

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 18.10.2014
Date of Reporting : 19.10.2014

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
35031	3306	38337	50.01	29892	880	30772	50.11	759.7	49.61

* 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	42.65	11.28		53.93	51.99	53.95	1.96	107.88	2.03
Haryana	46.34	0.67		47.01	62.37	64.57	2.20	111.58	0.17
Rajasthan	132.31	3.56	3.43	139.30	39.84	41.06	1.21	180.35	0.00
Delhi	27.60			27.60	40.15	40.76	0.62	68.36	0.00
UP	104.51	7.68	1.20	113.40	93.43	92.71	-0.72	206.11	44.93
Uttarakhand		10.06		10.06	17.76	18.53	0.78	28.60	2.45
HP		9.57		9.57	13.03	14.23	1.20	23.79	0.02
J & K		7.08	0.00	7.08	22.99	22.53	-0.47	29.61	0.00
Chandigarh				0.00	3.50	3.43	-0.07	3.43	0.00
Total	353.41	49.91	4.63	407.95	345.07	351.78	6.71	759.72	49.61

* 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	5283	0	-77	12	4430	0	141	0	5283
Haryana	5695	689	83	38	4067	0	-150	-376	5695
Rajasthan	7681	0	-228	-532	7155	0	127	122	8353
Delhi	3300	0	-43	-382	2439	0	176	-876	3360
UP	8775	2370	-252	402	8703	880	100	1072	9037
Uttarakhand	1371	245	56	291	1134	0	98	361	1481
HP	1170	2	-167	-372	760	0	-18	61	1271
J&K	1580	0	-56	16	1108	0	9	-20	1624
Chandigarh	176	0	-27	0	96	0	-21	0	185
Total	35031	3306	-712	-527	29892	880	461	345	35031

* 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	1073	1211	1148	25.51	1063	25.76	-0.25
Rihand I STPS (2*500)	1000	843	916	908	21.99	916	20.23	1.76
Rihand II STPS (2*500)	1000	440	517	482	11.82	493	10.56	1.26
Rihand III STPS (2*500)	1000	914	967	951	23.33	972	21.94	1.39
Dadri I STPS (4*210)	840	815	692	612	16.52	688	15.82	0.70
Dadri II STPS (2*490)	980	980	864	715	19.19	800	19.30	-0.11
Unchahar I TPS (2*210)	420	150	171	154	3.94	164	3.54	0.40
Unchahar II TPS (2*210)	420	301	328	290	7.70	321	6.95	0.75
Unchahar III TPS (1*220)	210	151	168	138	3.80	158	3.45	0.35
I-STPP (Jhajhar) (3*500)	1500	990	953	745	18.17	757	18.38	-0.21
Dadri GPS (4*130.19+2*154.51)	830	800	199	174	4.48	187	4.49	-0.01
Anta GPS (3*88.71+1*153.2)	419	393	-1	-1	0.00	0	0.00	0.00
Auraiya GPS (4*111.19+2*109.30)	663	484	151	155	3.79	158	3.71	0.08
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	8338	7136	6471	160	6679	154	6
B. NPC								
NAPS (2*220)	440	283	325	327	6.86	286	6.79	0.07
RAPS-B (2*220)	440	395	441	445	9.56	399	9.48	0.08
RAPS-C (2*220)	440	190	208	209	4.44	185	4.56	-0.12
Sub Total (B)	1320	868	974	981	20.86	869	20.83	0.03
C. NHPC								
Chamera I HPS (3*180)	540	534	182	0	3.48	145	3.40	0.08
Chamera II HPS (3*100)	300	300	101	0	2.36	98	2.30	0.06
Chamera III HPS (3*77)	231	229	227	0	1.33	56	1.30	0.04
Bairasuli HPS(3*60)	180	120	120	0	1.01	42	0.95	0.06
Salal-HPS (6*115)	690	225	223	251	5.84	244	5.41	0.44
Tanakpur-HPS (3*40)	94	65	80	66	1.60	67	1.56	0.04
Uri-I HPS (4*120)	480	345	312	339	8.65	361	8.27	0.38
Uri-II HPS (4*60)	240	197	222	215	4.97	207	4.72	0.25
Dhauliganga-HPS (4*70)	280	86	207	69	2.07	86	2.07	0.00
Dulhasti-HPS (3*130)	390	387	402	271	6.06	253	5.90	0.16
Sewa-II HPS (3*40)	120	119	128	0	0.52	22	0.45	0.07
Parbati 3 (4*130)	520	260	132	0	0.79	33	0.88	-0.09
Sub Total (C)	4065	2868	2334	1211	39	1612	37	1
D.SJVNL								
NJPC (6*250)	1500	1605	531	351	12.64	527	12.63	0.01
Rampur HEP (4*68.67)	275	141	134	95	3.49	145	3.38	0.11
Sub Total (D)	1775	1746	665	446	16.13	672	16.01	0.12
E. THDC								
Tehri HPS (4*250)	1000	1060	789	0	5.45	227	5.40	0.05
Koteshwar HPS (4*100)	400	91	100	0	1.60	67	1.55	0.05
Sub Total (E)	1400	1151	889	0	7.05	294	6.95	0.10
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	666	1180	390	16.12	672	15.99	0.13
Dehar HPS (6*165)	990	211	660	150	5.18	216	5.06	0.12
Pong HPS (6*66)	396	234	318	186	5.55	231	5.61	-0.06
Sub Total (F)	2900	1111	2158	726	26.85	1119	26.66	0.19
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	82	41	0.94	39	0.91	0.03
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	830	210	7.34	306	7.20	0.14
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	146	138	3.38	141	3.74	-0.36
Budhil HPS(IPP)	70	0	27	0	0.27	11	0.27	0.01
Sub Total (G)	1662	0	1085	390	11.93	497	12.12	-0.19
H. Total Regional Entities (A-G)	24419	16081	15241	10224	281.83	11743	274.00	7.83

