

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.12.2014
Date of Reporting : 10.12.2014

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
38839	2490	41329	50.10	30256	835	31091	50.13	819.4	41.44

* 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	53.16	10.40		67.48	41.70	43.00	1.30	110.48	0.00
Haryana	52.34	0.29		53.22	62.29	63.30	1.01	116.52	5.30
Rajasthan	135.38	4.39	3.48	142.60	64.85	63.60	-1.25	206.20	0.00
Delhi	18.26			18.40	41.00	40.85	-0.15	59.25	0.00
UP	141.80	3.40		146.80	80.60	78.60	-2.00	225.40	35.55
Uttarakhand		7.30		7.20	23.80	24.20	0.40	31.40	0.48
HP		4.70		4.70	19.90	20.00	0.10	24.70	0.12
J & K		5.57	0.00	5.70	33.90	36.30	2.40	42.00	0.00
Chandigarh				0.00	3.22	3.40	0.18	3.40	0.00
Total	400.93	36.04	3.48	446.10	371.26	373.25	1.99	819.35	41.44

† 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	5213	0	-26	-376	3759	0	149	-354	5434
Haryana	5785	205	67	-589	4179	0	-37	-780	5785
Rajasthan	9135	0	-131	309	8034	0	102	982	9536
Delhi	3056	0	43	-144	1676	0	112	-865	3074
UP	10635	1600	-91	78	9067	550	-163	73	10635
Uttarakhand	1650	75	54	679	1093	0	125	355	1735
HP	1133	99	-77	363	748	0	7	312	1346
J&K	2046	511	-13	518	1618	285	33	614	2046
Chandigarh	187	0	-3	0	83	0	-4	-30	188
Total	38839	2490	-177	839	30256	835	323	305	38839

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

figures may not be at simultaneous hour.

Diversity is 1.02

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	1550	1308	31.28	1303	31.05	0.23
Rihand I STPS (2*500)	1000	870	949	822	20.20	842	20.28	-0.08
Rihand II STPS (2*500)	1000	970	1043	852	21.90	913	22.00	-0.10
Rihand III STPS (2*500)	1000	475	507	465	11.10	463	11.05	0.05
Dadri I STPS (4*210)	840	615	450	415	10.40	433	10.85	-0.45
Dadri II STPS (2*490)	980	980	853	672	18.90	788	19.65	-0.75
Unchahar I TPS (2*210)	420	403	385	317	9.30	388	9.02	0.28
Unchahar II TPS (2*210)	420	399	360	295	8.90	371	8.30	0.60
Unchahar III TPS (1*220)	210	200	181	140	4.40	183	4.18	0.22
I-STPP (Jhajjar) (3*500)	1500	1210	926	889	21.72	905	23.53	-1.81
Dadri GPS (4*130.19+2*154.51)	830	772	394	406	7.10	296	7.39	-0.29
Anta GPS (3*88.71+1*153.2)	419	410	237	236	5.80	242	5.94	-0.14
Auraiva GPS (4*111.19+2*109.30)	663	493	307	306	7.40	308	7.29	0.11
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	9097	8138	7123	178	7435	181	-2
B. NPC								
NAPS (2*220)	440	295	322	329	7.06	294	7.08	-0.02
RAPS- B (2*220)	440	389	452	455	9.88	412	9.34	0.55
RAPS- C (2*220)	440	215	238	238	5.02	209	5.16	-0.14
Sub Total (B)	1320	899	1012	1022	21.97	915	21.58	0.39
C. NHPC								
Chamera I HPS (3*180)	540	356	366	0	1.82	76	1.70	0.12
Chamera II HPS (3*100)	300	200	208	0	1.33	55	1.26	0.07
Chamera III HPS (3*77)	231	154	128	0	0.70	29	0.65	0.05
Bairasuli HPS(3*60)	180	178	180	0	0.56	23	0.50	0.06
Salal-HPS (6*115)	690	129	110	146	3.21	134	3.30	-0.09
Tanakpur-HPS (3*40)	94	28	50	26	0.66	28	0.68	-0.02
Uri-I HPS (4*120)	480	142	236	84	3.54	147	3.40	0.14
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	138	140	0	1.04	43	1.00	0.04
Dulhasti-HPS (3*130)	390	387	393	0	3.03	126	2.90	0.13
Sewa-II HPS (3*40)	120	79	0	0	0.00	0	0.24	-0.24
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	4065	1791	1811	256	16	662	16	0
D. SJVNL								
NJPC (6*250)	1500	1605	1052	256	8.42	351	8.18	0.25
Rampur HEP (4*68.67)	275	350	299	0	1.42	59	1.37	0.04
Sub Total (D)	1775	1955	1351	256	9.84	410	9.55	0.29
E. THDC								
Tehri HPS (4*250)	1000	1060	1003	0	6.29	262	6.20	0.09
Koteshwar HPS (4*100)	400	91	100	90	2.24	93	2.20	0.04
Sub Total (E)	1400	1151	1103	90	8.53	355	8.40	0.13
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	631	1046	487	15.28	637	15.14	0.14
Dehar HPS (6*165)	990	123	165	0	2.95	123	2.94	0.00
Pong HPS (6*66)	396	266	384	60	6.38	266	6.38	0.00
Sub Total (F)	2900	1019	1595	547	24.61	1025	24.46	0.14
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	30	0	0.50	21	0.44	0.05
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	700	0	4.37	182	4.32	0.05
Malana Stg-II HPS (2*50)	100	0	0	0	0.21	9	0.20	0.01
Shree Cement TPS (2*150)	300	0	149	115	3.26	136	3.29	-0.03
Budhil HPS(IPP)	70	0	0	0	0.15	6	0.15	0.00
Sub Total (G)	1662	0	878	115	8.48	353	8.39	0.09
H. Total Regional Entities (A-G)	24419	15912	15889	9409	267.75	11156	268.62	-0.87

