

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 07.04.2015
Date of Reporting : 08.04.2015

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
33834	2642	36476	50.07	27082	518	27600	49.94	696.4	39.18

* 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	26.02	4.76		30.78	49.69	48.11	-1.58	78.89	0.00
Haryana	19.78	0.51		20.29	70.76	69.53	-1.23	89.82	0.00
Rajasthan	80.38	0.39	4.61	85.38	55.87	55.10	-0.77	140.47	0.00
Delhi	16.35			16.35	48.49	48.68	0.19	65.03	0.01
UP	128.40	6.40		134.80	91.55	89.34	-2.20	224.14	29.38
Uttarakhand		10.24		10.24	17.27	20.14	2.87	30.38	2.08
HP		11.30		11.30	12.57	14.30	1.73	25.60	0.00
J & K		13.50	0.00	13.50	22.46	25.11	2.65	38.61	7.72
Chandigarh				0.00	3.45	3.45	0.27	3.45	0.00
Total	270.93	47.09	4.61	322.64	372.12	373.76	1.92	696.40	39.18

* 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	3874	0	117	-150	2839	0	-35	140	4043
Haryana	5439	12	54	436	2933	0	-5	0	5439
Rajasthan	6888	0	90	397	5247	0	-119	554	6985
Delhi	3243	0	-13	-246	2131	0	57	-525	3243
UP	9662	2200	-87	193	10492	250	-63	129	10492
Uttarakhand	1556	75	131	303	1177	0	218	196	1556
HP	1232	0	83	-705	820	0	98	-160	1320
J&K	1773	355	74	-173	1339	268	63	-141	1778
Chandigarh	168	0	-11	-20	104	0	8	-25	175
Total	33834	2642	438	34	27082	518	222	169	33834

* 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	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	1730	1877	1877	44.55	1856	41.00	3.54
Rihand I STPS (2*500)	1000	344	374	408	9.03	376	7.84	1.20
Rihand II STPS (2*500)	1000	483	520	525	12.04	502	10.97	1.07
Rihand III STPS (2*500)	1000	973	1005	1032	23.34	973	22.17	1.17
Dadri I STPS (4*210)	840	815	570	601	16.67	695	15.59	1.09
Dadri II STPS (2*490)	980	613	701	335	11.41	475	11.50	-0.09
Unchahar I TPS (2*210)	420	405	432	429	9.60	400	9.15	0.45
Unchahar II TPS (2*210)	420	403	407	445	9.56	398	8.97	0.59
Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00
ISTPP (Jhajhar) (3*500)	1500	1500	768	662	16.46	686	17.55	-1.09
Dadri GPS (4*130.19+2*154.51)	830	816	157	367	5.27	219	5.15	0.12
Anta GPS (3*88.71+1*153.2)	419	172	0	0	0.00	0	0.00	0.00
Auraiya GPS (4*111.19+2*109.30)	663	657	163	164	3.66	152	3.57	0.09
Dadri Solar	5	1	0	0	0.02	1	0.02	0.00
Unchahar Solar	10	3	0	0	0.02	1	0.06	-0.05
Singrauli Solar	15	3	0	0	0.00	0	0.07	-0.07
KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	8917	6974	6845	162	6734	154	8
B. NPC								
NAPS (2*220)	440	405	433	436	9.59	399	9.72	-0.13
RAPS- B (2*220)	440	394	394	394	9.46	394	9.41	0.05
RAPS- C (2*220)	440	410	448	449	9.67	403	9.84	-0.17
Sub Total (B)	1320	1209	1275	1279	28.71	1196	28.97	-0.26
C. NHPC								
Chamera I HPS (3*180)	540	534	552	554	13.21	550	12.81	0.39
Chamera II HPS (3*100)	300	300	308	308	4.40	183	4.20	0.19
Chamera III HPS (3*77)	231	231	224	81	2.60	109	2.43	0.17
Bairasuli HPS(3*60)	180	120	120	121	2.81	117	2.80	0.02
Salal-HPS (6*115)	690	518	571	575	12.72	530	12.53	0.19
Tanakpur-HPS (3*40)	94	44	39	63	1.19	50	1.06	0.14
Uri-I HPS (4*120)	480	466	477	475	11.43	476	11.20	0.23
Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
Dhauliganga-HPS (4*70)	280	195	211	0	1.67	70	1.65	0.02
Dulhasti-HPS (3*130)	390	387	395	0	5.01	209	5.00	0.01
Sewa-II HPS (3*40)	120	119	130	130	2.81	117	2.86	-0.05
Parbati 3 (4*130)	520	260	132	0	0.95	40	0.91	0.04
Sub Total (C)	4065	3175	3159	2107	59	2451	57	1
D. SJVNL								
NJPC (6*250)	1500	1605	1597	0	9.56	398	9.49	0.07
Rampur HEP (4*68.67)	275	420	420	0	2.60	109	2.60	0.00
Sub Total (D)	1775	2025	2017	0	12.16	507	12.09	0.07
E. THDC								
Tehri HPS (4*250)	1000	549	550	0	6.50	271	6.40	0.10
Koteshwar HPS (4*100)	400	117	180	0	2.89	121	2.80	0.09
Sub Total (E)	1400	666	730	0	9.39	391	9.20	0.19
F. BBMB								
Bhakra HPS (3*108+2*126+6*157)	1514	382	531	339	8.93	372	9.16	-0.23
Dehar HPS (6*165)	990	453	495	495	10.83	451	10.88	-0.05
Pong HPS (6*66)	396	10	123	0	0.26	11	0.23	0.03
Sub Total (F)	2900	845	1149	834	20.02	834	20.27	-0.25
G. IPP(s)/JV(s)								
ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	16	16	0.44	18	0.61	-0.17
KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	752	0	4.92	205	4.93	-0.02
Malana Stg-II HPS (2*50)	100	0	12	12	0.28	12	0.27	0.01
Shree Cement TPS (2*150)	300	0	141	149	3.38	141	3.55	-0.18
Budhil HPS(IPP)	70	0	65	0	0.56	23	0.60	-0.04
Sub Total (G)	1662	0	986	178	9.57	399	9.96	-0.39
H. Total Regional Entities (A-G)	24834	16836	16290	11242	300.30	12512	291.56	8.74

