

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 27.12.2014
Date of Reporting : 28.12.2014

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
40166	2311	42478	50.09	31258	1467	32725	50.11	857.9	56.48

* 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	50.36	7.29		57.64	37.10	36.34	-0.77	93.98	0.00
Haryana	58.19	0.43		58.63	62.78	61.55	-1.23	120.18	0.33
Rajasthan	110.42	5.60	1.67	117.69	88.79	91.22	2.44	208.91	0.00
Delhi	27.89			27.89	45.97	46.79	0.82	74.68	0.00
UP	153.10	5.20		158.30	90.63	94.14	3.51	252.44	47.21
Uttarakhand		6.76		6.76	26.93	27.69	0.75	34.44	0.78
HP		4.10		4.10	21.38	21.53	0.15	25.63	0.48
J & K		4.85	0.00	4.85	35.55	38.69	3.15	43.55	7.69
Chandigarh				0.00	4.00	4.11	0.27	4.11	0.00
Total	399.96	34.23	1.67	435.86	413.12	422.05	9.09	857.91	56.48

* 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	4774	0	-135	-438	3039	0	157	-357	5130
Haryana	5719	346	-83	-852	4213	56	-114	-768	5861
Rajasthan	9399	0	216	888	8116	0	-14	1431	9823
Delhi	3767	0	-114	233	1957	0	78	-1034	4161
UP	11389	1575	-184	120	10073	1080	-1	73	11510
Uttarakhand	1737	40	93	629	1219	0	63	550	1864
HP	1290	20	-129	412	779	20	-9	521	1351
J&K	1874	331	30	644	1763	311	172	666	2001
Chandigarh	217	0	12	0	100	0	8	-31	238
Total	40166	2311	-294	1636	31258	1467	341	1052	40166

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

figures may not be at simultaneous hour.

Diversity is 1.04

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	1560	1550	37.55	1565	34.73	2.82
Rihand I STPS (2*500)	1000	875	942	939	22.95	956	20.95	2.00
Rihand II STPS (2*500)	1000	965	1025	1043	24.28	1012	22.55	1.73
Rihand III STPS (2*500)	1000	967	1006	940	23.44	977	22.16	1.28
Dadri I STPS (4*210)	840	575	512	403	12.71	530	11.77	0.94
Dadri II STPS (2*490)	980	856	626	626	18.57	774	17.99	0.58
Unchahar I TPS (2*210)	420	396	376	368	9.45	394	8.77	0.68
Unchahar II TPS (2*210)	420	396	356	305	9.03	376	8.24	0.79
Unchahar III TPS (1*220)	210	198	167	158	4.57	190	4.22	0.35
I-STPP (Jhajjar) (3*500)	1500	1042	950	780	20.93	872	22.19	-1.26
Dadri GPS (4*130.19+2*154.51)	830	844	376	180	7.72	322	7.91	-0.18
Anta GPS (3*88.71+1*153.2)	419	426	214	205	5.42	226	5.40	0.02
Auraiva GPS (4*111.19+2*109.30)	663	675	299	163	6.60	275	6.41	0.18
Dadri Solar	5	1	0	0	0.01	0	0.02	-0.01
Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
Sub Total (A)	11297	9667	8409	7660	203	8469	193	10
B. NPC								
NAPS (2*220)	440	326	373	369	7.96	332	7.82	0.13
RAPS- B (2*220)	440	415	452	455	9.84	410	9.96	-0.12
RAPS- C (2*220)	440	220	0	0	-0.03	-1	5.28	-5.31
Sub Total (B)	1320	961	825	824	17.76	740	23.06	-5.30
C. NHPC								
Chamera I HPS (3*180)	540	356	363	0	1.28	53	1.20	0.08
Chamera III HPS (3*100)	300	300	307	0	1.18	49	1.10	0.08
Chamera III HPS (3*77)	231	154	153	0	0.68	28	0.65	0.03
Bairasuli HPS(3*60)	180	179	133	0	0.41	17	0.36	0.05
Salal-HPS (6*115)	690	110	225	125	2.73	114	2.64	0.09
Tanakpur-HPS (3*40)	94	26	44	27	0.68	28	0.62	0.06
Uri-I HPS (4*120)	480	111	208	113	2.86	119	2.65	0.21
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	69	70	0	1.13	47	1.14	-0.01
Dulhasti-HPS (3*130)	390	387	401	0	2.95	123	2.80	0.15
Sewa-II HPS (3*40)	120	79	71	0	0.25	10	0.24	0.01
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	4065	1772	1976	265	14	590	13	1
D.SJVNL								
NJPC (6*250)	1500	1605	1307	0	7.22	301	7.20	0.02
Rampur HEP (4*68.67)	275	420	426	0	2.02	84	1.99	0.03
Sub Total (D)	1775	2025	1733	0	9.24	385	9.19	0.05
E. THDC								
Tehri HPS (4*250)	1000	1032	1035	0	7.90	329	7.75	0.15
Koteshwar HPS (4*100)	400	116	300	0	2.88	120	2.80	0.08
Sub Total (E)	1400	1148	1335	0	10.77	449	10.55	0.22
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	590	1051	347	14.53	605	14.17	0.36
Dehar HPS (6*165)	990	134	165	0	2.92	122	3.23	-0.31
Pong HPS (6*66)	396	234	384	60	5.64	235	5.61	0.03
Sub Total (F)	2900	958	1600	407	23.09	962	23.00	0.08
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.45	19	0.43	0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	622	0	3.66	152	3.60	0.05
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	278	232	6.39	266	6.23	0.16
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	900	232	10.49	437	10.27	0.23
H. Total Regional Entities (A-G)	24419	16532	16778	9388	288.76	12032	282.88	5.88

