

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 21.09.2014
Date of Reporting : 22.09.2014

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
43785	2507	46292	50.07	40642	3620	44262	50.07	975.6	65.15

* 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	79.26	11.08		90.34	98.82	99.62	0.80	189.95	0.00
Haryana	84.22	0.69		84.92	79.55	78.71	-0.84	163.63	0.00
Rajasthan	105.21	1.72	22.34	129.28	53.52	56.40	2.88	185.68	2.00
Delhi	24.03			24.03	69.23	68.58	-0.65	92.60	0.14
UP	115.10	15.60	0.36	131.06	120.29	125.14	4.86	256.20	62.94
Uttarakhand		18.59		18.59	14.13	14.10	-0.04	32.69	0.07
HP		19.54		19.54	4.30	5.03	0.73	24.58	0.00
J & K		10.46	0.00	10.46	15.33	15.39	0.06	25.85	0.00
Chandigarh				0.00	4.12	4.47	0.34	4.47	0.00
Total	407.82	77.69	22.70	508.21	459.29	467.44	8.15	975.65	65.15

* 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	9071	0	51	1241	7586	0	92	1495	9071
Haryana	7688	0	74	1319	7111	0	75	1444	7688
Rajasthan	7759	0	135	236	7665	0	1	513	8218
Delhi	4041	27	-103	512	3888	0	120	245	4519
UP	10752	2480	352	499	11168	3620	208	2039	11303
Uttarakhand	1617	0	-17	145	1228	0	-41	311	1656
HP	1141	0	-15	-962	1012	0	39	-709	1256
J&K	1490	0	46	-284	811	0	-22	-632	1490
Chandigarh	227	0	-2	0	172	0	24	0	227
Total	43785	2507	521	2706	40642	3620	497	4706	43785

* 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	1100	1526	1197	29.57	1232	26.39	3.18
Rihand I STPS (2*500)	1000	420	466	451	10.82	451	9.99	0.84
Rihand II STPS (2*500)	1000	950	1041	1022	24.64	1027	22.75	1.89
Rihand III STPS (2*500)	1000	470	502	495	12.02	501	11.17	0.85
Dadri I STPS (4*210)	840	813	819	765	19.39	808	19.41	-0.02
Dadri II STPS (2*490)	980	568	503	438	12.38	516	12.89	-0.51
Unchahar I TPS (2*210)	420	199	221	208	5.04	210	4.68	0.36
Unchahar II TPS (2*210)	420	398	436	418	10.24	427	9.38	0.86
Unchahar III TPS (1*220)	210	198	214	213	5.01	209	4.61	0.40
I-STPP (Jhajhar) (3*500)	1500	962	948	947	19.67	820	21.42	-1.75
Dadri GPS (4*130.19+2*154.51)	830	767	382	342	8.19	341	8.12	0.07
Anta GPS (3*88.71+1*153.2)	419	393	0	0	0.00	0	0.00	0.00
Auraiva GPS (4*111.19+2*109.30)	663	478	151	154	3.64	151	3.51	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	7719	7209	6650	161	6694	154	6
B. NPC								
NAPS (2*220)	440	275	308	320	6.64	277	6.60	0.04
RAPS- B (2*220)	440	394	439	444	9.48	395	9.46	0.02
RAPS- C (2*220)	440	175	187	189	3.89	162	4.20	-0.31
Sub Total (B)	1320	844	934	953	20.00	834	20.26	-0.25
C. NHPC								
Chamera I HPS (3*180)	540	534	555	0	6.37	265	6.25	0.12
Chamera II HPS (3*100)	300	300	303	180	5.08	212	5.00	0.08
Chamera III HPS (3*77)	231	229	231	84	3.55	148	3.50	0.05
Bairasuli HPS(3*60)	180	0	0	0	0.00	0	0.00	0.00
Salal-HPS (6*115)	690	577	670	564	14.27	595	13.85	0.43
Tanakpur-HPS (3*40)	94	80	82	74	1.97	82	1.92	0.05
Uri-I HPS (4*120)	480	421	459	449	10.73	447	10.12	0.62
Uri-II HPS (4*60)	240	184	221	175	4.55	190	4.41	0.14
Dhauliganga-HPS (4*70)	280	189	209	209	4.56	190	4.54	0.02
Dulhasti-HPS (3*130)	390	387	400	400	9.39	391	9.28	0.11
Sewa-II HPS (3*40)	120	119	86	0	1.06	44	1.00	0.06
Parbati 3 (4*130)	520	130	132	0	1.81	75	1.78	0.03
Sub Total ©	4065	3150	3349	2135	63	2639	62	2
D.SJVNL								
NJPC (6*250)	1500	1605	1610	910	25.67	1069	25.66	0.01
Rampur HEP (4*68.67)	275	350	371	224	5.93	247	5.58	0.35
Sub Total (D)	1775	1955	1981	1134	31.59	1316	31.23	0.36
E. THDC								
Tehri HPS (4*250)	1000	1060	1006	0	5.05	210	5.00	0.05
Koteshwar HPS (4*100)	400	91	101	0	1.78	74	1.75	0.03
Sub Total (E)	1400	1151	1107	0	6.83	284	6.75	0.08
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	906	1327	649	21.56	898	21.75	-0.20
Dehar HPS (6*165)	990	483	825	420	11.88	495	11.60	0.28
Pong HPS (6*66)	396	103	384	0	2.47	103	2.47	0.00
Sub Total (F)	2900	1493	2536	1069	35.91	1496	35.82	0.08
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	129	65	1.94	81	1.91	0.03
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	1100	500	14.10	588	14.64	-0.53
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	3.45	144	4.45	-1.01
Budhil HPS(IPP)	70	0	40	39	0.88	37	0.88	0.00
Sub Total (G)	1662	0	1418	751	20.37	849	21.88	-1.51
H. Total Regional Entities (A-G)	24419	16312	18533	12692	338.70	14112	331.97	6.73

