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 08.02.2015
Date of Reporting : 09.02.2015

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
35152	1695	36847	50.02	29210	734	29944	50.17	779.7	41.09

* 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	33.97	7.96		41.93	40.47	41.03	0.56	82.96	0.00
Haryana	58.76	0.37		59.13	48.52	48.23	-0.29	107.35	0.00
Rajasthan	119.93	4.80	21.46	146.19	56.25	57.27	1.02	203.45	0.00
Delhi	17.67			17.67	40.32	39.23	-1.09	56.91	0.00
UP	127.70	2.90		130.60	95.10	95.91	0.81	226.51	33.39
Uttarakhand		8.64		8.64	22.56	24.02	1.46	32.66	0.21
HP		4.56		4.56	19.37	19.57	0.20	24.13	0.00
J & K		4.45	0.00	4.45	36.94	37.99	1.04	42.43	7.49
Chandigarh				0.00	3.37	3.29	0.27	3.29	0.00
Total	**358.03**	**33.67**	**21.46**	**413.16**	**362.90**	**366.54**	**3.99**	**779.70**	**41.09**

* 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	4038	0	-87	-124	2799	0	140	-253	4280
Haryana	5692	0	73	-747	3384	0	166	-1049	6015
Rajasthan	8167	0	-153	405	7829	0	-65	1017	9640
Delhi	2648	0	-221	-280	1373	0	-21	-834	3458
UP	9755	1280	51	62	10086	445	123	68	10086
Uttarakhand	1662	75	13	433	1201	0	75	391	1690
HP	1093	0	147	226	804	0	-5	406	1304
J&K	1927	340	71	685	1639	289	43	645	2279
Chandigarh	171	0	-14	0	95	0	2	-31	193
Total	**35152**	**1695**	**-119**	**661**	**29210**	**734**	**458**	**360**	**35974**

