

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त महायुक्त कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 15.02.2015
Date of Reporting : 16.02.2015

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 Hrs) MW			Off Peak (03:00 Hrs) MW			Day Energy (Net MU)		
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
36318	1342	37660	50.09	30623	935	31558	50.06	808.8	38.90

* 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	46.90	11.43		58.33	41.84	41.27	-0.57	99.60	0.00
Haryana	59.40	0.36		59.76	52.48	51.03	-1.45	110.79	0.01
Rajasthan	132.14	4.36	9.68	146.17	65.48	65.33	-0.16	211.50	0.00
Delhi	15.68			15.68	39.04	38.36	-0.68	54.03	0.02
UP	138.68	2.85		141.53	93.61	91.14	-2.46	232.67	29.58
Uttarakhand		9.51		9.51	22.55	22.88	0.33	32.39	1.85
HP		4.38		4.38	18.69	18.13	-0.56	22.51	0.00
J & K		4.84	0.00	4.84	36.35	37.39	1.03	42.23	7.45
Chandigarh				0.00	3.29	3.12	0.27	3.12	0.00
Total	392.79	37.73	9.68	440.19	373.32	368.64	-4.24	808.83	38.90

* 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	5075	0	-170	-78	3330	0	73	-315	5230
Haryana	5444	0	35	-531	3843	0	50	-483	5929
Rajasthan	8859	0	-106	430	8475	0	-60	888	9829
Delhi	2575	0	-138	-486	1486	0	-12	-909	3274
UP	9676	970	-360	46	9836	645	-38	63	10590
Uttarakhand	1622	40	-67	435	1157	0	12	339	1777
HP	1022	0	-38	289	764	0	56	357	1214
J&K	1882	332	129	663	1643	290	98	647	1918
Chandigarh	163	0	-25	0	89	0	-4	-31	184
Total	36318	1342	-741	769	30623	935	175	557	37356

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

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III. Regional Entities :

