

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 10.04.2015
Date of Reporting : 11.04.2015

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
36178	2741	38919	50.10	28839	2001	30840	49.97	749.8	45.64

* 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	30.75	6.24		36.99	55.94	55.91	-0.02	92.90	0.00
Haryana	21.41	0.55		21.96	76.98	77.77	0.80	99.73	0.00
Rajasthan	97.51	0.51	4.96	102.98	58.63	58.35	-0.28	161.33	0.00
Delhi	16.13			16.13	53.46	54.67	1.22	70.80	0.02
UP	129.70	0.00		129.70	97.51	96.60	-0.91	226.30	35.85
Uttarakhand		9.16		9.16	19.46	22.96	3.50	32.13	2.09
HP		10.54		10.54	13.35	14.63	1.28	25.17	0.00
J & K		13.48	0.00	13.48	23.98	24.21	0.23	37.68	7.68
Chandigarh				0.00	3.66	3.72	0.27	3.72	0.00
Total	295.50	40.48	4.96	340.94	402.94	408.83	6.09	749.76	45.64

* 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	4678	0	90	-150	3270	0	25	264	4678
Haryana	5588	0	134	388	3343	0	158	129	5588
Rajasthan	7319	0	-70	479	6264	0	117	-126	7324
Delhi	3460	0	23	-232	2262	0	24	-520	3483
UP	10437	2170	-8	218	10100	1730	217	161	10437
Uttarakhand	1556	215	345	254	1258	0	149	344	1601
HP	1197	0	-14	-478	782	0	-8	-12	1342
J&K	1752	356	27	-97	1458	271	127	-126	1822
Chandigarh	193	0	5	-20	102	0	4	-25	193
Total	36178	2741	530	360	28839	2001	813	89	36178

!! 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 :

