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 19.02.2015
Date of Reporting : 20.02.2015

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
37213	1044	38258	50.00	30544	1227	31771	50.12	820.8	31.05

* 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	40.73	10.61		51.33	41.25	42.36	1.11	93.69	0.00
Haryana	59.78	0.35		60.13	56.50	55.18	-1.31	115.31	0.00
Rajasthan	128.45	4.50	7.25	140.20	69.76	71.31	1.55	211.50	0.00
Delhi	14.19			14.19	44.28	45.01	0.73	59.20	0.07
UP	140.10	4.50		144.60	97.87	94.68	-3.20	239.28	24.13
Uttarakhand		9.92		9.92	24.54	24.59	0.05	34.51	0.00
HP		5.69		5.69	19.93	19.31	-0.62	25.00	0.00
J & K		4.99	0.00	4.99	35.76	33.80	-1.96	38.80	6.85
Chandigarh				0.00	3.67	3.49	0.27	3.49	0.00
Total	**383.24**	**40.56**	**7.25**	**431.05**	**393.55**	**389.72**	**-3.38**	**820.78**	**31.05**

* 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	4533	0	-12	-228	3014	0	51	-306	4954
Haryana	5782	0	-11	-528	3825	0	-45	-744	6261
Rajasthan	8626	0	-287	728	8455	0	132	799	9560
Delhi	2973	0	-82	-438	1544	0	329	-857	3157
UP	10588	760	-112	68	10192	955	-173	68	11081
Uttarakhand	1757	0	62	463	1123	0	-26	353	1757
HP	1159	0	8	338	760	0	24	366	1330
J&K	1611	284	232	609	1543	272	-169	643	1867
Chandigarh	184	0	-19	0	89	0	-1	-31	194
Total	**37213**	**1044**	**-221**	**1011**	**30544**	**1227**	**122**	**290**	**38138**

