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 22.01.2015
Date of Reporting : 23.01.2015

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
37781	1383	39164	50.08	26560	461	27022	50.35	768.7	32.26

* 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	42.60	4.77		47.36	39.49	40.05	0.56	87.41	0.00
Haryana	69.53	0.39		69.92	35.87	34.02	-1.85	103.95	0.00
Rajasthan	98.96	3.37	5.95	108.27	59.43	55.53	-3.90	163.80	0.00
Delhi	22.80			22.80	46.52	46.56	0.04	69.36	0.08
UP	153.71	2.71		156.42	80.96	81.46	0.50	237.88	25.64
Uttarakhand		9.60		9.60	25.92	28.94	3.02	38.54	0.22
HP		4.00		4.00	21.27	23.64	2.37	27.64	0.00
J & K		3.91	0.00	3.91	33.07	31.94	-1.14	35.84	6.33
Chandigarh				0.00	3.95	4.33	0.27	4.33	0.00
Total	**387.59**	**28.74**	**5.95**	**422.28**	**346.49**	**346.47**	**-0.13**	**768.75**	**32.26**

* 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	4528	0	-91	-372	2733	0	-65	-298	4890
Haryana	5949	0	75	-820	3372	0	-32	-987	5949
Rajasthan	7954	0	98	763	5578	0	-958	1056	8046
Delhi	3479	0	-113	-270	1709	0	18	-962	3870
UP	10640	1010	-183	100	9738	280	90	74	10850
Uttarakhand	1804	40	-30	778	1348	0	187	461	1942
HP	1318	0	-12	396	955	0	179	446	1401
J&K	1888	333	111	734	1027	181	-468	688	1939
Chandigarh	221	0	2	15	100	0	12	-31	239
Total	**37781**	**1383**	**-142**	**1324**	**26560**	**461**	**-1037**	**448**	**37781**

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

Diversity is 1.04

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	1542	1794	1148	36.74	1531	33.72	3.02
	Rihand I STPS (2*500)	1000	820	841	654	18.92	788	17.28	1.64
	Rihand II STPS (2*500)	1000	902	823	661	19.57	815	18.24	1.33
	Rihand III STPS (2*500)	1000	968	845	724	20.38	849	19.29	1.09
	Dadri I STPS (4*210)	840	815	772	559	17.12	713	16.04	1.08
	Dadri II STPS (2*490)	980	980	886	663	18.49	770	18.33	0.16
	Unchahar I TPS (2*210)	420	404	408	260	8.47	353	8.49	-0.02
	Unchahar II TPS (2*210)	420	402	371	290	8.03	335	7.55	0.48
	Unchahar III TPS (1*220)	210	200	179	139	3.95	164	3.73	0.22
	ISTPP (Jhajjhar) (3*500)	1500	1500	906	887	20.38	849	21.83	-1.45
	Dadri GPS (4*130.19+2*154.51)	830	848	203	240	5.13	214	5.05	0.08
	Anta GPS (3*88.71+1*153.2)	419	426	197	207	5.42	226	5.30	0.11
	Auraiya GPS (4*111.19+2*109.30)	663	681	145	173	3.69	154	3.76	-0.06
	Dadri Solar	5	1	0	0	0.00	0	0.02	-0.02
	Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
	Singrauli Solar	15	1	0	0	0.00	0	0	-0.02
	Sub Total (A)	**11312**	**10492**	**8370**	**6605**	**186**	**7763**	**179**	**8**
B. NPC	NAPS (2*220)	440	400	426	433	9.38	391	9.60	-0.22
	RAPS- B (2*220)	440	413	455	457	9.91	413	9.91	-0.01
	RAPS- C (2*220)	440	211	234	235	4.95	206	5.06	-0.12
	Sub Total (B)	**1320**	**1024**	**1115**	**1125**	**24.23**	**1010**	**24.58**	**-0.34**
C. NHPC	Chamera I HPS (3*180)	540	534	137	0	1.68	70	1.60	0.07
	Chamera II HPS (3*100)	300	300	312	0	1.00	41	1.00	0.00
	Chamera III HPS (3*77)	231	231	153	0	0.43	18	0.38	0.05
	Bairasuil HPS(3*60)	180	120	120	0	0.69	29	0.63	0.06
	Salal-HPS (6*115)	690	93	220	0	2.27	95	2.22	0.05
	Tanakpur-HPS (3*40)	94	27	28	34	0.66	27	0.66	0.00
	Uri-I HPS (4*120)	480	92	203	20	2.35	98	2.22	0.14
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	210	140	0	0.79	33	0.70	0.09
	Dulhasti-HPS (3*130)	390	258	271	0	2.49	104	2.40	0.09
	Sewa-II HPS (3*40)	120	119	115	0	0.35	14	0.36	-0.01
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1984**	**1699**	**54**	**13**	**529**	**12**	**1**
D.SJVNL	NJPC (6*250)	1500	1525	1358	0	6.08	253	6.00	0.08
	Rampur HEP (4*68.67)	275	300	296	0	1.53	64	1.50	0.03
	Sub Total (D)	**1775**	**1825**	**1654**	**0**	**7.61**	**317**	**7.50**	**0.11**
E. THDC	Tehri HPS (4*250)	1000	885	974	0	9.15	381	9.10	0.05
	Koteshwar HPS (4*100)	400	134	293	90	3.28	137	3.20	0.08
	Sub Total (E)	**1400**	**1018**	**1267**	**90**	**12.43**	**518**	**12.30**	**0.13**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	477	1085	307	11.40	475	11.44	-0.04
	Dehar HPS (6*165)	990	121	330	0	2.88	120	2.91	-0.03
	Pong HPS (6*66)	396	129	246	0	3.06	127	3.08	-0.03
	Sub Total (F)	**2900**	**726**	**1661**	**307**	**17.33**	**722**	**17.43**	**-0.10**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.03	1	0.33	-0.29
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	751	0	3.00	125	3.00	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	133	60	2.70	113	2.83	-0.12
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	884	60	5.74	239	6.15	-0.42
H. Total Regional Entities (A-G)		**24434**	**17070**	**16649**	**8241**	**266.33**	**11097**	**258.85**	**7.48**

