

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 11.04.2015
Date of Reporting : 12.04.2015

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
34051	1991	36042	50.11	29604	1066	30670	50.03	726.6	33.92

* 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	32.12	5.42		37.54	56.41	55.88	-0.53	93.42	0.00
Haryana	19.89	0.55		20.44	80.46	79.10	-1.36	99.54	0.00
Rajasthan	87.25	0.88	9.18	97.31	48.52	47.81	-0.71	145.12	0.00
Delhi	16.62			16.62	52.57	53.49	0.92	70.11	0.04
UP	117.74	6.10		123.84	97.49	95.91	-1.58	219.75	25.68
Uttarakhand		10.49		10.49	20.75	22.76	2.01	33.25	0.52
HP		11.03		11.03	12.92	13.31	0.40	24.34	0.00
J & K		13.24	0.00	13.24	24.13	24.13	0.00	37.37	7.68
Chandigarh				0.00	3.55	3.66	0.27	3.66	0.00
Total	273.62	47.71	9.18	330.51	396.79	396.04	-0.58	726.55	33.92

* 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	4697	0	-52	-146	3358	0	32	278	4697
Haryana	5836	0	28	385	3483	0	-176	-281	5836
Rajasthan	5549	0	-297	523	6205	0	17	339	6912
Delhi	3406	0	79	-253	2457	0	121	-411	3429
UP	9813	1560	-464	213	10456	795	469	172	10456
Uttarakhand	1609	75	50	411	1256	0	120	346	1609
HP	1112	0	18	-475	815	0	-3	-41	1231
J&K	1845	356	149	-97	1468	271	93	-126	1866
Chandigarh	186	0	-9	-15	106	0	6	-20	186
Total	34051	1991	-498	546	29604	1066	679	256	34051

