

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पॉवरसिड की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 16.11.2014
Date of Reporting : 17.11.2014

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
35958	1285	37243	50.18	29314	1236	30550	50.14	763.5	38.28

* 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	39.12	6.46		45.58	45.94	48.33	2.40	93.91	0.00
Haryana	43.29	0.47		43.76	50.60	49.66	-0.94	93.42	0.00
Rajasthan	120.95	4.36	2.34	127.65	75.84	76.23	0.39	203.88	0.00
Delhi	20.30			20.30	35.30	34.50	-0.81	54.79	0.00
UP	118.90	3.50	2.40	124.80	97.02	96.33	-0.69	221.13	37.13
Uttarakhand		7.49		7.49	22.59	23.08	0.49	30.58	1.15
HP		5.92		5.92	16.35	17.59	1.24	23.51	0.00
J & K		7.06	0.00	7.06	30.52	32.20	1.68	39.26	0.00
Chandigarh				0.00	3.10	2.99	-0.11	2.99	0.00
Total	342.55	35.26	4.74	382.55	377.26	380.91	3.65	763.46	38.28

* 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	4410	0	-19	-217	3271	0	136	-471	4956
Haryana	5281	0	-198	-649	3319	0	136	-635	5281
Rajasthan	8543	0	-370	281	8376	0	17	1059	9747
Delhi	2776	0	-196	-519	1606	1	24	-920	2913
UP	10123	1210	-244	107	9264	1235	119	72	10123
Uttarakhand	1549	75	-71	413	1062	0	-55	439	1618
HP	1166	0	64	-141	807	0	41	422	1209
J&K	1949	0	32	334	1523	0	78	282	1949
Chandigarh	162	0	-18	0	86	0	-1	-31	162
Total	35958	1285	-1019	-391	29314	1236	495	218	35958

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

figures may not be at simultaneous hour.