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	1140	990	23.09	962
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	451	340	7.64	318
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	922	658	16.88	703
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1389	1376	31.66	1319
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	3902	3364	79.26	3303
	Total Hydro	1148	661	345	11.08	462
	Total Punjab	5828	4563	3709	90.34	3764
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	1123	1120	25.56	1065
	DCRTPP (Yamuna nagar) (2*300)	600	531	516	11.87	495
	Faridabad GPS (NTPC)	432	194	154	4.08	170
	RGTPP (khedar) (IPP) (2*600)	1200	753	745	16.24	677
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1183	1176	26.46	1103
	Thermal (Total)	4944	3784	3711	84.22	3509
	Total Hydro	62	30	28	0.69	29
	Total Haryana	5006	3814	3739	84.92	3538
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	853	884	21.32
suratgarh TPS (6*250)		1500	1107	1013	25.97	1082
Chabra TPS (3*250)		750	200	437	8.72	363
Dholpur GPS (3*110)		330	116	92	2.76	115
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	152	140	3.59	150
RAPS A (NPC) (1*100+1*200)		300	0	0	1.62	68
Barsingsar (NLC) (2*125)		250	96	98	2.18	91
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	832	832	20.25	844
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	1006	593	18.79	783
Thermal (Total)		8026	4362	4089	105	4384
Total Hydro		550	25	86	1.72	72
Wind power		2798	503	1155	20.74	864
Biomass		99	41	41	0.99	41
Solar		730	0	0	0.62	26
Renewable/Others (Total)		3627	544	1196	22.34	931
Total Rajasthan		12203	4931	5371	129.28	5387
UP	Anpara TPS (3*210+2*500)	1630	810	830	19.40	808
	Obra TPS (2*50+2*94+5*200)	1194	372	365	9.00	375
	Paricha TPS (2*110+2*220+2*250)	1140	622	630	15.00	625
	Panki TPS (2*105)	210	117	126	2.80	117
	Harduaganj TPS (1*60+1*105+2*250)	665	453	380	9.40	392
	Tanda TPS (NTPC) (4*110)	440	175	178	4.40	183
	Roza TPS (IPP) (4*300)	1200	1112	1112	26.50	1104
	Anpara-C (IPP) (2*600)	1200	900	900	21.70	904
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	359	6.90	288
	Thermal (Total)	8129	4881	4880	115.10	4796
	Vishnuparyag HPS (IPP)	400	436	436	10.50	438
	Other Hydro	527	229	206	5.10	213
	Cogeneration	981	15	15	0.36	15
	Total UP	10037	5561	5537	131.06	5023
	Uttarakhand	Total Hydro	1398	863	737	18.59
Total Uttarakhand		1398	863	737	18.59	775
Delhi	Raighat TPS (2*67.5)	135	41	27	0.89	37
	Delhi Gas Turbine (6x30 + 3x34)	282	106	108	2.52	105
	Pragati Gas Turbine (2x104+ 1x122)	330	263	290	6.27	261
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	281	238	6.61	275
	Badarpur TPS (NTPC) (3*95+2*210)	705	307	313	7.74	323
	Thermal (Total)	2917	998	976	24.03	1001
Total Delhi	2917	998	976	24.03	1001	
HP	Baspa HPS (IPP) (2*150)	300	208	287	5.27	220
	Malana HPS (IPP) (2*43)	86	71	40	1.14	47
	Other Hydro	728	556	584	13.14	547
	Total HP	1114	835	911	19.54	814
J & K	Baqilhar HPS (IPP) (3*150)	450	436	436	10.46	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	10.46	436
Total State Control Area Generation		39597	22001	21416	508.21	20738
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3832	7223	146.52	6105
Total Regional Availability(Gross)		64017	44366	41331	993.43	40956

