पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.02.2014
Date of Reporting : 21.02.2014

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
35806	2130	37936	50.05	27918	15	27933	50.03	780.8	50.33

* 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	35.88	10.73		46.61	41.30	42.42	1.12	89.03	1.37
Haryana	36.65	0.44		37.09	64.91	66.84	1.93	103.92	1.94
Rajasthan	96.46	5.27	3.28	105.01	89.86	89.03	-0.82	194.04	0.94
Delhi	18.44			18.44	41.66	42.66	1.00	61.10	0.51
UP	118.42	3.40	16.80	138.62	87.42	87.33	-0.09	225.95	42.77
Uttarakhand		8.89		8.89	21.82	23.90	2.08	32.79	1.11
HP		13.77		13.77	18.86	18.99	0.13	32.76	0.00
J & K		5.96	0.00	5.96	32.38	31.70	-0.68	37.66	1.70
Chandigarh				0.00	3.35	3.52	0.17	3.52	0.00
Total	**305.85**	**48.46**	**20.08**	**374.38**	**401.55**	**406.38**	**4.84**	**780.77**	**50.33**

*** 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				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transactio	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	5073	50	62	-512	3077	0	87	90	-6.89
Haryana	5273	0	1	-31	3510	0	305	-37	-3.92
Rajasthan	8130	214	150	874	7350	0	-93	1048	37.42
Delhi	3219	21	262	-956	1407	0	98	-1560	-25.89
UP	9471	1670	-234	378	9051	15	-79	460	6.52
Uttarakhand	1622	75	119	410	1137	0	113	439	10.53
HP	1096	0	-44	188	737	0	15	343	7.38
J&K	1737	100	-20	519	1567	0	-42	608	11.25
Chandigarh	185	0	-8	0	83	0	-6	0	0.00
Total	**35806**	**2130**	**288**	**870**	**27918**	**15**	**397**	**1392**	**36.40**

* STOA figures are at sellers boundary & PX figures are at regional boundary.

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	2000	1945	2078	2092	46.67	1945	46.68	-0.01
	Rihand I STPS	1000	945	1008	922	22.11	921	21.92	0.19
	Rihand II STPS	1000	975	1040	976	23.20	967	22.80	0.40
	Rihand III STPS	1000	472	509	448	11.35	473	11.24	0.11
	Dadri I STPS	840	683	808	589	15.23	634	15.57	-0.35
	Dadri II STPS	980	869	983	679	19.23	801	19.43	-0.20
	Unchahar I TPS	420	408	442	320	8.97	374	8.92	0.04
	Unchahar II TPS	420	406	445	312	8.81	367	8.81	0.00
	Unchahar III TPS	210	203	218	155	4.41	184	4.41	0.00
	ISTPP (Jhajjhar)	1500	1500	1030	622	18.38	766	18.74	-0.36
	Dadri GPS	830	841	402	51	10.75	448	10.86	-0.11
	Anta GPS	419	429	272	257	6.45	269	6.46	-0.01
	Auraiya GPS	663	674	157	162	3.69	154	3.76	-0.07
	Sub Total (A)	**11282**	**10349**	**9392**	**7585**	**199.23**	**8301**	**199.60**	**-0.37**
B. NPC	NAPS	440	299	332	336	7.11	296	7.18	-0.07
	RAPS- B	440	417	457	463	9.98	416	10.01	-0.03
	RAPS- C	440	430	468	477	10.25	427	10.32	-0.07
	Sub Total (B)	**1320**	**1146**	**1257**	**1276**	**27.33**	**1139**	**27.50**	**-0.17**
C. NHPC	Chamera I HPS	540	540	450	0	2.83	118	2.80	0.03
	Chamera II HPS	300	200	202	0	1.34	56	1.30	0.04
	Chamera III HPS	231	154	159	0	0.63	26	0.60	0.03
	Bairasuil HPS	180	182	182	60	1.11	46	1.10	0.01
	Salal-HPS	690	135	235	134	3.36	140	3.28	0.08
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00
	Uri-HPS	480	190	305	128	4.65	194	4.57	0.09
	Uri-II HPS	180	107	121	0	2.66	111	2.57	0.09
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	258	273	0	2.48	103	2.40	0.08
	Sewa-II HPS	120	119	123	0	1.44	60	1.40	0.04
	Sub Total (C)	**3485**	**1886**	**2050**	**322**	**20.50**	**854**	**20.02**	**0.49**
D.NJPC	Nathpa Jhakri	1500	1605	803	0	6.71	280	6.70	0.01
	Sub Total (D)	1500	1605	803	0	6.71	280	6.70	0.01
E. THDC	Tehri HPS	1000	900	905	0	7.11	296	7.00	0.11
	Koteshwar HPS	400	116	303	0	2.81	117	2.80	0.01
	Sub Total (E)	**1400**	**1016**	**1208**	**0**	**9.92**	**413**	**9.80**	**0.12**
F. BBMB	Bhakra HPS	1497	687	1159	388	16.60	692	16.50	0.10
	Dehar HPS	990	140	330	0	3.82	159	3.36	0.46
	Pong HPS	396	205	372	126	5.14	214	4.93	0.21
	Sub Total (F)	**2883**	**1033**	**1861**	**514**	**25.56**	**1065**	**24.79**	**0.78**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.37	15	0.35	0.02
	KWHEP HPS(IPP)	1000	0	0	0	3.30	138	3.24	0.06
	Malana Stg-II HPS	100	0	0	0	0.11	4	0.09	0.02
	Shree Cement TPS	300	0	120	119	2.88	120	3.52	-0.63
	Budhil HPS(IPP)	70	0	0	0	0.02	1	0.14	-0.11
	Sub Total (G)	1662	0	120	119	6.68	278	7.32	-0.65
H. Total Regional Entities (A-G)		**23532**	**17035**	**16691**	**9816**	**295.94**	**12331**	**295.73**	**0.20**