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	200	160	3.67	153
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.05	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	173	354	6.13	255
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	362	371	8.75	365
	Talwandi Saboo (1*660)	660	342	355	7.52	313
	Thermal (Total)	4680	1077	1240	26.02	1084
	Total Hydro	1148	102	225	4.76	198
Total Punjab	5828	1179	1465	30.78	1282	
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	234	222	5.20	217
	DCRTPP (Yamuna nagar) (2*300)	600	0	0	0.00	0
	Faridabad GPS (NTPC)	432	166	172	4.08	170
	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	617	377	10.50	438
	Thermal (Total)	4944	1017	771	19.78	824
	Total Hydro	62	19	19	0.51	21
	Total Haryana	5006	1036	790	20.29	845
	Rajasthan	kota TPS (2*110+2*195+3*210)	1240	274	276	6.12
suratgarh TPS (6*250)		1500	227	215	5.18	216
Chabra TPS (3*250)		750	466	593	11.91	496
Dholpur GPS (3*110)		330	0	0	0.00	0
Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)		271	125	115	3.35	139
RAPS A (NPC) (1*100+1*200)		300	167	162	4.09	170
Barsingar (NLC) (2*125)		250	193	198	4.58	191
Giral LTPS (2*125)		250	82	80	1.13	47
Rajwest LTPS (IPP) (8*135)		1080	843	436	17.56	732
VS LIGNITE LTPS (IPP) (1*135)		135	0	0	0.00	0
Kalisindh Thermal(1*600)		600	0	120	0.99	41
Kawai(Adani) (2*660)		1320	973	866	25.48	1062
Thermal (Total)		8026	3350	3061	80	3349
Total Hydro		550	20	20	0.39	16
Wind power		2798	103	269	4.10	171
Biomass		99	19	19	0.46	19
Solar		730	1	0	0.06	2
Renewable/Others (Total)		3627	123	288	4.61	192
Total Rajasthan		12203	3493	3369	85.38	3557
UP	Anpara TPS (3*210+2*500)	1630	1383	1303	31.70	1321
	Obra TPS (2*50+2*94+5*200)	1194	473	441	10.40	433
	Paricha TPS (2*110+2*220+2*250)	1140	590	647	14.80	617
	Panki TPS (2*105)	210	113	108	2.50	104
	Harduaganj TPS (1*60+1*105+2*250)	665	176	221	4.50	188
	Tanda TPS (NTPC) (4*110)	440	285	390	8.10	338
	Roza TPS (IPP) (4*300)	1200	594	819	16.30	679
	Anpara-C (IPP) (2*600)	1200	1076	1076	25.70	1071
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	0	0	0.00	0
	Anpara-D	500	0	0	0.00	0
	Thermal (Total)	8629	4690	5005	114	4750
	Vishnuparyag HPS (IPP)	400	96	98	2.30	96
	Other Hydro	527	281	302	4.10	171
	Cogeneration	981	600	600	14.40	600
	Total UP	10537	5667	6005	134.80	5521
	Uttarakhand	Total Hydro	1398	478	378	10.24
Total Uttarakhand		1398	478	378	10.24	427
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.03	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	80	81	1.92	80
	Pragati Gas Turbine (2x104+ 1x122)	330	155	162	3.73	155
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	310	269	7.11	296
	Badarpur TPS (NTPC) (3*95+2*210)	705	160	163	3.63	151
	Thermal (Total)	2917	705	675	16.35	681
	Total Delhi	2917	705	675	16.35	681
HP	Baspa HPS (IPP) (2*150)	300	64	0	1.05	44
	Malana HPS (IPP) (2*43)	86	12	0	0.30	13
	Other Hydro	728	415	418	9.95	415
	Total HP	1114	491	418	11.30	471
J & K	Baglihar HPS (IPP) (3*150)	450	436	440	10.52	438
	Other Hydro/IPP	436	128	133	2.99	124
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	564	573	13.50	563
Total State Control Area Generation		40097	13613	13673	322.64	13347
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4543	3101	99.30	4137
Total Regional Availability(Gross)		64932	34446	28016	722.23	29997