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

Diversity is 1.06

III. Regional Entities :

Entity	Station/ Constituent	Inst. Capacity	Declared Capacity(MW)	Peak MW	Off Peak MW	Energy	Average	Schedule	UI
		(Effective) MW		(Gross)	(Gross)	(Net MU)	Sentout(MW)	Net MU	Net MU
A. NTPC	Singrauli STPS (5*200+2*500)	2000	1730	1650	1869	44.14	1839	41.01	3.13
	Rihand I STPS (2*500)	1000	893	848	949	20.22	842	19.95	0.26
	Rihand II STPS (2*500)	1000	475	450	526	10.16	424	10.42	-0.26
	Rihand III STPS (2*500)	1000	963	797	1014	20.53	855	20.33	0.20
	Dadri I STPS (4*210)	840	815	685	609	15.20	633	15.16	0.03
	Dadri II STPS (2*490)	980	980	889	712	18.35	765	18.15	0.20
	Unchahar I TPS (2*210)	420	405	261	357	7.65	319	8.14	-0.50
	Unchahar II TPS (2*210)	420	401	309	352	7.52	313	7.21	0.31
	Unchahar III TPS (1*220)	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar) (3*500)	1500	1500	784	671	15.39	641	16.70	-1.31
	Dadri GPS (4*130.19+2*154.51)	830	815	379	403	9.37	390	9.46	-0.09
	Anta GPS (3*88.71+1*153.2)	419	251	0	0	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	656	156	165	3.82	159	3.76	0.06
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.03	1	0.06	-0.03
	Singrauli Solar	15	3	0	0	0.04	2	0.07	-0.03
	KHEP	400	0	0	0	0.00	0	0.00	0.00
Sub Total (A)	11712	9890	7208	7627	172	7185	170	2	
B. NPC	NAPS (2*220)	440	399	428	435	9.42	393	9.58	-0.16
	RAPS- B (2*220)	440	410	422	430	9.13	380	9.41	-0.28
	RAPS- C (2*220)	440	410	444	449	9.66	402	9.84	-0.18
	Sub Total (B)	1320	1219	1294	1314	28.21	1175	28.83	-0.62
C. NHPC	Chamera I HPS (3*180)	540	534	539	0	7.74	323	7.74	0.00
	Chamera II HPS (3*100)	300	300	306	102	4.89	204	4.82	0.08
	Chamera III HPS (3*77)	231	231	225	0	2.96	123	2.89	0.07
	Bairasuil HPS(3*60)	180	179	180	60	3.33	139	3.21	0.12
	Salal-HPS (6*115)	690	526	570	570	13.07	544	12.68	0.39
	Tanakpur-HPS (3*40)	94	38	39	36	0.98	41	0.92	0.06
	Uri-I HPS (4*120)	480	461	476	474	11.36	473	11.09	0.27
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	158	141	0	1.73	72	1.65	0.08
	Dulhasti-HPS (3*130)	390	387	403	0	5.94	248	5.70	0.24
	Sewa-II HPS (3*40)	120	119	130	130	3.09	129	2.86	0.23
	Parbati 3 (4*130)	520	260	0	0	0.76	32	0.75	0.02
	Sub Total (C)	4065	3193	3009	1373	56	2327	54	2
D.SJVNL	NJPC (6*250)	1500	1605	1479	0	10.37	432	10.27	0.10
	Rampur HEP (6*68.67)	412	430	390	0	2.92	122	2.85	0.07
	Sub Total (D)	1912	2035	1869	0	13.29	554	13.12	0.17
E. THDC	Tehri HPS (4*250)	1000	537	538	0	6.91	288	6.90	0.01
	Koteswar HPS (4*100)	400	129	396	91	3.28	137	3.19	0.09
	Sub Total (E)	1400	666	934	91	10.18	424	10.09	0.09
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	339	637	317	7.88	328	8.13	-0.26
	Dehar HPS (6*165)	990	450	495	330	10.58	441	10.80	-0.23
	Pong HPS (6*66)	396	41	186	0	0.79	33	0.99	-0.20
	Sub Total (F)	2900	830	1318	647	19.24	802	19.93	-0.68
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	26	26	0.63	26	0.61	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	880	0	5.29	220	5.30	-0.01
	Malana Stg-II HPS (2*50)	100	0	15	0	0.40	17	0.38	0.03
	Shree Cement TPS (2*150)	300	0	295	299	7.05	294	7.06	-0.01
	Budhil HPS(IPP)	70	0	70	0	0.57	24	0.56	0.01
	Sub Total (G)	1662	0	1287	325	13.94	581	13.90	0.04
H. Total Regional Entities (A-G)	24972	17834	16919	11377	313.15	13048	310.63	2.52	