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	870	850	19.77	824
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	100	2.18	91
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	456	355	8.65	360
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	555	360	11.91	496
	Talwandi Saboo (1*660)	660	358	341	7.84	327
	Thermal (Total)	4680	2329	2006	50.36	2098
	Total Hydro	1148	421	207	7.29	304
Total Punjab	5828	2750	2213	57.64	2402	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	757	948	18.88	787
	DCRTPP (Yamuna nagar) (2*300)	600	274	240	6.27	261
	Faridabad GPS (NTPC)	432	357	283	7.39	308
	RGTPP (khedar) (IPP) (2*600)	1200	555	355	12.59	525
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	610	367	13.08	545
	Thermal (Total)	4944	2553	2193	58.19	2425
	Total Hydro	62	14	11	0.43	18
	Total Haryana	5006	2567	2204	58.63	2443
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1024	807	21.44
suratgarh TPS (6*250)		1500	1328	1346	31.74	1322
Chabra TPS (3*250)		750	568	592	14.72	613
Dholpur GPS (3*110)		330	66	0	0.33	14
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	196	198	4.92	205
RAPS A (NPC) (1*100+1*200)		300	151	152	4.16	173
Barsingsar (NLC) (2*125)		250	187	187	4.39	183
Giral LTPS (2*125)		250	0	45	0.82	34
Rajwest LTPS (IPP) (8*135)		1080	608	612	14.66	611
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	0	0	0.00	0
Kawai(Adani) (2*660)		1320	547	548	13.22	551
Thermal (Total)		8026	4675	4487	110	4601
Total Hydro		550	386	126	5.60	233
Wind power		2798	56	44	1.01	42
Biomass		99	21	21	0.56	23
Solar		730	1	0	0.10	4
Renewable/Others (Total)		3627	78	65	1.67	70
Total Rajasthan		12203	5139	4678	117.69	4904
UP	Anpara TPS (3*210+2*500)	1630	1256	1125	28.30	1179
	Obra TPS (2*50+2*94+5*200)	1194	347	325	8.10	338
	Paricha TPS (2*110+2*220+2*250)	1140	734	799	18.50	771
	Panki TPS (2*105)	210	72	135	2.50	104
	Harduaganj TPS (1*60+1*105+2*250)	665	464	472	11.20	467
	Tanda TPS (NTPC) (4*110)	440	388	369	9.40	392
	Roza TPS (IPP) (4*300)	1200	1062	927	23.50	979
	Anpara-C (IPP) (2*600)	1200	976	1014	23.70	988
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	401	402	8.70	363
	Thermal (Total)	8129	5700	5568	133.90	5579
	Vishnuparyag HPS (IPP)	400	82	79	1.90	79
	Other Hydro	527	98	134	3.30	138
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	6680	6581	158.30	6517
Uttarakhand	Total Hydro	1398	396	218	6.76	282
	Total Uttarakhand	1398	396	218	6.76	282
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	82	82	1.91	80
	Pragati Gas Turbine (2x104+ 1x122)	330	285	290	6.62	276
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	483	482	11.47	478
	Badarpur TPS (NTPC) (3*95+2*210)	705	300	209	7.89	329
	Thermal (Total)	2917	1150	1063	27.89	1162
Total Delhi	2917	1150	1063	27.89	1162	
HP	Baspa HPS (IPP) (2*150)	300	27	0	0.96	40
	Malana HPS (IPP) (2*43)	86	0	0	0.28	12
	Other Hydro	728	208	59	2.86	119
	Total HP	1114	235	59	4.10	171
J & K	Baqilhar HPS (IPP) (3*150)	450	150	148	3.59	150
	Other Hydro/IPP	436	64	48	1.26	53
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	214	196	4.85	202
Total State Control Area Generation		39597	19131	17212	435.86	18082
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5374	5180	154.36	6432
Total Regional Availability(Gross)		64017	41283	31780	878.98	36545

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7266	672	61.35	2556
State Control Area Hydro	5684	1764	951	34.23	1347
Total Regional Hydro	17116	9030	1623	95.58	3903