IV. Total Hydro Generation:

Regional Entities Hydro	11432	10202	4903	153.70	6404
State Control Area Hydro	5684	3079	2749	77.69	2800
Total Regional Hydro	17116	13281	7652	231.39	9204

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	500	500	0	9.58	0.00	9.58		
Gwalior-Agra (D/C)	924	2071	2215	0	36.87	0.00	36.87		
Zerda-Kankroli	-189	-27	0	232	0.00	3.22	-3.22		
Zerda-Bhinmal	-192	-36	0	249	0.00	2.95	-2.95		
Malanpur-Auraiya	-94	-42	0	105	0.00	1.46	-1.46		
Badod-Kota/Morak	5	24	27	20	0.65	0.00	0.65		
Mundra-Mohindergarh(HVDC)	1798	1802	1805	0	43.55	0.00	43.55		
Vindhychal - Rihand	488	496	511	0	11.78	0.00	11.78		
Sub Total WR	2790	4788			102.43	7.63	94.80		
Pusauli Bypass	400	400	400	0	9.60	0.00	9.60		
MZP- GKP (D/C)	322	718	810	0	14.84	0.00	14.84		
Patna-Balia(D/C)	222	499	529	0	10.16	0.00	10.16		
B'Sharif-Balia (D/C)	28	286	323	0	5.38	0.00	5.38		
Pusauli-Balia	-133	-85	0	137	0.00	2.09	-2.09		
Gaya-Fatehpur (765 Kv)	113	363	433	0	7.46	0.00	7.46		
Pusauli-Sahupuri	164	150	164	0	3.27	0.00	3.27		
K'nasa-Sahupuri	0	0	0	0	0.96	0.00	0.96		
Son Ngr-Rihand	-36	-40	0	50	0.00	0.89	-0.89		
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00		
Sasaram - Fatehpur(765 KV)	-38	144	228	38	3.03	0.00	3.03		
Sub Total ER	1042	2435			54.70	2.98	51.72		
Total IR Exch	3832	7223			157.13	10.61	146.52		

