

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पॉवरसिड की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 11.12.2014
Date of Reporting : 12.12.2014

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
39466	2027	41493	50.14	29770	842	30612	50.20	825.3	49.88

* 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	56.65	8.99		65.64	40.70	41.50	0.80	107.14	0.00
Haryana	60.69	0.39		61.08	61.50	62.90	1.40	123.98	0.04
Rajasthan	129.01	5.40	19.65	154.05	59.76	58.86	-0.90	212.91	0.00
Delhi	13.35			13.35	40.00	40.88	0.88	54.23	0.00
UP	139.32	1.96		141.28	83.24	81.55	-1.69	222.83	41.10
Uttarakhand		7.13		7.13	25.72	26.35	0.63	33.48	1.19
HP		4.49		4.49	20.00	20.80	0.80	25.29	0.05
J & K		5.33	0.00	5.33	34.10	36.60	2.50	41.93	7.50
Chandigarh				0.00	3.27	3.49	0.22	3.49	0.00
Total	399.03	33.68	19.65	452.36	368.29	372.93	4.64	825.29	49.88

* 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	5259	0	35	-384	3399	0	55	-383	5725
Haryana	6031	0	18	-799	4345	0	94	-790	6031
Rajasthan	9299	0	-330	-130	7608	0	-253	668	9804
Delhi	3052	0	-54	-161	1881	0	337	-898	3093
UP	10604	1600	-197	78	8882	550	-225	73	10710
Uttarakhand	1705	75	-34	698	1134	0	39	484	1743
HP	1384	8	22	338	780	0	35	339	1384
J&K	1950	344	-48	521	1657	292	96	623	1950
Chandigarh	183	0	-9	0	83	0	-2	-30	192
Total	39466	2027	-597	162	29770	842	176	86	39466

* 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	1450	1559	1502	36.64	1527	33.89	2.75
Rihand I STPS (2*500)	1000	908	931	853	20.10	838	20.15	-0.05
Rihand II STPS (2*500)	1000	970	1031	679	20.64	860	20.88	-0.24
Rihand III STPS (2*500)	1000	836	909	439	17.73	739	17.28	0.45
Dadri I STPS (4*210)	840	615	574	453	12.25	510	11.59	0.66
Dadri II STPS (2*490)	980	980	854	708	18.67	778	18.41	0.26
Unchahar I TPS (2*210)	420	364	357	316	7.89	329	7.74	0.15
Unchahar II TPS (2*210)	420	407	353	290	8.46	353	7.91	0.55
Unchahar III TPS (1*220)	210	203	175	144	4.22	176	3.94	0.27
I-STPP (Jhajhar) (3*500)	1500	1265	1126	878	22.80	950	24.53	-1.73
Dadri GPS (4*130.19+2*154.51)	830	825	558	508	13.00	542	12.82	0.18
Anta GPS (3*88.71+1*153.2)	419	385	219	231	5.83	243	5.98	-0.14
Auraiva GPS (4*111.19+2*109.30)	663	493	148	164	3.74	156	3.67	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	9705	8794	7165	192	8001	189	3
B. NPC								
NAPS (2*220)	440	293	335	337	7.05	294	7.03	0.01
RAPS- B (2*220)	440	412	457	458	9.88	412	9.89	-0.01
RAPS- C (2*220)	440	220	239	239	5.01	209	5.28	-0.27
Sub Total (B)	1320	925	1031	1034	21.94	914	22.20	-0.26
C. NHPC								
Chamera I HPS (3*180)	540	356	330	0	2.30	96	2.20	0.10
Chamera III HPS (3*100)	300	200	198	0	1.23	51	1.20	0.03
Chamera III HPS (3*77)	231	154	149	0	0.67	28	0.65	0.02
Bairasuli HPS(3*60)	180	179	179	0	0.54	23	0.50	0.04
Salal-HPS (6*115)	690	131	224	142	3.29	137	3.15	0.14
Tanakpur-HPS (3*40)	94	27	34	29	0.70	29	0.66	0.04
Uri-I HPS (4*120)	480	136	229	79	3.39	141	3.27	0.12
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	127	138	0	0.10	4	1.00	-0.90
Dulhasti-HPS (3*130)	390	387	391	0	3.02	126	2.90	0.12
Sewa-II HPS (3*40)	120	79	80	0	0.24	10	0.24	0.00
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	4065	1777	1952	250	15	645	16	0
D.SJVNL								
NJPC (6*250)	1500	1605	1599	0	7.70	321	7.64	0.06
Rampur HEP (4*68.67)	275	350	364	0	2.02	84	1.91	0.11
Sub Total (D)	1775	1955	1963	0	9.73	405	9.55	0.18
E. THDC								
Tehri HPS (4*250)	1000	1060	1010	0	7.38	307	7.30	0.08
Koteshwar HPS (4*100)	400	104	200	90	2.52	105	2.50	0.02
Sub Total (E)	1400	1164	1210	90	9.90	412	9.80	0.10
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	705	1047	495	16.85	702	16.92	-0.07
Dehar HPS (6*165)	990	125	165	0	3.08	128	3.00	0.08
Pong HPS (6*66)	396	274	324	126	6.56	273	6.59	-0.03
Sub Total (F)	2900	1104	1536	621	26.49	1104	26.51	-0.01
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	23	0	0.48	20	0.47	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	700	0	4.12	172	4.08	0.04
Malana Stg-II HPS (2*50)	100	0	0	0	0.16	7	0.18	-0.02
Shree Cement TPS (2*150)	300	0	255	70	4.27	178	5.14	-0.87
Budhil HPS(IPP)	70	0	0	0	0.08	3	0.07	0.00
Sub Total (G)	1662	0	978	70	9.11	380	9.95	-0.84
H. Total Regional Entities (A-G)	24419	16631	17464	9230	284.65	11860	282.67	1.98