Entity	Station/Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Sentout(MW)	Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1730	1858	1870	44.64	1860	41.52	3.12
	Rihand I STPS (2*500)	1000	832	938	966	21.76	907	19.97	1.79
	Rihand II STPS (2*500)	1000	480	516	517	12.47	520	11.47	1.00
	Rihand III STPS (2*500)	1000	956	999	1017	23.97	999	22.80	1.17
	Dadri I STPS (4*210)	840	815	715	590	17.24	718	16.56	0.68
	Dadri II STPS (2*490)	980	980	863	674	18.79	783	18.46	0.33
	Unchahar I TPS (2*210)	420	403	359	437	9.45	394	9.37	0.08
	Unchahar II TPS (2*210)	420	290	0	441	6.74	281	6.39	0.35
	Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar) (3*500)	1500	1500	958	687	17.14	714	18.50	-1.37
	Dadri GPS (4*130.19+2*154.51)	830	814	347	182	6.50	271	6.64	-0.14
	Anta GPS (3*88.71+1*153.2)	419	245	-4	-2	-0.01	0	0.06	-0.07
	Auraiya GPS (4*111.19+2*109.30)	663	656	157	161	3.74	156	3.82	-0.08
	Dadri Solar	5	1	0	0	0.03	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.04	2	0.06	-0.03
	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	9708	7706	7540	182	7604	176	7	
B. NPC	NAPS (2*220)	440	399	428	443	9.50	396	9.58	-0.08
	RAPS- B (2*220)	440	401	410	410	9.50	396	9.41	0.09
	RAPS- C (2*220)	440	410	410	410	9.50	396	9.84	-0.34
	Sub Total (B)	1320	1210	1248	1263	28.50	1187	28.83	-0.33
C. NHPC	Chamera I HPS (3*180)	540	534	534	525	12.92	538	12.66	0.26
	Chamera II HPS (3*100)	300	300	306	101	4.45	185	4.29	0.16
	Chamera III HPS (3*77)	231	231	227	0	2.69	112	2.60	0.09
	Bairasuil HPS(3*60)	180	179	180	80	3.33	139	3.21	0.12
	Salal-HPS (6*115)	690	512	570	526	12.85	535	12.40	0.45
	Tanakpur-HPS (3*40)	94	38	38	45	0.96	40	0.91	0.05
	Uri-I HPS (4*120)	480	475	476	473	11.57	482	11.40	0.17
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	187	136	0	1.59	66	1.50	0.09
	Dulhasti-HPS (3*130)	390	387	408	0	6.24	260	6.00	0.24
	Sewa-II HPS (3*40)	120	119	130	130	3.08	128	2.86	0.22
	Parbati 3 (4*130)	520	260	269	0	1.01	42	0.98	0.04
	Sub Total (C)	4065	3223	3274	1879	61	2529	59	2
	D.SJVNL	NJPC (6*250)	1500	1605	1601	0	9.32	388	9.28
Rampur HEP (6*68.67)		412	430	439	0	2.60	108	2.56	0.04
Sub Total (D)		1912	2035	2040	0	11.92	497	11.84	0.08
E. THDC	Tehri HPS (4*250)	1000	540	543	0	6.96	290	6.90	0.06
	Koteswar HPS (4*100)	400	117	301	0	2.85	119	2.80	0.05
	Sub Total (E)	1400	657	844	0	9.81	409	9.70	0.11
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	341	483	317	8.03	335	8.18	-0.15
	Dehar HPS (6*165)	990	439	495	420	9.69	404	10.55	-0.86
	Pong HPS (6*66)	396	71	246	0	1.69	71	1.70	-0.01
	Sub Total (F)	2900	851	1224	737	19.41	809	20.43	-1.02
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	26	26	0.60	25	0.61	0.00
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	880	0	4.73	197	4.68	0.05
	Malana Stg-II HPS (2*50)	100	0	0	0	0.38	16	0.36	0.02
	Shree Cement TPS (2*150)	300	0	294	298	7.04	293	7.07	-0.03
	Budhil HPS(IPP)	70	0	70	0	0.53	22	0.53	0.00
	Sub Total (G)	1662	0	1270	324	13.30	554	13.25	0.05
H. Total Regional Entities (A-G)	24972	17683	17607	11743	326.12	13588	318.58	7.54	

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	420	420	8.55	356
	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	461	9.43	393
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	684	360	12.82	534
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	4680	1566	1241	30.75	1281
	Total Hydro	1148	391	146	6.24	260
	Total Punjab	5828	1957	1387	36.99	1541
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	294	0	1.72	71
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	615	767	19.69	820
Thermal (Total)		4944	909	767	21.41	892
Total Hydro		62	19	19	0.55	23
Total Haryana		5006	928	786	21.96	915
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	707	342	11.64
	suratgarh TPS (6*250)	1500	203	230	4.88	204
	Chabra TPS (4*250)	1000	407	637	13.92	580
	Dholpur GPS (3*110)	330	128	131	3.24	135
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	152	100	3.67	153
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	181	162	4.03	168
	Giral LTPS (2*125)	250	80	66	1.61	67
	Rajwest LTPS (IPP) (8*135)	1080	647	849	20.20	842
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	270	200	6.31	263
	Kawai(Adani) (2*660)	1320	1089	1200	28.03	1168
	Thermal (Total)	8276	3864	3917	98	4063
	Total Hydro	550	21	22	0.51	21
	Wind power	2798	57	116	3.67	153
	Biomass	99	39	39	0.95	39
	Solar	730	0	0	0.34	14
	Renewable/Others (Total)	3627	96	155	4.96	207
	Total Rajasthan	12453	3981	4094	102.98	4291
	UP	Anpara TPS (3*210+2*500)	1630	1390	1394	32.60
Obra TPS (2*50+2*94+5*200)		1194	440	461	10.60	442
Paricha TPS (2*110+2*220+2*250)		1140	631	683	15.20	633
Panki TPS (2*105)		210	104	122	2.60	108
Harduaganj TPS (1*60+1*105+2*250)		665	224	0	1.80	75
Tanda TPS (NTPC) (4*110)		440	390	370	9.60	400
Roza TPS (IPP) (4*300)		1200	783	806	17.80	742
Anpara-C (IPP) (2*600)		1200	1094	1094	25.10	1046
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	4804
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	5056	4930	115	9608
Vishnuparyag HPS (IPP)		400	92	90	0.00	0
Other Hydro		527	48	276	0.00	0
Cogeneration		981	600	600	14.40	600
Total UP		10537	5796	5896	129.70	10208
Uttarakhand		Total Hydro	1398	347	393	9.16
	Total Uttarakhand	1398	347	393	9.16	382
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	74	75	1.86	77
	Pragati Gas Turbine (2x104+ 1x122)	330	148	152	3.63	151
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	305	272	6.94	289
	Badarpur TPS (NTPC) (3*95+2*210)	705	186	182	3.73	155
	Thermal (Total)	2917	713	680	16.13	672
	Total Delhi	2917	713	680	16.13	672
HP	Baspa HPS (IPP) (2*150)	300	29	0	1.05	44
	Malana HPS (IPP) (2*43)	86	14	0	0.45	19
	Other Hydro	728	359	349	9.04	377
	Total HP	1114	402	349	10.54	439
J & K	Baglihar HPS (IPP) (3*150)	450	440	440	10.56	440
	Other Hydro/IPP	436	132	113	2.92	121
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	572	553	13.48	561
Total State Control Area Generation		40347	14696	14138	340.94	19010
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4545	3787	105.33	4389
Total Regional Availability(Gross)		65319	36848	29668	772.39	36987