Diversity is 1.06

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	1730	1808	1836	40.89	1704	41.52	-0.63
Rihand I STPS (2*500)	1000	870	817	907	21.32	888	20.16	1.16
Rihand II STPS (2*500)	1000	970	956	951	22.69	946	22.05	0.65
Rihand III STPS (2*500)	1000	964	958	848	21.79	908	21.16	0.63
Dadri I STPS (4*210)	840	799	597	582	14.60	608	13.99	0.61
Dadri II STPS (2*490)	980	980	814	695	19.30	804	20.11	-0.81
Unchahar I TPS (2*210)	420	400	333	335	8.68	362	8.49	0.19
Unchahar II TPS (2*210)	420	200	147	150	4.00	167	3.88	0.12
Unchahar III TPS (1*220)	210	200	152	151	4.12	172	3.86	0.16
I-STPP (Jhajhar) (3*500)	1500	1500	958	891	20.50	854	21.93	-1.33
Dadri GPS (4*130.19+2*154.51)	830	819	408	209	8.08	337	8.24	-0.16
Anta GPS (3*88.71+1*153.2)	419	398	244	235	5.95	248	6.28	-0.33
Auraiya GPS (4*111.19+2*109.30)	663	432	157	167	3.88	162	3.88	0.00
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	10267	8349	7957	196	8160	196	0
B. NPC								
NAPS (2*220)	440	294	329	334	7.04	293	7.06	-0.02
RAPS- B (2*220)	440	404	455	453	9.80	408	9.70	0.10
RAPS- C (2*220)	440	410	451	453	9.79	408	9.84	-0.05
Sub Total (B)	1320	1108	1235	1240	26.63	1109	26.59	0.04
C. NHPC								
Chamera I HPS (3*180)	540	534	515	0	2.51	105	2.50	0.01
Chamera II HPS (3*100)	300	300	308	0	1.31	54	1.38	-0.07
Chamera III HPS (3*77)	231	231	221	0	0.78	33	0.80	-0.02
Bairasuli HPS(3*60)	180	178	179	0	0.69	29	0.66	0.03
Salal-HPS (6*115)	690	165	225	203	4.07	170	3.95	0.12
Tanakpur-HPS (3*40)	94	40	61	40	0.96	40	0.97	-0.01
Uri-I HPS (4*120)	480	231	243	228	5.53	230	5.54	-0.01
Uri-II HPS (4*60)	240	132	162	133	3.19	133	3.18	0.01
Dhauliganga-HPS (4*70)	280	207	205	0	1.29	54	1.20	0.09
Dulhasti-HPS (3*130)	390	368	397	268	3.97	165	4.00	-0.03
Sewa-II HPS (3*40)	120	79	80	0	0.24	10	0.24	0.00
Parbati 3 (4*130)	520	260	232	0	0.52	22	0.55	-0.03
Sub Total (C)	4065	2725	2829	872	25	1044	25	0
D.SJVNL								
NJPC (6*250)	1500	1605	1589	0	8.46	353	8.50	-0.04
Rampur HEP (4*68.67)	275	333	301	0	2.10	87	2.11	-0.01
Sub Total (D)	1775	1938	1890	0	10.56	440	10.61	-0.04
E. THDC								
Tehri HPS (4*250)	1000	1060	1060	0	7.01	292	7.00	0.01
Koteshwar HPS (4*100)	400	104	200	91	2.60	108	2.50	0.10
Sub Total (E)	1400	1164	1260	91	9.60	400	9.50	0.10
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	525	1018	341	12.61	525	12.60	0.01
Dehar HPS (6*165)	990	142	495	0	3.55	148	3.40	0.15
Pong HPS (6*66)	396	194	318	132	4.57	191	4.65	-0.08
Sub Total (F)	2900	860	1831	473	20.73	864	20.65	0.08
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.57	24	0.56	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	860	0	4.56	190	4.80	-0.24
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	102	103	2.44	102	2.44	0.00
Budhil HPS(IPP)	70	0	0	0	0.05	2	0.05	0.00
Sub Total (G)	1662	0	962	103	7.62	317	7.85	-0.23
H. Total Regional Entities (A-G)	24419	18062	18357	10736	296.04	12335	295.81	0.24