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	1484	1531	1563	35.59	1483	35.41	0.18
Rihand I STPS (2*500)	1000	864	925	947	21.59	899	19.84	1.74
Rihand II STPS (2*500)	1000	906	845	938	21.30	887	19.85	1.45
Rihand III STPS (2*500)	1000	969	871	813	21.68	903	20.46	1.22
Dadri I STPS (4*210)	840	815	655	590	16.37	682	15.60	0.77
Dadri II STPS (2*490)	980	980	856	698	18.84	785	18.50	0.34
Unchahar I TPS (2*210)	420	405	271	319	8.20	342	8.75	-0.55
Unchahar II TPS (2*210)	420	403	278	298	7.88	328	7.89	-0.01
Unchahar III TPS (1*220)	210	201	131	153	3.95	165	3.96	-0.01
ISTPP (Jhajjar) (3*500)	1500	1500	720	636	15.58	649	17.16	-1.58
Dadri GPS (4*130.19+2*154.51)	830	645	188	186	4.54	189	4.69	-0.15
Anta GPS (3*88.71+1*153.2)	419	427	247	260	6.20	258	6.18	0.02
Auraiya GPS (4*111.19+2*109.30)	663	511	162	166	3.92	163	3.85	0.07
Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
Singrauli Solar	15	2	0	0	0.05	2	0	0.02
Sub Total (A)	11312	10113	7680	7567	186	7739	182	3
B. NPC								
NAPS (2*220)	440	396	423	431	9.35	390	9.50	-0.15
RAPS- B (2*220)	440	413	456	455	9.85	411	9.91	-0.06
RAPS- C (2*220)	440	216	230	233	4.70	196	5.17	-0.47
Sub Total (B)	1320	1025	1109	1119	23.91	996	24.59	-0.68
C. NHPC								
Chamera I HPS (3*180)	540	534	459	0	1.70	71	1.60	0.09
Chamera II HPS (3*100)	300	200	200	0	1.48	62	1.45	0.03
Chamera III HPS (3*77)	231	231	225	0	0.69	29	0.62	0.07
Bairasuli HPS(3*60)	180	179	180	0	0.80	33	0.80	0.00
Salal-HPS (6*115)	690	99	240	67	2.56	107	2.39	0.17
Tanakpur-HPS (3*40)	94	21	19	29	0.55	23	0.50	0.05
Uri-I HPS (4*120)	480	130	221	21	3.24	135	3.11	0.13
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	140	140	0	0.09	4	0.85	-0.76
Dulhasti-HPS (3*130)	390	258	274	0	3.09	129	3.00	0.09
Sewa-II HPS (3*40)	120	119	127	0	1.20	50	1.20	0.00
Parbati 3 (4*130)	520	238	0	0	0.35	15	0.33	0.03
Sub Total (C)	4065	2149	2084	117	16	656	16	0
D. SJVNL								
NJPC (6*250)	1500	1605	1563	0	5.58	232	5.60	-0.02
Rampur HEP (4*68.67)	275	370	373	0	1.54	64	1.51	0.03
Sub Total (D)	1775	1975	1936	0	7.11	296	7.11	0.00
E. THDC								
Tehri HPS (4*250)	1000	876	877	0	7.89	329	7.90	-0.01
Koteshwar HPS (4*100)	400	129	300	97	3.16	132	3.10	0.06
Sub Total (E)	1400	1005	1177	97	11.05	460	11.00	0.05
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	775	1150	489	18.67	778	18.60	0.06
Dehar HPS (6*165)	990	139	330	0	3.41	142	3.34	0.07
Pong HPS (6*66)	396	147	295	0	3.28	136	3.53	-0.25
Sub Total (F)	2900	1061	1775	489	25.35	1056	25.47	-0.12
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.30	13	0.28	0.03
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	0	0	3.01	125	2.99	0.01
Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
Shree Cement TPS (2*150)	300	0	113	127	2.97	124	2.95	0.01
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	113	127	6.28	262	6.23	0.05
H. Total Regional Entities (A-G)	24434	17328	15873	9516	275.17	11465	272.50	2.67