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	500	480	12.25	510
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	95	96	1.76	73
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	405	351	8.79	366
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	696	340	11.67	486
	Talwandi Saboo (1*660)	660	372	342	8.13	339
	Thermal (Total)	**4680**	**2068**	**1609**	**42.60**	**1775**
	Total Hydro	1148	216	101	4.77	199
	Total Punjab	**5828**	**2284**	**1710**	**47.36**	**1973**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	231	431	8.72	363
	DCRTPP (Yamuna nagar) (2*300)	600	530	483	11.97	499
	Faridabad GPS (NTPC)	432	373	310	8.41	350
	RGTPP (khedar) (IPP) (2*600)	1200	1164	744	19.14	797
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1200	720	21.30	888
	Thermal (Total)	**4944**	**3498**	**2688**	**69.53**	**2897**
	Total Hydro	62	11	17	0.39	16
	Total Haryana	**5006**	**3509**	**2705**	**69.92**	**2914**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	851	983	21.36	890
	suratgarh TPS (6*250)	1500	764	1129	19.18	799
	Chabra TPS (3*250)	750	403	596	10.44	435
	Dholpur GPS (3*110)	330	0	94	0.26	11
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	72	209	2.46	103
	RAPS A (NPC) (1*100+1*200)	300	149	149	4.11	171
	Barsingsar (NLC) (2*125)	250	191	190	4.39	183
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	773	445	14.15	590
	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	1119	859	22.61	942
	Thermal (Total)	**8026**	**4322**	**4654**	**99**	**4123**
	Total Hydro	550	94	91	3.37	140
	Wind power	2798	232	206	5.31	221
	Biomass	99	23	23	0.54	23
	Solar	730	1	0	0.10	4
	Renewable/Others (Total)	3627	256	229	5.95	248
	Total Rajasthan	**12203**	**4672**	**4974**	**108.27**	**4511**
UP	Anpara TPS (3*210+2*500)	1630	1398	1398	33.20	1383
	Obra TPS (2*50+2*94+5*200)	1194	348	350	8.40	350
	Paricha TPS (2*110+2*220+2*250)	1140	768	724	18.00	750
	Panki TPS (2*105)	210	0	0	0.00	0
	Harduaganj TPS (1*60+1*105+2*250)	665	461	448	10.60	442
	Tanda TPS (NTPC) (4*110)	440	380	301	9.13	380
	Roza TPS (IPP) (4*300)	1200	765	873	23.08	962
	Anpara-C (IPP) (2*600)	1200	1013	1046	25.07	1045
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	279	7.02	293
	Thermal (Total)	**8129**	**5413**	**5419**	**134.51**	**5604**
	Vishnuparyag HPS (IPP)	400	72	70	1.70	71
	Other Hydro	527	32	25	1.01	42
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**6317**	**6314**	**156.42**	**6447**
Uttarakhand	Total Hydro	1398	567	331	9.60	400
	Total Uttarakhand	**1398**	**567**	**331**	**9.60**	**400**
Delhi	Rajghat TPS (2*67.5)	135	43	41	0.97	40
	Delhi Gas Turbine (6x30 + 3x34)	282	156	158	3.73	156
	Pragati Gas Turbine (2x104+ 1x122)	330	159	152	3.66	152
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	316	229	6.37	265
	Badarpur TPS (NTPC) (3*95+2*210)	705	338	325	8.08	337
	Thermal (Total)	2917	1012	905	22.80	950
	Total Delhi	**2917**	**1012**	**905**	**22.80**	**950**
HP	Baspa HPS (IPP) (2*150)	300	31	0	1.01	42
	Malana HPS (IPP) (2*43)	86	0	0	0.21	9
	Other Hydro	728	135	78	2.78	116
	Total HP	**1114**	**166**	**78**	**4.00**	**167**
J & K	Baglihar HPS (IPP) (3*150)	450	150	0	2.90	121
	Other Hydro/IPP	436	78	18	1.01	42
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**228**	**18**	**3.91**	163
Total State Control Area Generation		**39597**	**18755**	**17035**	**422.28**	**17524**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4044.38**	**1509.33**	**24.26**	**1011**
Total Regional Availability(Gross)		**64032**	**39449**	**26785**	**712.88**	**29632**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7032**	**451**	**53.09**	**2212**
State Control Area Hydro	**5684**	**1314**	**661**	**28.74**	**1127**
Total Regional Hydro	**17116**	**8346**	**1112**	**81.83**	**3339**

