

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 15.01.2015
Date of Reporting : 16.01.2015

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
39199	1901	41100	50.04	28401	287	28688	50.11	813.9	48.10

* 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	42.51	5.92		48.43	38.09	38.87	0.78	87.30	0.00
Haryana	71.29	0.42		71.70	43.00	42.35	-0.65	114.05	0.00
Rajasthan	120.24	5.05	7.99	133.27	66.63	71.82	5.20	205.10	0.00
Delhi	20.80			20.80	49.54	49.62	0.08	70.41	0.03
UP	148.00	5.00		153.00	77.92	77.72	-0.20	230.72	40.15
Uttarakhand		10.38		10.38	24.81	25.60	0.79	35.97	0.46
HP		4.40		4.40	19.29	19.70	0.40	24.09	0.00
J & K		4.40	0.00	4.40	36.13	37.86	1.73	42.26	7.46
Chandigarh				0.00	3.75	4.03	0.27	4.03	0.00
Total	402.83	35.56	7.99	446.38	359.15	367.56	8.41	813.93	48.10

* 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	4596	0	-4	-273	2816	0	65	-174	4949
Haryana	6194	0	-81	-848	3539	0	-5	-796	6194
Rajasthan	9290	0	196	742	7515	0	-66	1062	9494
Delhi	3364	0	-132	-29	1709	0	52	-973	4069
UP	10695	1500	-86	98	9137	0	-199	69	10695
Uttarakhand	1777	75	-4	531	1234	0	45	403	1867
HP	1227	0	32	361	720	0	19	422	1298
J&K	1845	326	-1	610	1628	287	24	677	1931
Chandigarh	211	0	8	10	101	0	12	-31	235
Total	39199	1901	-72	1201	28401	287	-52	659	39199