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)	1260	1030	600	15.60	650
	Guru Nanak Dev TPS(Bhatinda)	440	225	90	2.05	85
	Guru Hargobind Singh TPS(L.mbt)	920	966	698	18.21	759
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	0	0	0.02	1
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	2221	1388	35.88	1495
	Total Hydro	1148	452	444	10.73	447
	Total Punjab	**5128**	**2673**	**1832**	**46.61**	**1942**
Haryana	Panipat TPS	1367	236	226	5.33	222
	DCRTPP (Yamuna nagar)	600	533	507	12.26	511
	Faridabad GPS (NTPC)	432	418	299	7.87	328
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	579	385	11.19	466
	Thermal (Total)	4944	1766	1417	36.65	1527
	Total Hydro	62	15	21	0.44	18
	Total Haryana	**5006**	**1781**	**1438**	**37.09**	**1545**
Rajasthan	kota TPS	1240	1157	1162	26.80	1117
	suratgarh TPS	1500	1348	1343	32.08	1337
	Chabra TPS	750	627	627	16.03	668
	Dholpur GPS	330	138	139	3.44	143
	Ramgarh GPS	221	0	0	0.00	0
	RAPS A (NPC)	300	175	175	4.13	172
	Barsingsar (NLC)	250	96	100	2.22	93
	Giral LTPS	250	72	69	1.41	59
	Rajwest LTPS (IPP)	1080	0	0	0.00	0
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	431	432	10.35	431
	Thermal (Total)	7976	4044	4047	96.46	4019
	Total Hydro	550	296	150	5.27	220
	Wind power	2191	89	165	2.03	85
	Biomass	91	30	30	0.72	30
	Solar	201	5	0	0.53	22
	Renewable/Others (Total)	2483	119	195	3.28	137
	Total Rajasthan	**11009**	**4459**	**4392**	**105.01**	**4375**
UP	Anpara TPS	1630	1125	1132	26.46	1103
	Obra TPS	1288	463	481	11.50	479
	Paricha TPS	1140	871	735	18.57	774
	Panki TPS	210	60	90	1.71	71
	Harduaganj TPS	665	460	479	11.16	465
	Tanda TPS (NTPC)	440	389	404	9.77	407
	Roza TPS (IPP)	1200	1083	748	21.46	894
	Anpara-C (IPP)	1200	540	549	12.74	531
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	280	195	5.05	211
	Thermal (Total)	8223	5271	4813	118.42	4934
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	147	143	3.40	142
	Cogeneration	981	700	700	16.80	700
	Total UP	**10131**	**6118**	**5656**	**138.62**	**5776**
Uttarakhand	Total Hydro	1303	507	152	8.89	370
	Total Uttarakhand	**1303**	**507**	**152**	**8.89**	**370**
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	78	76	1.79	74
	Pragati Gas Turbine	330	310	266	7.33	306
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	380	376	9.32	388
	Thermal (Total)	2232	768	718	18.44	768
	Total Delhi	**2232**	**768**	**718**	**18.44**	**768**
HP	Baspa HPS (IPP)	330	30	0	3.67	153
	Malana HPS (IPP)	86	0	0	9.90	413
	Other Hydro	589	177	110	0.20	8
	Total HP	**1005**	**207**	**110**	**13.77**	**574**
J & K	Baglihar HPS (IPP)	450	150	150	3.60	150
	Other Hydro	323	94	132	2.36	98
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**244**	**282**	**5.96**	248
Total State Control Area Generation		**36770**	**16757**	**14580**	**374.38**	**15599**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4889.47**	**4361**	**126.72**	**5280**
Total Regional Availability(Gross)		**60303**	**38337**	**28757**	**797.04**	**33210**

