

पावर 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 14.04.2015
Date of Reporting : 15.04.2015

I. Regional Availability/Demand:

Evening Peak (20:00 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
35067	2486	37552	50.01	27836	925	28761	50.04	719.8	42.04

* 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	28.85	5.09		33.94	60.79	61.09	0.30	95.03	0.00
Haryana	21.73	0.55		22.28	74.66	75.00	0.34	97.28	0.00
Rajasthan	86.80	0.06	7.22	94.08	53.54	54.80	1.26	148.88	0.00
Delhi	16.67			16.67	51.52	51.53	0.01	68.20	0.00
UP	121.10	6.70		127.80	83.81	84.74	0.93	212.54	33.66
Uttarakhand		10.94		10.94	20.17	22.63	2.46	33.57	1.06
HP		11.90		11.90	12.87	12.86	-0.02	24.76	0.00
J & K		10.88	0.00	10.88	24.24	24.99	0.74	35.87	7.32
Chandigarh				0.00	3.59	3.65	0.27	3.65	0.00
Total	275.15	46.13	7.22	328.49	385.20	391.27	6.28	719.76	42.04

* 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 (20:00 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	4823	0	28	101	3672	0	12	286	4823
Haryana	5728	0	133	416	3469	0	-197	425	5728
Rajasthan	6801	0	4	381	5593	0	-2	438	6936
Delhi	3385	0	77	-188	2250	0	37	-282	3385
UP	9733	2070	-36	213	9231	630	596	172	9799
Uttarakhand	1625	75	171	341	1295	0	51	250	1625
HP	1081	0	-58	-584	844	20	25	26	1246
J&K	1703	341	48	-70	1376	275	51	-121	1822
Chandigarh	188	0	1	0	107	0	-5	0	188
Total	35067	2486	368	609	27836	925	568	1193	35067

UI/OA/PX (OD/Import: (+ve), UD/Export: (-ve))