* 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		UI Net MU
							Net MU	Net MU	
A. NTPC									
Singrauli STPS (5*200+2*500)	2000	1450	1569	1455	37.20	1550	34.25		2.95
Rihand I STPS (2*500)	1000	629	454	883	15.90	662	14.47		1.42
Rihand II STPS (2*500)	1000	900	970	793	22.04	918	20.60		1.44
Rihand III STPS (2*500)	1000	966	1002	746	22.46	936	21.13		1.33
Dadri I STPS (4*210)	840	742	599	404	15.76	657	14.86		0.90
Dadri II STPS (2*490)	980	980	931	661	20.30	846	20.07		0.23
Unchahar I TPS (2*210)	420	391	413	325	9.31	388	8.71		0.60
Unchahar II TPS (2*210)	420	391	417	300	9.03	376	8.29		0.74
Unchahar III TPS (1*220)	210	196	206	140	4.47	186	4.14		0.33
ISTPP (Jhajjar) (3*500)	1500	1500	1210	881	21.04	877	22.59		-1.55
Dadri GPS (4*130.19+2*154.51)	830	848	411	408	9.17	382	9.14		0.03
Anta GPS (3*88.71+1*153.2)	419	427	259	198	6.07	253	5.98		0.09
Auraiya GPS (4*111.19+2*109.30)	663	681	170	177	4.11	171	4.06		0.05
Dadri Solar	5	1	0	0	0.02	1	0.02		-0.01
Unchahar Solar	10	3	0	0	0.00	0	0.07		-0.07
Singrauli Solar	15	0	0	0	0.00	0	0		0.00
Sub Total (A)	11312	10104	8611	7371	197	8203	188		8
B. NPC									
NAPS (2*220)	440	376	413	421	9.10	379	9.02		0.08
RAPS- B (2*220)	440	391	434	436	9.43	393	9.38		0.05
RAPS- C (2*220)	440	215	236	236	5.03	210	5.16		-0.13
Sub Total (B)	1320	982	1083	1093	23.57	982	23.57		0.00
C. NHPC									
Chamera I HPS (3*180)	540	534	546	0	1.69	70	1.60		0.08
Chamera II HPS (3*100)	300	300	304	0	1.10	46	1.10		0.00
Chamera III HPS (3*77)	231	202	157	0	0.59	25	0.55		0.04
Bairasuli HPS(3*60)	180	120	124	0	0.41	17	0.38		0.03
Salal-HPS (6*115)	690	89	220	64	2.22	93	2.13		0.09
Tanakpur-HPS (3*40)	94	30	31	33	0.74	31	0.72		0.02
Uri-I HPS (4*120)	480	97	210	20	2.53	105	2.33		0.20
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00		0.00
Dhauliganga-HPS (4*70)	280	139	139	0	0.97	41	0.90		0.08
Dulhasti-HPS (3*130)	390	258	269	0	2.80	117	2.70		0.10
Sewa-II HPS (3*40)	120	119	81	0	0.25	10	0.36		-0.11
Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00		0.00
Sub Total (C)	4065	1888	2081	117	13	554	13		1
D. SJVNL									
NJPC (6*250)	1500	1350	1340	0	5.93	247	5.80		0.13
Rampur HEP (4*68.67)	275	300	296	0	1.48	62	1.43		0.05
Sub Total (D)	1775	1650	1636	0	7.40	308	7.23		0.17
E. THDC									
Tehri HPS (4*250)	1000	1000	1000	0	9.17	382	9.10		0.07
Koteshwar HPS (4*100)	400	125	294	90	3.25	136	3.20		0.05
Sub Total (E)	1400	1125	1294	90	12.43	518	12.30		0.13
F. BBMB									
Bhakra HPS (3*108+2*126+6*157)	1514	499	1092	338	12.12	505	11.99		0.13
Dehar HPS (6*165)	990	133	330	0	3.32	138	3.20		0.12
Pong HPS (6*66)	396	135	252	0	3.12	130	3.24		-0.12
Sub Total (F)	2900	768	1674	338	18.56	773	18.42		0.14
G. IPP(s)/JV(s)									
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	21	0	0.34	14	0.33		0.01
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	560	0	3.25	135	3.21		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	278	152	5.66	236	5.61		0.05
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00		0.00
Sub Total (G)	1662	0	859	152	9.24	385	9.14		0.10
H. Total Regional Entities (A-G)	24434	16517	17237	9161	281.37	11724	271.80		9.56