* 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	1920	2075	2039	49.24	2052	45.86	3.38
	Rihand I STPS (2*500)	1000	871	889	924	21.45	894	19.92	1.53
	Rihand II STPS (2*500)	1000	906	874	945	22.11	921	20.96	1.16
	Rihand III STPS (2*500)	1000	967	949	728	21.96	915	21.01	0.95
	Dadri I STPS (4*210)	840	815	682	556	15.42	642	14.42	1.00
	Dadri II STPS (2*490)	980	980	812	656	17.79	741	17.38	0.41
	Unchahar I TPS (2*210)	420	405	340	281	7.02	292	8.21	-1.19
	Unchahar II TPS (2*210)	420	403	309	269	6.87	286	7.29	-0.42
	Unchahar III TPS (1*220)	210	201	151	133	3.40	142	3.73	-0.33
	ISTPP (Jhajjhar) (3*500)	1500	1500	734	666	15.90	663	17.35	-1.45
	Dadri GPS (4*130.19+2*154.51)	830	844	188	194	4.41	184	4.53	-0.11
	Anta GPS (3*88.71+1*153.2)	419	425	221	253	5.37	224	5.47	-0.10
	Auraiya GPS (4*111.19+2*109.30)	663	510	161	166	3.77	157	3.79	-0.02
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Singrauli Solar	15	2	0	0	0.04	2	0	0.00
	Sub Total (A)	**11312**	**10752**	**8385**	**7810**	**195**	**8116**	**190**	**5**
B. NPC	NAPS (2*220)	440	389	414	431	9.27	386	9.34	-0.07
	RAPS- B (2*220)	440	408	453	454	9.77	407	9.79	-0.02
	RAPS- C (2*220)	440	420	398	420	8.87	369	10.08	-1.21
	Sub Total (B)	**1320**	**1217**	**1265**	**1305**	**27.90**	**1163**	**29.21**	**-1.30**
C. NHPC	Chamera I HPS (3*180)	540	534	475	0	4.42	184	4.30	0.12
	Chamera II HPS (3*100)	300	200	210	0	1.53	64	1.49	0.04
	Chamera III HPS (3*77)	231	231	227	0	0.75	31	0.70	0.05
	Bairasuil HPS(3*60)	180	158	184	0	1.51	63	1.53	-0.02
	Salal-HPS (6*115)	690	190	230	200	4.82	201	4.57	0.25
	Tanakpur-HPS (3*40)	94	24	30	25	0.61	26	0.57	0.04
	Uri-I HPS (4*120)	480	299	351	328	7.64	318	7.18	0.45
	Uri-II HPS (4*60)	240	0	0	0	0.00	0	0.00	0.00
	Dhauliganga-HPS (4*70)	280	140	140	0	0.74	31	0.70	0.04
	Dulhasti-HPS (3*130)	390	258	273	0	3.14	131	3.00	0.14
	Sewa-II HPS (3*40)	120	6	0	0	0.13	5	0.12	0.01
	Parbati 3 (4*130)	520	130	132	0	0.43	18	0.39	0.04
	Sub Total (C)	**4065**	**2170**	**2253**	**553**	**26**	**1071**	**25**	**1**
D.SJVNL	NJPC (6*250)	1500	1350	1352	0	5.93	247	5.89	0.03
	Rampur HEP (4*68.67)	275	370	300	0	1.61	67	1.64	-0.03
	Sub Total (D)	**1775**	**1720**	**1652**	**0**	**7.54**	**314**	**7.53**	**0.01**
E. THDC	Tehri HPS (4*250)	1000	860	863	0	9.03	376	9.00	0.03
	Koteshwar HPS (4*100)	400	146	300	100	3.50	146	3.50	0.00
	Sub Total (E)	**1400**	**1006**	**1163**	**100**	**12.53**	**522**	**12.50**	**0.03**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	750	1144	464	17.92	747	17.99	-0.07
	Dehar HPS (6*165)	990	213	330	0	5.22	218	5.10	0.12
	Pong HPS (6*66)	396	104	236	0	2.41	101	2.50	-0.08
	Sub Total (F)	**2900**	**1066**	**1710**	**464**	**25.55**	**1065**	**25.59**	**-0.03**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	0	0	0.30	13	0.29	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	0	0	3.11	130	3.13	-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	130	110	3.04	127	3.10	-0.05
	Budhil HPS(IPP)	70	0	0	0	0.14	6	0.14	0.00
	Sub Total (G)	1662	0	130	110	6.60	275	6.66	-0.06
H. Total Regional Entities (A-G)		**24434**	**17931**	**16557**	**10343**	**300.63**	**12526**	**296.08**	**4.55**