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	210	210	4.25	177
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	1.87	78
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	253	251	5.13	214
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1383	1385	31.41	1309
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1946	1946	42.65	1777
	Total Hydro	1148	453	486	11.28	470
	Total Punjab	5828	2399	2432	53.93	2247
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	226	212	4.19
DCRTPP (Yamuna nagar) (2*300)		600	300	237	5.89	246
Faridabad GPS (NTPC)		432	321	258	6.33	264
RGTPP (khedar) (IPP) (2*600)		1200	776	703	17.81	742
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	600	372	12.13	505
Thermal (Total)		4944	2223	1782	46.34	1931
Total Hydro		62	28	28	0.67	28
Total Haryana		5006	2251	1810	47.01	1959
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	831	791	19.85
	suratgarh TPS (6*250)	1500	1020	1144	24.11	1004
	Chabra TPS (3*250)	750	641	433	14.98	624
	Dholpur GPS (3*110)	330	115	119	2.71	113
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	59	125	2.63	110
	RAPS A (NPC) (1*100+1*200)	300	182	172	4.38	183
	Barsingar (NLC) (2*125)	250	184	184	4.35	181
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	832	832	20.21	842
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	458	462	10.95	456
	Kawai(Adani) (2*660)	1320	1170	1160	28.13	1172
	Thermal (Total)	8026	5492	5422	132	5513
	Total Hydro	550	126	187	3.56	148
	Wind power	2798	106	130	2.54	106
	Biomass	99	20	20	0.49	20
	Solar	730	0	0	0.40	17
	Renewable/Others (Total)	3627	126	150	3.43	143
	Total Rajasthan	12203	5744	5759	139.30	5804
UP	Anpara TPS (3*210+2*500)	1630	839	900	21.70	904
	Obra TPS (2*50+2*94+5*200)	1194	455	425	10.60	442
	Paricha TPS (2*110+2*220+2*250)	1140	393	545	11.70	488
	Panki TPS (2*105)	210	113	108	2.70	113
	Harduaganj TPS (1*60+1*105+2*250)	665	464	444	10.80	450
	Tanda TPS (NTPC) (4*110)	440	279	268	6.83	284
	Roza TPS (IPP) (4*300)	1200	815	810	19.69	820
	Anpara-C (IPP) (2*600)	1200	536	536	12.77	532
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	361	361	7.73	322
	Thermal (Total)	8129	4255	4397	104.51	4355
	Vishnuparyag HPS (IPP)	400	179	158	4.06	169
	Other Hydro	527	142	162	3.62	151
	Cogeneration	981	50	50	1.20	50
	Total UP	10037	4626	4767	113.40	4556
	Uttarakhand	Total Hydro	1398	469	373	10.06
Total Uttarakhand		1398	469	373	10.06	419
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	79	80	1.88	78
	Pragati Gas Turbine (2x104+ 1x122)	330	272	271	6.53	272
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	464	440	10.87	453
	Badarpur TPS (NTPC) (3*95+2*210)	705	364	313	8.32	347
	Thermal (Total)	2917	1179	1104	27.60	1150
	Total Delhi	2917	1179	1104	27.60	1150
HP	Baspa HPS (IPP) (2*150)	300	200	30	2.07	86
	Malana HPS (IPP) (2*43)	86	34	0	0.48	20
	Other Hydro	728	298	237	7.02	292
	Total HP	1114	532	267	9.57	399
J & K	Baqilhar HPS (IPP) (3*150)	450	440	236	7.08	295
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	440	236	7.08	295
Total State Control Area Generation		39597	17640	16748	407.95	16829
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3171	4082	106.48	4437
Total Regional Availability(Gross)		64017	36052	31054	796.25	33008