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	12.19	508
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.32	96
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	635	505	13.88	578
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	594	355	11.11	463
	Talwandi Saboo (1*660)	660	350	360	7.40	308
	Thermal (Total)	4680	2209	1800	46.90	1954
	Total Hydro	1148	474	496	11.43	476
Total Punjab	5828	2683	2296	58.33	2430	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	460	440	10.40	433
	DCRTPP (Yamuna nagar) (2*300)	600	538	481	11.82	492
	Faridabad GPS (NTPC)	432	195	170	4.54	189
	RGTPP (khedar) (IPP) (2*600)	1200	1160	731	20.98	874
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	557	374	11.66	486
	Thermal (Total)	4944	2910	2196	59.40	2475
	Total Hydro	62	9	13	0.36	15
	Total Haryana	5006	2919	2209	59.76	2490
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1058	1089	26.03
suratgarh TPS (6*250)		1500	1146	1148	29.74	1239
Chabra TPS (3*250)		750	596	637	14.77	616
Dholpur GPS (3*110)		330	112	114	2.83	118
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	176	175	4.20	175
RAPS A (NPC) (1*100+1*200)		300	165	165	4.06	169
Barsingar (NLC) (2*125)		250	95	95	2.14	89
Giral LTPS (2*125)		250	17	84	1.07	45
Rajwest LTPS (IPP) (8*135)		1080	833	953	20.84	868
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	991	1205	26.44	1102
Thermal (Total)		8026	5189	5665	132	5506
Total Hydro		550	109	105	4.36	182
Wind power		2798	825	90	9.32	389
Biomass		99	12	12	0.30	12
Solar		730	1	0	0.06	2
Renewable/Others (Total)		3627	838	102	9.68	403
Total Rajasthan	12203	6136	5872	146.17	6091	
UP	Anpara TPS (3*210+2*500)	1630	1397	1351	33.00	1375
	Obra TPS (2*50+2*94+5*200)	1194	356	353	8.45	352
	Paricha TPS (2*110+2*220+2*250)	1140	584	574	14.62	609
	Panki TPS (2*105)	210	131	131	3.21	134
	Harduaganj TPS (1*60+1*105+2*250)	665	438	449	10.69	446
	Tanda TPS (NTPC) (4*110)	440	392	388	9.56	399
	Roza TPS (IPP) (4*300)	1200	720	801	18.16	757
	Anpara-C (IPP) (2*600)	1200	547	549	13.10	546
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	401	8.69	362
	Thermal (Total)	8129	4845	4997	119.48	4978
	Vishnuparyag HPS (IPP)	400	72	70	1.68	70
	Other Hydro	527	20	18	1.17	49
	Cogeneration	981	800	800	19.20	800
	Total UP	10037	5737	5885	141.53	5827
Uttarakhand	Total Hydro	1398	599	324	9.51	396
	Total Uttarakhand	1398	599	324	9.51	396
Delhi	Raighat TPS (2*67.5)	135	34	32	0.75	31
	Delhi Gas Turbine (6x30 + 3x34)	282	73	76	1.80	75
	Pragati Gas Turbine (2x104+ 1x122)	330	156	159	3.80	158
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	308	271	6.95	290
	Badarpur TPS (NTPC) (3*95+2*210)	705	157	161	2.38	99
	Thermal (Total)	2917	728	699	15.68	653
Total Delhi	2917	728	699	15.68	653	
HP	Baspa HPS (IPP) (2*150)	300	30	0	0.82	34
	Malana HPS (IPP) (2*43)	86	0	0	0.20	9
	Other Hydro	728	181	100	3.36	140
	Total HP	1114	211	100	4.38	183
J & K	Baqilhar HPS (IPP) (3*150)	450	150	120	3.45	144
	Other Hydro/IPP	436	68	41	1.39	58
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	218	161	4.84	202
Total State Control Area Generation		39597	19231	17546	440.19	18271
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5008	5427	92.64	3860
Total Regional Availability(Gross)		64032	40112	32489	808.00	33597

IV. Total Hydro Generation:

Regional Entities Hydro	11432	6971	703	62.56	2607
State Control Area Hydro	5684	1640	1217	37.73	1502
Total Regional Hydro	17116	8611	1920	100.29	4109

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	350	-250	350	450	3.08	1.77	1.31
Gwalior-Agra (D/C)	1351	2080	2096	0	41.53	0.00	41.53
Zerda-Kankroli	-296	-260	0	430	0.00	5.75	-5.75
Zerda-Bhinmal	-248	-166	39	440	0.00	3.80	-3.80
Malanpur-Auraiya	-30	-21	0	46	0.00	0.74	-0.74
Badod-Kota/Morak	-122	-100	0	218	-32.44	3.24	-35.68
Mundra-Mohindergarh(HVDC)	2303	2502	2508	0	54.71	0.00	54.71
Vindhychal - Rihand	479	423	500	0	10.82	0.00	10.82
Sub Total WR	3787	4208			77.69	15.30	62.39
Pusauli Bypass	400	400	400	0	9.11	0.00	9.11
MZP- GKP (D/C)	265	63	136	265	0.00	1.22	-1.22
Patna-Balia(D/C)	341	525	678	0	12.44	0.00	12.44
B'Sharif-Balia (D/C)	184	98	248	0	2.54	0.00	2.54
Pusauli-Balia	30	-77	113	77	0.43	0.00	0.43
Gaya-Fatehpur (765 Kv)	109	192	415	0	5.74	0.00	5.74
Pusauli-Sahupuri	99	158	158	0	2.94	0.00	2.94
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-25	-30	0	45	0.00	0.77	-0.77
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-182	-110	83	202	0.00	1.46	-1.46
Sub Total ER	1221	1219			33.69	3.45	30.25
Total IR Exch	5008	5427			111.39	18.75	92.64