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	7.59	316
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	100	2.33	97
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	554	563	13.73	572
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	376	352	9.50	396
	Talwandi Saboo (1*660)	660	344	341	7.58	316
	Thermal (Total)	**4680**	**1694**	**1676**	**40.73**	**1697**
	Total Hydro	1148	392	402	10.61	442
	Total Punjab	**5828**	**2086**	**2078**	**51.33**	**2139**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	233	413	7.96	332
	DCRTPP (Yamuna nagar) (2*300)	600	278	246	5.91	246
	Faridabad GPS (NTPC)	432	200	175	4.20	175
	RGTPP (khedar) (IPP) (2*600)	1200	1166	743	19.48	812
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	992	742	22.22	926
	Thermal (Total)	**4944**	**2869**	**2319**	**59.78**	**2491**
	Total Hydro	62	12	14	0.35	14
	Total Haryana	**5006**	**2881**	**2333**	**60.13**	**2505**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	1100	1078	26.13	1089
	suratgarh TPS (6*250)	1500	1231	1133	29.71	1238
	Chabra TPS (3*250)	750	647	630	15.55	648
	Dholpur GPS (3*110)	330	113	113	2.92	122
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	37	37	0.93	39
	RAPS A (NPC) (1*100+1*200)	300	158	161	4.09	170
	Barsingsar (NLC) (2*125)	250	96	97	2.17	91
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	752	819	19.23	801
	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	1181	1180	27.72	1155
	Thermal (Total)	**8026**	**5315**	**5248**	**128**	**5352**
	Total Hydro	550	145	91	4.50	188
	Wind power	2798	242	168	6.68	278
	Biomass	99	20	20	0.48	20
	Solar	730	1	0	0.09	4
	Renewable/Others (Total)	3627	263	188	7.25	302
	Total Rajasthan	**12203**	**5723**	**5527**	**140.20**	**5842**
UP	Anpara TPS (3*210+2*500)	1630	1384	1390	33.00	1375
	Obra TPS (2*50+2*94+5*200)	1194	333	344	8.30	346
	Paricha TPS (2*110+2*220+2*250)	1140	664	645	15.70	654
	Panki TPS (2*105)	210	117	63	2.60	108
	Harduaganj TPS (1*60+1*105+2*250)	665	440	437	10.50	438
	Tanda TPS (NTPC) (4*110)	440	388	392	9.00	375
	Roza TPS (IPP) (4*300)	1200	1071	1044	21.90	913
	Anpara-C (IPP) (2*600)	1200	545	540	12.90	538
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	401	279	7.00	292
	Thermal (Total)	**8129**	**5343**	**5134**	**120.90**	**5038**
	Vishnuparyag HPS (IPP)	400	64	68	1.60	67
	Other Hydro	527	293	173	2.90	121
	Cogeneration	981	800	800	19.20	800
	Total UP	**10037**	**6500**	**6175**	**144.60**	**5958**
Uttarakhand	Total Hydro	1398	595	334	9.92	413
	Total Uttarakhand	**1398**	**595**	**334**	**9.92**	**413**
Delhi	Rajghat TPS (2*67.5)	135	34	34	0.73	30
	Delhi Gas Turbine (6x30 + 3x34)	282	78	79	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	154	158	3.75	156
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	311	0	4.00	167
	Badarpur TPS (NTPC) (3*95+2*210)	705	160	163	3.87	161
	Thermal (Total)	2917	737	434	14.19	591
	Total Delhi	**2917**	**737**	**434**	**14.19**	**591**
HP	Baspa HPS (IPP) (2*150)	300	30	0	0.85	36
	Malana HPS (IPP) (2*43)	86	0	0	0.23	10
	Other Hydro	728	211	168	4.61	192
	Total HP	**1114**	**241**	**168**	**5.69**	**237**
J & K	Baglihar HPS (IPP) (3*150)	450	150	150	3.60	150
	Other Hydro/IPP	436	68	41	1.39	58
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**218**	**191**	**4.99**	208
Total State Control Area Generation		**39597**	**18981**	**17240**	**431.05**	**17894**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4952**	**4207**	**118.52**	**4938**
Total Regional Availability(Gross)		**64032**	**40490**	**31790**	**850.21**	**35359**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**6778**	**1117**	**74.75**	**3115**
State Control Area Hydro	**5684**	**1896**	**1373**	**40.56**	**1623**
Total Regional Hydro	**17116**	**8674**	**2490**	**115.31**	**4738**

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	0	500	0.00	5.11	-5.11
Gwalior-Agra (D/C)	1615	1293	2272	0	40.75	0.00	40.75
Zerda-Kankroli	-130	-355	0	373	0.00	5.58	-5.58
Zerda-Bhinmal	-32	-239	35	284	0.00	2.94	-2.94
Malanpur-Auraiya	-87	-133	0	133	0.00	2.21	-2.21
Badod-Kota/Morak	-94	-173	0	184	0.00	3.25	-3.25
Mundra-Mohindergarh(HVDC)	2302	2501	2506	0	58.29	0.00	58.29
Vindhyachal - Rihand	492	482	497	0	11.49	0.00	11.49
Sub Total WR	**4016**	**3326**			**110.53**	**19.09**	**91.44**
Pusauli Bypass	400	400	400	0	8.89	0.00	8.89
MZP- GKP (D/C)	-35	40	242	180	1.20	0.00	1.20
Patna-Balia(D/C)	426	418	605	0	11.29	0.00	11.29
B'Sharif-Balia (D/C)	-83	-74	76	206	0.00	1.04	-1.04
Pusauli-Balia	-59	-27	61	74	0.00	0.09	-0.09
Gaya-Fatehpur (765 Kv)	314	197	448	0	6.94	0.00	6.94
Pusauli-Sahupuri	147	151	194	0	3.42	0.00	3.42
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-36	0	44	0.00	0.85	-0.85
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-134	-188	23	195	0.00	2.67	-2.67
Sub Total ER	**936**	**881**			**31.73**	**4.65**	**27.09**
Total IR Exch	**4952**	**4207**			**142.26**	**23.74**	**118.52**