IV. Total Hydro Generation:

Regional Entities Hydro	11432	6958	2634	97.01	4042
State Control Area Hydro	5684	2190	1739	49.91	1910
Total Regional Hydro	17116	9148	4373	146.91	5952

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	-100	150	150	300	1.93	1.66	0.26
Gwalior-Agra (D/C)	490	625	1207	0	15.01	0.00	15.01
Zerda-Kankroli	-231	-210	0	298	0.00	4.92	-4.92
Zerda-Bhinmal	-159	-122	13	255	0.00	2.92	-2.92
Malanpur-Auraiya	-8	-6	0	36	0.00	1.24	-1.24
Badod-Kota/Morak	-198	-234	0	268	0.00	5.07	-5.07
Mundra-Mohindergarh(HVDC)	1298	1598	1703	0	36.03	0.00	36.03
Vindhychal - Rihand	497	503	509	0	11.82	0.00	11.82
Sub Total WR	1589	2304			64.79	15.80	48.99
Pusauli Bypass	400	400	400	0	9.72	0.00	9.72
MZP- GKP (D/C)	306	274	691	0	9.74	0.00	9.74
Patna-Balia(D/C)	503	589	844	0	16.00	0.00	16.00
B'Sharif-Balia (D/C)	173	131	375	0	5.60	0.00	5.60
Pusauli-Balia	-96	-78	0	-110	0.00	-1.85	1.85
Gaya-Fatehpur (765 Kv)	0	277	493	0	2.20	0.00	2.20
Pusauli-Sahupuri	153	164	204	0	3.93	0.00	3.93
K'nasa-Sahupuri	-30	-26	0	-30	0.00	-0.67	0.67
Son Ngr-Rihand	-40	-40	0	-41	0.00	-0.89	0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	213	87	445	0	6.89	0.00	6.89
Sub Total ER	1582	1778			54.08	-3.41	57.49
Total IR Exch	3171	4082			118.87	12.39	106.48

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
30.94	2.09	33.03	4.85	1.26	-0.95	-3.80	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
37.56	48.48	86.03	57.49	48.99	106.48	19.94	0.51	20.45

