पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

CIN: U40105DL2009GOI188682

Power Supply Position in Northern Region for 11.02.2015
Date of Reporting : 12.02.2015

I. Regional Availability/Demand:

Evening Peak (19:00 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
37260	2193	39452	49.97	30573	756	31328	50.10	816.3	44.16

* 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:

UI [OD:(+ve), UD: (-ve)]

State	State's Control Area Generation (Net MU)				Drawal Schedule	Actual Drawal	UI	Consumption	Shortages *
	Thermal	Hydro	Renewable/others $	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(MU)
Punjab	45.82	9.55		55.36	43.23	43.80	0.57	99.16	0.00
Haryana	71.60	0.36		71.96	44.50	42.66	-1.84	114.62	0.00
Rajasthan	135.59	3.78	2.74	142.12	67.50	69.00	1.49	211.11	0.00
Delhi	17.47			17.47	43.85	43.68	-0.17	61.15	0.01
UP	130.03	2.29		132.32	90.60	93.22	2.62	225.54	42.80
Uttarakhand		8.84		8.84	24.33	25.71	1.37	34.54	1.36
HP		4.30		4.30	20.16	20.25	0.09	24.55	0.00
J & K		4.45	0.00	4.45	36.03	37.53	1.51	41.98	0.00
Chandigarh				0.00	3.59	3.69	0.27	3.69	0.00
Total	**400.51**	**33.56**	**2.74**	**436.81**	**373.77**	**379.53**	**5.92**	**816.34**	**44.16**

* Shortage furnished by the respective constituent.$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

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

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	4957	0	-37	-220	3288	0	63	-244	5273
Haryana	5977	0	-112	-764	3542	0	127	-786	6228
Rajasthan	9031	0	-35	766	8135	0	179	1069	9753
Delhi	2931	0	-144	-280	1474	0	5	-790	3481
UP	9477	1770	65	73	10487	475	648	63	10487
Uttarakhand	1803	75	22	541	1191	0	51	368	1910
HP	1141	40	-154	331	772	0	38	357	1384
J&K	1745	308	-38	655	1590	281	20	643	1960
Chandigarh	198	0	-6	0	94	0	0	-31	209
Total	**37260**	**2193**	**-439**	**1100**	**30573**	**756**	**1131**	**650**	**38224**

* 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 :

UI [OG:(+ve), UG: (-ve)]

