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 23.01.2015
Date of Reporting : 24.01.2015

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
37990	1561	39551	50.03	26436	435	26871	50.12	790.5	41.23

* 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	44.00	5.19		49.19	38.67	39.53	0.86	88.73	0.00
Haryana	70.37	0.41		70.78	42.46	40.42	-2.03	111.20	0.00
Rajasthan	100.04	4.33	6.57	110.94	65.86	71.38	5.52	182.32	0.00
Delhi	22.24			22.24	46.60	46.50	-0.11	68.74	0.11
UP	151.29	2.87		154.16	78.69	78.16	-0.53	232.32	33.38
Uttarakhand		9.40		9.40	25.09	25.53	0.44	34.92	0.19
HP		4.04		4.04	20.71	21.41	0.70	25.44	0.00
J & K		4.26	0.00	4.26	35.36	38.55	3.19	42.81	7.55
Chandigarh				0.00	3.96	4.07	0.27	4.07	0.00
Total	**387.94**	**30.49**	**6.57**	**425.00**	**357.41**	**365.54**	**8.30**	**790.54**	**41.23**

* 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	4527	0	-37	-226	2716	0	108	-293	4996
Haryana	6448	0	190	-869	3178	0	-16	-934	6448
Rajasthan	8367	0	-9	954	6264	0	264	1042	8671
Delhi	3276	0	-97	-207	1606	0	-101	-1072	4012
UP	10378	1210	-343	90	8993	140	46	64	10805
Uttarakhand	1762	40	32	711	1169	0	18	453	1788
HP	1262	0	5	420	742	0	59	446	1367
J&K	1762	311	3	661	1669	295	108	688	2047
Chandigarh	208	0	-13	15	100	0	18	-31	234
Total	**37990**	**1561**	**-268**	**1547**	**26436**	**435**	**504**	**365**	**38289**

* 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	1707	1911	1545	43.21	1801	39.91	3.31
	Rihand I STPS (2*500)	1000	825	893	669	19.99	833	18.46	1.52
	Rihand II STPS (2*500)	1000	908	970	700	21.36	890	20.06	1.30
	Rihand III STPS (2*500)	1000	969	993	731	22.07	920	21.01	1.06
	Dadri I STPS (4*210)	840	768	541	557	16.56	690	15.57	1.00
	Dadri II STPS (2*490)	980	980	718	659	20.75	865	20.34	0.41
	Unchahar I TPS (2*210)	420	405	351	287	8.84	368	8.38	0.46
	Unchahar II TPS (2*210)	420	403	417	273	8.75	365	8.19	0.56
	Unchahar III TPS (1*220)	210	201	193	137	4.34	181	4.03	0.31
	ISTPP (Jhajjhar) (3*500)	1500	1500	950	876	20.55	856	22.13	-1.58
	Dadri GPS (4*130.19+2*154.51)	830	848	203	210	4.89	204	5.01	-0.12
	Anta GPS (3*88.71+1*153.2)	419	426	220	196	5.80	242	5.65	0.15
	Auraiya GPS (4*111.19+2*109.30)	663	681	170	122	3.69	154	3.64	0.05
	Dadri Solar	5	1	0	0	0.01	1	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.04
	Singrauli Solar	15	1	0	0	0.00	0	0	-0.02
	Sub Total (A)	**11312**	**10625**	**8529**	**6961**	**201**	**8368**	**192**	**8**
B. NPC	NAPS (2*220)	440	389	426	431	9.37	390	9.34	0.03
	RAPS- B (2*220)	440	412	455	458	9.92	413	9.89	0.03
	RAPS- C (2*220)	440	211	215	238	5.02	209	5.06	-0.04
	Sub Total (B)	**1320**	**1012**	**1096**	**1127**	**24.30**	**1013**	**24.29**	**0.02**
C. NHPC	Chamera I HPS (3*180)	540	534	459	0	1.72	72	1.60	0.11
	Chamera II HPS (3*100)	300	300	306	0	1.00	42	0.95	0.05
	Chamera III HPS (3*77)	231	231	160	0	0.39	16	0.35	0.04
	Bairasuil HPS(3*60)	180	120	120	0	0.55	23	0.50	0.05
	Salal-HPS (6*115)	690	96	220	0	2.37	99	2.22	0.15
	Tanakpur-HPS (3*40)	94	26	32	22	0.71	30	0.63	0.08
	Uri-I HPS (4*120)	480	100	203	21	2.63	109	2.41	0.22
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	170	140	0	1.05	44	1.00	0.05
	Dulhasti-HPS (3*130)	390	258	271	0	2.50	104	2.40	0.10
	Sewa-II HPS (3*40)	120	119	121	0	0.34	14	0.36	-0.01
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1954**	**2033**	**43**	**13**	**552**	**12**	**1**
D.SJVNL	NJPC (6*250)	1500	1350	1352	0	5.60	233	5.41	0.18
	Rampur HEP (4*68.67)	275	300	296	0	1.45	60	1.40	0.05
	Sub Total (D)	**1775**	**1650**	**1648**	**0**	**7.05**	**294**	**6.81**	**0.24**
E. THDC	Tehri HPS (4*250)	1000	891	975	0	8.99	375	8.90	0.09
	Koteshwar HPS (4*100)	400	134	290	90	3.20	133	3.20	0.00
	Sub Total (E)	**1400**	**1025**	**1265**	**90**	**12.19**	**508**	**12.10**	**0.09**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	460	1092	301	10.91	455	11.05	-0.14
	Dehar HPS (6*165)	990	134	330	0	3.25	135	3.21	0.04
	Pong HPS (6*66)	396	197	309	0	4.53	189	4.73	-0.20
	Sub Total (F)	**2900**	**791**	**1731**	**301**	**18.69**	**779**	**18.99**	**-0.30**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.32	13	0.31	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	731	0	2.92	122	2.88	0.04
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	133	73	2.74	114	2.78	-0.04
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	864	73	5.98	249	5.97	0.01
H. Total Regional Entities (A-G)		**24434**	**17057**	**17167**	**8595**	**282.29**	**11762**	**273.04**	**9.25**