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	500	500	12.16	507
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	110	80	2.21	92
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	460	362	9.36	390
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	490	353	10.49	437
	Talwandi Saboo (1*660)	660	347	348	8.30	346
	Thermal (Total)	4680	1907	1643	42.51	1771
	Total Hydro	1148	365	59	5.92	247
Total Punjab	5828	2272	1702	48.43	2018	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	667	607	15.05	627
	DCRTPP (Yamuna nagar) (2*300)	600	524	480	11.88	495
	Faridabad GPS (NTPC)	432	420	298	9.24	385
	RGTPP (khedar) (IPP) (2*600)	1200	1162	752	22.22	926
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	625	378	12.90	537
	Thermal (Total)	4944	3398	2515	71.29	2970
	Total Hydro	62	11	13	0.42	17
	Total Haryana	5006	3409	2528	71.70	2988
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1095	996	25.77
suratgarh TPS (6*250)		1500	1308	1135	29.80	1242
Chabra TPS (3*250)		750	664	582	15.06	627
Dholpur GPS (3*110)		330	114	113	2.79	116
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	126	161	3.46	144
RAPS A (NPC) (1*100+1*200)		300	0	0	0.00	0
Barsingsar (NLC) (2*125)		250	188	188	4.32	180
Giral LTPS (2*125)		250	0	0	0.00	0
Rajwest LTPS (IPP) (8*135)		1080	853	445	16.67	694
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	1006	815	22.38	933
Thermal (Total)		8026	5354	4435	120	5010
Total Hydro		550	169	93	5.05	210
Wind power		2798	396	565	7.66	319
Biomass		99	9	9	0.22	9
Solar		730	1	0	0.10	4
Renewable/Others (Total)		3627	406	574	7.99	333
Total Rajasthan		12203	5929	5102	133.27	5553
UP	Anpara TPS (3*210+2*500)	1630	1367	1382	32.40	1350
	Obra TPS (2*50+2*94+5*200)	1194	355	344	8.30	346
	Paricha TPS (2*110+2*220+2*250)	1140	776	704	17.50	729
	Panki TPS (2*105)	210	45	77	1.00	42
	Harduaganj TPS (1*60+1*105+2*250)	665	230	231	5.50	229
	Tanda TPS (NTPC) (4*110)	440	362	300	8.60	358
	Roza TPS (IPP) (4*300)	1200	914	774	21.90	913
	Anpara-C (IPP) (2*600)	1200	1076	1382	25.60	1067
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	401	280	8.00	333
	Thermal (Total)	8129	5526	5474	128.80	5367
	Vishnuparyag HPS (IPP)	400	73	74	1.70	71
	Other Hydro	527	140	52	3.30	138
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	6539	6400	153.00	6304
	Uttarakhand	Total Hydro	1398	614	350	10.38
Total Uttarakhand		1398	614	350	10.38	432
Delhi	Raighat TPS (2*67.5)	135	42	40	0.96	40
	Delhi Gas Turbine (6x30 + 3x34)	282	162	161	3.85	161
	Pragati Gas Turbine (2x104+ 1x122)	330	0	0	0.00	0
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	313	290	7.39	308
	Badarpur TPS (NTPC) (3*95+2*210)	705	394	334	8.60	358
	Thermal (Total)	2917	911	825	20.80	867
Total Delhi	2917	911	825	20.80	867	
HP	Baspa HPS (IPP) (2*150)	300	0	0	0.99	41
	Malana HPS (IPP) (2*43)	86	0	0	0.20	8
	Other Hydro	728	195	76	3.21	134
	Total HP	1114	195	76	4.40	183
J & K	Baqilhar HPS (IPP) (3*150)	450	150	120	3.27	136
	Other Hydro/IPP	436	79	20	1.14	47
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	229	140	4.40	183
Total State Control Area Generation		39597	20098	17123	446.38	18528
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4266	3601	116.00	4833
Total Regional Availability(Gross)		64032	41601	29885	843.74	35085

IV. Total Hydro Generation:

Regional Entities Hydro	11432	7265	546	55.27	2303
State Control Area Hydro	5684	1723	783	35.56	1411
Total Regional Hydro	17116	8988	1329	90.83	3714

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	-100	100	100	0.87	0.73	0.14
Gwalior-Agra (D/C)	870	1282	1883	0	33.55	0.00	33.55
Zerda-Kankroli	-128	-44	111	146	0.00	0.67	-0.67
Zerda-Bhinmal	-45	54	300	86	1.41	0.00	1.41
Malanpur-Auraiya	-75	-70	0	110	0.00	2.19	-2.19
Badod-Kota/Morark	-18	-13	53	75	0.00	0.71	-0.71
Mundra-Mohindergarh(HVDC)	2002	1501	2102	0	45.45	0.00	45.45
Vindhychal - Rihand	398	279	500	0	8.83	0.00	8.83
Sub Total WR	3054	2889			90.11	4.30	85.81
Pusauli Bypass	100	100	100	0	2.45	0.00	2.45
MZP- GKP (D/C)	23	-10	186	191	0.56	0.00	0.56
Patna-Balia(D/C)	715	538	802	0	16.61	0.00	16.61
B'Sharif-Balia (D/C)	-18	-124	112	156	0.00	1.32	-1.32
Pusauli-Balia	0	-37	40	69	0.00	0.20	-0.20
Gaya-Fatehpur (765 Kv)	262	164	517	0	7.43	0.00	7.43
Pusauli-Sahupuri	122	124	158	0	3.06	0.00	3.06
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-43	-25	0	43	0.00	0.81	-0.81
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	51	-18	303	42	2.39	0.00	2.39
Sub Total ER	1212	712			32.50	2.32	30.18
Total IR Exch	4266	3601			122.61	6.62	116.00