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	640	480	14.01	584	
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	120	2.53	105	
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	367	336	9.08	378	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura (2*700)	1400	704	680	19.79	824	
	Talwandi Saboo (1*660)	660	360	362	7.76	323	
	Thermal (Total)	4680	2191	1978	53.16	2215	
	Total Hydro	1148	484	252	10.40	433	
Total Punjab	5828	2675	2230	63.56	2648		
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	972	926	22.60	942	
	DCRTPP (Yamuna nagar) (2*300)	600	279	245	6.32	263	
	Faridabad GPS (NTPC)	432	0	0	0.00	0	
	RGTPP (khedar) (IPP) (2*600)	1200	587	382	12.72	530	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP) (2*660)	1320	375	379	10.70	446	
	Thermal (Total)	4944	2213	1932	52.34	2181	
	Total Hydro	62	11	10	0.29	12	
	Total Haryana	5006	2224	1942	52.62	2193	
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	763	952	20.66	861
suratgarh TPS (6*250)		1500	1179	982	26.17	1090	
Chabra TPS (3*250)		750	622	572	14.78	616	
Dholpur GPS (3*110)		330	113	116	2.98	124	
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	190	201	4.99	208	
RAPS A (NPC) (1*100+1*200)		300	144	149	4.09	170	
Barsingsar (NLC) (2*125)		250	162	162	4.48	187	
Giral LTPS (2*125)		250	71	72	1.44	60	
Rajwst LTPS (IPP) (8*135)		1080	733	734	17.14	714	
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0	
Kalisindh Thermal(1*600)		600	540	392	12.38	516	
Kawai(Adani) (2*660)		1320	1183	934	26.27	1095	
Thermal (Total)		8026	5700	5266	135	5641	
Total Hydro		550	296	150	4.39	183	
Wind power		2798	116	95	2.32	97	
Biomass		99	39	39	0.94	39	
Solar		730	0	0	0.22	9	
Renewable/Others (Total)		3627	155	134	3.48	145	
Total Rajasthan		12203	6151	5550	143.26	5969	
UP		Anpara TPS (3*210+2*500)	1630	1302	1342	30.20	1258
	Obra TPS (2*50+2*94+5*200)	1194	239	224	5.70	238	
	Paricha TPS (2*110+2*220+2*250)	1140	713	694	16.70	696	
	Panki TPS (2*105)	210	149	140	3.50	146	
	Harduaganj TPS (1*60+1*105+2*250)	665	459	439	10.80	450	
	Tanda TPS (NTPC) (4*110)	440	284	274	6.60	275	
	Roza TPS (IPP) (4*300)	1200	788	610	16.40	683	
	Anpara-C (IPP) (2*600)	1200	1065	1017	25.10	1046	
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	402	281	7.60	317	
	Thermal (Total)	8129	5401	5021	122.60	5108	
	Vishnuparyag HPS (IPP)	400	91	92	2.10	88	
	Other Hydro	527	162	27	1.30	54	
	Cogeneration	981	800	800	19.20	800	
	Total UP	10037	6454	5940	145.20	5963	
	Uttarakhand	Total Hydro	1398	418	223	7.30	304
		Total Uttarakhand	1398	418	223	7.30	304
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0	
	Delhi Gas Turbine (6x30 + 3x34)	282	79	79	1.92	80	
	Pragati Gas Turbine (2x104+ 1x122)	330	147	154	3.68	153	
	Rithala GPS (3*36)	95	0	0	0.00	0	
	Bawana GPS (6*250)	1370	299	271	7.19	300	
	Badarpur TPS (NTPC) (3*95+2*210)	705	222	219	5.48	228	
	Thermal (Total)	2917	747	723	18.26	761	
Total Delhi	2917	747	723	18.26	761		
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.08	45	
	Malana HPS (IPP) (2*43)	86	0	0	0.22	9	
	Other Hydro	728	100	103	3.40	141	
	Total HP	1114	130	103	4.70	196	
J & K	Baqilhar HPS (IPP) (3*150)	450	298	120	4.11	171	
	Other Hydro/IPP	436	91	42	1.46	61	
	Gas/Diesel/Others	209	0	0	0.00	0	
	Total J & K	1094	389	162	5.57	232	
Total State Control Area Generation		39597	19188	16873	440.46	18265	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4763	4636	119.65	4986	
Total Regional Availability(Gross)		64017	39840	30918	827.86	34407	

