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 31.01.2015
Date of Reporting : 01.02.2015

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
38079	1671	39750	50.10	29767	792	30559	50.10	828.8	45.08

* 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	43.89	8.53		52.41	43.23	44.24	1.01	96.66	0.00
Haryana	72.06	0.36		72.42	49.05	49.38	0.33	121.80	0.00
Rajasthan	123.83	2.71	4.45	130.98	72.25	74.55	2.31	205.54	0.00
Delhi	21.69			21.69	43.62	42.59	-1.03	64.27	0.01
UP	133.90	4.30		138.20	92.55	90.79	-1.76	228.99	36.16
Uttarakhand		6.74		6.74	27.79	28.61	0.82	35.36	0.68
HP		3.35		3.35	22.44	22.33	-0.11	25.68	0.00
J & K		4.11	0.00	4.11	38.03	42.55	4.52	46.67	8.24
Chandigarh				0.00	3.73	3.80	0.27	3.80	0.00
Total	**395.36**	**30.11**	**4.45**	**429.92**	**392.69**	**398.84**	**6.35**	**828.76**	**45.08**

* 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	4799	0	75	-287	3017	0	147	-277	5044
Haryana	6221	0	-60	-810	3684	0	226	-782	6221
Rajasthan	8495	0	45	937	7596	0	28	1088	10001
Delhi	3047	0	-215	-240	1596	0	-43	-981	3760
UP	10409	1295	-190	83	9803	445	104	73	10492
Uttarakhand	1817	40	-18	737	1228	0	19	553	1847
HP	1190	0	-108	378	780	0	-3	478	1368
J&K	1902	336	6	716	1967	347	317	695	2212
Chandigarh	199	0	-6	0	96	0	2	-31	218
Total	**38079**	**1671**	**-469**	**1513**	**29767**	**792**	**797**	**815**	**39047**