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	850	840	19.97	832
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	120	2.54	106
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	433	335	8.95	373
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	709	676	17.34	722
	Talwandi Saboo (1*660)	660	350	363	7.86	327
	Thermal (Total)	4680	2462	2334	56.65	2361
	Total Hydro	1148	443	232	8.99	375
Total Punjab	5828	2905	2566	65.64	2735	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	970	911	22.38	933
	DCRTPP (Yamuna nagar) (2*300)	600	281	247	6.35	265
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	586	316	10.77	449
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	915	724	21.19	883
	Thermal (Total)	4944	2752	2198	60.69	2529
	Total Hydro	62	16	16	0.39	16
	Total Haryana	5006	2768	2214	61.08	2545
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	958	944	23.08
suratgarh TPS (6*250)		1500	987	980	22.83	951
Chabra TPS (3*250)		750	637	568	14.43	601
Dholpur GPS (3*110)		330	116	118	2.98	124
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	147	181	4.53	189
RAPS A (NPC) (1*100+1*200)		300	151	152	4.11	171
Barsingsar (NLC) (2*125)		250	161	186	4.19	175
Giral LTPS (2*125)		250	77	76	1.60	67
Rajwest LTPS (IPP) (8*135)		1080	733	568	13.72	572
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	540	520	13.37	557
Kawai(Adani) (2*660)		1320	1150	857	24.16	1007
Thermal (Total)		8026	5657	5150	129	5375
Total Hydro		550	246	101	5.40	225
Wind power		2798	701	580	18.57	774
Biomass		99	40	40	0.95	40
Solar		730	1	0	0.13	5
Renewable/Others (Total)		3627	742	620	19.65	819
Total Rajasthan	12203	6645	5871	154.05	6419	
UP	Anpara TPS (3*210+2*500)	1630	941	934	22.23	926
	Obra TPS (2*50+2*94+5*200)	1194	336	337	7.91	329
	Paricha TPS (2*110+2*220+2*250)	1140	788	764	18.38	766
	Panki TPS (2*105)	210	122	149	3.38	141
	Harduaganj TPS (1*60+1*105+2*250)	665	465	464	11.05	460
	Tanda TPS (NTPC) (4*110)	440	282	275	6.95	290
	Roza TPS (IPP) (4*300)	1200	756	574	16.90	704
	Anpara-C (IPP) (2*600)	1200	1051	1035	25.21	1050
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	402	280	8.11	338
	Thermal (Total)	8129	5143	4812	120.12	5005
	Vishnuparyag HPS (IPP)	400	90	90	0.00	0
	Other Hydro	527	31	28	1.96	81
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	6064	5730	141.28	5887
	Uttarakhand	Total Hydro	1398	470	212	7.13
Total Uttarakhand		1398	470	212	7.13	297
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	81	81	1.94	81
	Pragati Gas Turbine (2x104+ 1x122)	330	151	158	3.79	158
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	294	269	7.13	297
	Badarpur TPS (NTPC) (3*95+2*210)	705	215	215	0.51	21
	Thermal (Total)	2917	741	723	13.35	556
Total Delhi	2917	741	723	13.35	556	
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.09	45
	Malana HPS (IPP) (2*43)	86	36	0	0.20	8
	Other Hydro	728	184	106	3.20	133
	Total HP	1114	250	106	4.49	187
J & K	Baqilhar HPS (IPP) (3*150)	450	270	118	3.90	163
	Other Hydro/IPP	436	90	42	1.43	60
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	360	160	5.33	222
Total State Control Area Generation		39597	20203	17582	452.36	18848
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3078	3222	99.17	4132
Total Regional Availability(Gross)		64017	40745	30034	836.18	34841

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7384	961	66.35	2765
State Control Area Hydro	5684	1816	855	33.68	1403
Total Regional Hydro	17116	9200	1816	100.03	4168

