

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 28.10.2014
Date of Reporting : 29.10.2014

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
36321	1815	38136	50.14	30688	880	31568	50.12	784.9	43.06

* 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	40.50	8.75		49.25	55.28	54.17	-1.12	103.41	0.00
Haryana	42.08	0.37		42.45	70.96	69.35	-1.61	111.80	0.00
Rajasthan	127.37	3.70	9.59	140.66	49.71	47.69	-2.03	188.34	0.00
Delhi	23.13			23.13	45.15	45.02	-0.13	68.15	0.00
UP	125.50	7.10	1.20	133.80	92.65	91.42	-1.23	225.22	40.00
Uttarakhand		9.01		9.01	18.49	19.79	1.31	28.80	3.07
HP		7.79		7.79	14.38	15.62	1.24	23.41	0.00
J & K		6.30	0.00	6.30	23.80	25.84	2.04	32.14	0.00
Chandigarh				0.00	3.27	3.59	0.31	3.59	0.00
Total	358.58	43.02	10.79	412.38	373.68	372.47	-1.21	784.85	43.06

* 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	4838	0	-262	191	4169	0	149	52	4838
Haryana	6071	0	-205	61	3967	0	26	67	6200
Rajasthan	7627	0	-834	-19	7801	0	51	371	8992
Delhi	3368	0	-77	-169	2104	0	-49	-630	3500
UP	10055	1740	-255	402	9503	880	-120	540	10055
Uttarakhand	1398	75	41	288	1091	0	5	351	1443
HP	1137	0	-39	-227	735	0	127	81	1276
J&K	1653	0	-26	76	1216	0	137	35	1740
Chandigarh	174	0	-23	0	102	0	2	0	200
Total	36321	1815	-1680	602	30688	880	328	868	36608

* 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	1512	1289	1604	3.53	147	35.36	-31.83
Rihand I STPS (2*500)	1000	871	810	809	21.63	901	19.93	1.69
Rihand II STPS (2*500)	1000	460	419	495	11.50	479	10.48	1.03
Rihand III STPS (2*500)	1000	958	942	986	23.49	979	22.33	1.16
Dadri I STPS (4*210)	840	815	621	602	16.06	669	15.19	0.87
Dadri II STPS (2*490)	980	980	770	712	18.05	752	17.86	0.19
Unchahar I TPS (2*210)	420	302	301	325	7.70	321	6.87	0.83
Unchahar II TPS (2*210)	420	311	291	316	7.39	308	6.76	0.64
Unchahar III TPS (1*220)	210	157	154	167	3.94	164	3.64	0.30
I-STPP (Jhajhar) (3*500)	1500	990	944	626	17.52	730	17.39	0.13
Dadri GPS (4*130.19+2*154.51)	830	800	184	199	4.48	187	4.42	0.06
Anta GPS (3*88.71+1*153.2)	419	402	237	261	6.00	250	5.91	0.09
Auraiva GPS (4*111.19+2*109.30)	663	645	160	161	3.76	157	3.69	0.07
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	9206	7122	7263	145	6046	170	-25
B. NPC								
NAPS (2*220)	440	285	319	325	6.78	283	6.84	-0.06
RAPS- B (2*220)	440	400	443	444	9.59	399	9.60	-0.01
RAPS- C (2*220)	440	190	213	208	4.25	177	2.61	1.64
Sub Total (B)	1320	875	975	977	20.62	859	19.05	1.57
C. NHPC								
Chamera I HPS (3*180)	540	534	238	0	1.58	66	1.60	-0.02
Chamera III HPS (3*100)	300	300	298	0	1.87	78	1.80	0.07
Chamera III HPS (3*77)	231	229	76	0	1.27	53	1.25	0.02
Bairasuli HPS(3*60)	180	178	178	0	0.78	33	0.73	0.05
Salal-HPS (6*115)	690	199	147	303	4.95	206	4.78	0.17
Tanakpur-HPS (3*40)	94	51	52	50	1.31	54	1.22	0.08
Uri-I HPS (4*120)	480	253	310	259	6.41	267	6.07	0.33
Uri-II HPS (4*60)	240	154	172	152	3.83	160	3.70	0.13
Dhauliganga-HPS (4*70)	280	73	209	70	1.80	75	1.76	0.04
Dulhasti-HPS (3*130)	390	387	299	218	4.98	208	4.80	0.18
Sewa-II HPS (3*40)	120	119	123	0	0.43	18	0.38	0.05
Parbati 3 (4*130)	520	260	210	0	0.86	36	0.81	0.05
Sub Total (C)	4065	2738	2312	1052	30	1253	29	1
D. SJVNL								
NJPC (6*250)	1500	1605	1435	0	11.15	464	11.00	0.15
Rampur HEP (4*68.67)	275	280	299	0	2.80	117	2.75	0.05
Sub Total (D)	1775	1885	1734	0	13.94	581	13.75	0.20
E. THDC								
Tehri HPS (4*250)	1000	1060	795	0	5.48	228	5.40	0.08
Koteshwar HPS (4*100)	400	91	99	89	1.77	74	1.75	0.02
Sub Total (E)	1400	1151	894	89	7.25	302	7.15	0.10
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	612	1181	497	14.71	613	14.70	0.02
Dehar HPS (6*165)	990	187	495	145	4.71	196	4.48	0.23
Pong HPS (6*66)	396	228	320	126	5.53	230	5.48	0.05
Sub Total (F)	2900	1027	1996	768	24.95	1040	24.65	0.30
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	112	0	0.85	36	0.84	0.02
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	750	727	6.08	253	6.13	-0.05
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	296	212	6.48	270	6.52	-0.04
Budhil HPS(IPP)	70	0	69	0	0.24	10	0.24	0.00
Sub Total (G)	1662	0	1227	939	13.66	569	13.72	-0.07
H. Total Regional Entities (A-G)	24419	16883	16260	11088	255.59	10649	277.15	-21.56

