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 24.01.2015
Date of Reporting : 25.01.2015

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
37574	2174	39749	50.09	27496	653	28148	50.15	792.9	39.47

* 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	41.81	5.67		47.48	38.95	37.97	-0.98	85.46	0.00
Haryana	68.94	0.42		69.36	41.71	40.44	-1.27	109.80	0.00
Rajasthan	107.62	2.72	6.40	116.74	69.01	71.23	2.22	187.96	0.00
Delhi	17.41			17.41	48.24	48.72	0.48	66.13	0.04
UP	154.41	3.14		157.54	80.63	79.18	-1.45	236.72	31.09
Uttarakhand		8.37		8.37	24.94	26.98	2.05	35.36	0.83
HP		3.88		3.88	20.77	21.17	0.40	25.05	0.00
J & K		4.28	0.00	4.28	36.37	38.31	1.94	42.59	7.52
Chandigarh				0.00	3.74	3.87	0.27	3.87	0.00
Total	**390.19**	**28.48**	**6.40**	**425.07**	**364.36**	**367.86**	**3.64**	**792.93**	**39.47**

* 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	4348	0	20	-191	2844	0	18	-297	4974
Haryana	6076	0	-286	-826	3109	0	-101	-841	6076
Rajasthan	8272	0	22	968	6729	0	29	1110	9147
Delhi	3141	0	-215	-46	1639	0	84	-1059	3899
UP	10588	1800	253	89	9523	350	94	74	10588
Uttarakhand	1802	40	8	677	1204	0	107	472	1824
HP	1247	0	-43	430	736	18	27	452	1346
J&K	1895	334	51	739	1614	285	86	694	1952
Chandigarh	205	0	-2	0	98	0	17	-31	227
Total	**37574**	**2174**	**-192**	**1840**	**27496**	**653**	**361**	**573**	**37574**

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

Diversity is 1.07

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	1735	1587	1704	43.16	1798	40.78	2.38
	Rihand I STPS (2*500)	1000	825	894	700	20.38	849	18.78	1.60
	Rihand II STPS (2*500)	1000	900	963	702	21.69	904	20.11	1.57
	Rihand III STPS (2*500)	1000	967	1016	756	23.30	971	21.00	2.30
	Dadri I STPS (4*210)	840	815	632	548	17.64	735	16.77	0.87
	Dadri II STPS (2*490)	980	980	798	658	20.22	843	20.05	0.17
	Unchahar I TPS (2*210)	420	405	320	316	8.85	369	8.68	0.17
	Unchahar II TPS (2*210)	420	402	326	275	8.42	351	8.05	0.37
	Unchahar III TPS (1*220)	210	201	155	138	4.14	172	3.99	0.14
	ISTPP (Jhajjhar) (3*500)	1500	1500	929	880	19.03	793	20.29	-1.26
	Dadri GPS (4*130.19+2*154.51)	830	848	209	153	4.59	191	4.51	0.08
	Anta GPS (3*88.71+1*153.2)	419	426	275	196	5.95	248	6.01	-0.06
	Auraiya GPS (4*111.19+2*109.30)	663	680	170	116	3.73	155	3.74	-0.02
	Dadri Solar	5	1	0	0	0.01	0	0.02	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Singrauli Solar	15	2	0	0	0.00	0	0	-0.04
	Sub Total (A)	**11312**	**10688**	**8274**	**7142**	**201**	**8380**	**193**	**8**
B. NPC	NAPS (2*220)	440	390	429	432	9.37	390	9.36	0.01
	RAPS- B (2*220)	440	413	457	460	9.94	414	9.91	0.02
	RAPS- C (2*220)	440	211	234	236	4.97	207	5.06	-0.10
	Sub Total (B)	**1320**	**1014**	**1120**	**1128**	**24.27**	**1011**	**24.34**	**-0.06**
C. NHPC	Chamera I HPS (3*180)	540	534	548	0	1.68	70	1.60	0.07
	Chamera II HPS (3*100)	300	300	303	0	0.82	34	0.80	0.02
	Chamera III HPS (3*77)	231	231	152	0	0.38	16	0.35	0.03
	Bairasuil HPS(3*60)	180	120	120	0	0.54	22	0.50	0.04
	Salal-HPS (6*115)	690	82	220	60	1.97	82	1.97	0.00
	Tanakpur-HPS (3*40)	94	29	32	26	0.73	30	0.70	0.03
	Uri-I HPS (4*120)	480	107	210	22	2.83	118	2.57	0.26
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	103	139	0	0.85	35	0.70	0.15
	Dulhasti-HPS (3*130)	390	258	272	0	2.48	103	2.40	0.08
	Sewa-II HPS (3*40)	120	119	119	0	0.31	13	0.36	-0.05
	Parbati 3 (4*130)	520	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**4065**	**1882**	**2115**	**108**	**13**	**524**	**12**	**1**
D.SJVNL	NJPC (6*250)	1500	1350	1353	0	5.75	240	5.60	0.15
	Rampur HEP (4*68.67)	275	300	296	0	1.49	62	1.45	0.04
	Sub Total (D)	**1775**	**1650**	**1649**	**0**	**7.25**	**302**	**7.05**	**0.20**
E. THDC	Tehri HPS (4*250)	1000	964	968	0	9.04	377	8.90	0.14
	Koteshwar HPS (4*100)	400	134	292	90	3.20	134	3.20	0.00
	Sub Total (E)	**1400**	**1098**	**1260**	**90**	**12.24**	**510**	**12.10**	**0.14**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	462	1092	337	11.23	468	11.09	0.14
	Dehar HPS (6*165)	990	142	330	0	3.47	145	3.41	0.06
	Pong HPS (6*66)	396	194	309	0	4.62	192	4.66	-0.04
	Sub Total (F)	**2900**	**798**	**1731**	**337**	**19.32**	**805**	**19.16**	**0.16**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.30	12	0.29	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	792	0	3.24	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	133	87	2.92	122	2.93	-0.01
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	925	87	6.46	269	6.45	0.01
H. Total Regional Entities (A-G)		**24434**	**17130**	**17074**	**8892**	**283.25**	**11802**	**273.93**	**9.32**

