पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 16.01.2014
Date of Reporting : 17.01.2014

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
38227	2073	40300	50.11	28757	15	28772	50.19	807.0	39.93

* 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	49.47	9.61		59.08	31.41	31.64	0.24	90.72	0.33
Haryana	50.92	0.31		51.23	56.54	55.43	-1.11	106.66	0.44
Rajasthan	115.53	4.47	3.17	123.17	74.28	72.35	-1.93	195.52	0.00
Delhi	22.26			22.26	46.67	45.41	-1.27	67.67	0.23
UP	130.87	1.96	15.60	148.44	95.57	93.49	-2.08	241.93	36.59
Uttarakhand		8.33		8.33	25.86	26.16	0.31	34.50	0.23
HP		4.48		4.48	20.61	20.49	-0.12	24.97	0.42
J & K		5.74	0.00	5.74	32.81	35.34	2.53	41.08	1.70
Chandigarh				0.00	3.21	3.92	0.71	3.92	0.00
Total	**369.06**	**34.91**	**18.77**	**422.73**	**386.96**	**384.23**	**-2.72**	**806.96**	**39.93**

*** 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 transactior	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	4941	50	0	-796	3072	0	158	-27	-9.15
Haryana	5707	103	1	-317	3734	0	34	-338	-12.89
Rajasthan	8565	0	-109	408	7140	0	-45	55	23.00
Delhi	3506	0	-96	-613	1504	5	13	-1324	-21.25
UP	10547	1780	-39	1150	9669	0	-161	596	15.56
Uttarakhand	1698	40	-81	661	1140	0	-12	580	14.67
HP	1251	0	-50	346	785	10	16	412	9.24
J&K	1807	100	-39	657	1621	0	73	634	12.08
Chandigarh	205	0	11	0	92	0	18	-12	-0.10
Total	**38227**	**2073**	**-402**	**1497**	**28757**	**15**	**94**	**575**	**31.16**

* 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	1947	2089	2078	46.85	1952	46.72	0.13
	Rihand I STPS	1000	881	968	748	20.32	847	20.27	0.05
	Rihand II STPS	1000	933	1037	781	21.67	903	21.59	0.08
	Rihand III STPS	1000	464	516	415	10.88	453	10.83	0.05
	Dadri I STPS	840	815	831	623	17.18	716	17.67	-0.49
	Dadri II STPS	980	985	990	744	21.35	890	21.80	-0.45
	Unchahar I TPS	420	408	355	357	8.78	366	8.84	-0.07
	Unchahar II TPS	420	405	397	310	8.41	350	8.43	-0.02
	Unchahar III TPS	210	202	199	155	4.28	179	4.32	-0.03
	ISTPP (Jhajjhar)	1500	1500	900	624	17.46	727	17.83	-0.38
	Dadri GPS	830	850	398	366	8.95	373	9.10	-0.15
	Anta GPS	419	291	248	203	5.86	244	5.71	0.15
	Auraiya GPS	663	676	330	138	6.31	263	6.49	-0.18
	Sub Total (A)	**11282**	**10357**	**9258**	**7542**	**198.30**	**8263**	**199.61**	**-1.31**
B. NPC	NAPS	440	327	349	368	7.70	321	7.85	-0.14
	RAPS- B	440	420	464	464	10.10	421	10.08	0.02
	RAPS- C	440	430	474	471	10.25	427	10.32	-0.07
	Sub Total (B)	**1320**	**1177**	**1287**	**1303**	**28.06**	**1169**	**28.25**	**-0.19**
C. NHPC	Chamera I HPS	540	540	360	0	1.65	69	1.61	0.05
	Chamera II HPS	300	200	201	0	1.02	42	0.98	0.04
	Chamera III HPS	231	231	227	0	0.59	25	0.59	0.00
	Bairasuil HPS	180	0	0	0	0.00	0	0.00	0.00
	Salal-HPS	690	113	197	35	2.59	108	2.64	-0.05
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00
	Uri-HPS	480	91	217	43	2.44	102	2.49	-0.06
	Uri-II HPS	180	59	121	36	1.48	62	1.30	0.18
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	258	275	0	2.66	111	2.70	-0.04
	Sewa-II HPS	120	119	124	0	0.43	18	0.48	-0.05
	Sub Total (C)	**3485**	**1611**	**1722**	**114**	**12.86**	**536**	**12.79**	**0.07**
D.NJPC	Nathpa Jhakri	1500	1605	1010	0	7.04	293	6.90	0.14
	Sub Total (D)	1500	1605	1010	0	7.04	293	6.90	0.14
E. THDC	Tehri HPS	1000	1000	752	0	8.55	356	8.50	0.05
	Koteshwar HPS	400	121	201	91	3.10	129	3.06	0.04
	Sub Total (E)	**1400**	**1121**	**953**	**91**	**11.65**	**485**	**11.56**	**0.09**
F. BBMB	Bhakra HPS	1497	718	1177	386	17.43	726	17.23	0.20
	Dehar HPS	990	114	330	0	2.92	122	2.73	0.19
	Pong HPS	396	230	312	60	5.59	233	5.53	0.06
	Sub Total (F)	**2883**	**1062**	**1819**	**446**	**25.94**	**1081**	**25.49**	**0.45**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.41	17	0.39	0.01
	KWHEP HPS(IPP)	1000	0	360	0	3.59	150	3.60	-0.01
	Malana Stg-II HPS	100	0	0	0	0.13	5	0.12	0.01
	Shree Cement TPS	300	0	268	243	6.47	270	6.44	0.04
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	628	243	10.60	442	10.55	0.04
H. Total Regional Entities (A-G)		**23532**	**16932**	**16677**	**9739**	**294.45**	**12269**	**295.15**	**-0.70**