IV. Total Hydro Generation:

Regional Entities Hydro	11432	6590	1149	63.94	2664
State Control Area Hydro	5684	1890	927	36.04	1414
Total Regional Hydro	17116	8480	2076	99.98	4078

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	50	-200	250	300	0.78	3.46	-2.67
Gwalior-Agra (D/C)	1836	1445	2077	0	40.34	0.00	40.34
Zerda-Kankroli	-73	-83	65	235	0.00	1.26	-1.26
Zerda-Bhinmal	3	11	183	238	0.80	0.00	0.80
Malanpur-Auraiya	-58	-111	0	124	0.00	2.42	-2.42
Badod-Kota/Morak	31	144	0	0	0.00	2.37	-2.37
Mundra-Mohindergarh(HVDC)	2304	2301	2313	0	55.15	0.00	55.15
Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	4093	3507			97.07	9.52	87.55
Pusauli Bypass	-385	-235	0	393	0.00	6.66	-6.66
MZP- GKP (D/C)	80	236	528	0	6.74	0.00	6.74
Patna-Balia(D/C)	406	555	675	0	13.16	0.00	13.16
B'Sharif-Balia (D/C)	118	116	312	0	4.22	0.00	4.22
Pusauli-Balia	19	7	20	0	0.11	0.00	0.11
Gaya-Fatehpur (765 Kv)	164	192	505	0	7.21	0.00	7.21
Pusauli-Sahupuri	142	112	148	0	2.48	0.00	2.48
K'nasa-Sahupuri	0	0	0	0	0.00	0.48	-0.48
Son Ngr-Rihand	-36	-28	0	40	0.00	0.80	-0.80
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	162	174	402	0	6.12	0.00	6.12
Sub Total ER	670	1129			40.04	7.94	32.10
Total IR Exch	4763	4636			137.10	17.45	119.65