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	530	490	12.01	501
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	90	90	2.09	87
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	364	328	8.07	336
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	359	352	10.70	446
	Talwandi Saboo (1*660)	660	372	383	8.94	373
	Thermal (Total)	**4680**	**1715**	**1643**	**41.81**	**1742**
	Total Hydro	1148	232	185	5.67	236
	Total Punjab	**5828**	**1947**	**1828**	**47.48**	**1979**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	235	215	5.36	223
	DCRTPP (Yamuna nagar) (2*300)	600	516	466	11.66	486
	Faridabad GPS (NTPC)	432	418	321	9.39	391
	RGTPP (khedar) (IPP) (2*600)	1200	1157	723	19.82	826
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1194	710	22.72	947
	Thermal (Total)	**4944**	**3520**	**2435**	**68.94**	**2873**
	Total Hydro	62	15	19	0.42	17
	Total Haryana	**5006**	**3535**	**2454**	**69.36**	**2890**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1016	818	24.04	1002
	suratgarh TPS (6*250)	1500	768	766	19.01	792
	Chabra TPS (3*250)	750	494	400	11.42	476
	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	83	1.90	79
	RAPS A (NPC) (1*100+1*200)	300	148	150	4.10	171
	Barsingsar (NLC) (2*125)	250	190	192	4.45	186
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	852	513	17.10	712
	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	1105	966	25.60	1067
	Thermal (Total)	**8026**	**4661**	**3888**	**108**	**4484**
	Total Hydro	550	55	56	2.72	113
	Wind power	2798	157	351	5.67	236
	Biomass	99	22	22	0.53	22
	Solar	730	0	0	0.20	8
	Renewable/Others (Total)	3627	179	373	6.40	267
	Total Rajasthan	**12203**	**4895**	**4317**	**116.74**	**4864**
UP	Anpara TPS (3*210+2*500)	1630	1351	1343	32.10	1338
	Obra TPS (2*50+2*94+5*200)	1194	356	346	8.40	350
	Paricha TPS (2*110+2*220+2*250)	1140	747	847	19.50	813
	Panki TPS (2*105)	210	0	0	0.70	29
	Harduaganj TPS (1*60+1*105+2*250)	665	484	466	11.20	467
	Tanda TPS (NTPC) (4*110)	440	316	305	8.85	369
	Roza TPS (IPP) (4*300)	1200	756	765	22.20	925
	Anpara-C (IPP) (2*600)	1200	1045	1049	25.12	1047
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	279	7.15	298
	Thermal (Total)	**8129**	**5335**	**5400**	**135.21**	**5634**
	Vishnuparyag HPS (IPP)	400	71	67	1.60	67
	Other Hydro	527	61	15	1.53	64
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**6267**	**6282**	**157.54**	**6498**
Uttarakhand	Total Hydro	1398	541	290	8.37	349
	Total Uttarakhand	**1398**	**541**	**290**	**8.37**	**349**
Delhi	Rajghat TPS (2*67.5)	135	44	0	0.65	27
	Delhi Gas Turbine (6x30 + 3x34)	282	161	158	3.82	159
	Pragati Gas Turbine (2x104+ 1x122)	330	165	158	3.89	162
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	240	182	4.07	169
	Badarpur TPS (NTPC) (3*95+2*210)	705	190	355	4.98	208
	Thermal (Total)	2917	800	853	17.41	726
	Total Delhi	**2917**	**800**	**853**	**17.41**	**726**
HP	Baspa HPS (IPP) (2*150)	300	29	0	0.90	37
	Malana HPS (IPP) (2*43)	86	0	0	0.22	9
	Other Hydro	728	142	80	2.76	115
	Total HP	**1114**	**171**	**80**	**3.88**	**162**
J & K	Baglihar HPS (IPP) (3*150)	450	150	120	3.27	136
	Other Hydro/IPP	436	78	18	1.01	42
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**228**	**138**	**4.28**	178
Total State Control Area Generation		**39597**	**18384**	**16242**	**425.07**	**17644**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3326**	**1868**	**113.74**	**4739**
Total Regional Availability(Gross)		**64032**	**38784**	**27002**	**822.06**	**34186**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7547**	**534**	**54.93**	**2289**
State Control Area Hydro	**5684**	**1303**	**783**	**28.48**	**1120**
Total Regional Hydro	**17116**	**8850**	**1317**	**83.41**	**3409**