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	480	480	11.46	478
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	90	2.08	87
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	461	358	9.13	380
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	687	357	12.32	513
	Talwandi Saboo (1*660)	660	368	350	9.01	375
	Thermal (Total)	**4680**	**2086**	**1635**	**44.00**	**1833**
	Total Hydro	1148	203	92	5.19	216
	Total Punjab	**5828**	**2289**	**1727**	**49.19**	**2050**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	234	215	5.32	222
	DCRTPP (Yamuna nagar) (2*300)	600	535	470	11.73	489
	Faridabad GPS (NTPC)	432	373	319	8.75	364
	RGTPP (khedar) (IPP) (2*600)	1200	1157	723	20.58	858
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1237	595	23.99	999
	Thermal (Total)	**4944**	**3536**	**2322**	**70.37**	**2932**
	Total Hydro	62	9	14	0.41	17
	Total Haryana	**5006**	**3545**	**2336**	**70.78**	**2949**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	915	847	21.12	880
	suratgarh TPS (6*250)	1500	905	748	19.83	826
	Chabra TPS (3*250)	750	417	227	6.77	282
	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	88	57	1.50	62
	RAPS A (NPC) (1*100+1*200)	300	146	150	4.11	171
	Barsingsar (NLC) (2*125)	250	149	148	3.37	141
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	831	451	17.55	731
	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	1113	866	25.79	1075
	Thermal (Total)	**8026**	**4564**	**3494**	**100**	**4168**
	Total Hydro	550	173	85	4.33	180
	Wind power	2798	161	468	5.99	250
	Biomass	99	20	20	0.48	20
	Solar	730	0	0	0.09	4
	Renewable/Others (Total)	3627	181	488	6.57	274
	Total Rajasthan	**12203**	**4918**	**4067**	**110.94**	**4622**
UP	Anpara TPS (3*210+2*500)	1630	1413	1383	33.10	1379
	Obra TPS (2*50+2*94+5*200)	1194	350	353	8.40	350
	Paricha TPS (2*110+2*220+2*250)	1140	826	761	19.30	804
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	452	374	10.50	438
	Tanda TPS (NTPC) (4*110)	440	391	300	9.01	376
	Roza TPS (IPP) (4*300)	1200	765	761	21.02	876
	Anpara-C (IPP) (2*600)	1200	1027	927	23.72	989
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	279	7.03	293
	Thermal (Total)	**8129**	**5504**	**5138**	**132.09**	**5504**
	Vishnuparyag HPS (IPP)	400	67	74	1.66	69
	Other Hydro	527	12	19	1.21	51
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**6383**	**6031**	**154.16**	**6354**
Uttarakhand	Total Hydro	1398	537	330	9.40	392
	Total Uttarakhand	**1398**	**537**	**330**	**9.40**	**392**
Delhi	Rajghat TPS (2*67.5)	135	0	43	0.71	30
	Delhi Gas Turbine (6x30 + 3x34)	282	159	155	3.75	156
	Pragati Gas Turbine (2x104+ 1x122)	330	154	152	3.65	152
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	288	200	6.01	250
	Badarpur TPS (NTPC) (3*95+2*210)	705	347	342	8.12	339
	Thermal (Total)	2917	948	892	22.24	927
	Total Delhi	**2917**	**948**	**892**	**22.24**	**927**
HP	Baspa HPS (IPP) (2*150)	300	30	0	0.91	38
	Malana HPS (IPP) (2*43)	86	0	0	0.22	9
	Other Hydro	728	131	75	2.91	121
	Total HP	**1114**	**161**	**75**	**4.04**	**168**
J & K	Baglihar HPS (IPP) (3*150)	450	150	120	3.25	135
	Other Hydro/IPP	436	78	18	1.01	42
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**228**	**138**	**4.26**	177
Total State Control Area Generation		**39597**	**19009**	**15596**	**425.00**	**17639**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3798.86**	**3097.99**	**104.19**	**4341**
Total Regional Availability(Gross)		**64032**	**39974**	**27289**	**811.48**	**33743**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7408**	**434**	**54.43**	**2268**
State Control Area Hydro	**5684**	**1323**	**753**	**30.49**	**1201**
Total Regional Hydro	**17116**	**8731**	**1187**	**84.92**	**3469**

