

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्ट की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 13.02.2015
Date of Reporting : 14.02.2015

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
38043	1721	39764	49.98	30519	1187	31707	50.10	823.6	50.86

* 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	45.78	10.71		56.49	43.06	42.60	-0.46	99.08	0.00
Haryana	64.12	0.33		64.45	56.90	54.85	-2.05	119.30	0.01
Rajasthan	128.19	3.89	17.29	149.38	62.97	61.39	-1.58	210.77	0.00
Delhi	17.37			17.37	43.30	43.86	0.56	61.23	0.07
UP	128.40	3.50		131.90	95.63	95.62	-0.01	227.52	41.99
Uttarakhand		9.73		9.73	23.99	25.05	1.07	34.78	1.23
HP		4.36		4.36	19.76	20.18	0.41	24.53	0.00
J & K		4.60	0.00	4.60	36.05	38.18	2.12	42.78	7.55
Chandigarh				0.00	3.68	3.61	0.27	3.61	0.00
Total	383.85	37.12	17.29	438.26	385.34	385.34	0.33	823.60	50.86

* 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	5615	0	8	-212	3164	0	-42	-179	5615
Haryana	5897	0	-273	-463	3818	0	33	-566	6511
Rajasthan	8876	0	-245	500	8383	0	105	831	9959
Delhi	2876	0	-40	-363	1469	0	-18	-780	3543
UP	9790	1355	107	75	9956	895	299	68	10322
Uttarakhand	1800	40	117	512	1210	0	3	416	1871
HP	1150	0	-65	337	769	0	87	351	1398
J&K	1849	326	51	601	1656	292	36	647	2036
Chandigarh	190	0	-19	0	94	0	-4	-31	210
Total	38043	1721	-359	987	30519	1187	499	758	38586

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

Diversity is 1.07

III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity	Declared	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
		(Effective) MW	Capacity(MW)	(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1764	1563	2044	45.20	1883	41.88	3.32
	Rihand I STPS (2*500)	1000	868	934	713	20.45	852	18.76	1.69
	Rihand II STPS (2*500)	1000	906	979	870	21.26	886	19.83	1.43
	Rihand III STPS (2*500)	1000	965	908	777	21.16	882	19.81	1.35
	Dadri I STPS (4*210)	840	815	588	546	15.28	637	14.12	1.16
	Dadri II STPS (2*490)	980	980	842	664	18.81	784	18.19	0.62
	Unchahar I TPS (2*210)	420	405	402	263	8.30	346	8.42	-0.12
	Unchahar II TPS (2*210)	420	403	382	284	7.78	324	7.51	0.28
	Unchahar III TPS (1*220)	210	201	193	140	3.96	165	3.80	0.16
	ISTPP (Jhajhar) (3*500)	1500	1500	893	599	17.03	710	17.81	-0.77
	Dadri GPS (4*130.19+2*154.51)	830	845	350	413	9.17	382	9.09	0.08
	Anta GPS (3*88.71+1*1153.2)	419	426	266	244	6.10	254	6.11	-0.01
	Auraiya GPS (4*111.19+2*109.30)	663	510	162	172	3.99	166	3.93	0.06
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
	Singrauli Solar	15	2	0	0	0.05	2	0	0.01
Sub Total (A)	11312	10592	8462	7729	199	8275	189	9	
B. NPC	NAPS (2*220)	440	395	427	439	9.50	396	9.48	0.02
	RAPS- B (2*220)	440	412	455	458	9.92	413	9.89	0.03
	RAPS- C (2*220)	440	220	232	233	4.94	206	5.28	-0.34
	Sub Total (B)	1320	1027	1114	1130	24.36	1015	24.65	-0.29
C. NHPC	Chamera I HPS (3*180)	540	534	391	0	1.51	63	1.60	-0.09
	Chamera II HPS (3*100)	300	200	204	0	1.24	52	1.20	0.04
	Chamera III HPS (3*77)	231	231	229	0	0.56	23	0.50	0.06
	Bairasuli HPS(3*60)	180	179	180	0	0.77	32	0.72	0.05
	Salal-HPS (6*115)	690	93	240	0	2.35	98	2.22	0.13
	Tanakpur-HPS (3*40)	94	21	23	25	0.58	24	0.51	0.07
	Uri-I HPS (4*120)	480	142	225	113	3.61	151	3.40	0.21
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	140	0	0.91	38	0.85	0.06
	Dulhasti-HPS (3*130)	390	258	273	0	3.55	148	3.40	0.15
	Sewa-II HPS (3*40)	120	119	128	121	2.84	118	2.85	-0.01
	Parbati 3 (4*130)	520	390	0	0	0.33	14	0.33	0.00
	Sub Total (C)	4065	2306	2032	259	18	760	18	1
D. SJVNL	NJPC (6*250)	1500	1605	1397	0	5.75	240	5.70	0.05
	Rampur HEP (4*68.67)	275	370	352	0	1.54	64	1.53	0.01
	Sub Total (D)	1775	1975	1749	0	7.29	304	7.23	0.06
E. THDC	Tehri HPS (4*250)	1000	888	888	0	8.45	352	8.40	0.05
	Koteshwar HPS (4*100)	400	129	604	96	3.12	130	3.10	0.02
	Sub Total (E)	1400	1017	1492	96	11.57	482	11.50	0.07
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	763	1122	491	18.39	766	18.31	0.08
	Dehar HPS (6*165)	990	116	330	0	2.71	113	2.79	-0.08
	Pong HPS (6*66)	396	150	295	0	3.40	142	3.60	-0.20
	Sub Total (F)	2900	1029	1747	491	24.51	1021	24.70	-0.20
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.34	14	0.32	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	0	0	3.16	132	3.13	0.03
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	137	110	3.07	128	3.19	-0.12
	Budhil HPS(IPP)	70	0	0	0	0.15	6	0.15	0.00
Sub Total (G)	1662	0	137	110	6.72	280	6.79	-0.07	
H. Total Regional Entities (A-G)	24434	17947	16732	9814	291.29	12137	281.83	9.45	