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

Diversity is 1.05

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	1925	2061	2031	49.51	2063	46.12	3.40
	Rihand I STPS (2*500)	1000	929	937	868	22.58	941	21.15	1.43
	Rihand II STPS (2*500)	1000	900	944	714	20.74	864	19.61	1.13
	Rihand III STPS (2*500)	1000	968	844	801	22.19	925	20.91	1.28
	Dadri I STPS (4*210)	840	815	628	558	15.26	636	14.11	1.15
	Dadri II STPS (2*490)	980	980	808	660	18.24	760	18.00	0.24
	Unchahar I TPS (2*210)	420	405	348	300	8.17	340	8.71	-0.54
	Unchahar II TPS (2*210)	420	403	272	270	7.50	312	7.89	-0.40
	Unchahar III TPS (1*220)	210	201	163	141	3.92	164	3.93	-0.01
	ISTPP (Jhajjhar) (3*500)	1500	1500	758	589	16.04	668	18.01	-1.97
	Dadri GPS (4*130.19+2*154.51)	830	648	389	399	9.28	387	9.23	0.05
	Anta GPS (3*88.71+1*153.2)	419	426	247	256	6.04	251	6.14	-0.10
	Auraiya GPS (4*111.19+2*109.30)	663	510	305	311	7.34	306	7.32	0.02
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
	Singrauli Solar	15	2	0	0	0.00	0	0	-0.04
	Sub Total (A)	**11312**	**10615**	**8704**	**7898**	**207**	**8620**	**201**	**6**
B. NPC	NAPS (2*220)	440	398	430	434	9.52	397	9.55	-0.03
	RAPS- B (2*220)	440	413	453	460	9.89	412	9.91	-0.02
	RAPS- C (2*220)	440	220	235	237	4.99	208	5.28	-0.29
	Sub Total (B)	**1320**	**1031**	**1118**	**1131**	**24.40**	**1016**	**24.74**	**-0.35**
C. NHPC	Chamera I HPS (3*180)	540	534	513	0	1.88	78	1.80	0.08
	Chamera II HPS (3*100)	300	200	205	0	1.21	50	1.16	0.05
	Chamera III HPS (3*77)	231	231	230	0	0.60	25	0.55	0.05
	Bairasuil HPS(3*60)	180	120	125	0	0.43	18	0.37	0.06
	Salal-HPS (6*115)	690	83	228	120	2.06	86	1.98	0.08
	Tanakpur-HPS (3*40)	94	24	25	24	0.60	25	0.58	0.01
	Uri-I HPS (4*120)	480	93	200	22	2.31	96	2.24	0.07
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	139	139	0	0.09	4	0.80	-0.71
	Dulhasti-HPS (3*130)	390	329	274	0	2.61	109	2.50	0.11
	Sewa-II HPS (3*40)	120	119	101	0	0.29	12	0.36	-0.06
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1872**	**2040**	**166**	**12**	**503**	**12**	**0**
D.SJVNL	NJPC (6*250)	1500	1424	1350	0	6.09	254	6.00	0.09
	Rampur HEP (4*68.67)	275	370	372	0	1.73	72	1.66	0.07
	Sub Total (D)	**1775**	**1794**	**1722**	**0**	**7.82**	**326**	**7.66**	**0.16**
E. THDC	Tehri HPS (4*250)	1000	940	940	0	7.92	330	7.90	0.02
	Koteshwar HPS (4*100)	400	125	300	92	3.03	126	3.00	0.03
	Sub Total (E)	**1400**	**1065**	**1240**	**92**	**10.95**	**456**	**10.90**	**0.05**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	697	1175	342	16.92	705	16.73	0.19
	Dehar HPS (6*165)	990	120	330	0	2.85	119	2.87	-0.02
	Pong HPS (6*66)	396	191	368	0	4.47	186	4.59	-0.12
	Sub Total (F)	**2900**	**1008**	**1873**	**342**	**24.24**	**1010**	**24.19**	**0.05**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.36	15	0.35	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	792	0	3.25	135	3.23	0.01
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	132	70	2.74	114	2.77	-0.03
	Budhil HPS(IPP)	70	0	0	0	0.14	6	0.15	0.00
	Sub Total (G)	1662	0	924	70	6.49	270	6.50	-0.01
H. Total Regional Entities (A-G)		**24434**	**17385**	**17622**	**9699**	**292.85**	**12202**	**287.60**	**5.25**