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	0.63	3.45	18.76	55.07	62.62	13.62	5.59	0.00	0.00

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time					
50.20	17.02	49.62	18.27	49.98	0.08	0.09	50.19	0.00

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	418	02:01	408	15:49	0.0	0.0	0.0	0.0
Gorakhpur	400	413	13:32	400	10:24	0.0	0.0	0.0	0.0
Bareilly	400	423	04:04	394	11:17	0.0	0.0	4.1	0.0
Kanpur	400	419	21:43	404	18:36	0.0	0.0	0.0	0.0
Dadri	400	421	04:00	400	11:17	0.0	0.0	0.5	0.0
Ballabgarh	400	429	04:03	406	10:24	0.0	0.0	34.0	0.0
Bawana	400	427	04:01	407	10:24	0.0	0.0	31.4	0.0
Bassi	400	429	04:03	406	10:24	0.0	0.0	30.9	0.0
Hissar	400	419	04:01	398	18:33	0.0	0.0	0.0	0.0
Moga	400	423	04:03	404	09:31	0.0	0.0	10.9	0.0
Abdullapur	400	428	02:28	396	18:36	0.0	0.0	28.7	0.0
Nalagarh	400	431	02:30	409	10:21	0.0	0.0	33.7	0.7
Kishenpur	400	423	02:28	396	18:32	0.0	0.0	9.2	0.0
Wagoora	400	415	01:30	380	18:45	0.0	9.7	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	780	04:01	742	10:25	0.0	0.0	0.0	0.0
Balia	765	769	06:04	747	10:24	0.0	0.0	0.0	0.0
Moga	765	802	04:00	744	10:18	0.0	0.0	1.2	0.0
Agra	765	795	04:04	759	10:25	0.0	0.0	0.0	0.0
Bhiwani	765	799	23:53	381	10:24	91.4	91.4	0.0	0.0
Unnao	765	768	04:01	0	10:30	2.7	3.7	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	508.43	1470.42	511.08	1605.30	275.49	457.32
Pong	426.72	384.05	415.17	680.86	421.68	961.02	73.31	341.16
Tehri	829.79	740.04	824.50	1107.95	824.75	1107.95	79.33	118.00
Koteshwar	612.50	598.50	608.94	3.98	610.10	4.58	118.00	106.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	90.17	94.57
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	511.26	3.15	518.53	2.45	82.46	140.08

* 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	0	0	0	12	0	0.00	0.07	0.07
Delhi	-400	-441	-35	-140	-238	-4	-5.31	-6.15	-11.46
Haryana	-54	-322	0	-31	69	0	-1.41	-4.52	-5.93
HP	81	-20	0	81	-453	0	1.94	-2.71	-0.77
J&K	-20	0	0	20	-4	0	0.85	0.06	0.91
CHD	0	0	0	0	0	0	0.00	0.15	0.15
Rajasthan	-64	184	2	-64	-470	2	-1.54	-0.46	-2.00
UP	552	491	29	402	0	0	10.62	8.38	19.01
Uttarakhand	318	42	0	220	71	0	5.78	2.61	8.39
Total	412	-65	-3	488	-1013	-2	10.94	-2.56	8.37

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	49	0	0	0
Delhi	-120	-400	-31	-509	-4	-35
Haryana	-31	-74	93	-476	0	0
HP	81	81	161	-488	0	0
J&K	82	-20	99	-102	0	0
CHD	0	0	34	0	0	0
Rajasthan	-64	-64	356	-811	2	2
UP	577	382	786	0	29	0
Uttarakhand	318	220	287	-7	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 18.10.2014 :**
Normal**XIV. Synchronisation of new generating units :**
0.00**XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**
400 kV NJPC-Nallagarh-II LIL Oed at Rampur (HEP) at 18:22 hrs. of 18/10/14.
Now we have NJPC-Nallagarh-D/c LIL Oed at Rampur(HEP)**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**