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

Diversity is 1.01

III. Regional Entities :

A. NTPC	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
	Singrauli STPS (5*200+2*500)	2000	1250	1347	1306	31.86	1328	29.05	2.81
	Rihand I STPS (2*500)	1000	854	897	880	21.37	890	19.65	1.72
	Rihand II STPS (2*500)	1000	475	523	506	12.07	503	11.03	1.03
	Rihand III STPS (2*500)	1000	961	1015	740	22.49	937	21.30	1.19
	Dadri I STPS (4*210)	840	815	633	618	15.34	639	14.74	0.60
	Dadri II STPS (2*490)	980	980	686	705	17.13	714	16.89	0.24
	Unchahar I TPS (2*210)	420	405	295	295	6.56	273	7.90	-1.34
	Unchahar II TPS (2*210)	420	401	241	247	6.32	263	7.14	-0.82
	Unchahar III TPS (1*220)	210	0	0	0	0.03	1	0.00	0.03
	ISTPP (Jhajjar) (3*500)	1500	1500	836	617	14.46	603	15.26	-0.80
	Dadri GPS (4*130.19+2*154.51)	830	815	390	401	9.53	397	9.54	-0.01
	Anta GPS (3*88.71+1*153.2)	419	256	47	44	1.12	47	1.68	-0.56
	Auraiya GPS (4*111.19+2*109.30)	663	656	163	169	3.93	164	3.94	0.00
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.00	0	0.06	-0.06
	Singrauli Solar	15	3	0	0	0.05	2	0.07	-0.02
	KHEP	400	0	0	0	0.00	0	0.00	0.00
	Sub Total (A)	11712	9373	7073	6528	162	6762	158	4
B. NPC	NAPS (2*220)	440	399	429	442	9.53	397	9.58	-0.05
	RAPS- B (2*220)	440	384	427	428	9.22	384	9.41	-0.19
	RAPS- C (2*220)	440	334	190	410	8.02	334	8.03	0.00
	Sub Total (B)	1320	1117	1046	1280	26.77	1115	27.01	-0.24
C. NHPC	Chamera I HPS (3*180)	540	534	549	0	9.13	380	9.07	0.05
	Chamera II HPS (3*100)	300	300	307	101	5.26	219	5.01	0.25
	Chamera III HPS (3*77)	231	231	233	0	3.36	140	3.25	0.10
	Bairasuil HPS(3*60)	180	179	180	180	4.26	177	4.13	0.13
	Salal-HPS (6*115)	690	523	570	570	13.03	543	12.57	0.46
	Tanakpur-HPS (3*40)	94	38	62	38	0.95	39	0.92	0.03
	Uri-I HPS (4*120)	480	475	477	472	11.60	483	11.40	0.20
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	140	0	1.86	77	1.78	0.08
	Dulhasti-HPS (3*130)	390	387	395	0	6.20	258	6.20	0.00
	Sewa-II HPS (3*40)	120	119	130	130	3.08	128	2.86	0.22
	Parbati 3 (4*130)	520	376	0	0	1.17	49	1.17	0.00
	Sub Total (C)	4065	3302	3043	1491	60	2495	58	2
D.SJVNL	NJPC (6*250)	1500	1605	1605	0	11.16	465	10.88	0.28
	Rampur HEP (6*68.67)	412	430	431	0	3.16	132	3.01	0.14
	Sub Total (D)	1912	2035	2036	0	14.31	596	13.90	0.42
E. THDC	Tehri HPS (4*250)	1000	531	537	0	7.15	298	7.10	0.05
	Koteswar HPS (4*100)	400	129	383	91	3.11	130	3.10	0.01
	Sub Total (E)	1400	660	920	91	10.26	428	10.20	0.06
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	353	638	324	8.02	334	8.48	-0.46
	Dehar HPS (6*165)	990	465	495	420	11.17	465	11.16	0.01
	Pong HPS (6*66)	396	47	246	0	1.04	44	1.12	-0.07
	Sub Total (F)	2900	865	1379	744	20.24	843	20.76	-0.52
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	29	29	0.74	21	0.66	0.07
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	880	0	5.50	329	5.52	-0.02
	Malana Stg-II HPS (2*50)	100	0	20	20	0.63	26	0.59	0.04
	Shree Cement TPS (2*150)	300	0	257	264	5.84	243	5.78	0.06
	Budhil HPS(IPP)	70	0	68	0	0.65	27	0.63	0.02
	Sub Total (G)	1662	0	1254	313	13.36	557	13.18	0.18
H. Total Regional Entities (A-G)		24972	17353	16751	10447	307.11	12796	301.70	5.41

