

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.11.2014
Date of Reporting : 16.11.2014

I. Regional Availability/Demand:

Evening Peak (19:00 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
37345	1610	38955	50.14	29516	1385	30901	50.15	783.6	44.91

* 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	45.52	6.85		52.37	48.29	49.51	1.21	101.88	0.00
Haryana	47.42	0.46		47.88	53.10	53.56	0.45	101.44	0.00
Rajasthan	123.78	4.90	1.99	130.67	72.17	76.02	3.84	206.69	0.00
Delhi	21.14			21.14	35.66	33.74	-1.91	54.89	0.00
UP	122.70	3.60	2.40	128.70	90.98	91.46	0.48	220.16	43.00
Uttarakhand		8.27		8.27	21.42	22.49	1.06	30.76	1.91
HP		6.19		6.19	17.17	18.68	1.51	24.87	0.00
J & K		7.04	0.00	7.04	29.41	32.68	3.27	39.72	0.00
Chandigarh				0.00	3.21	3.25	0.04	3.25	0.00
Total	360.56	37.32	4.39	402.27	371.41	381.37	9.96	783.64	44.91

* 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 (19:00 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	4775	0	-239	-308	3554	0	223	-282	5171
Haryana	5860	0	-9	-624	3454	0	110	-616	5860
Rajasthan	8906	0	-19	275	8152	0	137	945	9756
Delhi	2934	15	-23	-506	1474	0	-133	-890	2934
UP	9873	1520	-246	149	9347	1385	159	91	10244
Uttarakhand	1663	75	117	438	1105	0	23	342	1666
HP	1262	0	35	38	807	0	70	324	1331
J&K	1892	0	-1	353	1539	0	181	301	1900
Chandigarh	180	0	1	0	84	0	-4	-31	180
Total	37345	1610	-384	-184	29516	1385	766	185	37345

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

figures may not be at simultaneous hour.