	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	1514	1760	1556	39.69	1654	36.26	3.43
	Rihand I STPS (2*500)	1000	885	935	961	22.35	931	20.71	1.64
	Rihand II STPS (2*500)	1000	906	948	971	22.22	926	20.96	1.26
	Rihand III STPS (2*500)	1000	966	1018	784	22.43	935	21.10	1.33
	Dadri I STPS (4*210)	840	815	586	556	16.27	678	15.29	0.98
	Dadri II STPS (2*490)	980	980	829	681	20.35	848	19.90	0.45
	Unchahar I TPS (2*210)	420	405	333	299	8.50	354	8.98	-0.49
	Unchahar II TPS (2*210)	420	403	317	273	8.34	348	8.25	0.09
	Unchahar III TPS (1*220)	210	201	164	131	4.16	173	4.16	0.00
	ISTPP (Jhajjhar) (3*500)	1500	1500	649	572	14.63	610	15.39	-0.76
	Dadri GPS (4*130.19+2*154.51)	830	847	400	367	9.29	387	9.18	0.11
	Anta GPS (3*88.71+1*153.2)	419	426	270	219	5.86	244	5.96	-0.10
	Auraiya GPS (4*111.19+2*109.30)	663	511	166	161	3.94	164	3.94	0.00
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Singrauli Solar	15	0	0	0	0.00	0	0	0.00
	Sub Total (A)	**11312**	**10362**	**8375**	**7531**	**198**	**8253**	**190**	**8**
B. NPC	NAPS (2*220)	440	394	427	438	9.50	396	9.46	0.04
	RAPS- B (2*220)	440	412	455	458	9.90	412	9.89	0.01
	RAPS- C (2*220)	440	214	231	234	4.91	205	5.14	-0.23
	Sub Total (B)	**1320**	**1020**	**1113**	**1130**	**24.30**	**1013**	**24.48**	**-0.18**
C. NHPC	Chamera I HPS (3*180)	540	534	138	0	1.72	71	1.60	0.11
	Chamera II HPS (3*100)	300	200	211	0	1.36	57	1.30	0.06
	Chamera III HPS (3*77)	231	231	221	0	0.73	31	0.59	0.14
	Bairasuil HPS(3*60)	180	179	180	0	0.73	30	0.69	0.04
	Salal-HPS (6*115)	690	91	240	0	2.35	98	2.20	0.15
	Tanakpur-HPS (3*40)	94	23	22	25	0.57	24	0.56	0.02
	Uri-I HPS (4*120)	480	155	214	109	3.77	157	3.72	0.04
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	139	0	0.89	37	0.85	0.04
	Dulhasti-HPS (3*130)	390	258	274	0	3.21	134	3.10	0.11
	Sewa-II HPS (3*40)	120	0	0	0	0.00	0	0.00	0.00
	Parbati 3 (4*130)	520	183	135	0	0.32	13	0.26	0.06
	Sub Total (C)	**4065**	**1995**	**1773**	**134**	**16**	**652**	**15**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1504	0	5.95	248	5.99	-0.04
	Rampur HEP (4*68.67)	275	370	300	0	1.54	64	1.60	-0.06
	Sub Total (D)	**1775**	**1975**	**1804**	**0**	**7.50**	**312**	**7.59**	**-0.09**
E. THDC	Tehri HPS (4*250)	1000	896	896	0	7.95	331	7.90	0.05
	Koteshwar HPS (4*100)	400	133	301	97	3.25	135	3.20	0.05
	Sub Total (E)	**1400**	**1029**	**1197**	**97**	**11.20**	**467**	**11.10**	**0.10**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	725	1129	474	17.49	729	17.40	0.09
	Dehar HPS (6*165)	990	136	330	0	3.09	129	3.27	-0.17
	Pong HPS (6*66)	396	106	240	0	2.63	110	2.55	0.08
	Sub Total (F)	**2900**	**967**	**1699**	**474**	**23.21**	**967**	**23.22**	**-0.01**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.34	14	0.32	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	0	0	3.12	130	3.13	0.00
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	281	165	5.78	241	5.79	-0.02
	Budhil HPS(IPP)	70	0	0	0	0.18	7	0.18	0.00
	Sub Total (G)	1662	0	281	165	9.42	393	9.42	0.00
H. Total Regional Entities (A-G)		**24434**	**17349**	**16241**	**9531**	**289.33**	**12055**	**280.84**	**8.49**