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	-400	200	400	0.36	5.45	-5.09
Gwalior-Agra (D/C)	1019	816	2021	0	34.34	0.00	34.34
Zerda-Kankroli	-101	-170	31	189	0.00	1.27	-1.27
Zerda-Bhinmal	-7	-71	152	102	1.06	0.00	1.06
Malanpur-Auraiya	-95	-80	0	95	0.00	1.75	-1.75
Badod-Kota/Morak	-20	-114	0	138	0.00	1.54	-1.54
Mundra-Mohindergarh(HVDC)	2102	1801	2305	0	49.00	0.00	49.00
Vindhyachal - Rihand	487	286	514	0	10.38	0.00	10.38
Sub Total WR	**3285**	**2068**			**95.14**	**10.00**	**85.14**
Pusauli Bypass	300	300	300	0	7.28	0.00	7.28
MZP- GKP (D/C)	-155	-78	284	138	1.09	0.00	1.09
Patna-Balia(D/C)	-173	-528	710	0	12.35	0.00	12.35
B'Sharif-Balia (D/C)	-111	-139	0	215	0.00	2.14	-2.14
Pusauli-Balia	-3	55	82	60	0.00	0.14	-0.14
Gaya-Fatehpur (765 Kv)	165	166	492	0	6.91	0.00	6.91
Pusauli-Sahupuri	147	144	170	0	3.03	0.00	3.03
K'nasa-Sahupuri	0	0	0	0	0.48	0.00	0.48
Son Ngr-Rihand	-36	-42	0	46	0.00	0.88	-0.88
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-93	-78	217	97	0.62	0.00	0.62
Sub Total ER	**41**	**-200**			**31.76**	**3.16**	**28.60**
Total IR Exch	**3326**	**1868**			**126.90**	**13.16**	**113.74**