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	210	160	3.64	152
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.05	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	462	351	8.37	349
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	682	361	9.51	396
	Talwandi Saboo (1*660)	660	340	336	7.39	308
	Thermal (Total)	4680	1694	1208	28.85	1202
	Total Hydro	1148	278	105	5.09	212
	Total Punjab	5828	1972	1313	33.94	1414
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	556	489	11.63	485
Faridabad GPS (NTPC)		432	0	0	0.00	0
RGTPP (khedar) (IPP) (2*600)		1200	0	0	0.00	0
Magnum Diesel (IPP)		25	0	0	0.00	0
Jhajjar(CLP) (2*660)		1320	569	372	10.10	421
Thermal (Total)		4944	1125	861	21.73	905
Total Hydro		62	18	19	0.55	23
Total Haryana		5006	1143	880	22.28	928
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	281	270	6.47
	suratgarh TPS (6*250)	1500	200	189	4.78	199
	Chabra TPS (4*250)	1000	378	548	10.02	417
	Dholpur GPS (3*110)	330	0	0	0.00	0
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	184	181	4.57	190
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	131	163	3.21	134
	Giral LTPS (2*125)	250	90	86	1.76	73
	Rajwest LTPS (IPP) (8*135)	1080	844	846	19.25	802
	V/S LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	410	430	10.37	432
	Kawai(Adani) (2*660)	1320	1086	871	26.38	1099
	Thermal (Total)	8276	3604	3584	87	3617
	Total Hydro	550	1	0	0.06	3
	Wind power	2798	357	174	6.35	265
	Biomass	99	32	32	0.77	32
	Solar	730	0	0	0.09	4
	Renewable/Others (Total)	3627	389	206	7.22	301
	Total Rajasthan	12453	3994	3790	94.08	3920
	UP	Anpara TPS (3*210+2*500)	1630	1351	1389	32.60
Obra TPS (2*50+2*94+5*200)		1194	471	470	11.10	463
Paricha TPS (2*110+2*220+2*250)		1140	545	446	10.80	450
Panki TPS (2*105)		210	63	63	1.50	63
Harduaganj TPS (1*60+1*105+2*250)		665	221	221	4.80	200
Tanda TPS (NTPC) (4*110)		440	380	280	7.80	325
Roza TPS (IPP) (4*300)		1200	432	567	13.20	550
Anpara-C (IPP) (2*600)		1200	1093	1098	24.90	1038
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	4446
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	4556	4534	107	8892
Vishnuparyag HPS (IPP)		400	118	108	2.70	113
Other Hydro		527	83	203	4.00	167
Cogeneration		981	600	600	14.40	600
Total UP		10537	5357	5445	127.80	9658
Uttarakhand	Total Hydro	1398	474	480	10.94	456
	Total Uttarakhand	1398	474	480	10.94	456
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	78	82	1.90	79
	Pragati Gas Turbine (2x104+ 1x122)	330	155	156	3.69	154
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	238	272	6.87	286
	Badarpur TPS (NTPC) (3*95+2*210)	705	186	184	4.23	176
	Thermal (Total)	2917	657	694	16.67	695
	Total Delhi	2917	657	694	16.67	695
HP	Baspa HPS (IPP) (2*150)	300	97	29	1.46	61
	Malana HPS (IPP) (2*43)	86	41	0	0.68	28
	Other Hydro	728	437	401	9.77	407
	Total HP	1114	575	430	11.90	496
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	2	79	0.08	3
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	452	529	10.88	453
Total State Control Area Generation		40347	14624	13561	328.49	18021
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5223	5199	115.68	4820
Total Regional Availability(Gross)		65319	36598	29207	751.29	35637

IV. Total Hydro Generation:

Regional Entities Hydro	11969	8307	2375	111.571300	4649
State Control Area Hydro	5684	1881	1766	46.13	1809
Total Regional Hydro	17654	10188	4141	157.70	6458

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	-200	250	400	200	3.29	1.84	1.46
Gwalior-Agra (D/C)	1882	1625	2062	0	38.98	0.00	38.98
Zerda-Kankroli	-32	-156	0	212	0.00	3.17	-3.17
Zerda-Bhinmal	-18	-167	0	205	0.00	2.77	-2.77
Malanpur-Auraiya	-15	-10	0	25	0.00	0.23	-0.23
Badod-Kota/Morak	58	18	74	3	0.88	0.00	0.88
Mundra-Mohindergarh(HVDC)	2302	2196	2305	0	51.41	0.00	51.41
Vindhychal - Rihand	496	508	524	0	11.68	0.00	11.68
Sub Total WR	4473	4264			106.24	8.00	98.24
Pusauli Bypass	400	100	400	0	6.39	0.00	6.39
MZP- GKP (D/C)	90	196	212	192	1.05	0.00	1.05
Patna-Balia(D/C)	199	203	468	4	5.17	0.00	5.17
B'Sharif-Balia (D/C)	-119	74	95	182	0.00	0.89	-0.89
Pusauli-Balia	27	88	104	13	0.54	0.00	0.54
Gaya-Fatehpur (765 Kv)	151	143	236	0	3.37	0.00	3.37
Pusauli-Sahupuri	111	150	176	0	3.43	0.00	3.43
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-46	-30	0	46	0.00	0.85	-0.85
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-63	11	83	162	0.00	1.25	-1.25
Sub Total ER	750	935			20.43	2.98	17.45
Total IR Exch	5223	5199			126.67	10.99	115.68