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
22.32	3.83	26.14	14.13	22.48	15.08	35.03	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
55.36	88.08	143.44	51.72	94.80	146.52	-3.63	6.72	3.09

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	0.01	1.57	13.76	55.52	67.86	38.58	5.20	0.69	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	17.02	49.69	18.41	49.99	0.07	0.08	50.29	49.88

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	407	00:00	407	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	408	17:06	391	00:18	0.0	0.0	0.0	0.0
Bareilly	400	415	17:05	397	20:13	0.0	0.0	0.0	0.0
Kanpur	400	417	17:08	398	00:17	0.0	0.0	0.0	0.0
Dadri	400	413	17:07	399	00:05	0.0	0.0	0.0	0.0
Ballabgarh	400	419	17:06	403	00:04	0.0	0.0	0.0	0.0
Bawana	400	412	07:00	400	00:06	47.1	47.1	0.0	0.0
Bassi	400	426	18:04	402	09:29	0.0	0.0	14.0	0.0
Hissar	400	406	18:02	394	18:58	0.0	0.0	0.0	0.0
Moga	400	411	04:02	398	19:14	0.0	0.0	0.0	0.0
Abdullapur	400	413	06:59	396	19:14	0.0	0.0	0.0	0.0
Nalagarh	400	417	04:01	405	19:12	0.0	0.0	0.0	0.0
Kishenpur	400	416	04:01	401	19:25	0.0	0.0	0.0	0.0
Wagoora	400	415	04:02	396	19:28	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	777	17:06	738	00:15	0.0	3.1	0.0	0.0
Balia	765	766	17:12	733	00:26	0.0	12.6	0.0	0.0
Moga	765	788	17:04	765	19:17	0.0	0.0	0.0	0.0
Agra	765	794	17:03	755	00:07	0.0	0.0	0.0	0.0
Bhiwani	765	792	17:07	765	00:07	0.0	0.0	0.0	0.0
Unnao	765	752	04:05	736	00:09	0.0	15.6	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	511.52	1620.46	511.47	1620.46	541.11	629.26
Pong	426.72	384.05	416.91	755.83	423.52	1051.02	104.18	148.83
Tehri	829.79	740.04	822.30	1051.00	822.95	1065.64	204.15	110.00
Koteshwar	612.50	598.50	611.88	5.20	611.00	5.10	110.00	118.00
Chamera-I	760.00	748.75	756.68	0.00	0.00	0.00	167.30	172.57
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	516.41	4.35	519.80	6.81	145.89	190.15

* 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	1093	402	0	847	394	0	25.43	9.47	34.90
Delhi	164	111	-30	369	173	-30	9.00	3.33	12.34
Haryana	1382	62	0	1298	20	0	32.98	0.16	33.14
HP	-633	-76	0	-607	-355	0	-14.41	-3.50	-17.91
J&K	-538	-94	0	-336	51	0	-9.22	-0.64	-9.86
CHD	0	0	0	0	0	0	0.07	0.01	0.08
Rajasthan	184	327	2	257	-21	0	5.15	2.53	7.68
UP	90	1919	30	-421	911	9	-7.58	41.99	34.41
Uttarakhand	85	226	0	85	60	0	2.14	3.17	5.31
Total	1826	2878	2	1493	1234	-21	43.58	56.52	100.10

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	1241	847	402	394	0	0
Delhi	762	90	664	-145	0	-30
Haryana	1411	1298	62	-183	0	0
HP	-521	-708	0	-405	0	0
J&K	-336	-538	76	-94	0	0
CHD	15	0	10	0	0	0
Rajasthan	257	173	329	-21	2	0
UP	90	-543	1969	794	32	0
Uttarakhand	111	85	245	5	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 21.09.2014 :**

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 :**