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
30.20	0.26	30.47	13.07	-5.47	3.67	18.02	1.47	-1.47

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
48.68	64.19	112.87	30.18	85.81	116.00	-18.50	21.62	3.13

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	0.59	3.19	18.95	36.56	64.84	11.77	3.97	0.53	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				
50.32	00:14:24	49.55	08:38:24	49.97	0.09	0.09	50.19	49.79

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	404	23:58	402	23:55	99.7	99.7	0.0	0.0
Gorakhpur	400	410	23:55	410	23:55	99.7	99.7	0.0	0.0
Bareilly	400	422	23:56	420	23:59	99.7	99.7	0.2	0.0
Kanpur	400	420	23:55	419	23:58	99.7	99.7	0.0	0.0
Dadri	400	0	00:00	9999	00:00	100.0	100.0	0.0	0.0
Ballabgarh	400	426	23:55	426	23:55	99.7	99.7	0.3	0.0
Bawana	400	0	00:00	9999	00:00	100.0	100.0	0.0	0.0
Bassi	400	420	23:56	419	23:55	99.7	99.7	0.0	0.0
Hissar	400	415	23:55	414	23:58	99.7	99.7	0.0	0.0
Moga	400	422	23:55	421	23:56	99.7	99.7	0.3	0.0
Abdullapur	400	420	23:55	396	23:58	99.7	99.7	0.0	0.0
Nalagarh	400	424	23:56	423	23:55	99.7	99.7	0.3	0.0
Kishenpur	400	413	23:55	412	23:58	99.7	99.7	0.0	0.0
Wagoora	400	389	23:55	389	23:55	99.7	100.0	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	23:55	0	00:00	99.7	99.7	0.0	0.0
Balia	765	781	23:55	0	00:00	99.7	99.7	0.0	0.0
Moga	765	798	23:55	0	00:00	99.7	99.7	0.0	0.0
Agra	765	790	23:57	0	00:00	99.7	99.7	0.0	0.0
Bhiwani	765	0	00:00	0	00:00	100.0	100.0	0.0	0.0
Unnao	765	759	23:55	0	00:00	99.7	99.7	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	494.96	903.28	498.86	1053.16	136.94	356.03
Pong	426.72	384.05	403.43	304.55	410.12	504.32	69.94	222.68
Tehri	829.79	740.04	804.60	696.77	806.85	740.81	37.46	219.00
Koteshwar	612.50	598.50	608.92	4.44	610.11	4.69	219.00	216.00
Chamera-I	760.00	748.75	759.34	30.00	757.21	23.16	51.35	45.20
Rihand	268.22	252.98	850.50	263.50	854.30	326.40	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	504.00	2.33	510.20	2.77	43.18	89.86

* 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	-308	134	0	-277	4	0	-6.18	1.09	-5.09
Delhi	-942	-10	-21	-539	515	-5	-11.74	6.36	-5.38
Haryana	-947	151	0	-944	95	0	-23.25	0.38	-22.87
HP	483	-61	0	453	-92	0	12.28	-2.70	9.58
J&K	683	-5	0	485	125	0	13.17	2.32	15.49
CHD	-31	0	0	0	10	0	-0.25	0.68	0.44
Rajasthan	486	575	2	486	255	2	15.62	10.74	26.36
UP	69	0	0	98	0	0	-1.35	0.00	-1.35
Uttarakhand	290	87	25	290	232	8	6.97	7.22	14.19
Total	-217	870	7	53	1144	5	5.27	26.10	31.37

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-226	-308	249	0	0	0
Delhi	17	-942	694	-92	-5	-21
Haryana	-944	-994	151	-494	0	0
HP	555	429	0	-604	0	0
J&K	683	437	237	-5	0	0
CHD	0	-31	73	0	0	0
Rajasthan	841	486	575	246	2	2
UP	126	-312	0	0	0	0
Uttarakhand	290	290	475	87	48	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 15.01.2015 :****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 :**