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	
Vindhyachal B/B	100	-50	400	50	4.48	0.11	4.37
Gwalior-Agra (D/C)	1595	1605	2291	0	45.59	0.00	45.59
Zerda-Kankroli	-33	-78	142	83	0.46	0.00	0.46
Zerda-Bhinmal	75	17	276	10	2.80	0.00	2.80
Malanpur-Auraiya	-100	-100	0	105	0.00	2.13	-2.13
Badod-Kota/Morak	2	-39	50	9	8.97	6.48	2.49
Mundra-Mohindergarh(HVDC)	2098	2301	2305	0	50.32	0.00	50.32
Vindhyachal - Rihand	486	319	506	0	10.23	0.00	10.23
Sub Total WR	4223	3975			122.85	8.72	114.14
Pusauli Bypass	500	500	500	0	10.89	0.00	10.89
MZP- GKP (D/C)	-40	60	264	110	1.91	0.00	1.91
Patna-Balia(D/C)	542	518	682	0	16.34	0.00	16.34
B'Sharif-Balia (D/C)	-58	-153	142	153	0.00	0.16	-0.16
Pusauli-Balia	0	0	0	0	0.00	0.00	0.00
Gaya-Fatehpur (765 Kv)	194	215	479	0	7.34	0.00	7.34
Pusauli-Sahupuri	112	96	169	0	3.01	0.00	3.01
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-36	0	42	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-59	5	271	104	1.78	0.00	1.78
Sub Total ER	1151	1205			41.27	1.05	40.23
Total IR Exch	5374	5180			164.13	9.76	154.36

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
28.27	0.32	28.59	12.25	-9.69	8.29	28.76	5.89	-5.89

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
55.02	100.33	155.35	40.23	114.14	154.36	-14.80	13.80	-0.99

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	1.64	5.93	23.65	59.56	52.87	12.79	8.96	2.27	NA

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				
50.36	13:12:00	49.58	03:07:12	49.97	0.13	0.11	50.34	49.83

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	409	00:00	403	14:44	0.0	0.0	0.0	0.0
Gorakhpur	400	409	02:03	388	17:26	0.0	1.3	0.0	0.0
Bareilly	400	420	00:01	397	10:20	0.0	0.0	0.0	0.0
Kanpur	400	418	00:00	396	10:19	0.0	0.0	0.0	0.0
Dadri	400	420	02:03	397	10:26	0.0	0.0	0.0	0.0
Ballabgarh	400	426	01:57	399	10:20	0.0	0.0	30.4	0.0
Bawana	400	426	02:24	404	10:20	0.0	0.0	26.7	0.0
Bassi	400	427	20:54	387	10:22	0.0	0.5	8.6	0.0
Hissar	400	416	02:02	392	10:20	0.0	0.0	0.0	0.0
Moga	400	423	02:03	399	10:21	0.0	0.0	10.2	0.0
Abdullapur	400	422	02:29	396	18:17	0.0	0.0	3.7	0.0
Nalagarh	400	429	20:59	408	10:20	0.0	0.0	32.5	0.0
Kishenpur	400	417	03:00	385	10:27	0.0	9.3	0.0	0.0
Wagoora	400	397	02:50	359	18:33	57.5	78.8	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	23:30	734	10:21	0.0	13.1	0.0	0.0
Balia	765	767	23:37	728	10:18	0.0	49.4	0.0	0.0
Moga	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Agra	765	794	21:53	745	10:21	0.0	0.0	0.0	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	765	00:00	727	10:20	0.5	49.5	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	498.49	1029.80	503.01	1219.07	130.91	413.88
Pong	426.72	384.05	406.04	370.28	412.62	588.94	49.64	387.52
Tehri	829.79	740.04	811.30	822.28	814.20	882.26	42.37	182.00
Koteshwar	612.50	598.50	610.05	4.69	609.58	4.21	182.00	191.00
Chamera-I	760.00	748.75	759.35	0.00	0.00	0.00	42.12	34.20
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	507.66	1.27	511.95	2.88	41.16	72.30

* 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	-418	61	0	-438	0	0	-11.11	0.58	-10.53
Delhi	-902	-101	-31	-546	778	0	-14.04	10.00	-4.04
Haryana	-892	124	0	-892	40	0	-22.60	1.68	-20.91
HP	475	46	0	446	-33	0	11.88	-1.63	10.25
J&K	599	67	0	424	220	0	11.54	3.35	14.89
CHD	-31	0	0	0	0	0	-0.25	0.13	-0.12
Rajasthan	847	584	0	847	42	0	22.84	13.70	36.54
UP	73	0	0	120	0	0	0.88	0.00	0.88
Uttarakhand	213	288	49	213	387	29	5.12	10.64	15.76
Total	-36	1069	18	173	1434	29	4.26	38.45	42.71

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-418	-513	198	0	0	0
Delhi	-246	-902	1050	-108	0	-31
Haryana	-892	-1042	125	29	0	0
HP	569	426	49	-401	0	0
J&K	599	424	225	26	0	0
CHD	0	-31	59	0	0	0
Rajasthan	1129	847	1121	-318	0	0
UP	132	-133	0	0	0	0
Uttarakhand	213	213	508	264	49	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 27.12.2014 :**

Fog

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 :**