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	320	420	7.99	333
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	0	0	-0.05	-2
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	355	460	8.98	374
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	474	353	9.61	400
	Talwandi Saboo (1*660)	660	330	0	5.60	233
	Thermal (Total)	4680	1479	1233	32.12	1338
	Total Hydro	1148	225	173	5.42	226
	Total Punjab	5828	1704	1406	37.54	1564
	Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	0	0.00
DCRTPP (Yamuna nagar) (2*300)		600	576	278	8.13	339
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	607	11.76	490
Thermal (Total)		4944	1191	885	19.89	829
Total Hydro		62	23	22	0.55	23
Total Haryana		5006	1214	907	20.44	852
Rajasthan		kota TPS (2*110+2*195+3*210)	1240	727	561	15.59
	suratgarh TPS (6*250)	1500	191	196	4.47	186
	Chabra TPS (4*250)	1000	571	575	13.54	564
	Dholpur GPS (3*110)	330	0	118	1.38	58
	Ramgarh GPS (1*37.5 + 1*35.5 +2*37.5 +1*110 +1*50)	271	171	172	4.28	178
	RAPS A (NPC) (1*100+1*200)	300	0	0	0.00	0
	Barsingsar (NLC) (2*125)	250	167	196	3.93	164
	Giral LTPS (2*125)	250	85	85	1.59	66
	Rajwest LTPS (IPP) (8*135)	1080	446	718	15.67	653
	V/S LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	320	350	9.21	384
	Kawai(Adani) (2*660)	1320	360	864	17.59	733
	Thermal (Total)	8276	3038	3835	87	3635
	Total Hydro	550	22	19	0.88	37
	Wind power	2798	351	612	8.27	344
	Biomass	99	38	38	0.91	38
	Solar	730	0	0	0.00	0
	Renewable/Others (Total)	3627	389	650	9.18	383
	Total Rajasthan	12453	3449	4504	97.31	4054
	UP	Anpara TPS (3*210+2*500)	1630	1363	1368	32.10
Obra TPS (2*50+2*94+5*200)		1194	448	446	10.30	429
Paricha TPS (2*110+2*220+2*250)		1140	662	651	15.00	625
Panki TPS (2*105)		210	86	104	1.80	75
Harduaganj TPS (1*60+1*105+2*250)		665	225	221	5.20	217
Tanda TPS (NTPC) (4*110)		440	385	390	9.30	388
Roza TPS (IPP) (4*300)		1200	567	828	17.20	717
Anpara-C (IPP) (2*600)		1200	998	1098	25.40	1058
Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)		450	0	0	0.00	4846
Anpara-D		500	0	0	0.00	0
Thermal (Total)		8629	4734	5106	116	9692
Vishnuparyag HPS (IPP)		400	98	93	2.30	96
Other Hydro		527	48	236	3.80	158
Cogeneration		981	600	600	1.44	60
Total UP		10537	5480	6035	123.84	9910
Uttarakhand	Total Hydro	1398	477	389	10.49	437
	Total Uttarakhand	1398	477	389	10.49	437
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	74	75	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	148	152	3.61	150
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	304	272	7.02	293
	Badarpur TPS (NTPC) (3*95+2*210)	705	186	181	4.17	174
	Thermal (Total)	2917	712	679	16.62	693
	Total Delhi	2917	712	679	16.62	693
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.13	47
	Malana HPS (IPP) (2*43)	86	45	0	0.50	21
	Other Hydro	728	391	376	9.40	392
	Total HP	1114	466	376	11.03	459
J & K	Baglihar HPS (IPP) (3*150)	450	440	442	10.58	441
	Other Hydro/IPP	436	137	123	2.66	111
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	1094	577	565	13.24	552
Total State Control Area Generation		40347	14079	14861	330.51	18521
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3833	4621	107.50	4479
Total Regional Availability(Gross)		65319	34831	30859	751.15	36048

IV. Total Hydro Generation:

Regional Entities Hydro	11969	8052	2137	104.884026	4370
State Control Area Hydro	5684	1838	1780	47.71	1892
Total Regional Hydro	17654	9890	3917	152.60	6262

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	100	200	300	100	4.24	0.26	3.98
Gwalior-Agra (D/C)	1702	1876	2087	0	42.16	0.00	42.16
Zerda-Kankroli	-188	-283	0	361	0.00	6.36	-6.36
Zerda-Bhinmal	-160	-266	0	358	0.00	5.67	-5.67
Malanpur-Auraiya	-33	-45	0	57	0.00	0.70	-0.70
Badod-Kota/Morak	-60	-65	1	-91	0.00	-2.05	2.05
Mundra-Mohindergarh(HVDC)	2497	2198	2525	0	57.73	0.00	57.73
Vindhychal - Rihand	506	505	513	0	10.64	0.00	10.64
Sub Total WR	4364	4120			114.76	10.93	103.83
Pusauli Bypass	100	100	100	0	2.42	0.00	2.42
MZP- GKP (D/C)	-178	87	88	241	0.00	1.33	-1.33
Patna-Balia(D/C)	-85	131	154	93	1.62	0.00	1.62
B'Sharif-Balia (D/C)	-155	-1	13	188	0.00	1.49	-1.49
Pusauli-Balia	-4	61	85	43	0.47	0.00	0.47
Gaya-Fatehpur (765 Kv)	-77	87	150	99	1.24	0.00	1.24
Pusauli-Sahupuri	165	136	211	0	4.03	0.00	4.03
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-41	-40	0	-41	0.00	0.86	-0.86
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-256	-60	0	287	0.00	2.92	-2.92
Sub Total ER	-531	501			10.27	6.60	3.67
Total IR Exch	3833	4621			125.03	17.53	107.50

