera I HPS (3*180)	540	534	553	0	6.57	274	6.30	0.27
Chamera II HPS (3*100)	300	300	303	206	4.60	192	4.45	0.15
Chamera III HPS (3*77)	231	229	227	79	3.30	137	3.23	0.07
Bairasuli HPS(3*60)	180	120	120	60	1.58	66	1.54	0.04
Salal-HPS (6*115)	690	530	664	552	13.36	557	12.71	0.65
Tanakpur-HPS (3*40)	94	79	78	85	1.96	82	1.89	0.07
Uri-I HPS (4*120)	480	403	430	430	10.20	425	9.66	0.54
Uri-II HPS (4*60)	240	181	211	172	4.46	186	4.35	0.11
Dhauliganga-HPS (4*70)	280	187	209	209	4.55	190	4.49	0.07
Dulhasti-HPS (3*130)	390	387	400	399	9.43	393	9.28	0.15
Sewa-II HPS (3*40)	120	119	130	42	1.56	65	1.40	0.16
Parbati 3 (4*130)	520	130	133	0	1.69	70	1.65	0.04
Sub Total ©	4065	3198	3459	2234	63	2635	61	2
D. SJVNL								
NJPC (6*250)	1500	1605	1610	761	23.73	989	23.55	0.19
Rampur HEP (4*68.67)	275	227	370	214	5.69	237	5.45	0.23
Sub Total (D)	1775	1832	1980	975	29.42	1226	29.00	0.42
E. THDC								
Tehri HPS (4*250)	1000	1060	1006	0	5.09	212	5.00	0.09
Koteshwar HPS (4*100)	400	91	101	0	1.78	74	1.75	0.03
Sub Total (E)	1400	1151	1107	0	6.87	286	6.75	0.12
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	903	1335	649	21.76	907	21.66	0.10
Dehar HPS (6*165)	990	413	825	435	10.30	429	9.92	0.38
Pong HPS (6*66)	396	172	384	0	4.20	175	4.13	0.07
Sub Total (F)	2900	1488	2544	1084	36.25	1511	35.71	0.55
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	101	93	2.03	85	2.10	-0.07
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	100	400	12.90	537	12.96	-0.06
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	146	3.51	146	4.06	-0.56
Budhil HPS(IPP)	70	0	45	36	0.90	37	0.99	-0.10
Sub Total (G)	1662	0	394	675	19.33	806	20.12	-0.79
H. Total Regional Entities (A-G)	24419	16813	18090	13018	350.41	14601	345.10	5.31

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	1240	1000	24.90	1037
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	454	340	8.58	358
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	955	736	19.07	795
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1405	1399	31.70	1321
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	4054	3475	84.25	3510
	Total Hydro	1148	766	424	14.97	624
Total Punjab	5828	4820	3899	99.22	4134	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1174	1104	24.34	1014
	DCRTPP (Yamuna nagar) (2*300)	600	510	465	11.44	477
	Faridabad GPS (NTPC)	432	178	197	4.17	174
	RGTPP (khedar) (IPP) (2*600)	1200	745	637	16.42	684
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1044	1043	24.08	1003
	Thermal (Total)	4944	3651	3446	80.44	3352
	Total Hydro	62	30	28	0.74	31
	Total Haryana	5006	3681	3474	81.18	3382
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	860	912	20.91
suratgarh TPS (6*250)		1500	1093	1030	26.98	1124
Chabra TPS (3*250)		750	400	273	9.00	375
Dholpur GPS (3*110)		330	110	116	2.75	115
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	151	142	3.72	155
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0
Barsingsar (NLC) (2*125)		250	99	98	2.19	91
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	832	832	20.48	853
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	620	1161	17.19	716
Thermal (Total)		8026	4165	4564	103	4301
Total Hydro		550	159	45	1.81	75
Wind power		2798	621	712	17.96	748
Biomass		99	43	43	1.03	43
Solar		730	0	0	0.60	25
Renewable/Others (Total)		3627	664	755	19.59	816
Total Rajasthan		12203	4988	5364	124.62	5192
UP	Anpara TPS (3*210+2*500)	1630	867	774	20.40	850
	Obra TPS (2*50+2*94+5*200)	1194	289	353	7.80	325
	Paricha TPS (2*110+2*220+2*250)	1140	609	631	13.90	579
	Panki TPS (2*105)	210	122	113	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	264	259	5.90	246
	Tanda TPS (NTPC) (4*110)	440	171	179	4.40	183
	Roza TPS (IPP) (4*300)	1200	1103	1098	26.50	1104
	Anpara-C (IPP) (2*600)	1200	909	905	21.70	904
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	321	320	7.50	313
	Thermal (Total)	8129	4655	4632	111.00	4625
	Vishnuparyag HPS (IPP)	400	436	436	10.10	421
	Other Hydro	527	244	289	6.50	271
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5350	5372	127.96	4911
Uttarakhand	Total Hydro	1398	774	731	18.62	776
	Total Uttarakhand	1398	774	731	18.62	776
Delhi	Raighat TPS (2*67.5)	135	40	0	0.89	37
	Delhi Gas Turbine (6x30 + 3x34)	282	107	109	2.50	104
	Pragati Gas Turbine (2x104+ 1x122)	330	278	261	6.47	269
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	278	243	6.29	262
	Badarpur TPS (NTPC) (3*95+2*210)	705	306	315	7.69	320
	Thermal (Total)	2917	1009	928	23.84	993
Total Delhi	2917	1009	928	23.84	993	
HP	Baspa HPS (IPP) (2*150)	300	150	249	4.93	205
	Malana HPS (IPP) (2*43)	86	80	37	1.01	42
	Other Hydro	728	527	518	12.41	517
Total HP	1114	757	804	18.35	765	
J & K	Baqilhar 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		39597	21829	21022	504.58	20603
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4012	5922	128.47	5353
Total Regional Availability(Gross)		64017	43931	39962	983.45	40556

