

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.12.2014
Date of Reporting : 20.12.2014

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
38725	2714	41439	50.02	29508	1299	30807	50.16	807.9	52.19

* 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	46.01	7.50		53.51	38.77	38.85	0.08	92.36	0.00
Haryana	52.73	0.49		53.21	59.16	58.58	-0.58	111.79	3.80
Rajasthan	114.03	4.15	4.14	122.31	83.45	85.88	2.43	208.20	0.00
Delhi	16.45			16.45	48.22	49.65	1.44	66.11	0.00
UP	137.37	4.49		141.86	82.55	81.14	-1.40	223.00	39.75
Uttarakhand		7.22		7.22	26.08	27.87	1.79	35.09	0.77
HP		4.61		4.61	20.19	20.31	0.12	24.93	0.39
J & K		5.21	0.00	5.21	33.80	37.20	3.39	42.41	7.48
Chandigarh				0.00	3.68	4.07	0.27	4.07	0.00
Total	366.59	33.66	4.14	404.38	395.90	403.57	7.54	807.95	52.19

* 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	4736	0	-237	-426	2790	0	78	-373	5040
Haryana	5362	704	-122	-934	4101	0	-31	-881	5434
Rajasthan	9522	0	205	1313	8128	0	72	1483	9837
Delhi	3311	145	-48	45	1685	0	86	-720	3599
UP	10553	1475	23	116	9027	980	-91	74	10553
Uttarakhand	1770	40	93	736	1149	0	80	453	1790
HP	1299	3	85	406	765	7	-29	410	1299
J&K	1963	346	216	493	1768	312	145	634	1963
Chandigarh	210	0	17	20	95	0	6	-101	232
Total	38725	2714	232	1769	29508	1299	316	1049	38725

* 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	1448	1543	1557	37.58	1566	34.73	2.85
Rihand I STPS (2*500)	1000	880	953	802	21.74	906	19.94	1.79
Rihand II STPS (2*500)	1000	970	1039	832	23.53	980	21.87	1.66
Rihand III STPS (2*500)	1000	971	994	894	22.84	952	21.41	1.43
Dadri I STPS (4*210)	840	615	584	400	14.22	593	13.32	0.90
Dadri II STPS (2*490)	980	980	934	659	20.96	873	20.27	0.69
Unchahar I TPS (2*210)	420	406	434	329	9.44	393	8.76	0.68
Unchahar II TPS (2*210)	420	263	222	302	5.75	240	5.27	0.48
Unchahar III TPS (1*220)	210	201	218	137	4.52	189	4.18	0.35
I-STPP (Jhajhar) (3*500)	1500	1097	1048	877	23.06	961	22.99	0.07
Dadri GPS (4*130.19+2*154.51)	830	835	260	316	6.72	280	6.70	0.02
Anta GPS (3*88.71+1*153.2)	419	425	195	222	5.30	221	5.24	0.06
Auraiva GPS (4*111.19+2*109.30)	663	666	371	291	7.64	318	7.44	0.21
Dadri Solar	5	1	0	0	0.01	0	0.02	-0.02
Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
Sub Total (A)	11297	9762	8795	7618	203	8472	192	11
B. NPC								
NAPS (2*220)	440	296	333	337	7.11	296	7.10	0.00
RAPS-B (2*220)	440	414	456	462	9.94	414	9.94	0.00
RAPS-C (2*220)	440	219	239	238	5.08	212	5.26	-0.18
Sub Total (B)	1320	929	1028	1037	22.12	922	22.30	-0.17
C. NHPC								
Chamera I HPS (3*180)	540	356	366	0	2.02	84	1.90	0.12
Chamera III HPS (3*100)	300	300	208	0	1.35	56	1.35	0.00
Chamera III HPS (3*77)	231	231	145	0	0.75	31	0.69	0.06
Bairasuli HPS(3*60)	180	179	120	0	0.55	23	0.50	0.05
Salal-HPS (6*115)	690	93	220	30	2.37	99	2.24	0.13
Tanakpur-HPS (3*40)	94	30	32	31	0.78	33	0.73	0.05
Uri-I HPS (4*120)	480	118	202	80	3.09	129	2.83	0.26
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	135	140	0	1.03	43	0.90	0.13
Dulhasti-HPS (3*130)	390	387	394	0	3.01	126	2.90	0.11
Sewa-II HPS (3*40)	120	119	84	0	0.37	15	0.36	0.01
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
Sub Total (C)	4065	1948	1912	141	15	638	14	1
D.SJVNL								
NJPC (6*250)	1500	1605	1006	0	6.82	284	6.60	0.22
Rampur HEP (4*68.67)	275	420	334	0	1.92	80	1.84	0.09
Sub Total (D)	1775	2025	1340	0	8.74	364	8.43	0.31
E. THDC								
Tehri HPS (4*250)	1000	1060	1004	0	7.35	306	7.20	0.15
Koteshwar HPS (4*100)	400	104	201	91	2.58	107	2.50	0.08
Sub Total (E)	1400	1164	1205	91	9.93	414	9.70	0.23
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	546	1037	339	12.74	531	13.10	-0.36
Dehar HPS (6*165)	990	126	165	0	3.29	137	3.02	0.27
Pong HPS (6*66)	396	224	324	0	5.46	228	5.37	0.09
Sub Total (F)	2900	896	1526	339	21.49	896	21.49	0.00
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	28	0	0.54	22	0.50	0.03
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	622	0	3.74	156	3.58	0.15
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	281	212	6.31	263	6.27	0.03
Budhil HPS(IPP)	70	0	36	0	0.15	6	0.15	0.00
Sub Total (G)	1662	0	967	212	10.73	447	10.51	0.22
H. Total Regional Entities (A-G)	24419	16724	16773	9437	291.67	12153	279.04	12.64