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	3.78	157
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	90	2.09	87
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	362	363	8.82	368
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	688	692	15.47	645
	Talwandi Saboo (1*660)	660	364	387	8.96	373
	Thermal (Total)	4680	1664	1692	39.12	1630
	Total Hydro	1148	234	178	6.46	269
Total Punjab	5828	1898	1870	45.58	1899	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	213	208	4.88	203
	DCRTPP (Yamuna nagar) (2*300)	600	268	245	5.83	243
	Faridabad GPS (NTPC)	432	200	201	4.58	191
	RGTPP (khedar) (IPP) (2*600)	1200	1106	742	17.78	741
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	379	360	10.22	426
	Thermal (Total)	4944	2166	1756	43.29	1804
	Total Hydro	62	19	24	0.47	20
	Total Haryana	5006	2185	1780	43.76	1823
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	767	780	19.49
suratgarh TPS (6*250)		1500	987	996	24.25	1010
Chabra TPS (3*250)		750	418	440	10.20	425
Dholpur GPS (3*110)		330	100	126	2.94	123
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	165	195	4.45	185
RAPS A (NPC) (1*100+1*200)		300	183	174	4.33	180
Barsingsar (NLC) (2*125)		250	87	87	2.09	87
Giral LTPS (2*125)		250	67	44	1.19	50
Rajwest LTPS (IPP) (8*135)		1080	598	733	16.42	684
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	435	500	9.27	386
Kawai(Adani) (2*660)		1320	1147	1057	26.32	1097
Thermal (Total)		8026	4954	5132	121	5040
Total Hydro		550	161	131	4.36	182
Wind power		2798	44	47	1.29	54
Biomass		99	33	33	0.79	33
Solar		730	3	0	0.27	11
Renewable/Others (Total)		3627	80	80	2.34	98
Total Rajasthan		12203	5195	5343	127.65	5319
UP		Anpara TPS (3*210+2*500)	1630	903	906	21.70
	Obra TPS (2*50+2*94+5*200)	1194	313	304	7.40	308
	Paricha TPS (2*110+2*220+2*250)	1140	811	720	18.90	788
	Panki TPS (2*105)	210	117	122	2.80	117
	Harduaganj TPS (1*60+1*105+2*250)	665	164	264	5.50	229
	Tanda TPS (NTPC) (4*110)	440	275	280	6.80	283
	Roza TPS (IPP) (4*300)	1200	1035	1074	25.10	1046
	Anpara-C (IPP) (2*600)	1200	972	946	22.90	954
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	361	361	7.80	325
	Thermal (Total)	8129	4951	4977	118.90	4954
	Vishnuparyag HPS (IPP)	400	118	114	2.60	108
	Other Hydro	527	36	37	0.90	38
	Cogeneration	981	100	100	2.40	100
	Total UP	10037	5205	5228	124.80	5092
	Uttarakhand	Total Hydro	1398	459	234	7.49
Total Uttarakhand		1398	459	234	7.49	312
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	71	80	1.90	79
	Pragati Gas Turbine (2x104+ 1x122)	330	267	262	3.56	148
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	305	323	6.97	291
	Badarpur TPS (NTPC) (3*95+2*210)	705	336	310	7.87	328
	Thermal (Total)	2917	979	975	20.30	846
Total Delhi	2917	979	975	20.30	846	
HP	Baspa HPS (IPP) (2*150)	300	70	40	1.44	60
	Malana HPS (IPP) (2*43)	86	39	0	0.30	13
	Other Hydro	728	182	166	4.18	174
	Total HP	1114	291	206	5.92	247
J & K	Baqilhar HPS (IPP) (3*150)	450	296	148	4.84	202
	Other Hydro/IPP	436	103	81	2.21	92
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	399	229	7.06	294
Total State Control Area Generation		39597	16611	15865	382.55	15831
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2455	3591	105.01	4375
Total Regional Availability(Gross)		64017	37423	30192	783.60	32542

IV. Total Hydro Generation:

Regional Entities Hydro	11432	8670	1436	71.08	2962
State Control Area Hydro	5684	1599	1039	35.26	1361
Total Regional Hydro	17116	10269	2475	106.34	4322

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	-500	-450	0	500	0.00	11.18	-11.18
Gwalior-Agra (D/C)	517	975	1854	0	31.69	0.00	31.69
Zerda-Kankroli	-218	-262	43	302	0.00	3.50	-3.50
Zerda-Bhinmal	-119	-147	175	310	0.00	0.98	-0.98
Malanpur-Auraiya	-101	-152	0	156	0.00	2.68	-2.68
Badod-Kota/Morak	-129	-164	0	109	0.00	3.82	-3.82
Mundra-Mohindergarh(HVDC)	2202	2202	2205	0	53.20	0.00	53.20
Vindhychal - Rihand	465	388	498	0	9.93	0.00	9.93
Sub Total WR	2117	2390			94.82	22.15	72.67
Pusauli Bypass	200	50	200	0	3.67	0.00	3.67
MZP- GKP (D/C)	40	260	392	40	5.36	0.00	5.36
Patna-Balia(D/C)	432	607	721	0	15.19	0.00	15.19
B'Sharif-Balia (D/C)	-146	28	70	146	0.54	0.00	0.54
Pusauli-Balia	-175	-127	0	175	0.00	3.61	-3.61
Gaya-Fatehpur (765 Kv)	11	198	408	0	6.30	0.00	6.30
Pusauli-Sahupuri	87	84	135	0	2.64	0.00	2.64
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-24	0	40	0.00	0.65	-0.65
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-76	125	262	76	2.90	0.00	2.90
Sub Total ER	338	1201			36.60	4.26	32.34
Total IR Exch	2455	3591			131.42	26.41	105.01

