

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 27.10.2014
Date of Reporting : 28.10.2014

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
36982	1170	38152	50.10	30060	1145	31205	50.14	785.2	43.08

* 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	33.84	10.11		43.95	58.59	60.06	1.47	104.01	0.00
Haryana	41.49	0.49		41.98	68.27	68.86	0.59	110.84	0.00
Rajasthan	129.23	4.60	3.02	136.85	49.88	51.56	1.68	188.40	0.00
Delhi	22.73			22.73	45.08	45.33	0.25	68.06	0.00
UP	119.90	8.00	1.20	129.10	94.23	95.63	1.40	224.73	41.05
Uttarakhand		9.71		9.71	18.10	19.74	1.64	29.45	2.03
HP		8.12		8.12	13.33	15.06	1.73	23.18	0.00
J & K		6.30	0.00	6.30	24.22	26.60	2.39	32.90	0.00
Chandigarh				0.00	3.46	3.58	0.12	3.58	0.00
Total	347.20	47.32	4.22	398.74	375.15	386.42	11.27	785.15	43.08

* 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	5068	0	-24	179	3909	0	69	117	5068
Haryana	6025	0	23	70	4061	0	99	53	6025
Rajasthan	7748	0	-169	-93	7559	0	78	309	8861
Delhi	3284	0	-204	-163	2272	0	37	-542	3479
UP	10354	1095	-48	408	9234	1145	165	524	10354
Uttarakhand	1481	75	-4	300	1067	0	58	380	1568
HP	1145	0	8	-354	710	0	100	-10	1241
J&K	1695	0	1	76	1148	0	26	6	1810
Chandigarh	183	0	-15	0	101	0	-9	0	194
Total	36982	1170	-432	423	30060	1145	622	838	36982

* 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	1509	1610	1597	36.24	1510	36.22	0.02
Rihand I STPS (2*500)	1000	861	907	768	21.66	902	20.00	1.65
Rihand II STPS (2*500)	1000	470	507	436	11.88	495	10.87	1.01
Rihand III STPS (2*500)	1000	965	1012	902	23.22	968	22.28	0.94
Dadri I STPS (4*210)	840	815	628	600	15.90	662	15.10	0.80
Dadri II STPS (2*490)	980	980	762	710	17.76	740	17.70	0.06
Unchahar I TPS (2*210)	420	237	321	161	5.95	248	5.25	0.69
Unchahar II TPS (2*210)	420	374	306	311	8.61	359	7.84	0.77
Unchahar III TPS (1*220)	210	187	154	151	4.35	181	3.98	0.37
I-STPP (Jhajhar) (3*500)	1500	990	743	630	16.19	675	17.02	-0.83
Dadri GPS (4*130.19+2*154.51)	830	801	197	407	5.77	241	5.73	0.05
Anta GPS (3*88.71+1*153.2)	419	402	224	237	5.74	239	5.67	0.07
Auraiva GPS (4*111.19+2*109.30)	663	645	161	331	5.53	230	5.56	-0.04
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
Sub Total (A)	11297	9239	7532	7241	179	7452	173	5
B. NPC								
NAPS (2*220)	440	283	321	325	6.81	284	6.79	0.02
RAPS- B (2*220)	440	400	446	444	9.61	401	9.60	0.01
RAPS- C (2*220)	440	190	209	212	4.17	174	4.56	-0.39
Sub Total (B)	1320	873	976	981	20.60	858	20.95	-0.36
C. NHPC								
Chamera I HPS (3*180)	540	534	270	0	1.62	67	1.60	0.01
Chamera II HPS (3*100)	300	300	199	0	2.00	83	1.98	0.02
Chamera III HPS (3*77)	231	229	79	0	1.33	55	1.30	0.03
Bairasuli HPS(3*60)	180	178	177	0	0.84	35	0.81	0.03
Salal-HPS (6*115)	690	210	341	307	5.17	215	5.05	0.12
Tanakpur-HPS (3*40)	94	51	74	58	1.27	53	1.24	0.04
Uri-I HPS (4*120)	480	250	316	262	6.27	261	6.01	0.27
Uri-II HPS (4*60)	240	151	183	158	3.72	155	3.61	0.11
Dhauliganga-HPS (4*70)	280	92	207	69	2.21	92	2.21	0.00
Dulhasti-HPS (3*130)	390	387	403	218	5.69	237	5.50	0.19
Sewa-II HPS (3*40)	120	119	124	0	0.43	18	0.38	0.06
Parbati 3 (4*130)	520	260	262	0	0.81	34	0.78	0.03
Sub Total (C)	4065	2763	2636	1072	31	1306	30	1
D.SJVNL								
NJPC (6*250)	1500	1605	1501	0	11.31	471	11.19	0.12
Rampur HEP (4*68.67)	275	280	225	0	2.73	114	2.78	-0.05
Sub Total (D)	1775	1885	1726	0	14.04	585	13.97	0.07
E. THDC								
Tehri HPS (4*250)	1000	1060	796	0	4.75	198	4.70	0.05
Koteshwar HPS (4*100)	400	141	297	90	1.80	75	1.75	0.05
Sub Total (E)	1400	1201	1093	90	6.54	273	6.45	0.09
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	630	1023	497	14.99	624	15.13	-0.14
Dehar HPS (6*165)	990	193	495	140	5.03	210	4.62	0.41
Pong HPS (6*66)	396	230	320	126	5.49	229	5.52	-0.03
Sub Total (F)	2900	1053	1838	763	25.51	1063	25.27	0.24
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	113	0	0.85	36	0.84	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	727	727	6.24	260	6.23	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	301	226	6.14	256	6.09	0.06
Budhil HPS(IPP)	70	0	69	0	0.24	10	0.24	0.00
Sub Total (G)	1662	0	1210	953	13.48	562	13.39	0.10
H. Total Regional Entities (A-G)	24419	17014	17010	11099	290.38	12099	283.82	6.55