IV. Total Hydro Generation:

Regional Entities Hydro	11432	9291	4786	150.73	6280
State Control Area Hydro	5684	3180	2771	81.88	2991
Total Regional Hydro	17116	12471	7557	232.60	9271

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	Import	Export	
Vindhychal B/B	50	350	350	50	2.14	0.69	1.46		
Gwalior-Agra (D/C)	1264	1486	2093	0	35.03	0.00	35.03		
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	-111	-85	0	111	0.00	2.10	-2.10		
Badod-Kota/Morak	-4	-7	10	44	0.00	1.98	-1.98		
Mundra-Mohindergarh(HVDC)	1802	1802	1804	0	43.55	0.00	43.55		
Vindhychal - Rihand	488	496	511	0	11.79	0.00	11.79		
Sub Total WR	3171	3703			92.52	13.09	79.43		
Pusauli Bypass	400	400	400	0	9.77	0.00	9.77		
MZP- GKP (D/C)	212	708	888	0	14.05	0.00	14.05		
Patna-Balia(D/C)	221	417	536	0	9.42	0.00	9.42		
B'Sharif-Balia (D/C)	77	224	341	0	5.66	0.00	5.66		
Pusauli-Balia	-96	-98	0	109	0.00	1.53	-1.53		
Gaya-Fatehpur (765 Kv)	14	331	368	9	6.05	0.00	6.05		
Pusauli-Sahupuri	144	113	171	0	2.69	0.00	2.69		
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48		
Son Ngr-Rihand	-36	-41	0	50	0.00	1.00	-1.00		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	-95	165	292	109	3.44	0.00	3.44		
Sub Total ER	841	2219			51.56	2.53	49.03		
Total IR Exch	4012	5922			144.08	15.61	128.47		

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
19.87	3.84	23.71	14.44	23.76	10.63	14.29	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
48.79	69.61	118.40	49.03	79.43	128.47	0.25	9.82	10.07

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	0.86	9.99	38.33	79.34	54.72	5.13	1.85	0.00	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				
50.18	17.02	49.62	18.33	49.92	0.14	0.09	50.13	49.86

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	412	18:03	407	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	411	18:03	392	00:05	0.0	0.0	0.0	0.0
Bareilly	400	415	18:00	394	10:12	0.0	0.0	0.0	0.0
Kanpur	400	416	18:01	399	10:13	0.0	0.0	0.0	0.0
Dadri	400	412	04:00	399	09:43	0.0	0.0	0.0	0.0
Ballabgarh	400	417	03:58	402	09:45	0.0	0.0	0.0	0.0
Bawana	400	414	03:58	401	12:45	0.0	0.0	0.0	0.0
Bassi	400	428	05:02	399	10:11	37.0	37.0	11.4	0.0
Hissar	400	406	03:59	392	11:45	0.0	0.0	0.0	0.0
Moga	400	412	03:44	397	11:41	0.0	0.0	0.0	0.0
Abdullapur	400	413	03:57	396	11:45	0.0	0.0	0.0	0.0
Nalagarh	400	420	03:42	402	12:46	0.0	0.0	0.0	0.0
Kishenpur	400	416	03:15	398	18:53	0.0	0.0	0.0	0.0
Wagoora	400	414	03:00	390	19:19	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	18:03	738	10:14	0.0	1.1	0.0	0.0
Balia	765	767	18:04	735	10:14	0.0	2.4	0.0	0.0
Moga	765	790	04:00	762	12:45	0.0	0.0	0.0	0.0
Agra	765	788	18:03	753	09:47	0.0	0.0	0.0	0.0
Bhiwani	765	789	04:00	763	10:13	0.0	0.0	0.0	0.0
Unnao	765	764	18:04	743	13:46	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	511.45	1620.46	511.47	1620.46	509.33	630.59
Pong	426.72	384.05	416.86	755.83	423.43	1051.02	127.09	253.55
Tehri	829.79	740.04	822.55	1056.00	823.20	1070.00	210.22	111.00
Koteshwar	612.50	598.50	611.82	5.20	611.00	5.10	111.00	118.00
Chamera-I	760.00	748.75	756.54	0.00	164.25	178.32	0.00	0.00
Rihand	268.22	252.98	0.00	0.00	260.76	347.00	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	516.31	6.61	519.63	6.47	146.00	190.00

* 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	1094	264	0	823	256	0	25.38	6.16	31.54
Delhi	164	259	-30	369	312	-30	9.36	5.68	15.04
Haryana	1376	24	0	1292	23	0	32.86	-0.29	32.57
HP	-582	-162	0	-546	-285	0	-12.94	-3.10	-16.04
J&K	-538	-96	0	-336	41	0	-9.22	-0.86	-10.08
CHD	0	0	0	0	0	0	0.07	0.07	0.14
Rajasthan	194	262	2	258	-20	0	5.66	1.98	7.64
UP	82	1526	28	-394	0	28	-6.68	18.86	12.17
Uttarakhand	32	72	0	32	23	0	0.77	2.17	2.95
Total	1822	2149	0	1499	351	-2	45.26	30.66	75.92

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1241	823	264	256	0	0
Delhi	763	164	618	-30	0	-30
Haryana	1405	1292	34	-380	0	0
HP	-460	-647	-25	-361	0	0
J&K	-336	-538	66	-96	0	0
CHD	15	0	49	0	0	0
Rajasthan	472	173	444	-24	2	0
UP	82	-507	1526	0	32	0
Uttarakhand	32	32	269	11	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 22.09.2014 :**

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 :**