

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.10.2014
Date of Reporting : 20.10.2014

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
35741	2526	38267	50.11	29660	2230	31890	50.08	759.1	54.76

* 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	40.79	11.13		51.92	54.27	54.68	0.42	106.61	3.59
Haryana	42.63	0.62		43.25	62.86	66.21	3.35	109.46	0.48
Rajasthan	128.21	4.93	3.30	136.44	44.56	48.69	4.13	185.12	0.00
Delhi	27.24			27.24	36.26	34.85	-1.41	62.09	0.00
UP	103.01	7.83	1.20	112.03	92.40	96.30	3.90	208.33	48.82
Uttarakhand		9.89		9.89	16.78	19.07	2.28	28.96	1.87
HP		8.29		8.29	12.36	14.37	2.01	22.66	0.01
J & K		7.00	0.00	7.00	22.45	25.68	3.24	32.69	0.00
Chandigarh				0.00	3.26	3.19	-0.07	3.19	0.00
Total	341.88	49.69	4.50	396.07	345.17	363.03	17.86	759.10	54.76

* 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	5144	0	2	1	4481	455	3	4	5144
Haryana	5724	322	94	57	4262	0	246	-144	5724
Rajasthan	7937	0	-91	-451	7162	0	359	-238	8550
Delhi	3138	0	-146	-390	2022	0	-73	-748	3138
UP	9241	2120	-240	382	8573	1775	-233	1070	9429
Uttarakhand	1549	70	160	296	1080	0	60	322	1578
HP	1121	14	-6	-194	803	0	79	47	1181
J&K	1717	0	90	20	1173	0	108	-71	1760
Chandigarh	169	0	-34	0	104	0	-8	0	173
Total	35741	2526	-171	-279	29660	2230	541	242	35741

* STOA figures are at sellers boundary & PX figures are at regional boundary.

figures may not be at simultaneous hour.

Diversity is 1.03

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	1295	1495	1302	31.41	1309	31.09	0.33
Rihand I STPS (2*500)	1000	866	894	933	22.15	923	20.50	1.65
Rihand II STPS (2*500)	1000	460	491	502	12.11	505	10.83	1.28
Rihand III STPS (2*500)	1000	950	988	967	23.81	992	22.59	1.22
Dadri I STPS (4*210)	840	815	625	596	15.57	649	14.88	0.69
Dadri II STPS (2*490)	980	497	459	399	10.75	448	10.74	0.01
Unchahar I TPS (2*210)	420	150	165	163	3.87	161	3.48	0.39
Unchahar II TPS (2*210)	420	304	322	313	8.35	348	6.74	1.61
Unchahar III TPS (1*220)	210	154	159	164	3.78	157	3.40	0.37
I-STPP (Jhajhar) (3*500)	1500	1013	932	710	20.09	837	22.16	-2.07
Dadri GPS (4*130.19+2*154.51)	830	800	199	204	4.61	192	4.67	-0.07
Anta GPS (3*88.71+1*153.2)	419	393	-1	-1	0.00	0	0.00	0.00
Auraiva GPS (4*111.19+2*109.30)	663	486	163	167	3.83	160	3.76	0.07
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	8187	6891	6419	160	6683	155	5
B. NPC								
NAPS (2*220)	440	284	322	326	6.84	285	6.82	0.03
RAPS-B (2*220)	440	396	443	442	9.59	400	9.50	0.09
RAPS-C (2*220)	440	190	208	211	4.46	186	4.56	-0.10
Sub Total (B)	1320	870	973	979	20.90	871	20.88	0.02
C. NHPC								
Chamera I HPS (3*180)	540	534	345	0	3.35	139	3.25	0.10
Chamera II HPS (3*100)	300	300	231	0	1.90	79	1.82	0.08
Chamera III HPS (3*77)	231	229	226	0	1.30	54	1.30	0.00
Bairasuli HPS(3*60)	180	145	180	0	0.84	35	0.74	0.10
Salal-HPS (6*115)	690	228	185	321	5.78	241	5.48	0.29
Tanakpur-HPS (3*40)	94	64	75	65	1.54	64	1.53	0.01
Uri-I HPS (4*120)	480	337	349	341	8.45	352	8.08	0.37
Uri-II HPS (4*60)	240	193	211	199	4.75	198	4.62	0.13
Dhauliganga-HPS (4*70)	280	86	208	71	2.09	87	2.07	0.02
Dulhasti-HPS (3*130)	390	387	402	270	5.66	236	5.50	0.15
Sewa-II HPS (3*40)	120	119	123	0	0.49	20	0.45	0.04
Parbati 3 (4*130)	520	260	130	0	0.80	33	0.78	0.02
Sub Total (C)	4065	2883	2665	1267	37	1539	36	1
D. SJVNL								
NJPC (6*250)	1500	1605	732	353	11.76	490	11.76	0.00
Rampur HEP (4*68.67)	275	134	146	112	3.06	128	3.14	-0.08
Sub Total (D)	1775	1739	878	465	14.82	618	14.90	-0.07
E. THDC								
Tehri HPS (4*250)	1000	1060	941	0	5.49	229	5.42	0.07
Koteshwar HPS (4*100)	400	91	101	0	1.79	75	1.75	0.04
Sub Total (E)	1400	1151	1042	0	7.28	303	7.17	0.11
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	630	858	386	15.51	646	15.12	0.38
Dehar HPS (6*165)	990	208	660	145	4.99	208	4.99	0.00
Pong HPS (6*66)	396	233	318	186	5.63	235	5.59	0.04
Sub Total (F)	2900	1071	1836	717	26.13	1089	25.70	0.42
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	83	38	0.86	36	0.82	0.03
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	807	180	6.45	269	6.48	-0.03
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	298	172	6.36	265	6.75	-0.40
Budhil HPS(IPP)	70	0	32	0	0.26	11	0.25	0.00
Sub Total (G)	1662	0	1220	390	13.91	580	14.31	-0.40
H. Total Regional Entities (A-G)	24419	15901	15505	10236	280.36	11681	273.52	6.83