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	50	-50	50	50	0.65	0.56	0.09
Gwalior-Agra (D/C)	852	291	2116	0	29.96	0.00	29.96
Zerda-Kankroli	-130	-415	66	415	0.00	3.87	-3.87
Zerda-Bhinmal	-59	-319	167	319	0.00	1.72	-1.72
Malanpur-Auraiya	-100	-60	0	105	0.00	1.78	-1.78
Badod-Kota/Morak	27	-268	27	159	0.00	2.21	-2.21
Mundra-Mohindergarh(HVDC)	2002	1700	0	2003	0.00	42.45	-42.45
Vindhyachal - Rihand	501	283	506	0	10.93	0.00	10.93
Sub Total WR	**3143**	**1162**			**41.53**	**52.58**	**-11.05**
Pusauli Bypass	300	300	300	0	7.37	0.00	7.37
MZP- GKP (D/C)	34	-102	327	174	2.05	1.53	0.52
Patna-Balia(D/C)	530	451	873	0	19.13	0.00	19.13
B'Sharif-Balia (D/C)	-151	-197	0	197	0.00	1.80	-1.80
Pusauli-Balia	-62	-57	124	77	0.22	0.00	0.22
Gaya-Fatehpur (765 Kv)	224	48	586	0	7.01	0.00	7.01
Pusauli-Sahupuri	113	129	164	0	3.02	0.00	3.02
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-46	-40	0	48	0.00	0.90	-0.90
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-40	-184	320	185	0.74	0.00	0.74
Sub Total ER	**901**	**347**			**39.54**	**4.23**	**35.31**
Total IR Exch	**4044**	**1509**			**81.07**	**56.81**	**24.26**