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
19.17	0.94	20.11	5.59	-14.38	5.75	11.43	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
35.98	65.24	101.22	32.34	72.67	105.01	-3.64	7.43	3.79

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	0.22	1.11	23.37	46.45	24.63	21.11	6.70	0.00

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				
50.42	6.04	49.72	22.08	50.06	0.12	0.09	50.39	50.01

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	412	20:59	403	16:40	0.0	0.0	0.0	0.0
Gorakhpur	400	415	21:54	404	12:46	100.0	100.0	0.0	0.0
Bareilly	400	424	20:55	407	12:24	0.0	0.0	0.0	0.0
Kanpur	400	422	20:52	403	11:10	0.0	0.0	2.3	0.0
Dadri	400	423	20:51	406	12:20	0.0	0.0	7.1	0.0
Ballabgarh	400	431	20:57	413	11:10	0.0	0.0	58.5	0.7
Bawana	400	430	20:04	407	09:30	0.0	0.0	0.0	0.0
Bassi	400	429	20:29	395	07:47	0.0	0.0	11.3	0.0
Hissar	400	422	21:41	403	09:13	0.0	0.0	1.5	0.0
Moga	400	425	21:44	410	07:09	0.0	0.0	27.1	0.0
Abdullapur	400	428	20:32	396	07:20	0.0	0.0	31.3	0.0
Nalagarh	400	434	21:45	412	11:11	0.0	0.0	62.6	12.4
Kishenpur	400	428	03:23	399	18:21	0.0	0.0	20.8	0.0
Wagoora	400	424	20:10	397	18:20	0.0	0.0	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	779	20:58	742	11:10	0.0	0.0	0.0	0.0
Balia	765	771	05:03	749	10:38	0.0	0.0	0.0	0.0
Moga	765	806	21:43	776	07:19	0.0	0.0	6.9	0.0
Agra	765	797	20:57	756	11:10	0.0	0.0	0.0	0.0
Bhiwani	765	801	20:40	758	10:50	0.0	0.0	0.0	0.0
Unnao	765	762	21:46	740	09:14	0.0	3.8	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	504.98	1312.37	509.52	1530.03	192.27	389.61
Pong	426.72	384.05	411.77	555.85	418.55	821.34	53.97	292.20
Tehri	829.79	740.04	821.45	1033.00	822.55	1055.00	66.64	154.00
Koteshwar	612.50	598.50	609.22	4.21	610.20	4.69	164.00	172.00
Chamera-I	760.00	748.75	759.37	0.00	0.00	0.00	54.51	67.71
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	510.15	1.70	516.14	3.70	74.85	84.29

* 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	-484	13	0	-458	242	0	-10.90	4.84	-6.06
Delhi	-817	-88	-15	-597	93	-15	-14.42	-0.79	-15.21
Haryana	-802	167	0	-786	136	0	-20.31	3.41	-16.91
HP	422	0	0	398	-539	0	9.49	-3.94	5.55
J&K	282	0	0	334	0	0	6.65	0.54	7.19
CHD	-31	0	0	0	0	0	-0.24	0.00	-0.24
Rajasthan	490	568	2	490	-211	2	11.75	12.78	24.53
UP	72	0	0	107	0	0	1.85	0.00	1.85
Uttarakhand	293	146	0	293	120	0	7.03	3.27	10.30
Total	-574	806	-13	-220	-158	-13	-9.11	20.11	11.00

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-382	-484	336	3	0	0
Delhi	-437	-826	226	-148	-15	-15
Haryana	-786	-1005	169	46	0	0
HP	422	378	0	-858	0	0
J&K	351	236	49	0	0	0
CHD	0	-31	0	0	0	0
Rajasthan	490	490	1243	-366	2	2
UP	114	11	0	0	0	0
Uttarakhand	293	293	230	74	0	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 16.11.2014 :**

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 :**