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	160	210	3.88	162
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	100	1.85	77
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	204	250	4.72	197
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1371	1381	30.35	1264
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1815	1941	40.79	1700
	Total Hydro	1148	450	453	11.13	464
Total Punjab	5828	2265	2394	51.92	2163	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	658	243	8.47	353
	DCRTPP (Yamuna nagar) (2*300)	600	272	291	6.50	271
	Faridabad GPS (NTPC)	432	193	193	4.56	190
	RGTPP (khedar) (IPP) (2*600)	1200	959	775	21.04	877
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	0	374	2.05	85
	Thermal (Total)	4944	2082	1876	42.63	1776
	Total Hydro	62	25	26	0.62	26
	Total Haryana	5006	2107	1902	43.25	1802
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	826	813	19.00
suratgarh TPS (6*250)		1500	1148	976	27.54	1148
Chabra TPS (3*250)		750	397	600	10.29	429
Dholpur GPS (3*110)		330	112	123	2.72	113
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	157	59	4.93	205
RAPS A (NPC) (1*100+1*200)		300	196	173	4.36	182
Barsingar (NLC) (2*125)		250	184	184	4.31	180
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	832	665	19.54	814
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	400	308	10.43	435
Kawai(Adani) (2*660)		1320	994	855	25.09	1045
Thermal (Total)		8026	5246	4756	128	5342
Total Hydro		550	152	148	4.93	205
Wind power		2798	31	272	2.48	104
Biomass		99	28	28	0.67	28
Solar		730	0	0	0.15	6
Renewable/Others (Total)		3627	59	300	3.30	137
Total Rajasthan		12203	5457	5204	136.44	5685
UP	Anpara TPS (3*210+2*500)	1630	950	930	22.50	938
	Obra TPS (2*50+2*94+5*200)	1194	437	456	10.60	442
	Paricha TPS (2*110+2*220+2*250)	1140	473	372	9.90	413
	Panki TPS (2*105)	210	72	108	1.80	75
	Harduaganj TPS (1*60+1*105+2*250)	665	468	409	8.50	354
	Tanda TPS (NTPC) (4*110)	440	287	280	7.03	293
	Roza TPS (IPP) (4*300)	1200	819	837	19.69	820
	Anpara-C (IPP) (2*600)	1200	797	538	14.63	610
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	361	361	8.36	348
	Thermal (Total)	8129	4664	4291	103.01	4292
	Vishnuparyag HPS (IPP)	400	164	164	3.91	163
	Other Hydro	527	94	231	3.91	163
	Cogeneration	981	50	50	1.20	50
	Total UP	10037	4972	4736	112.03	4505
	Uttarakhand	Total Hydro	1398	534	352	9.89
Total Uttarakhand		1398	534	352	9.89	412
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	78	81	1.87	78
	Pragati Gas Turbine (2x104+ 1x122)	330	269	268	6.51	271
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	484	443	10.79	449
	Badarpur TPS (NTPC) (3*95+2*210)	705	352	321	8.07	336
	Thermal (Total)	2917	1183	1113	27.24	1135
Total Delhi	2917	1183	1113	27.24	1135	
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.70	71
	Malana HPS (IPP) (2*43)	86	44	0	0.45	19
	Other Hydro	728	224	240	6.14	256
	Total HP	1114	298	240	8.29	346
J & K	Baqilhar HPS (IPP) (3*150)	450	442	236	7.00	292
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	442	236	7.00	292
Total State Control Area Generation		39597	17258	16177	396.07	16340
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2647	4310	95.94	3997
Total Regional Availability(Gross)		64017	35410	30723	772.36	32019