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	530	480	10.92	455
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	120	100	1.86	78
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	713	581	13.44	560
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	694	350	11.25	469
	Talwandi Saboo (1*660)	660	400	345	8.31	346
	Thermal (Total)	4680	2457	1856	45.78	1907
	Total Hydro	1148	461	477	10.71	446
Total Punjab	5828	2918	2333	56.49	2354	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	472	430	10.53	439
	DCRTPP (Yamuna nagar) (2*300)	600	530	479	12.07	503
	Faridabad GPS (NTPC)	432	196	162	4.45	186
	RGTPP (khedar) (IPP) (2*600)	1200	1161	738	20.72	863
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	472	741	16.35	681
	Thermal (Total)	4944	2831	2550	64.12	2672
	Total Hydro	62	5	11	0.33	14
	Total Haryana	5006	2836	2561	64.45	2685
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1057	1014	24.94
suratgarh TPS (6*250)		1500	1152	1142	28.07	1170
Chabra TPS (3*250)		750	431	595	13.43	559
Dholpur GPS (3*110)		330	111	112	2.77	115
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	160	145	3.99	166
RAPS A (NPC) (1*100+1*200)		300	164	165	4.07	170
Barsingsar (NLC) (2*125)		250	96	96	2.17	91
Giral LTPS (2*125)		250	100	69	1.95	81
Rajwest LTPS (IPP) (8*135)		1080	870	963	21.37	890
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	1103	974	25.43	1060
Thermal (Total)		8026	5244	5275	128	5341
Total Hydro		550	216	130	3.89	162
Wind power		2798	725	239	16.78	699
Biomass		99	15	15	0.36	15
Solar		730	0	0	0.16	6
Renewable/Others (Total)		3627	740	254	17.29	720
Total Rajasthan		12203	6200	5659	149.38	6224
UP		Anpara TPS (3*210+2*500)	1630	959	963	22.90
	Obra TPS (2*50+2*94+5*200)	1194	347	354	8.40	350
	Paricha TPS (2*110+2*220+2*250)	1140	637	670	15.70	654
	Panki TPS (2*105)	210	126	126	3.00	125
	Harduaganj TPS (1*60+1*105+2*250)	665	443	450	10.70	446
	Tanda TPS (NTPC) (4*110)	440	390	390	9.50	396
	Roza TPS (IPP) (4*300)	1200	630	801	18.80	783
	Anpara-C (IPP) (2*600)	1200	539	545	13.00	542
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	279	7.20	300
	Thermal (Total)	8129	4351	4578	109.20	4550
	Vishnuparyag HPS (IPP)	400	70	66	1.60	67
	Other Hydro	527	50	85	1.90	79
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5271	5529	131.90	5429
	Uttarakhand	Total Hydro	1398	575	340	9.73
Total Uttarakhand		1398	575	340	9.73	405
Delhi	Raighat TPS (2*67.5)	135	34	34	0.74	31
	Delhi Gas Turbine (6x30 + 3x34)	282	76	79	1.85	77
	Pragati Gas Turbine (2x104+ 1x122)	330	155	163	3.85	160
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	318	271	7.03	293
	Badarpur TPS (NTPC) (3*95+2*210)	705	165	161	3.90	163
	Thermal (Total)	2917	748	708	17.37	724
Total Delhi	2917	748	708	17.37	724	
HP	Baspa HPS (IPP) (2*150)	300	32	0	0.92	38
	Malana HPS (IPP) (2*43)	86	0	0	0.20	9
	Other Hydro	728	146	87	3.24	135
	Total HP	1114	178	87	4.36	182
J & K	Baqilhar HPS (IPP) (3*150)	450	150	120	3.21	134
	Other Hydro/IPP	436	71	41	1.39	58
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	221	161	4.60	192
Total State Control Area Generation		39597	18947	17378	438.26	18194
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5620	4419	122.91	5121
Total Regional Availability(Gross)		64032	41299	31611	852.45	35452

