

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 16.02.2015
Date of Reporting : 17.02.2015

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
36457	1781	38238	49.91	29107	710	29818	50.14	785.2	46.95

* 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	40.99	10.88		51.87	38.87	34.36	-4.51	86.23	0.00
Haryana	66.13	0.34		66.47	45.99	43.28	-2.71	109.75	0.00
Rajasthan	127.03	4.87	14.60	146.50	60.81	60.35	-0.47	206.84	0.00
Delhi	17.42			17.42	40.08	41.09	1.01	58.51	0.08
UP	134.75	2.70		137.45	86.52	87.46	0.94	224.91	38.91
Uttarakhand		9.80		9.80	23.02	24.25	1.23	34.05	1.26
HP		4.71		4.71	18.85	18.80	-0.05	23.51	0.00
J & K		4.79	0.00	4.79	33.50	33.18	-0.32	37.98	6.70
Chandigarh				0.00	3.64	3.49	0.27	3.49	0.00
Total	386.32	38.09	14.60	439.00	351.29	346.24	-4.62	785.24	46.95

† 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	4146	0	-282	-123	3151	0	40	-251	4418
Haryana	5540	0	-438	-635	3379	0	-17	-504	5991
Rajasthan	8581	0	-101	314	8079	0	18	784	9714
Delhi	3005	0	162	-364	1511	0	-12	-822	3194
UP	10300	1380	473	67	9670	450	277	42	10321
Uttarakhand	1685	75	-10	499	1106	0	-2	327	1778
HP	1170	0	-55	320	650	0	7	331	1250
J&K	1846	326	164	663	1474	260	-33	646	1871
Chandigarh	185	0	-23	0	87	0	-4	-31	198
Total	36457	1781	-109	740	29107	710	274	522	36622

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

Diversity is 1.06

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	1430	1549	1528	36.15	1506	32.90	3.25
	Rihand I STPS (2*500)	1000	861	918	848	20.61	859	18.68	1.93
	Rihand II STPS (2*500)	1000	902	943	782	20.90	871	19.27	1.63
	Rihand III STPS (2*500)	1000	969	976	761	21.67	903	20.03	1.64
	Dadri I STPS (4*210)	840	815	728	590	15.35	639	14.45	0.90
	Dadri II STPS (2*490)	980	980	804	693	17.96	748	17.53	0.43
	Unchahar I TPS (2*210)	420	405	382	275	8.25	344	8.19	0.07
	Unchahar II TPS (2*210)	420	403	330	267	7.63	318	7.33	0.31
	Unchahar III TPS (1*220)	210	201	159	133	4.01	167	3.87	0.15
	ISTPP (Jhajhar) (3*500)	1500	1500	896	607	16.66	694	18.06	-1.40
	Dadri GPS (4*130.19+2*154.51)	830	844	190	194	4.57	190	4.67	-0.10
	Anta GPS (3*88.71+1*1153.2)	419	426	262	251	5.99	250	5.99	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	510	160	168	3.90	162	3.86	0.04
	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
	Singrauli Solar	15	2	0	0	0.03	1	0	0.00
Sub Total (A)	11312	10252	8297	7097	184	7656	175	9	
B. NPC	NAPS (2*220)	440	394	421	427	9.35	390	9.46	-0.10
	RAPS- B (2*220)	440	410	449	454	9.72	405	9.84	-0.12
	RAPS- C (2*220)	440	215	360	232	6.14	256	5.16	0.98
	Sub Total (B)	1320	1019	1230	1113	25.21	1051	24.46	0.76
C. NHPC	Chamera I HPS (3*180)	540	534	506	0	2.74	114	2.60	0.14
	Chamera II HPS (3*100)	300	200	204	0	1.53	64	1.40	0.13
	Chamera III HPS (3*77)	231	231	226	0	0.78	33	0.70	0.09
	Bairasuli HPS(3*60)	180	179	180	0	1.12	46	1.07	0.05
	Salal-HPS (6*115)	690	119	261	135	3.14	131	2.88	0.26
	Tanakpur-HPS (3*40)	94	20	31	21	0.57	24	0.49	0.08
	Uri-I HPS (4*120)	480	138	225	87	3.69	154	3.31	0.38
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	140	0	0.12	5	1.15	-1.03
	Dulhasti-HPS (3*130)	390	258	272	0	3.10	129	3.00	0.09
	Sewa-II HPS (3*40)	120	119	126	0	1.80	75	1.70	0.10
	Parbati 3 (4*130)	520	130	131	0	0.34	14	0.33	0.01
	Sub Total (C)	4065	2068	2302	243	19	789	19	0
D. SJVNL	NJPC (6*250)	1500	1605	1609	0	6.14	256	5.91	0.22
	Rampur HEP (4*68.67)	275	320	222	0	1.48	62	1.40	0.08
	Sub Total (D)	1775	1925	1831	0	7.61	317	7.31	0.30
E. THDC	Tehri HPS (4*250)	1000	872	872	0	8.01	334	7.90	0.11
	Koteshwar HPS (4*100)	400	129	299	95	3.14	131	3.10	0.04
	Sub Total (E)	1400	1001	1171	95	11.15	465	11.00	0.15
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	732	1113	488	17.49	729	17.57	-0.08
	Dehar HPS (6*165)	990	149	330	0	3.62	151	3.57	0.06
	Pong HPS (6*66)	396	121	236	0	2.79	116	2.90	-0.10
	Sub Total (F)	2900	1001	1679	488	23.91	996	24.03	-0.13
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.40	17	0.38	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	0	0	3.17	132	3.13	0.04
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	133	76	2.78	116	2.78	-0.01
	Budhil HPS(IPP)	70	0	0	0	0.15	6	0.15	0.00
Sub Total (G)	1662	0	133	76	6.50	271	6.44	0.06	
H. Total Regional Entities (A-G)	24434	17266	16644	9112	277.04	11543	266.80	10.24	