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	320	8.22	343
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	120	2.46	102
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	663	718	15.05	627
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	660	335	12.39	516
	Talwandi Saboo (1*660)	660	328	222	7.70	321
	Thermal (Total)	**4680**	**2071**	**1715**	**45.82**	**1909**
	Total Hydro	1148	444	367	9.55	398
	Total Punjab	**5828**	**2515**	**2082**	**55.36**	**2307**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	448	442	10.47	436
	DCRTPP (Yamuna nagar) (2*300)	600	545	469	11.76	490
	Faridabad GPS (NTPC)	432	203	192	4.72	197
	RGTPP (khedar) (IPP) (2*600)	1200	1156	726	20.74	864
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1196	740	23.92	997
	Thermal (Total)	**4944**	**3548**	**2569**	**71.60**	**2983**
	Total Hydro	62	6	16	0.36	15
	Total Haryana	**5006**	**3554**	**2585**	**71.96**	**2998**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	914	1043	25.48	1062
	suratgarh TPS (6*250)	1500	1158	959	28.49	1187
	Chabra TPS (3*250)	750	775	664	18.64	776
	Dholpur GPS (3*110)	330	111	122	2.88	120
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	145	158	4.10	171
	RAPS A (NPC) (1*100+1*200)	300	163	163	4.04	168
	Barsingsar (NLC) (2*125)	250	189	190	4.04	168
	Giral LTPS (2*125)	250	40	0	0.20	9
	Rajwest LTPS (IPP) (8*135)	1080	914	942	22.28	928
	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	1134	844	25.46	1061
	Thermal (Total)	**8026**	**5543**	**5085**	**136**	**5650**
	Total Hydro	550	103	253	3.78	158
	Wind power	2798	67	142	2.25	94
	Biomass	99	18	18	0.42	18
	Solar	730	1	0	0.07	3
	Renewable/Others (Total)	3627	86	160	2.74	114
	Total Rajasthan	**12203**	**5732**	**5498**	**142.12**	**5921**
UP	Anpara TPS (3*210+2*500)	1630	781	1220	23.56	982
	Obra TPS (2*50+2*94+5*200)	1194	349	346	8.34	347
	Paricha TPS (2*110+2*220+2*250)	1140	617	657	15.29	637
	Panki TPS (2*105)	210	140	131	3.28	137
	Harduaganj TPS (1*60+1*105+2*250)	665	444	447	10.60	442
	Tanda TPS (NTPC) (4*110)	440	373	385	9.47	394
	Roza TPS (IPP) (4*300)	1200	617	810	18.49	770
	Anpara-C (IPP) (2*600)	1200	541	540	12.87	536
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	401	8.93	372
	Thermal (Total)	**8129**	**4142**	**4937**	**110.83**	**4618**
	Vishnuparyag HPS (IPP)	400	70	68	0.00	0
	Other Hydro	527	58	186	2.29	95
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**5070**	**5991**	**132.32**	**5513**
Uttarakhand	Total Hydro	1398	595	282	8.84	368
	Total Uttarakhand	**1398**	**595**	**282**	**8.84**	**368**
Delhi	Rajghat TPS (2*67.5)	135	32	35	0.73	30
	Delhi Gas Turbine (6x30 + 3x34)	282	77	78	1.86	77
	Pragati Gas Turbine (2x104+ 1x122)	330	158	163	3.86	161
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	315	270	7.19	300
	Badarpur TPS (NTPC) (3*95+2*210)	705	155	160	3.83	160
	Thermal (Total)	2917	737	706	17.47	728
	Total Delhi	**2917**	**737**	**706**	**17.47**	**728**
HP	Baspa HPS (IPP) (2*150)	300	23	0	0.82	34
	Malana HPS (IPP) (2*43)	86	0	0	0.18	8
	Other Hydro	728	168	111	3.30	137
	Total HP	**1114**	**191**	**111**	**4.30**	**179**
J & K	Baglihar HPS (IPP) (3*150)	450	150	120	3.09	129
	Other Hydro/IPP	436	90	91	1.36	57
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**240**	**211**	**4.45**	185
Total State Control Area Generation		**39597**	**18634**	**17466**	**436.81**	**18201**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4762**	**4294**	**114.34**	**4764**
Total Regional Availability(Gross)		**64032**	**39637**	**31291**	**840.49**	**35020**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**6473**	**705**	**61.01**	**2542**
State Control Area Hydro	**5684**	**1637**	**1426**	**33.56**	**1398**
Total Regional Hydro	**17116**	**8110**	**2131**	**94.57**	**3941**

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
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	-100	-200	100	400	0.21	5.60	-5.39
Gwalior-Agra (D/C)	1636	1558	2160	0	40.97	0.00	40.97
Zerda-Kankroli	-141	-252	0	295	0.00	3.94	-3.94
Zerda-Bhinmal	-54	-146	95	222	0.00	1.45	-1.45
Malanpur-Auraiya	-56	-62	0	117	0.00	1.59	-1.59
Badod-Kota/Morak	-65	-132	0	31	0.00	2.96	-2.96
Mundra-Mohindergarh(HVDC)	2301	2301	2307	0	55.61	0.00	55.61
Vindhyachal - Rihand	473	307	496	0	10.67	0.00	10.67
Sub Total WR	**3994**	**3374**			**107.46**	**15.54**	**91.92**
Pusauli Bypass	300	300	300	0	7.24	0.00	7.24
MZP- GKP (D/C)	-74	39	148	163	0.00	0.32	-0.32
Patna-Balia(D/C)	253	291	420	0	7.55	0.00	7.55
B'Sharif-Balia (D/C)	-4	-20	107	92	0.00	0.10	-0.10
Pusauli-Balia	117	86	130	0	1.30	0.00	1.30
Gaya-Fatehpur (765 Kv)	163	189	332	0	5.29	0.00	5.29
Pusauli-Sahupuri	160	142	194	0	3.35	0.00	3.35
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-48	0	48	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-107	-59	77	135	0.00	0.98	-0.98
Sub Total ER	**768**	**920**			**24.73**	**2.31**	**22.42**
Total IR Exch	**4762**	**4294**			**132.19**	**17.84**	**114.34**