Diversity is 1.05

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	1674	1614	1842	39.72	1655	40.17	-0.45
Rihand I STPS (2*500)	1000	870	915	933	21.02	876	20.76	0.26
Rihand II STPS (2*500)	1000	970	1019	972	23.96	998	23.13	0.83
Rihand III STPS (2*500)	1000	816	908	553	19.94	831	19.36	0.58
Dadri I STPS (4*210)	840	790	637	592	16.33	681	16.04	0.29
Dadri II STPS (2*490)	980	980	928	712	20.74	864	21.19	-0.45
Unchahar I TPS (2*210)	420	400	375	410	9.72	405	9.37	0.34
Unchahar II TPS (2*210)	420	200	177	184	4.74	198	4.53	0.22
Unchahar III TPS (1*220)	210	200	178	149	4.53	189	4.34	0.19
I-STPP (Jhajjar) (3*500)	1500	1500	1383	916	21.46	894	22.87	-1.41
Dadri GPS (4*130.19+2*154.51)	830	821	158	211	4.57	191	4.58	-0.01
Anta GPS (3*88.71+1*153.2)	419	403	233	237	5.67	236	5.83	-0.16
Auraiya GPS (4*111.19+2*109.30)	663	431	151	165	3.77	157	3.68	0.09
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	10059	8676	7876	196	8176	196	0
B. NPC								
NAPS (2*220)	440	294	329	338	7.08	295	7.06	0.02
RAPS- B (2*220)	440	403	453	450	9.78	408	9.67	0.11
RAPS- C (2*220)	440	400	448	450	9.75	406	9.60	0.15
Sub Total (B)	1320	1097	1230	1238	26.61	1109	26.33	0.28
C. NHPC								
Chamera I HPS (3*180)	540	534	538	0	2.56	107	2.50	0.06
Chamera III HPS (3*100)	300	300	303	0	1.39	58	1.35	0.04
Chamera III HPS (3*77)	231	231	223	0	0.87	36	0.85	0.02
Bairasuli HPS(3*60)	180	178	176	0	0.70	29	0.68	0.02
Salal-HPS (6*115)	690	163	230	205	4.10	171	3.90	0.20
Tanakpur-HPS (3*40)	94	40	62	37	0.97	40	0.96	0.02
Uri-I HPS (4*120)	480	234	227	237	5.69	237	5.63	0.06
Uri-II HPS (4*60)	240	138	162	131	3.31	138	3.30	0.01
Dhauliganga-HPS (4*70)	280	207	207	0	1.29	54	1.16	0.14
Dulhasti-HPS (3*130)	390	387	396	0	4.05	169	3.90	0.15
Sewa-II HPS (3*40)	120	94	80	0	0.39	16	0.38	0.01
Parbati 3 (4*130)	520	260	224	0	0.51	21	0.55	-0.04
Sub Total (C)	4065	2766	2827	610	26	1076	25	1
D. SJVNL								
NJPC (6*250)	1500	1605	1614	0	8.72	363	8.70	0.02
Rampur HEP (4*68.67)	275	350	333	0	2.40	100	2.30	0.10
Sub Total (D)	1775	1955	1947	0	11.12	463	11.00	0.12
E. THDC								
Tehri HPS (4*250)	1000	1060	1062	0	7.33	305	7.29	0.05
Koteshwar HPS (4*100)	400	91	90	90	2.21	92	2.20	0.01
Sub Total (E)	1400	1151	1152	90	9.54	398	9.49	0.06
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	523	1019	341	12.55	523	12.56	-0.02
Dehar HPS (6*165)	990	145	495	0	3.63	151	3.47	0.16
Pong HPS (6*66)	396	174	318	66	4.01	167	4.18	-0.17
Sub Total (F)	2900	842	1832	407	20.19	841	20.21	-0.03
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	179	0	0.62	26	0.61	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	788	0	4.92	205	5.04	-0.12
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	139	103	2.99	125	3.01	-0.02
Budhil HPS(IPP)	70	0	69	0	0.14	6	0.14	0.00
Sub Total (G)	1662	0	1175	103	8.67	361	8.80	-0.13
H. Total Regional Entities (A-G)	24419	17871	18839	10324	298.17	12424	296.94	1.23