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	160	160	3.82	159
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.75	73
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	205	206	4.48	187
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1216	913	23.79	991
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1661	1359	33.84	1410
	Total Hydro	1148	412	397	10.11	421
Total Punjab	5828	2073	1756	43.95	1831	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	447	206	6.68	279
	DCRTPP (Yamuna nagar) (2*300)	600	281	235	5.78	241
	Faridabad GPS (NTPC)	432	170	172	4.11	171
	RGTPP (khedar) (IPP) (2*600)	1200	0	371	3.30	138
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	984	740	21.62	901
	Thermal (Total)	4944	1882	1724	41.49	1729
	Total Hydro	62	15	22	0.49	20
	Total Haryana	5006	1897	1746	41.98	1749
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	916	850	20.93
suratgarh TPS (6*250)		1500	1187	938	26.67	1111
Chabra TPS (3*250)		750	223	222	5.43	226
Dholpur GPS (3*110)		330	90	119	2.72	113
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	163	163	4.88	203
RAPS A (NPC) (1*100+1*200)		300	179	172	4.42	184
Barsingar (NLC) (2*125)		250	184	184	4.33	181
Giral LTPS (2*125)		250	70	62	1.35	56
Rajwest LTPS (IPP) (8*135)		1080	820	832	19.59	816
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	515	515	11.55	481
Kawai(Adani) (2*660)		1320	1126	1060	27.37	1140
Thermal (Total)		8026	5473	5117	129	5385
Total Hydro		550	107	193	4.60	192
Wind power		2798	26	117	2.00	83
Biomass		99	35	35	0.84	35
Solar		730	0	0	0.18	8
Renewable/Others (Total)		3627	61	152	3.02	126
Total Rajasthan		12203	5641	5462	136.85	5702
UP		Anpara TPS (3*210+2*500)	1630	765	914	21.10
	Obra TPS (2*50+2*94+5*200)	1194	459	443	10.80	450
	Paricha TPS (2*110+2*220+2*250)	1140	798	761	18.90	788
	Panki TPS (2*105)	210	59	135	2.60	108
	Harduaganj TPS (1*60+1*105+2*250)	665	473	493	11.40	475
	Tanda TPS (NTPC) (4*110)	440	334	336	8.20	342
	Roza TPS (IPP) (4*300)	1200	981	581	20.20	842
	Anpara-C (IPP) (2*600)	1200	852	860	20.20	842
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	360	221	6.50	271
	Thermal (Total)	8129	5081	4744	119.90	4996
	Vishnuparyag HPS (IPP)	400	148	144	3.40	142
	Other Hydro	527	173	194	4.60	192
	Cogeneration	981	50	50	1.20	50
	Total UP	10037	5452	5132	129.10	5238
	Uttarakhand	Total Hydro	1398	510	345	9.71
Total Uttarakhand		1398	510	345	9.71	405
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	78	79	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	263	265	6.43	268
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	296	242	6.76	282
	Badarpur TPS (NTPC) (3*95+2*210)	705	312	312	7.70	321
	Thermal (Total)	2917	949	898	22.73	947
Total Delhi	2917	949	898	22.73	947	
HP	Baspa HPS (IPP) (2*150)	300	29	59	1.92	80
	Malana HPS (IPP) (2*43)	86	85	0	0.49	21
	Other Hydro	728	212	226	5.71	238
	Total HP	1114	326	285	8.12	338
J & K	Baqilhar HPS (IPP) (3*150)	450	390	220	6.30	263
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	390	220	6.30	263
Total State Control Area Generation		39597	17238	15844	398.74	16472
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3388	3700	119.11	4963
Total Regional Availability(Gross)		64017	37636	30643	808.22	33534

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8133	2652	84.55	3523
State Control Area Hydro	5684	1933	1656	47.32	1830
Total Regional Hydro	17116	10066	4308	131.87	5353