IV. Total Hydro Generation:

Regional Entities Hydro	11969	8288	2642	107.554607	4481
State Control Area Hydro	5684	1800	1758	40.48	1687
Total Regional Hydro	17654	10088	4400	148.04	6168

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	-100	200	200	1.82	0.99	0.82
Gwalior-Agra (D/C)	1834	1280	2320	0	40.37	0.00	40.37
Zerda-Kankroli	-54	-426	0	426	0.00	5.88	-5.88
Zerda-Bhinmal	-18	-354	5	366	0.00	4.43	-4.43
Malanpur-Auraiya	-46	-75	0	75	0.00	1.07	-1.07
Badod-Kota/Morak	-42	-134	0	134	0.00	1.52	-1.52
Mundra-Mohindergarh(HVDC)	2002	2499	2506	0	53.67	0.00	53.67
Vindhychal - Rihand	502	503	509	0	12.02	0.00	12.02
Sub Total WR	4228	3193			107.86	13.89	93.97
Pusaui Bypass	100	300	300	0	4.29	0.00	4.29
MZP- GKP (D/C)	-52	-10	55	166	0.00	0.95	-0.95
Patna-Balia(D/C)	60	89	321	6	3.53	0.00	3.53
B'Sharif-Balia (D/C)	73	55	157	170	0.00	0.19	-0.19
Pusaui-Balia	6	54	144	23	0.54	0.00	0.54
Gaya-Fatehpur (765 Kv)	95	71	178	31	2.03	0.00	2.03
Pusaui-Sahupuri	160	191	191	0	3.78	0.00	3.78
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-32	-38	0	-42	0.00	0.70	-0.70
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-93	-118	57	164	0.00	1.46	-1.46
Sub Total ER	317	594			14.65	3.29	11.36
Total IR Exch	4545	3787			122.51	17.18	105.33

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
25.22	0.51	25.74	-3.11	-1.75	3.09	-1.16	0.79	-0.79

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
26.50	74.05	100.55	11.36	93.97	105.33	-15.14	19.92	4.78

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	0.81	5.74	30.60	71.99	55.01	8.78	5.75	0.27	0.00

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					
50.22	7.05	49.64	22.11	49.95	0.12	0.10	50.24	49.83