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7020	846	65.11	2713
State Control Area Hydro	5684	1706	1291	37.12	1480
Total Regional Hydro	17116	8726	2137	102.23	4193

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	150	-400	300	400	2.01	2.84	-0.83
Gwalior-Agra (D/C)	1693	1778	2589	0	47.98	0.00	47.98
Zerda-Kankroli	-165	-308	0	371	0.00	5.40	-5.40
Zerda-Bhinmal	-112	-227	42	360	0.00	3.96	-3.96
Malanpur-Auraiya	-86	-77	0	111	0.00	1.75	-1.75
Badod-Kota/Morak	-100	-109	0	168	0.00	2.81	-2.81
Mundra-Mohindergarh(HVDC)	2502	2298	2505	0	57.79	0.00	57.79
Vindhychal - Rihand	459	389	502	0	9.05	0.00	9.05
Sub Total WR	4341	3344			116.84	16.76	100.08
Pusauli Bypass	400	400	400	0	9.11	0.00	9.11
MZP- GKP (D/C)	239	21	34	341	0.00	2.12	-2.12
Patna-Balia(D/C)	564	529	723	341	13.33	2.12	11.21
B'Sharif-Balia (D/C)	-104	-77	46	252	0.00	2.12	-2.12
Pusauli-Balia	138	67	193	0	1.21	0.00	1.21
Gaya-Fatehpur (765 Kv)	117	158	319	0	4.86	0.00	4.86
Pusauli-Sahupuri	178	135	192	0	3.71	0.00	3.71
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-30	-40	0	50	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-223	-118	0	289	0.00	2.64	-2.64
Sub Total ER	1279	1075			32.70	9.87	22.83
Total IR Exch	5620	4419			149.53	26.63	122.91

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
21.89	0.06	21.95	5.46	-1.53	14.65	6.33	0.22	-0.22