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	350	500	10.37	432
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.28	95
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	510	544	12.57	524
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	368	352	8.33	347
	Talwandi Saboo (1*660)	660	340	340	7.44	310
	Thermal (Total)	4680	1668	1836	40.99	1708
	Total Hydro	1148	479	391	10.88	453
Total Punjab	5828	2147	2227	51.87	2161	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	436	445	9.86	411
	DCRTPP (Yamuna nagar) (2*300)	600	538	486	11.99	499
	Faridabad GPS (NTPC)	432	197	193	4.58	191
	RGTPP (khedar) (IPP) (2*600)	1200	1150	726	22.29	929
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1181	376	17.41	725
	Thermal (Total)	4944	3502	2226	66.13	2755
	Total Hydro	62	7	13	0.34	14
	Total Haryana	5006	3509	2239	66.47	2770
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1105	1053	26.01
suratgarh TPS (6*250)		1500	1135	1164	26.98	1124
Chabra TPS (3*250)		750	620	586	14.75	615
Dholpur GPS (3*110)		330	112	112	2.86	119
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	39	158	1.29	54
RAPS A (NPC) (1*100+1*200)		300	163	162	4.04	168
Barsingsar (NLC) (2*125)		250	95	97	2.19	91
Giral LTPS (2*125)		250	90	17	1.93	81
Rajwest LTPS (IPP) (8*135)		1080	954	652	20.71	863
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	1166	933	26.25	1094
Thermal (Total)		8026	5479	4934	127	5293
Total Hydro		550	210	91	4.87	203
Wind power		2798	112	882	14.12	588
Biomass		99	19	19	0.45	19
Solar		730	0	0	0.03	1
Renewable/Others (Total)		3627	131	901	14.60	608
Total Rajasthan		12203	5820	5926	146.50	6104
UP	Anpara TPS (3*210+2*500)	1630	1363	1403	33.10	1379
	Obra TPS (2*50+2*94+5*200)	1194	325	358	7.80	325
	Paricha TPS (2*110+2*220+2*250)	1140	662	678	16.00	667
	Panki TPS (2*105)	210	108	126	2.90	121
	Harduaganj TPS (1*60+1*105+2*250)	665	448	446	10.70	446
	Tanda TPS (NTPC) (4*110)	440	383	390	9.47	395
	Roza TPS (IPP) (4*300)	1200	756	577	15.95	665
	Anpara-C (IPP) (2*600)	1200	550	545	13.14	548
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	281	280	6.49	270
	Thermal (Total)	8129	4876	4803	115.55	4815
	Vishnuparyag HPS (IPP)	400	70	68	1.68	70
	Other Hydro	527	50	20	1.02	43
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5796	5691	137.45	5657
	Uttarakhand	Total Hydro	1398	594	333	9.80
Total Uttarakhand		1398	594	333	9.80	408
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	167	3.95	165
	Thermal (Total)	2917	748	714	17.42	726
Total Delhi	2917	748	714	17.42	726	
HP	Baspa HPS (IPP) (2*150)	300	30	30	0.97	40
	Malana HPS (IPP) (2*43)	86	0	0	0.23	10
	Other Hydro	728	173	113	3.51	146
	Total HP	1114	203	143	4.71	196
J & K	Baqilhar HPS (IPP) (3*150)	450	150	116	3.40	142
	Other Hydro/IPP	436	68	41	1.39	58
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	218	157	4.79	200
Total State Control Area Generation		39597	19035	17430	439.00	18222
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3794.65	4096.06	105.61	4401
Total Regional Availability(Gross)		64032	39473	30638	821.65	34166

IV. Total Hydro Generation:

Regional Entities Hydro	11432	6984	826	65.16	2715
State Control Area Hydro	5684	1761	1148	38.09	1517
Total Regional Hydro	17116	8745	1974	103.25	4232