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
21.35	0.13	21.48	4.14	-1.53	10.63	7.33	0.22	-0.22

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incids Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
36.46	76.08	112.55	22.42	91.92	114.34	-14.04	15.83	1.80

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	1.96	14.84	41.14	56.35	18.03	9.35	1.46	NA

<---------- Frequency (Hz) ---------->				Average	Frequency	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum		Frequency	Variation		MAX	MIN
Freq	Time	Freq	Time	Hz	Index		(Hz)	(Hz)
50.34	21.59	49.71	14.49	50.00	0.08	0.09	50.23	49.88

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	00:00	402	11:23	0.0	0.0	0.0	0.0
Gorakhpur	400	414	21:56	390	09:20	0.0	0.0	0.0	0.0
Bareilly	400	424	20:56	395	13:42	0.0	0.0	3.9	0.0
Kanpur	400	421	05:03	401	12:18	0.0	0.0	0.3	0.0
Dadri	400	419	04:04	397	14:46	9.0	9.0	0.0	0.0
Ballabhgarh	400	427	04:03	402	13:49	0.0	0.0	35.2	0.0
Bawana	400	424	04:00	402	13:49	0.0	0.0	22.7	0.0
Bassi	400	425	20:53	396	12:48	0.0	0.0	5.2	0.0
Hissar	400	414	03:59	389	14:12	0.0	0.1	0.0	0.0
Moga	400	422	03:34	396	13:48	0.0	0.0	3.7	0.0
Abdullapur	400	421	23:47	396	13:49	0.0	0.0	0.2	0.0
Nalagarh	400	433	04:00	404	13:48	0.0	0.0	42.2	5.9
Kishenpur	400	428	23:46	391	18:42	0.0	0.0	12.2	0.0
Wagoora	400	415	23:46	364	18:42	36.7	71.8	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	782	00:00	737	13:51	0.0	0.0	100.0	100.0
Balia	765	786	21:55	744	09:21	0.0	0.0	100.0	100.0
Moga	765	800	04:00	751	13:50	0.0	0.0	100.0	100.0
Agra	765	792	04:02	750	14:47	0.0	0.0	100.0	100.0
Bhiwani	765	802	04:03	757	14:11	0.0	0.0	100.0	100.0
Unnao	765	774	21:55	736	13:50	0.0	0.0	100.0	100.0

IX. Reservior Parameters:

Name of Reservior	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	488.38	680.71	493.89	858.11	82.43	590.63
Pong	426.72	384.05	400.09	223.85	407.27	407.15	49.98	196.63
Tehri	829.79	740.04	792.90	498.30	797.40	560.42	36.64	202.00
Koteshwar	612.50	598.50	610.43	4.95	610.20	4.69	202.00	216.00
Chamera-I	760.00	748.75	759.68	0.00	0.00	0.00	54.30	45.51
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	501.86	2.54	508.63	2.85	49.43	74.54

*** 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	77	0	-290	70	0	-7.22	3.24	-3.97
Delhi	-687	-83	-20	-475	205	-10	-10.59	1.65	-8.94
Haryana	-900	115	0	-897	133	0	-22.78	2.45	-20.33
HP	413	-55	0	383	-52	0	11.22	-2.56	8.66
J&K	647	-3	0	468	187	0	13.13	1.81	14.94
CHD	-31	0	0	0	0	0	-0.24	0.21	-0.04
Rajasthan	548	519	2	548	227	-9	12.46	9.68	22.13
UP	63	0	0	73	0	0	-0.04	0.00	-0.04
Uttarakhand	268	57	42	268	272	0	6.34	5.83	12.17
Total	**0**	**626**	**24**	**77**	**1042**	**-19**	**2.28**	**22.30**	**24.57**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-290	-321	300	2	0	0
Delhi	-120	-687	342	-91	-10	-20
Haryana	-897	-1068	164	-161	0	0
HP	541	383	10	-564	0	0
J&K	647	468	266	-80	0	0
CHD	0	-31	29	0	0	0
Rajasthan	548	489	600	-80	2	-74
UP	110	-150	0	0	0	0
Uttarakhand	268	252	345	55	73	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 11.02.2015 :

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 :

Report for : 11.02.2015 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**