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
42.28	80.91	123.19	22.83	100.08	122.91	-19.45	19.17	-0.28

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	0.02	2.72	16.53	54.78	59.26	15.45	8.61	0.82	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				
50.37	18.01	49.69	18.42	49.99	0.08	0.09	50.17	0

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	23:33	402	08:36	0.0	0.0	0.0	0.0
Gorakhpur	400	412	21:42	391	08:56	0.0	0.0	0.0	0.0
Bareilly	400	421	21:28	396	14:17	0.0	0.0	0.4	0.0
Kanpur	400	420	21:00	399	14:14	0.0	0.0	0.0	0.0
Dadri	400	416	03:12	397	14:17	6.4	6.4	0.0	0.0
Ballabgarh	400	425	03:26	401	14:14	0.0	0.0	24.6	0.0
Bawana	400	423	03:15	401	14:18	0.0	0.0	12.5	0.0
Bassi	400	426	20:57	399	11:38	0.0	0.0	6.5	0.0
Hissar	400	414	21:14	390	14:16	0.0	0.0	0.0	0.0
Moga	400	420	21:14	398	14:09	0.0	0.0	0.0	0.0
Abdullapur	400	421	03:15	396	14:16	0.0	0.0	2.0	0.0
Nalagarh	400	433	21:15	406	14:23	0.0	0.0	49.0	2.4
Kishenpur	400	418	04:02	393	18:47	0.0	0.0	0.0	0.0
Wagoora	400	404	09:58	359	18:48	35.9	73.9	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	787	21:30	731	08:55	0.0	14.8	0.0	0.0
Balia	765	783	21:55	741	08:53	0.0	0.4	0.0	0.0
Moga	765	796	21:21	753	14:18	0.0	0.0	0.0	0.0
Agra	765	790	21:30	747	14:16	0.0	0.0	0.0	0.0
Bhiwani	765	799	21:00	756	14:15	0.0	0.0	0.0	0.0
Unnao	765	773	21:50	734	14:15	0.0	11.4	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	487.59	661.49	493.42	848.04	89.45	610.43
Pong	426.72	384.05	399.85	216.87	407.10	407.15	47.88	243.78
Tehri	829.79	740.04	791.80	483.10	796.75	560.42	36.25	216.00
Koteshwar	612.50	598.50	610.70	4.95	610.40	4.69	216.00	207.00
Chamera-I	760.00	748.75	759.82	0.00	0.00	0.00	51.06	40.51
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	501.52	2.47	508.46	2.92	33.30	121.08

* 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	-321	143	0	-290	78	0	-7.22	4.80	-2.41
Delhi	-687	-62	-31	-475	133	-20	-10.88	0.84	-10.04
Haryana	-599	32	0	-595	132	0	-15.58	2.60	-12.98
HP	413	-62	0	383	-46	0	11.22	-2.37	8.85
J&K	647	0	0	468	133	0	13.13	1.28	14.41
CHD	-31	0	0	0	0	0	-0.24	0.26	0.02
Rajasthan	293	536	2	293	204	2	7.04	10.22	17.26
UP	68	0	0	75	0	0	0.00	0.00	0.00
Uttarakhand	268	81	67	268	225	19	6.34	5.06	11.41
Total	52	668	39	126	860	0	3.81	22.71	26.52

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-290	-321	356	5	0	0
Delhi	-169	-687	332	-65	0	-31
Haryana	-595	-771	166	-120	0	0
HP	541	383	10	-604	0	0
J&K	647	468	180	-76	0	0
CHD	0	-31	34	0	0	0
Rajasthan	293	293	537	36	2	-59
UP	121	-149	0	0	0	0
Uttarakhand	268	252	348	62	73	3

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 13.02.2015 :**
Normal**XIV. Synchronisation of new generating units :****XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :**
1. 400 kV Anta-Kalisindh-II first time synchronized at 1420 Hrs on 13.02.15.**XVI. Tripping of lines in pooling stations :****XVII. Complete generation loss in a generating station :**