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

Diversity is 1.08

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	2082	1978	48.22	2009	44.77	3.44
	Rihand I STPS (2*500)	1000	914	915	978	22.06	919	20.34	1.71
	Rihand II STPS (2*500)	1000	900	775	848	21.15	881	20.05	1.10
	Rihand III STPS (2*500)	1000	969	858	903	21.47	895	19.91	1.56
	Dadri I STPS (4*210)	840	815	621	602	15.06	628	14.19	0.87
	Dadri II STPS (2*490)	980	980	748	690	17.56	732	17.33	0.23
	Unchahar I TPS (2*210)	420	405	271	285	6.98	291	8.41	-1.43
	Unchahar II TPS (2*210)	420	403	321	273	6.71	279	7.35	-0.64
	Unchahar III TPS (1*220)	210	201	150	136	3.30	138	3.66	-0.36
	ISTPP (Jhajjhar) (3*500)	1500	1500	766	608	16.04	668	17.31	-1.27
	Dadri GPS (4*130.19+2*154.51)	830	647	389	393	9.38	391	9.31	0.07
	Anta GPS (3*88.71+1*153.2)	419	426	241	250	5.61	234	6.17	-0.56
	Auraiya GPS (4*111.19+2*109.30)	663	510	164	169	4.03	168	3.98	0.05
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.00	0	0.07	-0.07
	Singrauli Solar	15	2	0	0	0.09	4	0	0.05
	Sub Total (A)	**11312**	**10600**	**8301**	**8113**	**198**	**8236**	**193**	**5**
B. NPC	NAPS (2*220)	440	396	427	435	9.42	392	9.50	-0.09
	RAPS- B (2*220)	440	413	456	455	9.90	413	9.91	-0.01
	RAPS- C (2*220)	440	214	234	235	4.94	206	5.14	-0.20
	Sub Total (B)	**1320**	**1023**	**1117**	**1125**	**24.26**	**1011**	**24.55**	**-0.29**
C. NHPC	Chamera I HPS (3*180)	540	534	136	0	1.66	69	1.60	0.06
	Chamera II HPS (3*100)	300	200	203	0	0.00	0	1.83	-1.83
	Chamera III HPS (3*77)	231	232	226	0	1.06	44	1.08	-0.02
	Bairasuil HPS(3*60)	180	179	180	0	0.71	29	0.67	0.04
	Salal-HPS (6*115)	690	102	230	67	2.48	103	2.45	0.04
	Tanakpur-HPS (3*40)	94	24	24	24	0.60	25	0.57	0.03
	Uri-I HPS (4*120)	480	137	221	55	3.53	147	3.34	0.20
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	139	0	0.85	35	0.80	0.05
	Dulhasti-HPS (3*130)	390	359	271	0	2.19	91	2.20	-0.01
	Sewa-II HPS (3*40)	120	119	121	0	0.83	35	0.90	-0.07
	Parbati 3 (4*130)	520	260	136	0	0.25	10	0.26	-0.01
	Sub Total (C)	**4065**	**2286**	**1888**	**146**	**14**	**590**	**16**	**-2**
D.SJVNL	NJPC (6*250)	1500	1605	1325	0	5.35	223	5.31	0.04
	Rampur HEP (4*68.67)	275	338	298	0	1.38	57	1.36	0.02
	Sub Total (D)	**1775**	**1943**	**1623**	**0**	**6.73**	**280**	**6.67**	**0.05**
E. THDC	Tehri HPS (4*250)	1000	916	917	0	7.57	315	7.60	-0.03
	Koteshwar HPS (4*100)	400	121	298	95	2.92	122	2.90	0.02
	Sub Total (E)	**1400**	**1037**	**1215**	**95**	**10.49**	**437**	**10.50**	**-0.01**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	699	1171	421	17.11	713	16.77	0.34
	Dehar HPS (6*165)	990	130	330	0	3.06	128	3.12	-0.06
	Pong HPS (6*66)	396	152	360	0	3.53	147	3.65	-0.12
	Sub Total (F)	**2900**	**981**	**1861**	**421**	**23.70**	**988**	**23.54**	**0.16**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.31	13	0.30	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	0	0	2.82	118	2.90	-0.08
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	135	78	2.86	119	2.90	-0.04
	Budhil HPS(IPP)	70	0	0	0	0.07	3	0.07	0.00
	Sub Total (G)	1662	0	135	78	6.06	253	6.17	-0.11
H. Total Regional Entities (A-G)		**24434**	**17870**	**16140**	**9978**	**283.07**	**11795**	**280.04**	**3.03**