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	4.03	168
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	90	2.14	89
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	362	362	9.10	379
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	709	687	18.75	781
	Talwandi Saboo (1*660)	660	660	370	11.51	479
	Thermal (Total)	4680	1981	1669	45.52	1897
	Total Hydro	1148	196	320	6.85	285
Total Punjab	5828	2177	1989	52.37	2182	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	226	207	4.91	205
	DCRTPP (Yamuna nagar) (2*300)	600	277	241	5.98	249
	Faridabad GPS (NTPC)	432	189	196	4.49	187
	RGTPP (khedar) (IPP) (2*600)	1200	1129	730	20.29	845
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	610	374	11.75	489
	Thermal (Total)	4944	2431	1748	47.42	1976
	Total Hydro	62	14	18	0.46	19
	Total Haryana	5006	2445	1766	47.88	1995
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	839	798	19.87
suratgarh TPS (6*250)		1500	1160	942	25.47	1061
Chabra TPS (3*250)		750	437	442	10.58	441
Dholpur GPS (3*110)		330	129	125	3.08	128
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	195	191	4.92	205
RAPS A (NPC) (1*100+1*200)		300	189	177	4.37	182
Barsingar (NLC) (2*125)		250	186	186	3.00	125
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	559	736	16.08	670
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	495	500	10.44	435
Kawai(Adani) (2*660)		1320	1085	985	25.97	1082
Thermal (Total)		8026	5274	5082	124	5157
Total Hydro		550	266	134	4.90	204
Wind power		2798	54	36	0.93	39
Biomass		99	34	34	0.82	34
Solar		730	2	0	0.25	10
Renewable/Others (Total)		3627	90	70	1.99	83
Total Rajasthan	12203	5630	5286	130.67	5445	
UP	Anpara TPS (3*210+2*500)	1630	926	922	22.40	933
	Obra TPS (2*50+2*94+5*200)	1194	301	452	9.60	400
	Paricha TPS (2*110+2*220+2*250)	1140	760	755	18.60	775
	Panki TPS (2*105)	210	135	131	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	259	298	6.10	254
	Tanda TPS (NTPC) (4*110)	440	277	280	6.80	283
	Roza TPS (IPP) (4*300)	1200	1035	1058	24.80	1033
	Anpara-C (IPP) (2*600)	1200	945	981	23.10	963
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	361	361	8.40	350
	Thermal (Total)	8129	4999	5238	122.70	5113
	Vishnuparyag HPS (IPP)	400	120	114	2.60	108
	Other Hydro	527	37	34	1.00	42
	Cogeneration	981	100	100	2.40	100
	Total UP	10037	5256	5486	128.70	5254
Uttarakhand	Total Hydro	1398	482	237	8.27	345
	Total Uttarakhand	1398	482	237	8.27	345
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	76	78	1.90	79
	Pragati Gas Turbine (2x104+ 1x122)	330	150	149	3.58	149
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	318	271	7.19	299
	Badarpur TPS (NTPC) (3*95+2*210)	705	316	310	8.48	353
	Thermal (Total)	2917	860	808	21.14	881
Total Delhi	2917	860	808	21.14	881	
HP	Baspa HPS (IPP) (2*150)	300	0	47	1.42	59
	Malana HPS (IPP) (2*43)	86	76	0	0.31	13
	Other Hydro	728	182	173	4.46	186
	Total HP	1114	258	220	6.19	258
J & K	Baqilhar HPS (IPP) (3*150)	450	296	148	4.84	202
	Other Hydro/IPP	436	103	81	2.20	92
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	399	229	7.04	293
Total State Control Area Generation		39597	17507	16021	402.27	16653
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2937	4476	105.39	4391
Total Regional Availability(Gross)		64017	39283	30821	805.83	33468

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8725	1107	72.21	3009
State Control Area Hydro	5684	1652	1192	37.32	1446
Total Regional Hydro	17116	10377	2299	109.53	4455

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	-450	-450	0	450	0.00	10.64	-10.64
Gwalior-Agra (D/C)	689	1279	0	1488	26.34	0.00	26.34
Zerda-Kankroli	-153	-188	44	197	0.00	2.60	-2.60
Zerda-Bhinmal	-106	-63	183	110	0.09	0.00	0.09
Malanpur-Auraiya	41	46	0	55	0.00	0.97	-0.97
Badod-Kota/Morak	-142	-181	0	110	0.00	4.04	-4.04
Mundra-Mohindergarh(HVDC)	2199	2199	2205	0	53.21	0.00	53.21
Vindhychal - Rihand	491	354	503	0	10.31	0.00	10.31
Sub Total WR	2569	2996			89.95	18.24	71.71
Pusauli Bypass	50	50	50	0	1.27	0.00	1.27
MZP- GKP (D/C)	60	284	390	60	5.34	0.00	5.34
Patna-Balia(D/C)	448	693	797	0	16.22	0.00	16.22
B'Sharif-Balia (D/C)	-135	54	150	-135	0.32	0.00	0.32
Pusauli-Balia	-113	-75	0	117	0.00	2.05	-2.05
Gaya-Fatehpur (765 Kv)	26	239	433	0	6.79	0.00	6.79
Pusauli-Sahupuri	99	125	138	0	2.50	0.00	2.50
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-18	0	40	0.00	0.69	-0.69
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-32	128	324	32	3.99	0.00	3.99
Sub Total ER	368	1480			36.42	2.74	33.68
Total IR Exch	2937	4476			126.37	20.98	105.39