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
25.68	0.05	25.74	4.77	-1.30	16.61	-0.01	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
47.33	72.73	120.06	30.25	62.39	92.64	-17.08	-10.34	-27.42

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	0.73	6.38	18.39	57.16	58.60	11.66	8.44	2.95	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				
50.44	17.05	49.66	9.15	49.98	0.13	0.11	50.44	49.81

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	408	05:00	403	09:08	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	425	21:51	390	09:54	0.0	0.0	8.6	0.0
Kanpur	400	420	21:53	398	10:15	0.0	0.0	0.0	0.0
Dadri	400	0	00:00	9999	00:00	100.0	100.0	0.0	0.0
Ballabgarh	400	428	05:04	406	11:12	0.0	0.0	38.2	0.0
Bawana	400	425	05:04	406	11:15	0.0	0.0	18.6	0.0
Bassi	400	425	05:02	393	11:32	0.0	0.0	9.6	0.0
Hissar	400	415	21:58	394	11:09	0.0	0.0	0.0	0.0
Moga	400	421	20:09	398	11:10	0.0	0.0	1.6	0.0
Abdullapur	400	424	20:10	396	12:17	0.0	0.0	6.3	0.0
Nalagarh	400	431	20:19	408	11:15	0.0	0.0	31.3	0.8
Kishenpur	400	418	05:04	391	10:17	0.0	0.0	0.0	0.0
Wagoora	400	396	18:02	362	10:20	57.1	93.0	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	05:06	738	09:11	0.0	8.6	0.0	0.0
Balia	765	783	21:56	748	09:10	0.0	0.0	0.0	0.0
Moga	765	798	20:09	756	11:10	0.0	0.0	0.0	0.0
Agra	765	791	21:54	748	11:09	0.0	0.0	0.0	0.0
Bhiwani	765	803	21:28	764	11:10	0.0	0.0	4.9	0.0
Unnao	765	773	21:57	735	10:05	0.0	12.3	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	486.74	636.01	493.02	838.00	152.74	629.82
Pong	426.72	384.05	399.58	209.93	406.96	397.88	42.14	238.03
Tehri	829.79	740.04	790.95	467.00	796.05	545.00	35.75	203.00
Koteshwar	612.50	598.50	610.11	4.69	610.77	4.95	203.00	209.00
Chamera-I	760.00	748.75	759.89	0.00	0.00	0.00	46.42	45.54
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	501.21	2.83	508.74	1.75	60.21	137.14

* 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	6	0	-290	213	0	-7.22	3.82	-3.40
Delhi	-687	-191	-31	-475	20	-31	-11.25	-1.58	-12.83
Haryana	-618	135	0	-615	84	0	-15.99	2.15	-13.84
HP	413	-55	0	383	-94	0	11.22	-3.03	8.19
J&K	647	0	0	468	196	0	13.11	2.48	15.59
CHD	-31	0	0	0	0	0	-0.24	0.00	-0.24
Rajasthan	293	592	2	293	137	-1	7.04	10.83	17.87
UP	63	0	0	46	0	0	-0.34	0.00	-0.34
Uttarakhand	268	45	26	268	167	0	6.34	3.86	10.20
Total	27	531	-2	78	722	-32	2.67	18.53	21.20

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-290	-321	341	3	0	0
Delhi	-244	-687	238	-304	0	-31
Haryana	-615	-782	138	-136	0	0
HP	541	383	-9	-612	0	0
J&K	647	468	269	-126	0	0
CHD	0	-31	0	0	0	0
Rajasthan	293	293	598	-246	2	-74
UP	94	-156	0	0	0	0
Uttarakhand	268	252	289	35	73	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 15.02.2015 :**

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 :**