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	3.61	150
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.77	74
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	206	205	4.32	180
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1375	1191	30.80	1283
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1821	1636	40.50	1687
	Total Hydro	1148	281	386	8.75	365
Total Punjab	5828	2102	2022	49.25	2052	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	420	424	10.00	416
	DCRTPP (Yamuna nagar) (2*300)	600	225	249	5.68	237
	Faridabad GPS (NTPC)	432	0	199	1.53	64
	RGTPP (khedar) (IPP) (2*600)	1200	474	0	4.13	172
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1092	739	20.75	865
	Thermal (Total)	4944	2211	1611	42.08	1754
	Total Hydro	62	10	17	0.37	15
	Total Haryana	5006	2221	1628	42.45	1769
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	933	898	21.20
suratgarh TPS (6*250)		1500	1131	1126	28.00	1167
Chabra TPS (3*250)		750	199	225	4.30	179
Dholpur GPS (3*110)		330	93	119	2.58	107
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	163	163	4.62	193
RAPS A (NPC) (1*100+1*200)		300	179	177	4.39	183
Barsingar (NLC) (2*125)		250	184	184	4.30	179
Giral LTPS (2*125)		250	81	74	1.58	66
Rajwest LTPS (IPP) (8*135)		1080	706	832	18.50	771
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	515	515	11.40	475
Kawai(Adani) (2*660)		1320	1152	1157	26.50	1104
Thermal (Total)		8026	5336	5470	127	5307
Total Hydro		550	154	109	3.70	154
Wind power		2798	456	186	8.60	358
Biomass		99	30	30	0.73	30
Solar		730	0	0	0.26	11
Renewable/Others (Total)		3627	486	216	9.59	399
Total Rajasthan		12203	5976	5795	140.66	5861
UP	Anpara TPS (3*210+2*500)	1630	895	886	21.40	892
	Obra TPS (2*50+2*94+5*200)	1194	490	467	11.40	475
	Paricha TPS (2*110+2*220+2*250)	1140	647	796	18.60	775
	Panki TPS (2*105)	210	72	72	1.70	71
	Harduaganj TPS (1*60+1*105+2*250)	665	509	499	11.70	488
	Tanda TPS (NTPC) (4*110)	440	342	337	8.30	346
	Roza TPS (IPP) (4*300)	1200	990	1098	23.20	967
	Anpara-C (IPP) (2*600)	1200	887	855	20.70	863
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	361	361	8.50	354
	Thermal (Total)	8129	5193	5371	125.50	5229
	Vishnuparyag HPS (IPP)	400	139	134	3.30	138
	Other Hydro	527	129	157	3.80	158
	Cogeneration	981	50	50	1.20	50
	Total UP	10037	5511	5712	133.80	5438
Uttarakhand	Total Hydro	1398	481	284	9.01	375
	Total Uttarakhand	1398	481	284	9.01	375
Delhi	Raighat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	76	79	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	261	267	6.34	264
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	298	255	7.03	293
	Badarpur TPS (NTPC) (3*95+2*210)	705	305	313	7.94	331
	Thermal (Total)	2917	940	914	23.13	964
Total Delhi	2917	940	914	23.13	964	
HP	Baspa HPS (IPP) (2*150)	300	28	28	1.80	75
	Malana HPS (IPP) (2*43)	86	70	0	0.39	16
	Other Hydro	728	209	231	5.60	233
	Total HP	1114	307	259	7.79	325
J & K	Baqilhar HPS (IPP) (3*150)	450	384	214	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	384	214	6.30	263
Total State Control Area Generation		39597	17922	16828	412.38	17045
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2911	4695	110.44	4602
Total Regional Availability(Gross)		64017	37093	32611	778.41	32296

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7798	2636	83.14	3464
State Control Area Hydro	5684	1746	1426	43.02	1655
Total Regional Hydro	17116	9544	4062	126.15	5119