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	150	300	300	2.97	1.97	1.01
Gwalior-Agra (D/C)	1340	1621	2165	0	41.19	0.00	41.19
Zerda-Kankroli	-231	-238	0	265	0.00	4.44	-4.44
Zerda-Bhinmal	-178	-168	0	267	0.00	2.74	-2.74
Malanpur-Auraiya	-250	-243	0	273	0.00	5.84	-5.84
Badod-Kota/Morak	-171	-198	0	210	0.00	4.76	-4.76
Mundra-Mohindergarh(HVDC)	2299	1902	2305	0	51.80	0.00	51.80
Vindhychal - Rihand	371	0	391	0	2.63	0.00	2.63
Sub Total WR	2880	2826			98.59	19.74	78.85
Pusauli Bypass	400	400	400	0	9.38	0.00	9.38
MZP- GKP (D/C)	-140	-418	568	0	9.64	0.00	9.64
Patna-Balia(D/C)	173	348	452	0	8.23	0.00	8.23
B'Sharif-Balia (D/C)	71	218	323	0	5.32	0.00	5.32
Pusauli-Balia	-85	-52	0	98	0.00	1.42	-1.42
Gaya-Fatehpur (765 Kv)	0	247	355	0	3.24	0.00	3.24
Pusauli-Sahupuri	108	133	139	0	2.58	0.00	2.58
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-44	-40	0	44	0.00	0.95	-0.95
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	25	38	408	0	4.24	0.00	4.24
Sub Total ER	508	874			42.63	2.37	40.26
Total IR Exch	3388	3700			141.22	22.11	119.11

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
26.34	1.49	27.83	6.09	-0.56	4.24	3.77	0.62	-0.62

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
38.79	68.62	107.41	40.26	78.85	119.11	1.48	10.23	11.70

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	0.09	2.80	15.31	51.36	56.74	18.48	9.07	0.45	NA

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				
50.26	21.50	49.67	18.09	49.99	0.08	0.09	50.27	49.89

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	415	04:01	410	08:41	0.0	0.0	0.0	0.0
Gorakhpur	400	414	17:03	400	17:45	0.0	0.0	0.0	0.0
Bareilly	400	422	04:02	121	14:36	3.2	3.2	3.5	0.0
Kanpur	400	422	04:02	404	10:50	0.0	0.0	0.8	0.0
Dadri	400	420	04:00	401	12:14	0.0	0.0	0.0	0.0
Ballabgarh	400	426	04:02	403	12:31	0.0	0.0	29.8	0.0
Bawana	400	423	23:56	408	10:14	0.0	0.0	10.9	0.0
Bassi	400	424	04:01	402	06:52	0.0	0.0	21.4	0.0
Hissar	400	418	04:02	396	12:14	0.0	0.0	0.0	0.0
Moga	400	422	01:58	406	12:21	0.0	0.0	9.5	0.0
Abdullapur	400	426	01:57	396	12:23	0.0	0.0	32.7	0.0
Nalagarh	400	433	21:06	415	12:14	0.0	0.0	59.6	1.5
Kishenpur	400	420	02:23	395	18:38	0.0	0.0	0.0	0.0
Wagoora	400	412	13:50	378	18:51	1.0	11.1	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	04:04	735	10:52	0.0	9.7	0.0	0.0
Balia	765	768	17:03	748	18:09	0.0	0.0	0.0	0.0
Moga	765	800	02:58	767	12:14	0.0	0.0	0.0	0.0
Agra	765	792	04:02	750	12:31	0.0	0.0	0.0	0.0
Bhiwani	765	804	01:58	796	00:09	0.0	0.0	95.8	0.0
Unnao	765	764	04:03	734	12:08	0.0	18.5	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	507.50	1426.07	511.02	1605.30	250.32	421.16
Pong	426.72	384.05	414.16	644.91	420.65	916.71	71.50	343.77
Tehri	829.79	740.04	823.90	1084.67	824.50	1097.37	82.59	103.00
Koteshwar	612.50	598.50	608.72	3.98	611.80	5.46	103.00	119.00
Chamera-I	760.00	748.75	757.55	0.00	0.00	0.00	66.71	43.84
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	510.21	3.10	518.12	2.56	56.54	134.92

* 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	0	117	0	0	179	0	0.00	5.13	5.13
Delhi	-457	-83	-2	-120	-41	-2	-5.42	-1.16	-6.58
Haryana	-24	77	0	-6	76	0	-0.47	-0.19	-0.66
HP	81	-90	0	81	-434	0	1.94	-1.74	0.20
J&K	31	-25	0	27	49	0	1.30	0.00	1.30
CHD	0	0	0	0	0	0	0.00	0.20	0.20
Rajasthan	-64	372	2	-64	-31	2	-1.54	6.12	4.58
UP	524	0	0	408	0	0	10.31	0.00	10.31
Uttarakhand	318	62	0	220	80	0	5.77	2.03	7.80
Total	409	429	0	545	-122	0	11.89	10.40	22.29

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	392	-27	0	0
Delhi	-100	-457	0	-168	0	-2
Haryana	-6	-24	81	-381	0	0
HP	81	81	98	-514	0	0
J&K	133	-18	49	-25	0	0
CHD	0	0	25	0	0	0
Rajasthan	-64	-64	373	-351	2	0
UP	545	356	0	0	0	0
Uttarakhand	318	220	152	-4	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 27.10.2014 :**

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 :**