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	520	11.25	469
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.18	91
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	565	530	12.01	500
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	356	359	8.53	355
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**1501**	**1509**	**33.97**	**1415**
	Total Hydro	1148	408	242	7.96	332
	Total Punjab	**5828**	**1909**	**1751**	**41.93**	**1747**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	471	437	10.52	438
	DCRTPP (Yamuna nagar) (2*300)	600	539	493	11.81	492
	Faridabad GPS (NTPC)	432	196	205	4.63	193
	RGTPP (khedar) (IPP) (2*600)	1200	977	725	18.88	787
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	616	372	12.92	538
	Thermal (Total)	**4944**	**2799**	**2232**	**58.76**	**2448**
	Total Hydro	62	9	12	0.37	15
	Total Haryana	**5006**	**2808**	**2244**	**59.13**	**2464**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	860	860	20.92	872
	suratgarh TPS (6*250)	1500	1135	1131	27.14	1131
	Chabra TPS (3*250)	750	750	750	18.22	759
	Dholpur GPS (3*110)	330	0	114	1.81	75
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	147	143	3.67	153
	RAPS A (NPC) (1*100+1*200)	300	159	164	4.02	168
	Barsingsar (NLC) (2*125)	250	189	188	4.16	173
	Giral LTPS (2*125)	250	64	50	0.99	41
	Rajwest LTPS (IPP) (8*135)	1080	514	512	15.99	666
	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	884	978	23.02	959
	Thermal (Total)	**8026**	**4702**	**4890**	**120**	**4997**
	Total Hydro	550	254	90	4.80	200
	Wind power	2798	880	836	20.92	872
	Biomass	99	18	18	0.44	18
	Solar	730	1	0	0.10	4
	Renewable/Others (Total)	3627	899	854	21.46	894
	Total Rajasthan	**12203**	**5855**	**5834**	**146.19**	**6091**
UP	Anpara TPS (3*210+2*500)	1630	1219	1028	27.80	1158
	Obra TPS (2*50+2*94+5*200)	1194	319	318	7.60	317
	Paricha TPS (2*110+2*220+2*250)	1140	637	645	15.40	642
	Panki TPS (2*105)	210	126	140	3.10	129
	Harduaganj TPS (1*60+1*105+2*250)	665	234	450	8.60	358
	Tanda TPS (NTPC) (4*110)	440	400	383	9.50	396
	Roza TPS (IPP) (4*300)	1200	585	810	16.20	675
	Anpara-C (IPP) (2*600)	1200	540	547	13.00	542
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	280	401	7.30	304
	Thermal (Total)	**8129**	**4340**	**4722**	**108.50**	**4521**
	Vishnuparyag HPS (IPP)	400	8	73	1.60	67
	Other Hydro	527	62	174	1.30	54
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**5210**	**5769**	**130.60**	**5375**
Uttarakhand	Total Hydro	1398	542	293	8.64	360
	Total Uttarakhand	**1398**	**542**	**293**	**8.64**	**360**
Delhi	Rajghat TPS (2*67.5)	135	33	35	0.77	32
	Delhi Gas Turbine (6x30 + 3x34)	282	75	78	1.84	76
	Pragati Gas Turbine (2x104+ 1x122)	330	159	163	3.86	161
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	322	271	7.33	305
	Badarpur TPS (NTPC) (3*95+2*210)	705	163	165	3.89	162
	Thermal (Total)	2917	752	712	17.67	736
	Total Delhi	**2917**	**752**	**712**	**17.67**	**736**
HP	Baspa HPS (IPP) (2*150)	300	62	0	1.04	43
	Malana HPS (IPP) (2*43)	86	0	0	0.22	9
	Other Hydro	728	163	117	3.31	138
	Total HP	**1114**	**225**	**117**	**4.56**	**190**
J & K	Baglihar HPS (IPP) (3*150)	450	150	120	3.09	129
	Other Hydro/IPP	436	91	40	1.36	57
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**241**	**160**	**4.45**	185
Total State Control Area Generation		**39597**	**17542**	**16880**	**413.16**	**17148**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3867**	**3163**	**102.90**	**4287**
Total Regional Availability(Gross)		**64032**	**37549**	**30021**	**799.13**	**33230**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**6586**	**662**	**58.22**	**2426**
State Control Area Hydro	**5684**	**1741**	**1088**	**33.67**	**1336**
Total Regional Hydro	**17116**	**8327**	**1750**	**91.89**	**3762**

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	-250	-500	0	500	0.00	10.41	-10.41
Gwalior-Agra (D/C)	949	1056	2045	0	35.84	0.00	35.84
Zerda-Kankroli	-236	-342	0	358	0.00	4.43	-4.43
Zerda-Bhinmal	-203	-263	77	305	0.00	2.81	-2.81
Malanpur-Auraiya	-100	-86	0	105	0.00	1.81	-1.81
Badod-Kota/Morak	-117	-165	0	193	3.14	2.93	0.21
Mundra-Mohindergarh(HVDC)	2298	2298	2305	0	53.06	0.00	53.06
Vindhyachal - Rihand	489	418	489	0	11.38	0.00	11.38
Sub Total WR	**2830**	**2416**			**103.42**	**22.39**	**81.03**
Pusauli Bypass	400	400	400	0	8.97	0.00	8.97
MZP- GKP (D/C)	154	76	169	183	0.00	1.02	-1.02
Patna-Balia(D/C)	481	413	649	0	11.85	0.00	11.85
B'Sharif-Balia (D/C)	-150	-170	0	239	0.00	2.37	-2.37
Pusauli-Balia	-1	27	148	37	0.38	0.00	0.38
Gaya-Fatehpur (765 Kv)	151	82	300	0	4.24	0.00	4.24
Pusauli-Sahupuri	193	154	193	0	3.25	0.00	3.25
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-33	-44	0	49	0.00	0.91	-0.91
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-158	-191	59	200	0.00	2.51	-2.51
Sub Total ER	**1037**	**747**			**28.69**	**6.82**	**21.87**
Total IR Exch	**3867**	**3163**			**132.11**	**29.21**	**102.90**