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	-350	-500	0	500	0.00	9.36	-9.36
Gwalior-Agra (D/C)	867	1899	1996	0	36.58	0.00	36.58
Zerda-Kankroli	-309	-241	0	335	0.00	5.11	-5.11
Zerda-Bhinmal	-313	-182	29	339	0.00	3.85	-3.85
Malanpur-Auraiya	-88	-260	0	277	0.00	4.82	-4.82
Badod-Kota/Morak	-239	-217	0	300	0.00	5.34	-5.34
Mundra-Mohindergarh(HVDC)	2102	2297	2306	0	53.57	0.00	53.57
Vindhychal - Rihand	484	375	489	0	10.37	0.00	10.37
Sub Total WR	2154	3171			100.52	28.48	72.04
Pusauli Bypass	400	400	400	0	9.90	0.00	9.90
MZP- GKP (D/C)	130	382	560	0	8.31	0.00	8.31
Patna-Balia(D/C)	149	277	456	0	7.77	0.00	7.77
B'Sharif-Balia (D/C)	80	175	329	0	4.66	0.00	4.66
Pusauli-Balia	-87	-60	0	100	0.00	1.58	-1.58
Gaya-Fatehpur (765 Kv)	0	232	360	0	2.89	0.00	2.89
Pusauli-Sahupuri	110	134	153	0	2.86	0.00	2.86
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-38	-43	0	44	0.00	0.95	-0.95
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	13	27	378	4	4.05	0.00	4.05
Sub Total ER	757	1524			40.93	2.53	38.40
Total IR Exch	2911	4695			141.45	31.01	110.44

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
27.90	1.53	29.43	6.09	-0.82	5.79	2.75	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
41.94	63.48	105.42	38.40	72.04	110.44	-3.53	8.56	5.02

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	0.00	5.47	20.81	53.72	57.42	14.20	7.35	0.27	0.00

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.23	0.02	49.71	12.19	49.98	0.10	0.10	50.19	49.84

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	414	03:28	406	14:00	0.0	0.0	0.0	0.0
Gorakhpur	400	410	20:57	397	12:12	0.0	0.0	0.0	0.0
Bareilly	400	419	20:57	397	12:07	0.0	0.0	0.0	0.0
Kanpur	400	419	03:23	400	10:36	0.0	0.0	0.0	0.0
Dadri	400	420	03:02	401	12:18	0.0	0.0	0.0	0.0
Ballabgarh	400	426	03:04	403	12:19	0.0	0.0	27.4	0.0
Bawana	400	425	03:03	402	12:20	0.0	0.0	23.6	0.0
Bassi	400	426	20:50	402	10:16	0.0	0.0	11.3	0.0
Hissar	400	417	01:57	396	12:15	0.0	0.0	0.0	0.0
Moga	400	422	01:57	408	07:12	0.0	0.0	14.5	0.0
Abdullapur	400	426	01:55	396	18:17	0.0	0.0	28.8	0.0
Nalagarh	400	434	21:53	412	18:39	0.0	0.0	61.5	4.9
Kishenpur	400	422	13:01	399	18:37	0.0	0.0	1.4	0.0
Wagoora	400	416	04:36	380	18:38	0.0	10.5	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	775	03:20	732	12:18	0.0	14.8	0.0	0.0
Balia	765	765	20:55	742	12:17	0.0	0.0	0.0	0.0
Moga	765	799	03:04	770	18:17	0.0	0.0	0.0	0.0
Agra	765	794	20:55	746	12:20	0.0	0.0	0.0	0.0
Bhiwani	765	804	00:00	758	12:19	0.0	0.0	41.7	0.0
Unnao	765	758	03:25	726	10:37	1.7	23.8	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	507.40	1426.07	510.98	1590.18	228.18	415.52
Pong	426.72	384.05	414.04	633.63	420.53	916.71	80.39	345.83
Tehri	829.79	740.04	823.85	1083.62	824.45	1097.21	90.76	119.00
Koteshwar	612.50	598.50	608.63	3.98	611.90	5.46	119.00	118.00
Chamera-I	760.00	748.75	757.81	33.25	0.00	0.00	68.42	42.91
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	510.17	2.05	518.05	2.64	57.00	135.00

* 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	0	52	0	0	191	0	0.00	2.33	2.33
Delhi	-508	-112	-10	-140	-18	-10	-6.14	-1.16	-7.30
Haryana	-24	91	0	-6	66	0	-0.47	0.49	0.02
HP	81	0	0	81	-308	0	1.94	-0.23	1.70
J&K	61	-25	0	27	49	0	1.53	0.50	2.03
CHD	0	0	0	0	0	0	0.00	0.12	0.12
Rajasthan	-64	433	3	-64	42	3	-1.54	7.30	5.76
UP	540	0	0	402	0	0	10.40	0.00	10.40
Uttarakhand	318	33	0	220	68	0	5.77	2.10	7.87
Total	403	472	-7	519	90	-7	11.48	11.45	22.93

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	339	-205	0	0
Delhi	-121	-508	0	-122	-10	-10
Haryana	-6	-24	91	-478	0	0
HP	81	81	182	-449	0	0
J&K	163	12	49	-25	0	0
CHD	0	0	29	0	0	0
Rajasthan	-64	-64	749	-305	3	3
UP	545	376	0	0	0	0
Uttarakhand	318	220	192	14	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 28.10.2014 :**
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 :**