IV. Total Hydro Generation:

Regional Entities Hydro	11832	7835	2969	106.029666	4418
State Control Area Hydro	5684	1955	1935	47.09	1866
Total Regional Hydro	17516	9790	4904	153.12	6284

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	-50	50	0	150	0.00	0.53	-0.53
Gwalior-Agra (D/C)	1605	1066	2006	0	36.35	0.00	36.35
Zerda-Kankroli	-148	-383	0	409	0.00	5.94	-5.94
Zerda-Bhinmal	-122	-323	0	380	0.00	4.66	-4.66
Malanpur-Auraiya	-43	-79	0	86	0.00	1.17	-1.17
Badod-Kota/Morak	-46	-143	9	99	0.00	1.84	-1.84
Mundra-Mohindergarh(HVDC)	2402	2400	2406	0	58.03	0.00	58.03
Vindhychal - Rihand	474	522	522	0	12.13	0.00	12.13
Sub Total WR	4072	3110			106.51	14.14	92.36
Pusauli Bypass	200	200	200	0	4.88	0.00	4.88
MZP- GKP (D/C)	-45	-43	84	152	0.00	0.83	-0.83
Patna-Balia(D/C)	105	12	165	0	1.94	0.00	1.94
B'Sharif-Balia (D/C)	-69	-85	0	115	0.00	1.71	-1.71
Pusauli-Balia	129	15	189	0	0.97	0.00	0.97
Gaya-Fatehpur (765 Kv)	52	-48	129	56	0.27	0.00	0.27
Pusauli-Sahupuri	121	159	183	0	3.39	0.00	3.39
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-33	-36	0	42	0.00	0.69	-0.69
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	11	-183	96	189	0.00	1.29	-1.29
Sub Total ER	471	-9			11.45	4.52	6.93
Total IR Exch	4543	3101			117.96	18.66	99.30