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
25.21	0.19	25.40	11.12	-5.33	1.88	22.98	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
38.61	75.66	114.27	28.60	85.14	113.74	-10.01	9.47	-0.53

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	1.77	13.68	50.50	61.05	16.30	7.41	1.59	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)
50.41	00:28:48	49.71	09:36:00	49.99	0.08	0.09	50.26	49.89

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	03:44	403	08:50	0.0	0.0	0.0	0.0
Gorakhpur	400	410	03:01	392	07:41	0.0	0.0	0.0	0.0
Bareilly	400	424	03:02	405	09:14	0.0	0.0	10.8	0.0
Kanpur	400	421	03:01	402	09:04	0.0	0.0	0.3	0.0
Dadri	400	424	03:00	403	09:45	0.2	0.2	12.9	0.0
Ballabhgarh	400	431	03:05	409	09:43	0.0	0.0	40.4	0.6
Bawana	400	428	02:03	410	09:47	0.0	0.0	33.9	0.0
Bassi	400	430	20:54	403	09:15	0.0	0.0	59.3	0.0
Hissar	400	419	02:02	403	09:06	0.0	0.0	0.0	0.0
Moga	400	425	00:41	408	08:21	0.0	0.0	18.4	0.0
Abdullapur	400	427	03:02	396	06:11	0.0	0.0	42.4	0.0
Nalagarh	400	429	21:40	411	05:44	0.0	0.0	32.9	0.0
Kishenpur	400	430	00:36	397	18:32	0.0	0.0	0.5	0.0
Wagoora	400	416	00:37	366	18:32	49.4	99.1	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	782	16:05	738	09:06	0.0	0.2	0.0	0.0
Balia	765	781	03:01	748	10:40	0.0	0.0	0.0	0.0
Moga	765	802	00:36	678	15:14	0.0	0.0	1.1	0.0
Agra	765	795	03:01	753	09:05	0.0	0.0	0.0	0.0
Bhiwani	765	805	23:17	772	06:52	0.0	0.0	12.1	0.0
Unnao	765	769	03:01	737	10:21	0.0	8.2	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	493.44	848.04	497.31	994.96	138.21	335.84
Pong	426.72	384.05	402.23	273.51	409.08	464.36	67.14	327.68
Tehri	829.79	740.04	800.50	617.00	803.75	680.19	39.40	220.00
Koteshwar	612.50	598.50	609.83	4.44	610.14	4.69	220.00	213.00
Chamera-I	760.00	748.75	759.06	0.00	0.00	0.00	40.56	44.96
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	503.02	1.03	509.44	2.33	48.87	57.27

*** 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	113	0	-379	188	0	-8.62	1.87	-6.75
Delhi	-875	-164	-20	-473	448	-20	-10.58	3.52	-7.06
Haryana	-943	102	0	-939	113	0	-23.54	0.79	-22.75
HP	533	-81	0	504	-74	0	13.48	-2.67	10.81
J&K	694	0	0	496	243	0	13.42	3.05	16.47
CHD	-31	0	0	0	0	0	-0.25	0.00	-0.25
Rajasthan	487	621	2	487	479	2	15.66	11.76	27.42
UP	74	0	0	89	0	0	-1.82	0.00	-1.82
Uttarakhand	291	136	45	291	376	10	6.99	7.33	14.31
Total	**-180**	**727**	**26**	**75**	**1774**	**-8**	**4.74**	**25.65**	**30.40**

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	37	-875	517	-164	-20	-20
Haryana	-939	-1067	154	-385	0	0
HP	605	479	40	-605	0	0
J&K	694	447	292	-51	0	0
CHD	0	-31	0	0	0	0
Rajasthan	843	487	628	381	2	2
UP	126	-406	0	0	0	0
Uttarakhand	291	291	415	99	45	8

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 24.01.2015 :

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 : 24.01.2015 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**