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
17.45	0.44	17.88	0.49	-1.75	5.84	-0.01	0.81	-0.81

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
25.01	76.94	101.95	3.67	103.83	107.50	-21.35	26.89	5.54

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	0.94	3.46	14.76	51.11	60.01	17.84	7.87	0.29	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					
50.27	6.02	49.63	0.12	49.99	0.08	0.09	50.19	49.8

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	406	13:16	401	10:14	0.0	0.0	0.0	0.0
Gorakhpur	400	415	17:36	407	19:19	0.0	0.0	0.9	0.0
Bareilly	400	421	04:22	402	19:12	0.0	0.0	0.1	0.0
Kanpur	400	420	06:06	407	11:42	0.0	0.0	0.0	0.0
Dadri	400	423	03:27	404	19:10	0.0	0.0	12.4	0.0
Ballabgarh	400	429	03:11	408	19:12	0.0	0.0	59.2	0.0
Bawana	400	426	03:13	405	19:29	0.0	0.0	38.5	0.0
Bassi	400	430	17:02	404	12:22	0.0	0.0	43.7	0.0
Hissar	400	419	03:21	393	19:12	0.0	0.0	0.0	0.0
Moga	400	429	03:11	401	19:12	0.0	0.0	20.5	0.0
Abdullapur	400	430	02:41	396	19:12	0.0	0.0	66.9	0.0
Nalagarh	400	434	03:14	383	18:50	0.0	2.0	67.8	12.1
Kishenpur	400	228	03:11	213	19:45	100.0	100.0	0.0	0.0
Wagooora	400	416	03:56	375	19:46	8.3	23.5	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	781	17:38	755	11:42	0.0	0.0	0.0	0.0
Balia	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Moga	765	818	03:15	761	19:12	0.0	0.0	15.8	0.0
Agra	765	791	17:03	764	11:42	0.0	0.0	0.0	0.0
Bhiwani	765	806	03:11	771	11:42	0.0	0.0	22.1	0.0
Unnao	765	769	17:37	746	12:22	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	481.53	495.33	481.81	503.43	298.83	234.18
Pong	426.72	384.05	403.81	312.39	402.05	266.33	125.53	57.09
Tehri	829.79	740.04	769.45	204.00	771.10	220.00	77.02	202.00
Koteshwar	612.50	598.50	611.00	4.95	610.19	4.69	202.00	217.00
Chamera-I	760.00	748.75	755.57	0.00	0.00	0.00	243.69	205.86
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	515.25	2.20	515.14	3.20	296.50	96.90

* 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	424	0	-150	5	0	-3.52	5.69	2.17
Delhi	-216	-154	-41	-216	-36	0	-5.19	-1.49	-6.68
Haryana	264	-544	0	264	121	0	6.33	-0.93	5.40
HP	99	-140	0	-104	-371	0	1.15	-4.81	-3.66
J&K	-70	-56	0	-70	-27	0	-1.69	-0.10	-1.78
CHD	0	-20	0	0	-15	0	0.00	-0.21	-0.21
Rajasthan	-121	473	-12	-121	642	2	-2.90	11.12	8.22
UP	172	0	0	213	0	0	4.28	0.00	4.28
Uttarakhand	147	150	49	147	264	0	3.53	4.73	8.26
Total	128	132	-4	-38	581	2	1.99	14.01	16.00

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-146	-150	431	0	0	0
Delhi	-216	-216	82	-216	0	-41
Haryana	264	264	163	-544	0	0
HP	99	-104	-80	-547	0	0
J&K	-70	-70	96	-106	0	0
CHD	0	0	0	-25	0	0
Rajasthan	-121	-121	642	-81	2	-53
UP	213	166	0	0	0	0
Uttarakhand	147	147	264	116	49	0

XI. System Constraints:**XII. Grid Disturbance / Any Other Significant Event:****XIII. Weather Conditions For 11.04.2015 :**

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 :**