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	7.39	308
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.29	95
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	502	506	12.59	525
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	444	351	11.57	482
	Talwandi Saboo (1*660)	660	361	346	10.05	419
	Thermal (Total)	**4680**	**1727**	**1623**	**43.89**	**1829**
	Total Hydro	1148	465	184	8.53	355
	Total Punjab	**5828**	**2192**	**1807**	**52.41**	**2184**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	243	218	5.36	223
	DCRTPP (Yamuna nagar) (2*300)	600	547	490	12.55	523
	Faridabad GPS (NTPC)	432	203	196	4.75	198
	RGTPP (khedar) (IPP) (2*600)	1200	1179	761	23.88	995
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1175	741	25.52	1063
	Thermal (Total)	**4944**	**3347**	**2406**	**72.06**	**3003**
	Total Hydro	62	10	18	0.36	15
	Total Haryana	**5006**	**3357**	**2424**	**72.42**	**3018**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1044	1030	25.54	1064
	suratgarh TPS (6*250)	1500	766	767	19.06	794
	Chabra TPS (3*250)	750	749	729	19.40	808
	Dholpur GPS (3*110)	330	97	101	2.44	101
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	192	197	4.97	207
	RAPS A (NPC) (1*100+1*200)	300	165	168	4.14	173
	Barsingsar (NLC) (2*125)	250	166	165	3.84	160
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	840	839	19.53	814
	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	1079	869	24.91	1038
	Thermal (Total)	**8026**	**5098**	**4865**	**124**	**5159**
	Total Hydro	550	93	54	2.71	113
	Wind power	2798	92	65	3.47	145
	Biomass	99	20	20	0.49	20
	Solar	730	2	0	0.49	20
	Renewable/Others (Total)	3627	114	85	4.45	185
	Total Rajasthan	**12203**	**5305**	**5004**	**130.98**	**5458**
UP	Anpara TPS (3*210+2*500)	1630	1346	1259	31.50	1313
	Obra TPS (2*50+2*94+5*200)	1194	351	355	8.40	350
	Paricha TPS (2*110+2*220+2*250)	1140	812	795	19.40	808
	Panki TPS (2*105)	210	68	63	1.60	67
	Harduaganj TPS (1*60+1*105+2*250)	665	456	404	10.30	429
	Tanda TPS (NTPC) (4*110)	440	375	372	9.20	383
	Roza TPS (IPP) (4*300)	1200	572	801	17.50	729
	Anpara-C (IPP) (2*600)	1200	540	540	9.30	388
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	279	401	7.50	313
	Thermal (Total)	**8129**	**4799**	**4990**	**114.70**	**4779**
	Vishnuparyag HPS (IPP)	400	68	66	1.60	67
	Other Hydro	527	79	109	2.70	113
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**5746**	**5965**	**138.20**	**5692**
Uttarakhand	Total Hydro	1398	484	222	6.74	281
	Total Uttarakhand	**1398**	**484**	**222**	**6.74**	**281**
Delhi	Rajghat TPS (2*67.5)	135	42	39	0.95	40
	Delhi Gas Turbine (6x30 + 3x34)	282	120	120	2.85	119
	Pragati Gas Turbine (2x104+ 1x122)	330	317	273	7.19	300
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	291	271	6.94	289
	Badarpur TPS (NTPC) (3*95+2*210)	705	162	158	3.76	157
	Thermal (Total)	2917	932	861	21.69	904
	Total Delhi	**2917**	**932**	**861**	**21.69**	**904**
HP	Baspa HPS (IPP) (2*150)	300	31	0	0.78	33
	Malana HPS (IPP) (2*43)	86	0	0	0.17	7
	Other Hydro	728	158	72	2.40	100
	Total HP	**1114**	**189**	**72**	**3.35**	**140**
J & K	Baglihar HPS (IPP) (3*150)	450	150	72	3.09	129
	Other Hydro/IPP	436	72	20	1.02	43
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**222**	**92**	**4.11**	171
Total State Control Area Generation		**39597**	**18427**	**16447**	**429.92**	**17847**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4897**	**4098**	**115.59**	**4816**
Total Regional Availability(Gross)		**64032**	**40946**	**30244**	**838.35**	**34865**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7668**	**600**	**58.69**	**2445**
State Control Area Hydro	**5684**	**1542**	**751**	**30.11**	**1188**
Total Regional Hydro	**17116**	**9210**	**1351**	**88.80**	**3633**

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	-400	-450	0	450	0.00	9.76	-9.76
Gwalior-Agra (D/C)	1494	1442	2209	0	42.68	0.00	42.68
Zerda-Kankroli	-95	-270	12	284	0.00	2.52	-2.52
Zerda-Bhinmal	-17	-179	112	183	0.00	0.26	-0.26
Malanpur-Auraiya	-95	-75	0	95	0.00	1.70	-1.70
Badod-Kota/Morak	-14	-86	0	102	0.00	9.47	-9.47
Mundra-Mohindergarh(HVDC)	2303	2302	2305	0	55.61	0.00	55.61
Vindhyachal - Rihand	501	272	505	0	10.80	0.00	10.80
Sub Total WR	**3677**	**2956**			**109.09**	**23.71**	**85.38**
Pusauli Bypass	400	400	400	0	8.97	0.00	8.97
MZP- GKP (D/C)	62	18	153	185	0.18	0.00	0.18
Patna-Balia(D/C)	626	620	790	0	18.34	0.00	18.34
B'Sharif-Balia (D/C)	93	42	57	230	0.00	1.35	-1.35
Pusauli-Balia	-25	-44	131	78	0.00	0.64	-0.64
Gaya-Fatehpur (765 Kv)	125	131	349	0	4.49	0.00	4.49
Pusauli-Sahupuri	107	123	176	0	2.71	0.00	2.71
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-42	0	46	0.00	0.95	-0.95
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-132	-106	98	177	0.00	1.54	-1.54
Sub Total ER	**1220**	**1142**			**34.69**	**4.48**	**30.21**
Total IR Exch	**4897**	**4098**			**143.78**	**28.19**	**115.59**