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	04:52	399	19:00	0.0	0.0	0.0	0.0
Gorakhpur	400	415	23:57	396	18:22	0.0	0.0	0.0	0.0
Bareilly	400	420	23:58	400	19:08	0.0	0.0	0.0	0.0
Kanpur	400	417	02:59	397	19:09	0.0	0.0	0.0	0.0
Dadri	400	425	03:01	402	19:08	0.0	0.0	16.2	0.0
Ballabgarh	400	431	02:55	403	19:08	0.0	0.0	34.2	1.6
Bawana	400	429	03:02	407	11:47	0.0	0.0	35.7	0.0
Bassi	400	426	02:56	403	19:13	0.0	0.0	14.8	0.0
Hissar	400	421	03:01	392	19:13	0.0	0.0	0.2	0.0
Moga	400	427	03:01	402	19:08	0.0	0.0	20.2	0.0
Abdullapur	400	432	02:56	396	19:09	0.0	0.0	33.8	3.3
Nalagarh	400	434	02:56	389	06:56	0.0	0.1	52.3	15.5
Kishenpur	400	227	02:55	214	19:14	100.0	100.0	0.0	0.0
Wagooora	400	411	03:28	377	20:37	4.4	23.6	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	774	23:57	734	19:09	0.0	1.4	0.0	0.0
Balia	765	767	07:02	746	09:13	0.0	0.0	0.0	0.0
Moga	765	809	02:55	2	10:09	34.4	34.4	16.4	0.0
Agra	765	788	23:59	753	19:09	0.0	0.0	0.0	0.0
Bhiwani	765	809	02:05	766	19:09	0.0	0.0	18.0	0.0
Unnao	765	761	23:59	731	19:09	0.0	9.1	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	481.46	495.33	481.87	503.43	317.54	241.17
Pong	426.72	384.05	403.77	312.39	402.01	266.33	145.07	118.73
Tehri	829.79	740.04	769.85	208.27	771.70	229.00	76.00	203.00
Koteswar	612.50	598.50	611.50	4.95	609.78	4.44	203.00	189.00
Chamera-I	760.00	748.75	755.14	0.00	0.00	0.00	269.68	354.12
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	515.06	2.36	515.02	3.00	339.54	79.86

* 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	410	0	-150	0	0	-3.52	4.08	0.56
Delhi	-216	-253	-51	-216	-16	0	-5.19	-1.75	-6.94
Haryana	264	-135	0	264	124	0	6.33	-4.48	1.85
HP	99	-111	0	-104	-374	0	1.15	-4.45	-3.29
J&K	-70	-56	0	-70	-27	0	-1.69	0.05	-1.64
CHD	0	-25	0	0	-20	0	0.00	-0.28	-0.28
Rajasthan	-121	2	-7	-121	598	2	-2.90	9.30	6.40
UP	161	0	0	218	0	0	4.26	0.00	4.26
Uttarakhand	0	295	49	0	254	0	0.00	7.47	7.47
Total	-30	127	-9	-180	538	2	-1.55	9.94	8.39

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-146	-150	412	0	0	0
Delhi	-216	-216	132	-309	0	-51
Haryana	264	264	165	-620	0	0
HP	99	-104	-71	-457	0	0
J&K	-70	-70	120	-106	0	0
CHD	0	0	0	-35	0	0
Rajasthan	-121	-121	642	-70	2	-58
UP	218	151	0	0	0	0
Uttarakhand	0	0	379	63	49	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 10.04.2015 :**

Normal

XIV. Synchronisation of new generating units :

Unit no. 3 at Koldam (200MW) first time synchronized at 0652Hrs.

XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / substation :

400kV Chhabra-Anta line first time idle charged from 400kV Chhabra GSS at 2027Hrs.

XVI. Tripping of lines in pooling stations :**XVII. Complete generation loss in a generating station :**