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
18.28	0.93	19.21	4.67	-13.05	4.99	12.19	4.54	-4.54

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
33.40	60.32	93.73	33.68	71.71	105.39	0.28	11.39	11.66

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	0.71	5.82	26.96	47.29	26.83	13.52	6.54	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					
50.35	21.46	49.71	17.41	50.04	0.10	0.09	50.37	49.90

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	411	01:57	403	17:31	0.0	0.0	0.0	0.0
Gorakhpur	400	233	20:57	222	17:37	100.0	100.0	0.0	0.0
Bareilly	400	421	20:58	397	01:21	0.0	0.0	0.8	0.0
Kanpur	400	421	21:00	403	06:45	0.0	0.0	0.2	0.0
Dadri	400	421	21:27	401	12:15	0.0	0.0	0.0	0.0
Ballabgarh	400	429	21:27	408	09:34	0.0	0.0	37.9	0.0
Bawana	400	428	20:42	406	09:21	0.0	0.0	0.0	0.0
Bassi	400	426	20:52	393	07:39	0.0	0.0	9.9	0.0
Hissar	400	419	21:00	399	09:26	0.0	0.0	0.0	0.0
Moga	400	423	04:04	405	09:32	0.0	0.0	11.2	0.0
Abdullapur	400	427	20:59	396	18:14	0.0	0.0	31.5	0.0
Nalagarh	400	433	04:13	410	12:12	0.0	0.0	43.2	6.0
Kishenpur	400	428	04:01	401	18:45	0.0	0.0	15.9	0.0
Wagoora	400	409	13:03	384	19:09	0.0	3.4	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	00:03	742	06:52	0.0	0.0	0.0	0.0
Balia	765	773	21:45	739	17:41	0.0	0.3	0.0	0.0
Moga	765	802	20:59	768	09:34	0.0	0.0	1.1	0.0
Agra	765	797	20:59	759	09:26	0.0	0.0	0.0	0.0
Bhiwani	765	788	20:40	768	08:40	0.0	0.0	0.0	0.0
Unnao	765	761	21:27	706	17:41	2.7	19.0	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	505.10	1312.37	509.63	1530.03	215.75	382.76
Pong	426.72	384.05	411.88	555.85	418.62	821.34	51.93	256.15
Tehri	829.79	740.04	821.65	1038.00	822.70	1058.00	67.21	161.00
Koteshwar	612.50	598.50	609.78	4.45	610.20	4.69	161.00	147.00
Chamera-I	760.00	748.75	759.51	0.00	0.00	0.00	59.20	68.88
Rihand	268.22	252.98	853.30	309.60	858.90	406.40	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	510.11	1.88	516.28	4.64	56.00	101.00

* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (19:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-290	8	0	-367	59	0	-7.73	2.75	-4.98
Delhi	-786	-92	-12	-607	113	-12	-14.64	0.68	-13.95
Haryana	-802	186	0	-786	162	0	-20.31	3.60	-16.71
HP	324	0	0	300	-261	0	7.38	-1.26	6.12
J&K	301	0	0	353	0	0	7.12	-0.04	7.08
CHD	-31	0	0	0	0	0	-0.24	0.12	-0.12
Rajasthan	490	453	2	490	-216	2	11.75	10.83	22.58
UP	91	0	0	149	0	0	2.71	0.00	2.71
Uttarakhand	244	98	0	244	194	0	5.86	3.77	9.63
Total	-458	654	-10	-224	50	-10	-8.11	20.46	12.36

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-265	-392	309	0	0	0
Delhi	-505	-786	364	-102	-12	-12
Haryana	-786	-1005	188	-47	0	0
HP	324	300	131	-585	0	0
J&K	370	255	0	-10	0	0
CHD	0	-31	25	-20	0	0
Rajasthan	490	490	1018	-599	2	2
UP	159	86	0	0	0	0
Uttarakhand	244	244	319	89	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 15.11.2014 :**

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 :**