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
26.77	0.59	27.37	5.83	-9.12	6.60	10.96	6.19	-6.19

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
45.99	73.07	119.06	32.10	87.55	119.65	-13.89	14.48	0.59

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	1.15	4.96	19.82	51.64	51.74	14.63	12.03	1.78	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.29	21.58	49.61	6.37	49.98	0.12	0.11	50.26	49.77

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	413	23:27	402	20:05	0.0	0.0	0.0	0.0
Gorakhpur	400	412	03:01	392	17:40	0.0	0.0	0.0	0.0
Bareilly	400	425	02:03	400	06:51	0.0	0.0	20.8	0.0
Kanpur	400	423	02:00	402	12:22	0.0	0.0	18.3	0.0
Dadri	400	423	02:03	404	14:56	0.0	0.0	15.7	0.0
Ballabgarh	400	430	02:00	407	14:57	0.0	0.0	40.6	0.0
Bawana	400	428	02:00	407	14:56	0.0	0.0	38.9	0.0
Bassi	400	427	20:48	388	07:43	0.0	0.8	8.3	0.0
Hissar	400	418	20:59	394	11:30	0.0	0.0	0.0	0.0
Moga	400	423	02:00	402	08:45	0.0	0.0	28.0	0.0
Abdullapur	400	423	01:58	396	18:10	0.0	0.0	19.3	0.0
Nalagarh	400	427	21:00	402	11:29	0.0	0.0	16.8	0.0
Kishenpur	400	422	01:57	392	11:30	0.0	0.0	7.5	0.0
Wagoora	400	403	02:00	370	07:56	32.2	66.9	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	02:02	740	14:46	0.0	0.9	0.0	0.0
Balia	765	775	04:02	740	14:56	0.0	0.9	0.0	0.0
Moga	765	802	21:01	753	14:56	0.0	0.0	0.9	0.0
Agra	765	796	02:01	752	08:47	0.0	0.0	0.0	0.0
Bhiwani	765	809	21:00	767	14:56	0.0	0.0	29.2	0.0
Unnao	765	767	04:01	729	14:45	0.0	39.2	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	501.39	1153.36	506.40	1367.40	144.30	468.19
Pong	426.72	384.05	408.92	464.36	415.54	693.24	64.11	425.35
Tehri	829.79	740.04	816.25	925.00	818.75	980.00	48.44	142.00
Koteshwar	612.50	598.50	609.78	4.44	610.10	4.69	142.00	149.00
Chamera-I	760.00	748.75	759.64	30.96	757.21	23.16	44.34	48.74
Rihand	268.22	252.98	853.30	309.60	857.70	385.10	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	508.72	3.49	513.86	2.85	32.93	74.63

* 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	36	0	-411	34	0	-10.65	0.61	-10.04
Delhi	-803	-37	-25	-521	387	-10	-14.41	3.53	-10.88
Haryana	-936	156	0	-721	132	0	-22.89	3.11	-19.78
HP	431	-119	0	401	-39	0	10.95	-2.36	8.59
J&K	565	49	0	437	81	0	11.90	1.85	13.74
CHD	-30	0	0	0	0	0	-0.24	0.12	-0.13
Rajasthan	490	490	2	490	-183	2	15.78	5.67	21.45
UP	73	0	0	78	0	0	1.28	0.00	1.28
Uttarakhand	215	131	9	215	427	37	5.16	8.10	13.26
Total	-386	706	-15	-30	840	28	-3.11	20.62	17.51

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-391	-594	181	0	0	0
Delhi	-475	-803	505	-61	-10	-25
Haryana	-622	-1105	157	97	0	0
HP	496	382	-27	-289	0	0
J&K	565	437	130	0	0	0
CHD	0	-30	20	0	0	0
Rajasthan	849	490	492	-716	2	2
UP	110	-10	0	0	0	0
Uttarakhand	215	215	471	131	49	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 09.12.2014 :**

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 :**