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
23.75	0.15	23.90	4.06	-1.53	15.85	-0.93	0.22	-0.22

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
44.02	74.45	118.47	27.09	91.44	118.52	-16.93	16.98	0.05

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	0.48	7.51	63.34	57.00	22.11	11.74	1.72	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	21.59	49.74	6.54	50.02	0.07	0.08	50.29	49.94

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	00:00	402	19:21	0.0	0.0	0.0	0.0
Gorakhpur	400	399	19:28	398	19:24	0.0	0.0	0.0	0.0
Bareilly	400	420	23:57	403	12:12	0.0	0.0	0.0	0.0
Kanpur	400	418	04:02	400	12:11	0.0	0.0	0.0	0.0
Dadri	400	411	17:04	404	12:19	77.1	77.1	0.0	0.0
Ballabhgarh	400	429	04:01	406	12:11	0.0	0.0	34.3	0.0
Bawana	400	425	21:53	408	11:18	0.0	0.0	27.0	0.0
Bassi	400	423	05:02	398	11:46	0.0	0.0	3.9	0.0
Hissar	400	418	21:54	396	11:51	0.0	0.0	0.0	0.0
Moga	400	424	04:03	405	12:13	0.0	0.0	17.4	0.0
Abdullapur	400	425	21:53	396	18:48	0.0	0.0	14.8	0.0
Nalagarh	400	432	20:50	413	11:57	0.0	0.0	52.3	2.1
Kishenpur	400	425	15:13	401	18:58	0.0	0.0	10.1	0.0
Wagoora	400	411	15:19	378	06:36	6.4	48.7	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	04:01	742	11:52	0.0	0.0	0.0	0.0
Balia	765	772	00:00	752	06:53	0.0	0.0	0.0	0.0
Moga	765	805	21:56	767	12:12	0.0	0.0	4.4	0.0
Agra	765	794	21:56	755	11:52	0.0	0.0	0.0	0.0
Bhiwani	765	807	04:01	767	12:12	0.0	0.0	10.5	0.0
Unnao	765	766	04:01	738	12:11	0.0	2.8	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	485.13	593.99	492.14	808.03	137.51	621.70
Pong	426.72	384.05	399.25	203.01	406.65	388.64	143.48	176.07
Tehri	829.79	740.04	788.75	439.29	794.70	529.09	35.70	235.00
Koteshwar	612.50	598.50	610.52	4.83	610.70	4.95	235.00	232.00
Chamera-I	760.00	748.75	759.18	0.00	0.00	0.00	97.18	119.17
Rihand	268.22	252.98	848.60	233.20	851.90	286.30	0.00	0.00
RPS	352.80	343.81	1137.59	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	500.84	2.96	508.57	2.55	95.94	144.93

*** 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	-321	15	0	-291	62	0	-7.22	1.77	-5.45
Delhi	-688	-144	-26	-476	64	-26	-11.27	-1.54	-12.81
Haryana	-626	-118	0	-675	147	0	-16.96	2.31	-14.65
HP	412	-45	0	382	-45	0	10.97	-2.73	8.24
J&K	643	0	0	467	142	0	13.08	1.67	14.74
CHD	-31	0	0	0	0	0	-0.24	0.18	-0.06
Rajasthan	293	504	2	293	433	2	7.04	9.73	16.76
UP	68	0	0	68	0	0	0.64	0.00	0.64
Uttarakhand	268	54	31	268	176	19	6.34	5.17	11.51
Total	**18**	**265**	**7**	**37**	**978**	**-4**	**2.36**	**16.56**	**18.92**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-291	-321	250	0	0	0
Delhi	-244	-688	80	-226	-26	-26
Haryana	-626	-842	185	-169	0	0
HP	521	382	16	-557	0	0
J&K	643	467	220	-153	0	0
CHD	0	-31	25	0	0	0
Rajasthan	293	293	509	-5	2	-30
UP	120	-95	0	0	0	0
Uttarakhand	268	252	315	54	49	9

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 19.02.2015 :

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 : 19.02.2015 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**