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7311	2666	92.46	3853
State Control Area Hydro	5684	1995	1686	49.69	1908
Total Regional Hydro	17116	9306	4352	142.16	5760

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	-500	-300	0	500	0.00	9.68	-9.68
Gwalior-Agra (D/C)	613	1177	1432	0	24.86	0.00	24.86
Zerda-Kankroli	-195	-184	0	231	0.00	4.50	-4.50
Zerda-Bhinmal	-155	-99	0	245	0.00	2.70	-2.70
Malanpur-Auraiya	-126	-123	0	153	0.00	2.69	-2.69
Badod-Kota/Morak	-156	-204	0	224	0.00	4.42	-4.42
Mundra-Mohindergarh(HVDC)	1198	1301	1304	0	30.85	0.00	30.85
Vindhychal - Rihand	484	502	510	0	11.91	0.00	11.91
Sub Total WR	1163	2070			67.62	23.98	43.64
Pusauli Bypass	400	400	400	0	9.69	0.00	9.69
MZP- GKP (D/C)	230	521	721	0	11.18	0.00	11.18
Patna-Balia(D/C)	552	690	895	0	16.72	0.00	16.72
B'Sharif-Balia (D/C)	91	286	381	0	5.55	0.00	5.55
Pusauli-Balia	-119	-78	0	-125	0.00	1.96	-1.96
Gaya-Fatehpur (765 Kv)	0	0	357	0	1.23	0.00	1.23
Pusauli-Sahupuri	142	171	171	0	3.48	0.00	3.48
K'nasa-Sahupuri	-32	-26	0	-32	0.00	0.71	-0.71
Son Ngr-Rihand	-40	-43	0	-44	0.00	0.93	-0.93
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	260	319	477	0	8.05	0.00	8.05
Sub Total ER	1484	2240			55.89	3.60	52.30
Total IR Exch	2647	4310			123.51	27.57	95.94

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
30.50	2.10	32.61	3.95	-0.42	1.17	-4.39	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
38.35	48.17	86.52	52.30	43.64	95.94	13.95	-4.53	9.42

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	3.60	20.97	55.09	55.21	14.50	8.80	1.11	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time					
50.37	23.59	49.72	11.20	49.98	0.10	0.10	50.32	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	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	508.34	1470.42	511.11	1605.30	265.36	430.70
Pong	426.72	384.05	415.05	680.86	421.58	961.02	73.88	349.15
Tehri	829.79	740.04	824.45	1095.00	824.75	1100.00	78.75	119.00
Koteshwar	612.50	598.50	609.05	4.21	610.10	4.69	119.00	119.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	78.15	90.47
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	511.13	3.06	518.53	2.45	79.51	132.72

* 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	4	0	0	1	0	0.00	1.25	1.25
Delhi	-400	-313	-35	-140	-246	-4	-5.31	-5.68	-10.99
Haryana	-71	-73	0	-69	126	0	-2.29	-3.36	-5.65
HP	81	-34	0	81	-275	0	1.94	-3.44	-1.50
J&K	-20	-51	0	20	0	0	0.85	-0.17	0.67
CHD	0	0	0	0	0	0	0.00	0.07	0.07
Rajasthan	-64	-176	2	-64	-389	2	-1.54	3.30	1.77
UP	550	491	29	382	0	0	10.13	6.98	17.11
Uttarakhand	318	4	0	220	76	0	5.78	1.31	7.08
Total	393	-148	-3	429	-706	-2	9.56	0.27	9.82

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	224	0	0	0
Delhi	-120	-400	-61	-460	-4	-35
Haryana	-49	-205	129	-554	0	0
HP	81	81	-34	-476	0	0
J&K	82	-20	99	-152	0	0
CHD	0	0	20	0	0	0
Rajasthan	-64	-64	360	-626	2	2
UP	571	351	491	0	29	0
Uttarakhand	318	220	233	-16	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 19.10.2014 :**

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 :**