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
20.84	0.19	21.03	5.20	-1.30	7.87	7.75	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
34.32	70.59	104.90	21.87	81.03	102.90	-12.45	10.44	-2.01

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	0.69	4.34	37.43	61.72	19.92	11.55	2.58	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	18.02	49.71	22.07	50.03	0.07	0.08	0.00	0

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	03:03	401	06:57	0.0	0.0	0.0	0.0
Gorakhpur	400	411	21:46	396	18:09	0.0	0.0	0.0	0.0
Bareilly	400	424	21:43	404	15:36	0.0	0.0	8.4	0.0
Kanpur	400	422	03:52	402	15:36	0.0	0.0	2.9	0.0
Dadri	400	421	03:52	402	09:46	0.2	0.2	0.4	0.0
Ballabhgarh	400	429	03:25	405	15:36	0.0	0.0	30.0	0.0
Bawana	400	426	03:03	407	15:36	0.0	0.0	28.3	0.0
Bassi	400	424	05:00	395	08:32	0.0	0.0	9.8	0.0
Hissar	400	417	03:22	399	07:12	0.0	0.0	0.0	0.0
Moga	400	424	21:00	405	07:15	0.0	0.0	4.4	0.0
Abdullapur	400	426	03:22	396	18:41	0.0	0.0	24.3	0.0
Nalagarh	400	431	20:59	411	08:18	0.0	0.0	39.9	0.7
Kishenpur	400	225	18:00	208	19:01	100.0	100.0	0.0	0.0
Wagoora	400	411	18:01	363	19:06	24.6	71.4	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	780	04:00	742	07:25	0.0	0.0	0.0	0.0
Balia	765	779	03:58	753	18:11	0.0	0.0	0.0	0.0
Moga	765	800	21:00	765	07:17	0.0	0.0	0.0	0.0
Agra	765	794	21:48	752	07:16	0.0	0.0	0.0	0.0
Bhiwani	765	803	21:54	765	07:15	0.0	0.0	2.2	0.0
Unnao	765	776	04:00	743	15:38	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	489.47	719.44	494.52	880.64	99.25	546.94
Pong	426.72	384.05	400.38	230.85	407.47	416.46	62.07	253.07
Tehri	829.79	740.04	794.20	515.00	798.50	582.30	36.64	191.00
Koteshwar	612.50	598.50	610.47	4.69	610.36	4.69	191.00	194.00
Chamera-I	760.00	748.75	759.51	0.00	0.00	0.00	64.39	45.03
Rihand	268.22	252.98	849.10	241.10	852.70	299.60	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	502.34	0.99	508.75	2.35	51.47	74.15

*** 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	-322	69	0	-291	167	0	-7.24	3.60	-3.63
Delhi	-689	-115	-31	-477	205	-8	-10.64	1.07	-9.56
Haryana	-832	-217	0	-829	82	0	-21.15	0.34	-20.82
HP	411	-5	0	381	-155	0	11.17	-2.37	8.80
J&K	645	0	0	466	219	0	13.11	1.98	15.09
CHD	-31	0	0	0	0	0	-0.25	0.07	-0.17
Rajasthan	488	528	2	488	-84	2	11.70	8.44	20.14
UP	68	0	0	62	0	0	-0.54	0.00	-0.54
Uttarakhand	267	71	53	267	166	0	6.32	4.35	10.67
Total	**5**	**331**	**25**	**68**	**599**	**-6**	**2.50**	**17.48**	**19.98**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-291	-322	311	3	0	0
Delhi	-123	-689	395	-197	0	-31
Haryana	-829	-999	134	-268	0	0
HP	539	381	16	-540	0	0
J&K	645	466	268	-77	0	0
CHD	0	-31	24	0	0	0
Rajasthan	488	488	531	-846	2	-7
UP	104	-198	0	0	0	0
Uttarakhand	267	252	300	34	73	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 08.02.2015 :

Cloudy weather in some part of NR

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 : 08.02.2015 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**