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	-250	-150	50	350	0.01	5.49	-5.48
Gwalior-Agra (D/C)	1189	1186	1886	0	34.49	0.00	34.49
Zerda-Kankroli	-264	-226	0	353	0.00	4.08	-4.08
Zerda-Bhinmal	-194	-154	50	337	0.00	2.26	-2.26
Malanpur-Auraiya	-86	-107	0	125	0.00	2.20	-2.20
Badod-Kota/Morak	-124	-223	0	159	0.00	4.03	-4.03
Mundra-Mohindergarh(HVDC)	2298	2301	2305	0	55.63	0.00	55.63
Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	2569	2627			90.12	18.05	72.07
Pusauli Bypass	-315	-371	0	371	0.00	7.14	-7.14
MZP- GKP (D/C)	42	150	490	0	5.24	0.00	5.24
Patna-Balia(D/C)	426	415	712	0	12.67	0.00	12.67
B'Sharif-Balia (D/C)	47	79	0	229	2.89	0.00	2.89
Pusauli-Balia	-31	0	0	35	0.00	0.40	-0.40
Gaya-Fatehpur (765 Kv)	156	125	502	0	6.61	0.00	6.61
Pusauli-Sahupuri	116	118	180	0	2.81	0.00	2.81
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-43	-38	0	44	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	111	117	402	0	5.32	0.00	5.32
Sub Total ER	509	595			35.54	8.44	27.10
Total IR Exch	3078	3222			125.66	26.49	99.17

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
26.27	0.53	26.80	6.56	-9.75	3.29	4.90	6.01	-6.01

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mdra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
42.66	60.26	102.92	27.10	72.07	99.17	-15.56	11.81	-3.75

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	0.19	3.60	17.73	44.39	45.75	19.31	12.80	4.48	NA

←----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	(Hz)	(Hz)		
50.36	21.14	49.69	12.19	50.01	0.12	0.11	50.34	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	415	03:03	404	18:07	0.0	0.0	0.0	0.0
Gorakhpur	400	430	20:59	407	12:14	0.0	0.0	45.2	0.0
Bareilly	400	424	04:04	401	18:09	0.0	0.0	15.9	0.0
Kanpur	400	425	03:03	403	10:10	0.0	0.0	15.2	0.0
Dadri	400	427	04:01	402	10:24	0.0	0.0	20.4	0.0
Ballabgarh	400	435	04:03	406	10:24	0.0	0.0	41.7	6.9
Bawana	400	430	04:02	405	10:19	0.0	0.0	31.4	0.0
Bassi	400	423	04:03	390	10:38	0.0	0.0	1.0	0.0
Hissar	400	418	04:03	391	10:38	0.0	0.0	0.0	0.0
Moga	400	425	03:04	396	10:21	0.0	0.0	12.5	0.0
Abdullapur	400	426	20:55	396	11:18	0.0	0.0	10.6	0.0
Nalagarh	400	427	20:34	393	12:32	0.0	0.0	10.7	0.0
Kishenpur	400	230	01:57	215	07:19	100.0	100.0	0.0	0.0
Wagoora	400	407	01:57	374	18:52	6.3	31.7	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	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Balia	765	765	05:02	723	12:14	0.0	0.0	100.0	100.0
Moga	765	795	03:04	744	10:10	0.0	0.0	100.0	100.0
Agra	765	816	04:03	770	08:48	0.0	0.0	100.0	100.0
Bhiwani	765	804	04:03	756	10:19	0.0	0.0	100.0	100.0
Unnao	765	766	04:04	736	17:53	0.0	0.0	100.0	100.0

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	500.94	1140.31	505.96	1352.81	120.83	500.39
Pong	426.72	384.05	408.59	444.61	415.21	680.86	54.00	439.31
Tehri	829.79	740.04	815.85	922.00	818.40	970.00	48.40	166.00
Koteshwar	612.50	598.50	609.80	4.69	610.05	4.55	166.00	167.00
Chamera-I	760.00	748.75	759.54	0.00	0.00	0.00	54.59	61.63
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	508.61	2.30	513.63	3.13	53.54	28.00

* 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	-391	8	0	-411	27	0	-10.44	0.51	-9.94
Delhi	-864	-4	-30	-521	372	-12	-14.41	2.64	-11.77
Haryana	-936	146	0	-920	121	0	-23.79	2.66	-21.13
HP	431	-92	0	401	-63	0	10.95	-2.90	8.06
J&K	623	0	0	440	81	0	12.15	1.58	13.74
CHD	-30	0	0	0	0	0	-0.24	0.03	-0.22
Rajasthan	490	177	1	490	-622	1	15.78	0.21	15.99
UP	73	0	0	78	0	0	1.35	0.00	1.35
Uttarakhand	215	227	41	215	483	0	5.16	8.48	13.64
Total	-388	462	12	-226	399	-11	-3.48	13.20	9.72

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-391	-485	194	0	0	0
Delhi	-426	-864	393	-10	-12	-30
Haryana	-920	-1105	147	69	0	0
HP	496	382	74	-480	0	0
J&K	623	440	130	-17	0	0
CHD	0	-30	15	0	0	0
Rajasthan	849	490	443	-896	1	0
UP	115	-10	0	0	0	0
Uttarakhand	215	215	490	1	41	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 11.12.2014 :**

Fog in Eastern UP

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 :**