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	350	350	0	3.29	0.00	3.29
Gwalior-Agra (D/C)	572	1171	1680	0	29.93	0.00	29.93
Zerda-Kankroli	-339	-451	0	451	0.00	7.81	-7.81
Zerda-Bhinmal	-240	-391	0	425	0.00	6.10	-6.10
Malanpur-Auraiya	-48	-44	0	48	0.00	0.87	-0.87
Badod-Kota/Morak	-153	-187	0	238	0.00	4.41	-4.41
Mundra-Mohindergarh(HVDC)	1998	2301	2305	0	50.68	0.00	50.68
Vindhychal - Rihand	492	277	498	0	10.84	0.00	10.84
Sub Total WR	2332	3026			94.74	19.19	75.56
Pusauli Bypass	400	400	400	0	8.89	0.00	8.89
MZP- GKP (D/C)	224	44	330	62	1.56	0.00	1.56
Patna-Balia(D/C)	478	443	598	0	11.84	0.00	11.84
B'Sharif-Balia (D/C)	139	154	291	291	2.63	0.00	2.63
Pusauli-Balia	37	-1	-95	101	0.00	0.18	-0.18
Gaya-Fatehpur (765 Kv)	202	103	341	0	4.83	0.00	4.83
Pusauli-Sahupuri	103	127	143	0	2.72	0.00	2.72
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-26	-24	0	40	0.00	0.77	-0.77
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-94	-176	39	-193	0.00	1.94	-1.94
Sub Total ER	1463	1070			32.95	2.89	30.06
Total IR Exch	3795	4096			127.69	22.08	105.61

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
17.99	0.03	18.02	5.02	-1.30	16.43	-0.06	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
39.69	64.14	103.83	30.06	75.56	105.61	-9.63	11.41	1.78

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	0.94	11.08	27.73	66.56	59.76	9.22	2.96	0.36	NA

Frequency (Hz)				Average Frequency (Hz)	Frequency Variation Index	Std. Dev. (Hz)	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time					
50.23	5.01	49.66	16.41	49.95	0.13	0.10	50.18	49.82

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	01:57	402	11:42	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	424	05:01	407	08:34	0.0	0.0	6.9	0.0
Kanpur	400	422	05:01	402	09:11	0.0	0.0	1.6	0.0
Dadri	400	0	00:00	9999	00:00	100.0	100.0	0.0	0.0
Ballabgarh	400	431	03:28	410	09:12	0.0	0.0	38.9	1.1
Bawana	400	428	03:27	410	18:35	0.0	0.0	31.6	0.0
Bassi	400	426	05:01	399	07:24	0.0	0.0	5.3	0.0
Hissar	400	418	05:01	400	07:27	0.0	0.0	0.0	0.0
Moga	400	420	20:56	408	12:31	0.0	0.0	0.0	0.0
Abdullapur	400	425	03:26	396	06:28	0.0	0.0	21.8	0.0
Nalagarh	400	430	03:30	407	12:31	0.0	0.0	47.4	0.0
Kishenpur	400	434	03:31	394	19:31	0.0	0.0	18.7	1.6
Wagoora	400	418	03:31	368	19:10	11.2	36.6	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	778	13:06	748	09:56	0.0	0.0	0.0	0.0
Balia	765	786	05:01	752	09:08	0.0	0.0	0.0	0.0
Moga	765	796	20:54	772	12:33	0.0	0.0	0.0	0.0
Agra	765	796	03:33	756	09:13	0.0	0.0	0.0	0.0
Bhiwani	765	806	05:01	772	07:32	0.0	0.0	9.7	0.0
Unnao	765	774	05:00	741	09:10	0.0	0.3	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	486.35	627.57	492.82	827.99	145.18	597.54
Pong	426.72	384.05	399.48	209.93	406.90	397.88	41.91	203.51
Tehri	829.79	740.04	790.55	456.11	795.75	538.00	35.97	206.00
Koteshwar	612.50	598.50	610.12	4.69	610.70	4.95	206.00	208.00
Chamera-I	760.00	748.75	759.92	0.00	0.00	0.00	76.56	73.92
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	501.03	2.95	508.69	2.16	49.95	139.63

* 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	-321	70	0	-291	168	0	-7.22	3.25	-3.98
Delhi	-688	-124	-10	-476	122	-10	-11.27	0.21	-11.06
Haryana	-619	115	0	-616	-19	0	-16.02	1.63	-14.39
HP	412	-81	0	382	-62	0	10.97	-2.75	8.22
J&K	646	0	0	467	195	0	13.10	2.45	15.55
CHD	-31	0	0	0	0	0	-0.24	0.18	-0.07
Rajasthan	293	488	2	293	95	-74	7.04	8.43	15.46
UP	42	0	0	67	0	0	0.41	0.00	0.41
Uttarakhand	268	54	5	268	184	47	6.34	4.78	11.12
Total	3	522	-3	95	683	-38	3.10	18.17	21.27

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-291	-321	323	3	0	0
Delhi	-244	-688	242	-141	-10	-20
Haryana	-616	-783	129	-290	0	0
HP	521	382	10	-655	0	0
J&K	646	467	269	-128	0	0
CHD	0	-31	25	0	0	0
Rajasthan	293	293	505	-545	2	-74
UP	115	-95	0	0	0	0
Uttarakhand	268	252	325	37	73	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 16.02.2015 :**
Normal**XIV. Synchronisation of new generating units :****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 :**