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
26.85	0.22	27.08	11.12	-6.85	10.48	14.29	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
48.89	62.04	110.93	35.31	-11.05	24.26	-13.58	-73.09	-86.67

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	2.08	12.62	32.92	60.15	43.22	12.31	7.38	4.20	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)
50.31	21.31.00	49.56	7.17.30	49.96	0.19	0.13	50.40	49.93

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	23:36	404	09:21	0.0	0.0	0.0	0.0
Gorakhpur	400	414	03:04	391	10:36	0.0	0.0	0.0	0.0
Bareilly	400	426	03:00	403	14:07	0.0	0.0	20.8	0.0
Kanpur	400	424	02:01	403	14:07	0.0	0.0	15.0	0.0
Dadri	400	426	03:01	404	14:47	0.1	0.1	20.8	0.0
Ballabhgarh	400	433	03:07	411	13:55	0.0	0.0	50.8	8.7
Bawana	400	430	02:17	408	14:18	0.0	0.0	41.9	0.0
Bassi	400	436	01:41	409	18:27	0.0	0.0	70.1	18.4
Hissar	400	422	02:17	399	14:37	0.0	0.0	6.3	0.0
Moga	400	427	02:06	402	14:36	0.0	0.0	22.2	0.0
Abdullapur	400	425	23:44	396	14:18	0.0	0.0	7.7	0.0
Nalagarh	400	430	02:18	407	14:47	0.0	0.0	40.3	0.0
Kishenpur	400	433	02:39	380	04:39	0.0	1.5	22.6	0.5
Wagoora	400	428	02:39	349	18:26	35.5	49.5	2.0	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	786	02:02	741	14:11	0.0	0.1	0.0	0.0
Balia	765	787	02:08	753	10:36	0.0	0.0	0.0	0.0
Moga	765	808	02:06	762	14:46	0.0	0.0	14.6	0.0
Agra	765	806	02:02	758	13:46	0.0	0.0	1.4	0.0
Bhiwani	765	810	02:17	769	14:47	0.0	0.0	16.1	0.0
Unnao	765	775	02:09	735	14:08	0.0	6.8	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	493.72	858.11	497.53	994.96	94.21	339.18
Pong	426.72	384.05	402.53	281.22	409.20	474.29	65.72	218.46
Tehri	829.79	740.04	801.45	632.00	804.35	690.00	36.25	222.00
Koteshwar	612.50	598.50	609.45	4.21	609.90	4.44	222.00	220.00
Chamera-I	760.00	748.75	759.07	0.00	0.00	0.00	46.83	45.07
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	503.04	0.96	509.43	1.81	52.15	47.91

*** 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	112	0	-379	7	0	-8.62	1.67	-6.96
Delhi	-901	-31	-31	-499	238	-10	-11.19	2.10	-9.09
Haryana	-943	-46	1	-939	119	1	-24.87	-4.80	-29.67
HP	533	-86	0	504	-107	0	13.48	-2.96	10.52
J&K	694	-5	0	496	238	0	13.42	2.91	16.33
CHD	-31	0	0	0	15	0	-0.25	0.78	0.54
Rajasthan	487	568	2	487	274	2	15.66	16.58	32.24
UP	74	0	0	100	0	0	-1.68	0.00	-1.68
Uttarakhand	291	127	44	291	452	35	6.99	9.02	16.01
Total	**-206**	**638**	**16**	**60**	**1235**	**28**	**2.94**	**25.31**	**28.24**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-328	-410	244	0	0	0
Delhi	11	-901	482	-31	-10	-31
Haryana	-939	-1476	157	-845	1	1
HP	605	479	10	-541	0	0
J&K	694	447	287	-57	0	0
CHD	0	-31	73	0	0	0
Rajasthan	843	487	1378	-287	2	2
UP	134	-389	0	0	0	0
Uttarakhand	291	291	465	102	44	30

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 22.01.2015 :

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 : 22.01.2015 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**