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	705	480	13.90	579
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	115	115	2.43	101
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	451	414	9.54	398
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	675	350	12.58	524
	Talwandi Saboo (1*660)	660	350	351	7.56	315
	Thermal (Total)	4680	2296	1710	46.01	1917
	Total Hydro	1148	247	182	7.50	312
Total Punjab	5828	2543	1892	53.51	2229	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	892	831	20.62	859
	DCRTPP (Yamuna nagar) (2*300)	600	248	238	5.99	250
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	579	373	12.82	534
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	621	590	13.30	554
	Thermal (Total)	4944	2340	2032	52.73	2197
	Total Hydro	62	18	23	0.49	20
	Total Haryana	5006	2358	2055	53.21	2217
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1024	961	24.12
suratgarh TPS (6*250)		1500	1324	1189	29.80	1242
Chabra TPS (3*250)		750	628	583	14.87	620
Dholpur GPS (3*110)		330	135	118	3.16	132
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	174	148	4.93	205
RAPS A (NPC) (1*100+1*200)		300	149	152	4.13	172
Barsingsar (NLC) (2*125)		250	183	183	4.22	176
Giral LTPS (2*125)		250	75	51	1.35	56
Rajwest LTPS (IPP) (8*135)		1080	606	735	15.25	635
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	580	472	12.20	508
Thermal (Total)		8026	4878	4592	114	4751
Total Hydro		550	212	105	4.15	173
Wind power		2798	162	149	3.22	134
Biomass		99	33	33	0.78	33
Solar		730	1	0	0.14	6
Renewable/Others (Total)		3627	196	182	4.14	172
Total Rajasthan		12203	5286	4879	122.31	5096
UP		Anpara TPS (3*210+2*500)	1630	1349	1368	31.90
	Obra TPS (2*50+2*94+5*200)	1194	344	344	6.70	279
	Paricha TPS (2*110+2*220+2*250)	1140	736	675	17.20	717
	Panki TPS (2*105)	210	45	32	1.00	42
	Harduaganj TPS (1*60+1*105+2*250)	665	491	481	11.60	483
	Tanda TPS (NTPC) (4*110)	440	292	225	6.50	271
	Roza TPS (IPP) (4*300)	1200	765	765	18.97	791
	Anpara-C (IPP) (2*600)	1200	1021	1017	24.30	1013
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Thermal (Total)	8129	5043	4907	118.17	4924
	Vishnuparyag HPS (IPP)	400	88	84	2.05	85
	Other Hydro	527	182	75	2.44	102
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	6113	5866	141.86	5825
	Uttarakhand	Total Hydro	1398	430	211	7.22
Total Uttarakhand		1398	430	211	7.22	301
Delhi	Raighat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	83	82	1.94	81
	Pragati Gas Turbine (2x104+ 1x122)	330	154	157	3.68	153
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	352	243	5.30	221
	Badarpur TPS (NTPC) (3*95+2*210)	705	588	220	5.54	231
	Thermal (Total)	2917	1177	702	16.45	686
Total Delhi	2917	1177	702	16.45	686	
HP	Baspa HPS (IPP) (2*150)	300	70	0	1.13	47
	Malana HPS (IPP) (2*43)	86	0	0	0.00	0
	Other Hydro	728	175	80	3.48	145
	Total HP	1114	245	80	4.61	192
J & K	Baqilhar HPS (IPP) (3*150)	450	268	120	3.91	163
	Other Hydro/IPP	436	87	39	1.30	54
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	355	159	5.21	217
Total State Control Area Generation		39597	18507	15844	404.38	16764
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5397.71	5486.95	152.25	6344
Total Regional Availability(Gross)		64017	40678	30768	848.30	35261

IV. Total Hydro Generation:

Regional Entities Hydro	11432	6634	571	59.76	2490
State Control Area Hydro	5684	1689	835	33.66	1317
Total Regional Hydro	17116	8323	1406	93.42	3807