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
20.26	0.36	20.63	-0.35	-1.75	12.70	3.45	0.83	-0.83

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
33.81	65.65	99.47	17.45	98.24	115.68	-16.37	32.58	16.22

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	0.00	0.98	8.23	49.16	70.98	17.16	4.20	0.14	NA

Frequency (Hz)				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time					
50.21	13.05	49.76	9.15	50.00	0.05	0.07	50.22	49.95

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	403	00:00	403	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	415	17:25	398	19:10	0.0	0.0	0.0	0.0
Bareilly	400	417	04:02	396	19:11	0.0	0.0	0.0	0.0
Kanpur	400	416	04:00	407	05:42	0.0	0.0	0.0	0.0
Dadri	400	422	03:59	404	19:09	0.0	0.0	6.7	0.0
Ballabgarh	400	426	03:04	404	19:11	0.0	0.0	37.2	0.0
Bawana	400	424	03:29	402	19:11	0.0	0.0	20.4	0.0
Bassi	400	423	03:59	404	19:12	0.0	0.0	11.0	0.0
Hissar	400	416	03:04	391	19:12	0.0	0.0	0.0	0.0
Moga	400	422	03:28	401	19:11	0.0	0.0	4.4	0.0
Abdullapur	400	426	03:30	396	19:11	0.0	0.0	59.2	0.0
Nalagarh	400	430	03:29	405	19:17	0.0	0.0	63.5	0.0
Kishenpur	400	225	02:29	214	19:36	100.0	100.0	0.0	0.0
Wagooora	400	414	03:24	378	06:47	2.0	16.4	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	771	08:01	741	19:11	0.0	0.0	0.0	0.0
Balia	765	772	17:18	748	19:11	0.0	0.0	0.0	0.0
Moga	765	799	03:28	759	19:12	0.0	0.0	0.0	0.0
Agra	765	786	04:02	755	19:11	0.0	0.0	0.0	0.0
Bhiwani	765	799	23:29	761	19:09	0.0	0.0	0.0	0.0
Unnao	765	752	08:01	724	19:10	0.4	37.6	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	481.80	503.43	482.15	511.55	380.89	236.02
Pong	426.72	384.05	403.92	312.39	402.13	266.33	126.46	73.79
Tehri	829.79	740.04	768.00	189.93	769.25	201.35	71.88	211.00
Koteswar	612.50	598.50	611.05	4.95	610.69	4.95	211.00	206.00
Chamera-I	760.00	748.75	755.69	0.00	0.00	0.00	256.43	246.76
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	516.12	1.92	515.62	2.73	253.80	75.37

* NA: Not Available

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-155	440	0	-155	256	0	-3.71	8.76	5.05
Delhi	-216	-25	-41	-216	69	-41	-5.19	0.23	-4.96
Haryana	252	173	0	264	152	0	6.28	3.72	10.00
HP	99	-73	0	-205	-379	0	0.59	-4.39	-3.79
J&K	-70	-51	0	-70	0	0	-1.69	-0.21	-1.90
CHD	0	0	0	0	0	0	0.00	0.11	0.11
Rajasthan	-125	561	2	-121	499	2	-2.94	11.86	8.92
UP	172	0	0	213	0	0	4.36	0.00	4.36
Uttarakhand	147	74	29	147	164	29	3.53	3.42	6.95
Total	103	1099	-9	-144	762	-9	1.23	23.50	24.73

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-155	-155	440	252	0	0
Delhi	-216	-216	177	-25	-15	-41
Haryana	268	252	174	137	0	0
HP	99	-205	-49	-540	0	0
J&K	-70	-70	123	-101	0	0
CHD	0	0	20	0	0	0
Rajasthan	-121	-125	562	411	2	-44
UP	218	140	0	0	0	0
Uttarakhand	147	147	176	63	49	5

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 14.04.2015 :**

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 :**