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
19.82	1.18	21.00	-0.76	-1.93	5.81	-0.35	0.43	-0.43

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
26.48	69.26	95.73	6.93	92.36	99.30	-19.54	23.11	3.56

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	4.28	23.49	50.80	83.99	43.58	4.53	0.98	0.15	0.00

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				
50.22	17.04	49.50	21.04	49.89	0.24	0.11	50.18	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	17:25	403	01:20	0.0	0.0	0.0	0.0
Gorakhpur	400	415	06:59	400	12:12	0.2	0.2	0.0	0.0
Bareilly	400	422	21:26	404	19:05	0.0	0.0	1.3	0.0
Kanpur	400	420	07:55	404	19:06	0.0	0.0	0.0	0.0
Dadri	400	426	03:01	408	19:08	0.0	0.0	33.4	0.0
Ballabgarh	400	432	03:02	410	19:10	0.0	0.0	70.1	8.1
Bawana	400	429	03:01	408	19:13	0.0	0.0	54.6	0.0
Bassi	400	425	04:25	393	19:24	0.0	0.0	12.2	0.0
Hissar	400	424	03:01	398	19:10	0.0	0.0	9.3	0.0
Moga	400	426	23:45	409	19:10	0.0	0.0	34.1	0.0
Abdullapur	400	431	03:06	396	19:14	0.0	0.0	76.4	0.1
Nalagarh	400	436	02:24	413	19:10	0.0	0.0	93.1	32.9
Kishenpur	400	227	13:04	215	19:29	100.0	100.0	0.0	0.0
Wagoora	400	411	13:03	381	19:27	0.0	21.5	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	773	07:57	738	19:13	0.0	1.7	0.0	0.0
Balia	765	769	08:01	745	12:14	0.0	0.0	0.0	0.0
Moga	765	807	23:47	773	19:10	0.0	0.0	17.8	0.0
Agra	765	788	04:24	755	19:13	0.0	0.0	0.0	0.0
Bhiwani	765	809	23:47	774	19:13	0.0	0.0	25.6	0.0
Unnao	765	767	07:55	746	19:06	0.0	0.0	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	481.21	488.47	481.62	495.33	362.17	265.22
Pong	426.72	384.05	403.62	308.55	401.91	266.33	167.30	19.82
Tehri	829.79	740.04	771.15	220.00	773.40	246.00	78.74	188.00
Koteshwar	612.50	598.50	610.80	4.97	610.06	4.69	188.00	192.00
Chamera-I	760.00	748.75	757.81	0.00	0.00	0.00	297.17	356.99
Rihand	268.22	252.98	844.30	172.40	849.40	245.90	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	513.91	2.36	514.48	1.95	356.84	106.89

* 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	-146	286	0	-150	0	0	-3.52	4.49	0.97
Delhi	-216	-279	-30	-216	1	-30	-5.19	-2.02	-7.21
Haryana	317	-317	0	313	123	0	7.55	-2.35	5.20
HP	99	-259	0	-155	-550	0	0.85	-6.54	-5.70
J&K	-70	-70	0	-70	-103	0	-1.69	-0.93	-2.62
CHD	0	-25	0	0	-20	0	0.00	-0.28	-0.28
Rajasthan	-125	677	2	-121	516	2	-2.94	14.32	11.38
UP	129	0	0	193	0	0	3.96	0.00	3.96
Uttarakhand	0	153	43	0	231	73	0.00	5.62	5.62
Total	-12	166	15	-206	196	44	-0.99	12.29	11.31

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-146	-150	390	0	0	0
Delhi	-216	-216	172	-302	0	-30
Haryana	317	313	141	-466	0	0
HP	99	-155	-81	-640	0	0
J&K	-70	-70	-5	-103	0	0
CHD	0	0	0	-30	0	0
Rajasthan	-121	-125	678	471	2	2
UP	193	125	0	0	0	0
Uttarakhand	0	0	254	1	74	13

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 07.04.2015 :**
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 :**