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	300	200	500	0	8.69	0.00	8.69
Gwalior-Agra (D/C)	1788	1864	2288	0	46.33	0.00	46.33
Zerda-Kankroli	-7	-88	93	98	0.01	0.00	0.01
Zerda-Bhinmal	81	9	230	25	2.28	0.00	2.28
Malanpur-Auraiya	-70	-55	0	110	0.00	1.69	-1.69
Badod-Kota/Morak	23	-65	62	53	0.00	0.52	-0.52
Mundra-Mohindergarh(HVDC)	2098	2298	2314	0	53.46	0.00	53.46
Vindhychal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	4213	4163			110.77	2.21	108.56
Pusauli Bypass	425	425	425	0	10.38	0.00	10.38
MZP- GKP (D/C)	66	124	340	0	4.16	0.00	4.16
Patna-Balia(D/C)	600	680	867	0	18.10	0.00	18.10
B'Sharif-Balia (D/C)	54	3	350	46	2.83	0.00	2.83
Pusauli-Balia	-179	-189	0	203	0.00	3.79	-3.79
Gaya-Fatehpur (765 Kv)	178	220	494	0	7.78	0.00	7.78
Pusauli-Sahupuri	153	102	163	0	3.50	0.00	3.50
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-39	-32	0	42	0.00	0.83	-0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-73	-9	213	89	1.57	0.00	1.57
Sub Total ER	1185	1324			48.31	4.63	43.69
Total IR Exch	5398	5487			159.09	6.84	152.25

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
26.13	0.51	26.64	9.59	-6.69	0.46	30.21	2.29	-2.29

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
38.98	99.20	138.17	43.69	108.56	152.25	4.71	9.37	14.08

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	3.02	18.54	42.59	67.73	38.67	11.37	6.62	0.75	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				
50.25	5.03	49.62	14.45.40	49.93	0.21	0.13	50.23	49.75

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	414	04:03	398	19:47	0.0	0.0	0.0	0.0
Gorakhpur	400	413	23:57	388	15:19	0.0	3.7	0.0	0.0
Bareilly	400	425	03:01	393	14:46	0.0	0.0	13.6	0.0
Kanpur	400	422	03:00	397	14:45	0.0	0.0	1.8	0.0
Dadri	400	425	03:00	400	13:50	0.4	0.4	13.9	0.0
Ballabgarh	400	431	02:59	403	13:47	0.0	0.0	33.9	0.4
Bawana	400	431	03:01	404	14:45	0.0	0.0	31.8	0.1
Bassi	400	426	21:24	389	07:29	0.0	0.0	10.4	0.0
Hissar	400	420	03:00	395	14:45	0.0	0.0	0.0	0.0
Moga	400	426	03:01	404	14:45	0.0	0.0	19.5	0.0
Abdullapur	400	425	02:59	396	14:45	0.0	0.0	19.0	0.0
Nalagarh	400	429	21:28	406	14:48	0.0	0.0	34.2	0.0
Kishenpur	400	425	03:04	389	18:48	0.0	0.1	10.5	0.0
Wagoora	400	416	11:17	361	18:46	26.5	70.4	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	780	03:00	731	14:45	0.0	33.5	0.0	0.0
Balia	765	780	03:00	732	14:47	0.0	19.7	0.0	0.0
Moga	765	806	03:01	762	14:46	0.0	0.0	6.4	0.0
Agra	765	795	03:00	748	09:46	0.0	0.0	0.0	0.0
Bhiwani	765	812	03:01	762	14:46	0.0	0.0	17.1	0.0
Unnao	765	772	03:04	725	14:46	1.5	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	499.86	1088.42	504.28	1272.20	145.77	371.04
Pong	426.72	384.05	407.36	407.15	413.81	633.63	81.38	370.98
Tehri	829.79	740.04	813.75	882.00	816.85	942.00	47.58	167.00
Koteshwar	612.50	598.50	609.56	4.21	609.50	4.21	167.00	171.00
Chamera-I	760.00	748.75	759.09	0.00	0.00	0.00	49.71	54.11
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	507.93	2.23	512.71	3.42	58.30	104.88

* 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	-416	43	0	-436	10	0	-11.06	2.35	-8.71
Delhi	-653	-37	-31	-472	522	-5	-11.66	6.27	-5.39
Haryana	-1043	162	0	-1027	93	0	-26.35	3.05	-23.29
HP	477	-68	0	448	-42	0	12.08	-3.27	8.81
J&K	634	0	0	413	81	0	11.77	1.16	12.93
CHD	-31	0	0	0	20	0	-0.24	0.36	0.11
Rajasthan	850	631	2	850	461	2	24.13	12.69	36.82
UP	74	0	0	116	0	0	1.49	0.00	1.49
Uttarakhand	214	190	49	195	492	49	5.10	10.06	15.16
Total	107	922	20	86	1638	45	5.24	32.67	37.92

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-416	-511	281	7	0	0
Delhi	-328	-653	682	-48	0	-31
Haryana	-1027	-1212	164	93	0	0
HP	543	428	0	-540	0	0
J&K	634	413	147	-179	0	0
CHD	0	-31	34	0	0	0
Rajasthan	1208	850	733	-104	2	2
UP	116	4	0	0	0	0
Uttarakhand	214	195	514	177	49	9

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 19.12.2014 :**

Light 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 :**