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	-250	0	350	0.00	4.10	-4.10
Gwalior-Agra (D/C)	1126	904	1906	0	32.86	0.00	32.86
Zerda-Kankroli	-83	-163	22	203	0.00	1.81	-1.81
Zerda-Bhinmal	7	-69	108	109	0.31	0.00	0.31
Malanpur-Auraiya	-65	-70	0	105	0.00	1.78	-1.78
Badod-Kota/Morak	-58	-102	0	149	0.00	2.25	-2.25
Mundra-Mohindergarh(HVDC)	1802	1601	2004	0	44.04	0.00	44.04
Vindhyachal - Rihand	491	392	502	0	11.27	0.00	11.27
Sub Total WR	**3120**	**2243**			**88.49**	**9.94**	**78.55**
Pusauli Bypass	300	300	300	0	7.28	0.00	7.28
MZP- GKP (D/C)	-235	-84	0	300	0.00	2.60	-2.60
Patna-Balia(D/C)	664	592	767	0	11.99	0.00	11.99
B'Sharif-Balia (D/C)	-207	-134	0	243	0.00	0.30	-0.30
Pusauli-Balia	-120	-28	17	129	0.00	0.66	-0.66
Gaya-Fatehpur (765 Kv)	233	174	489	0	7.04	0.00	7.04
Pusauli-Sahupuri	117	139	184	0	3.10	0.00	3.10
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-35	0	50	0.00	0.92	-0.92
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-35	-69	230	89	0.71	0.00	0.71
Sub Total ER	**679**	**855**			**30.12**	**4.48**	**25.64**
Total IR Exch	**3799**	**3098**			**118.61**	**14.42**	**104.19**

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
25.80	0.19	25.99	7.92	-5.55	9.79	14.49	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
43.91	64.18	108.10	25.64	78.55	104.19	-18.27	14.36	-3.90