IV. Total Hydro Generation:

Regional Entities Hydro	**10560**	**5922**	**836**	**66.46**	**2769**
State Control Area Hydro	**5368**	**1868**	**1302**	**48.46**	**2019**
Total Regional Hydro	**15928**	**7790**	**2138**	**114.92**	**4788**

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	400	300	500	0	10.35	0.00	10.35
Gwalior-Agra (D/C)	1534	1508	1954	0	37.24	0.00	37.24
Zerda-Kankroli	14	-210	218	210	0.10	0.00	0.10
Zerda-Bhinmal	153	-67	391	82	3.68	0.00	3.68
Malanpur-Auraiya	-98	-72	0	105	0.00	1.92	-1.92
Badod-Kota/Morak	-44	-125	81	235	0.00	0.96	-0.96
Mundra-Mohindergarh(HVDC)	1998	2003	2005	0	48.33	0.00	48.33
Sub Total WR	**3957**	**3337**			**99.70**	**2.88**	**96.82**
Pusauli Bypass	300	300	300	0	7.24	0.00	7.24
MZP- GKP (D/C)	95	121	283	0	3.67	0.00	3.67
Patna-Balia(D/C)	261	400	472	0	8.83	0.00	8.83
B'Sharif-Balia (D/C)	215	225	391	0	5.78	0.00	5.78
Pusauli-Balia	-91	-66	0	113	0.00	1.44	-1.44
Gaya-Fatehpur (765 Kv)	-4	-47	181	60	1.04	0.00	1.04
Pusauli-Sahupuri	139	116	149	0	2.63	0.00	2.63
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-31	-28	0	0	0.00	0.68	-0.68
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	48	3	299	9	2.84	0.00	2.84
Sub Total ER	**932**	**1024**			**32.03**	**2.12**	**29.91**
Total IR Exch	**4889**	**4361**			**131.73**	**5.01**	**126.72**

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
31.65	0.15	31.80	13.97	2.03	4.91	12.07	0.07	-0.07

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
50.76	74.32	125.08	29.91	96.82	126.72	-20.85	22.50	1.65

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	>50.50
0.00	1.30	8.90	28.80	62.80	47.80	11.30	12.10	1.90	0.00

<---------- 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)
50.30	18.00	49.58	9.12	49.96	0.15	0.12	50.31	49.83

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	406	00:00	400	07:10	0.0	0.0	0.0	0.0
Gorakhpur	400	423	08:51	411	19:04	0.0	0.0	19.8	0.0
Bareilly	400	425	13:09	407	07:13	0.0	0.0	7.5	0.0
Kanpur	400	416	00:00	404	07:14	0.0	0.0	0.0	0.0
Dadri	400	422	00:55	406	18:40	0.0	0.0	7.3	0.0
Ballabhgarh	400	429	00:00	414	07:11	0.0	0.0	60.7	0.0
Bawana	400	428	04:02	411	18:38	0.0	0.0	36.7	0.0
Bassi	400	428	04:01	395	07:13	0.0	0.0	18.6	0.0
Hissar	400	415	03:01	396	14:48	0.0	0.0	0.0	0.0
Moga	400	413	13:01	397	11:11	0.0	0.0	0.0	0.0
Abdullapur	400	424	23:50	399	06:17	0.0	0.0	3.3	0.0
Nalagarh	400	425	23:59	408	14:48	0.0	0.0	14.5	0.0
Kishenpur	400	411	13:01	388	18:38	0.0	0.7	0.0	0.0
Wagoora	400	398	13:02	365	18:39	50.5	96.2	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	775	13:04	747	08:36	0.0	0.0	0.0	0.0
Balia	765	776	13:00	749	18:40	0.0	0.0	0.0	0.0
Moga	765	787	23:58	757	07:13	0.0	0.0	0.0	0.0
Agra	765	808	13:04	774	09:11	0.0	0.0	13.9	0.0
Bhiwani	765	737	03:02	711	07:12	66.3	100.0	0.0	0.0
Unnao	765	766	13:05	747	10:20	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	491.89	798.09	482.81	527.87	174.71	505.40
Pong	426.72	384.05	406.55	388.64	401.19	244.95	141.36	340.45
Tehri	829.79	740.04	793.95	513.60	818.65	982.26	68.85	179.00
Koteshwar	612.50	598.50	610.40	4.69	610.00	4.69	185.00	188.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	74.63	76.39
Rihand	268.22	252.98	259.84	296.30	259.78	292.90	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	508.74	148.00	510.66	150.00	99.99	116.98

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:
NIL

XII. Weather Conditions For 20.02.2014 :
Normal weather in NR.

XIII. Synchronisation of new generating units :
0.00

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

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :
Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.
Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood
Vishnuprayag and Dhauliganga expected by Mar, 2014 .

Report for : 20.02.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**