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
24.75	0.14	24.88	10.57	-5.48	8.05	20.34	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
43.71	85.54	129.25	30.21	85.38	115.59	-13.51	-0.16	-13.67

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	0.39	6.68	37.17	60.03	19.50	11.27	2.56	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)
50.38	00:43:12	49.77	22.07	50.02	0.08	0.08	50.10	50.10

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	407	01:48	400	09:46	0.0	0.0	0.0	0.0
Gorakhpur	400	409	05:02	394	08:15	0.0	0.0	0.0	0.0
Bareilly	400	421	05:02	403	05:55	0.0	0.0	0.1	0.0
Kanpur	400	420	05:02	402	09:45	0.0	0.0	0.0	0.0
Dadri	400	418	03:31	398	09:16	0.8	0.8	0.0	0.0
Ballabhgarh	400	427	03:38	403	09:48	0.0	0.0	26.3	0.0
Bawana	400	425	04:00	404	09:15	0.0	0.0	20.4	0.0
Bassi	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Hissar	400	414	03:59	391	11:06	0.0	0.0	0.0	0.0
Moga	400	421	04:00	396	11:10	0.0	0.0	0.0	0.0
Abdullapur	400	424	23:51	396	11:08	0.0	0.0	10.2	0.0
Nalagarh	400	429	23:48	404	11:07	0.0	0.0	29.2	0.0
Kishenpur	400	416	05:00	387	11:18	0.0	1.9	0.0	0.0
Wagoora	400	396	13:01	363	19:11	60.1	83.1	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	04:00	740	09:16	0.0	2.0	0.0	0.0
Balia	765	775	05:01	750	09:07	0.0	0.0	0.0	0.0
Moga	765	794	03:59	754	11:06	0.0	0.0	0.0	0.0
Agra	765	788	05:02	748	10:10	0.0	0.0	0.0	0.0
Bhiwani	765	801	03:59	760	10:18	0.0	0.0	0.4	0.0
Unnao	765	768	04:01	743	10:18	0.0	0.0	0.0	0.0

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	491.88	798.09	496.15	948.89	165.94	541.02
Pong	426.72	384.05	401.08	244.95	408.39	444.61	56.12	320.57
Tehri	829.79	740.04	797.65	570.74	801.40	634.92	36.20	196.00
Koteshwar	612.50	598.50	610.23	4.69	610.25	4.69	196.00	201.00
Chamera-I	760.00	748.75	758.40	0.00	0.00	0.00	48.21	50.85
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	502.73	1.91	509.01	1.99	72.83	93.61

*** 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	-409	132	0	-378	91	0	-8.61	2.78	-5.83
Delhi	-899	-61	-20	-498	278	-20	-11.70	2.44	-9.27
Haryana	-940	158	0	-937	127	0	-23.77	2.95	-20.82
HP	534	-56	0	504	-127	0	13.81	-2.46	11.35
J&K	695	0	0	496	219	0	13.46	2.86	16.32
CHD	-31	0	0	0	0	0	-0.25	0.30	0.05
Rajasthan	487	598	2	487	447	2	15.69	11.48	27.17
UP	73	0	0	83	0	0	-1.81	0.00	-1.81
Uttarakhand	292	217	45	292	418	28	7.00	9.31	16.30
Total	**-198**	**987**	**26**	**50**	**1453**	**9**	**3.81**	**29.66**	**33.47**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-327	-409	307	4	0	0
Delhi	-36	-899	497	-61	-20	-20
Haryana	-937	-1088	161	74	0	0
HP	632	480	65	-603	0	0
J&K	695	448	268	-26	0	0
CHD	0	-31	49	0	0	0
Rajasthan	844	487	939	-608	40	-20
UP	120	-394	0	0	0	0
Uttarakhand	292	292	476	147	49	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 31.01.2015 :

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 : 31.01.2015 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**