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	0.05	4.01	23.49	61.55	58.56	11.23	6.54	0.53	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)
50.27	17.03.50	49.69	9.12.1	49.97	0.10	0.09	50.20	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	412	01:04	405	09:39	0.0	0.0	0.0	0.0
Gorakhpur	400	409	03:00	392	08:13	0.0	0.0	0.0	0.0
Bareilly	400	423	03:02	400	06:36	0.0	0.0	13.0	0.0
Kanpur	400	420	01:59	402	11:24	0.0	0.0	0.0	0.0
Dadri	400	422	01:57	403	11:16	0.0	0.0	10.2	0.0
Ballabhgarh	400	429	01:49	408	11:23	0.0	0.0	36.9	0.0
Bawana	400	426	00:50	248	13:15	16.9	16.9	25.9	0.0
Bassi	400	431	03:02	404	11:25	0.0	0.0	38.4	0.5
Hissar	400	417	01:58	400	11:26	0.0	0.0	0.0	0.0
Moga	400	421	03:02	404	11:32	0.0	0.0	0.4	0.0
Abdullapur	400	425	03:02	396	17:32	0.1	0.1	22.0	0.0
Nalagarh	400	428	21:24	406	11:32	0.0	0.0	29.5	0.0
Kishenpur	400	416	04:00	393	11:20	0.0	0.0	0.0	0.0
Wagoora	400	394	16:33	362	11:18	49.5	89.5	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	776	06:05	742	11:30	0.0	0.0	0.0	0.0
Balia	765	781	03:02	754	09:16	0.0	0.0	0.0	0.0
Moga	765	798	23:45	767	11:24	0.0	0.0	0.0	0.0
Agra	765	792	00:00	760	11:28	0.0	0.0	0.0	0.0
Bhiwani	765	806	23:48	771	06:56	0.0	0.0	2.1	0.0
Unnao	765	770	03:58	736	11:26	0.0	9.8	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	493.59	848.04	497.42	994.96	158.46	327.85
Pong	426.72	384.05	402.39	273.51	409.14	464.36	77.11	324.62
Tehri	829.79	740.04	801.05	627.40	804.05	685.10	37.62	219.00
Koteshwar	612.50	598.50	609.61	4.44	610.16	4.69	206.00	212.00
Chamera-I	760.00	748.75	759.11	0.00	0.00	0.00	49.50	45.98
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	503.03	1.10	509.53	1.43	49.41	57.90

*** 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	-410	117	0	-379	153	0	-8.62	2.99	-5.63
Delhi	-901	-149	-23	-499	302	-10	-11.19	1.99	-9.20
Haryana	-984	51	0	-985	115	0	-24.60	0.83	-23.76
HP	533	-86	0	504	-84	0	13.48	-2.79	10.69
J&K	694	-5	0	496	165	0	13.42	1.84	15.26
CHD	-31	0	0	0	15	0	-0.25	0.91	0.67
Rajasthan	487	555	0	487	467	0	14.13	10.85	24.98
UP	64	0	0	90	0	0	-1.92	0.00	-1.92
Uttarakhand	271	134	49	269	395	46	6.47	8.60	15.06
Total	**-278**	**617**	**26**	**-17**	**1528**	**36**	**0.91**	**25.23**	**26.14**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-328	-410	261	7	0	0
Delhi	11	-901	428	-149	-10	-31
Haryana	-984	-1112	154	-584	0	0
HP	605	479	34	-605	0	0
J&K	694	447	214	-57	0	0
CHD	0	-31	73	0	0	0
Rajasthan	843	487	556	-102	0	0
UP	124	-399	0	0	0	0
Uttarakhand	271	269	517	131	49	42

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 23.01.2015 :

Fog observed in most parts of NR.

XIV. Synchronisation of new generating units :

0.00

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

1. First time Charging of 400kV Bus reactor at Nakodar Punjab is done at 16.13hrs on 21.01.15.

2. First time charging of 400kV Main bay Ratangarh-1 at 18.54 and 400kV Mainbay Neemrana-1 at 19.57hrs at Sikar Substation

XVI. Tripping of lines in pooling stations :

XVII. Complete generation loss in a generating station :

Report for : 23.01.2015 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**