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	1240	1010	24.51	1021
	Guru Nanak Dev TPS(Bhatinda)	440	340	250	6.14	256
	Guru Hargobind Singh TPS(L.mbt)	920	970	657	18.82	784
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	0	0	0.00	0
	Talwandi Saboo	660	0		0.00	0
	Thermal (Total)	3980	2550	1917	49.47	2061
	Total Hydro	1148	466	386	9.61	400
	Total Punjab	**5128**	**3016**	**2303**	**59.08**	**2462**
Haryana	Panipat TPS	1367	467	429	10.51	438
	DCRTPP (Yamuna nagar)	600	555	503	12.70	529
	Faridabad GPS (NTPC)	432	210	0	3.31	138
	RGTPP (khedar) (IPP)	1200	596	508	12.70	529
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	619	372	11.71	488
	Thermal (Total)	4944	2447	1812	50.92	2122
	Total Hydro	62	15	8	0.31	13
	Total Haryana	**5006**	**2462**	**1820**	**51.23**	**2134**
Rajasthan	kota TPS	1240	1153	1160	27.14	1131
	suratgarh TPS	1500	1046	1087	25.24	1052
	Chabra TPS	750	457	455	10.85	452
	Dholpur GPS	330	107	107	2.54	106
	Ramgarh GPS	221	134	136	3.33	139
	RAPS A (NPC)	300	175	175	4.12	172
	Barsingsar (NLC)	250	106	106	2.33	97
	Giral LTPS	250	42	18	1.03	43
	Rajwest LTPS (IPP)	1080	475	474	11.60	483
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	1132	1069	27.34	1139
	Thermal (Total)	7976	4827	4787	115.53	4814
	Total Hydro	550	151	140	4.47	186
	Wind power	2191	71	134	2.26	94
	Biomass	91	20	20	0.48	20
	Solar	201	4	0	0.43	18
	Renewable/Others (Total)	2483	91	154	3.17	132
	Total Rajasthan	**11009**	**5069**	**5081**	**123.17**	**5132**
UP	Anpara TPS	1630	1527	1376	30.60	1275
	Obra TPS	1288	568	564	12.20	508
	Paricha TPS	1140	988	930	21.20	883
	Panki TPS	210	0	100	0.50	21
	Harduaganj TPS	665	436	504	10.30	429
	Tanda TPS (NTPC)	440	372	296	7.89	329
	Roza TPS (IPP)	1200	648	704	17.93	747
	Anpara-C (IPP)	1200	1070	1065	25.42	1059
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	198	199	4.84	202
	Thermal (Total)	8223	5807	5738	130.87	5453
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	93	60	1.96	82
	Cogeneration	981	650	650	15.60	650
	Total UP	**10131**	**6550**	**6448**	**148.44**	**6185**
Uttarakhand	Total Hydro	1303	504	190	8.33	347
	Total Uttarakhand	**1303**	**504**	**190**	**8.33**	**347**
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	163	160	3.50	146
	Pragati Gas Turbine	330	318	265	6.59	274
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	610	505	12.18	508
	Thermal (Total)	2232	1091	930	22.26	928
	Total Delhi	**2232**	**1091**	**930**	**22.26**	**928**
HP	Baspa HPS (IPP)	330	0	0	1.22	51
	Malana HPS (IPP)	86	0	0	0.18	7
	Other Hydro	589	175	64	3.08	129
	Total HP	**1005**	**175**	**64**	**4.48**	**187**
J & K	Baglihar HPS (IPP)	450	152	120	3.17	132
	Other Hydro	323	104	127	2.57	107
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**256**	**247**	**5.74**	239
Total State Control Area Generation		**36770**	**19123**	**17083**	**422.73**	**17614**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4431**	**2955**	**105.71**	**4405**
Total Regional Availability(Gross)		**60303**	**40231**	**29777**	**822.89**	**34287**

IV. Total Hydro Generation:

Regional Entities Hydro	**10560**	**5864**	**651**	**61.62**	**2567**
State Control Area Hydro	**5368**	**1660**	**1095**	**34.91**	**1454**
Total Regional Hydro	**15928**	**7524**	**1746**	**96.52**	**4022**

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	0	400	150	3.86	0.55	3.31
Gwalior-Agra (D/C)	1472	839	1753	0	32.17	0.00	32.17
Zerda-Kankroli	-89	-302	15	361	0.00	2.99	-2.99
Zerda-Bhinmal	11	-184	174	258	0.02	0.00	0.02
Malanpur-Auraiya	-166	-106	0	193	0.00	3.36	-3.36
Badod-Kota/Morak	-2	-181	0	198	0.00	2.38	-2.38
Mundra-Mohindergarh(HVDC)	1898	1698	2004	0	45.36	0.00	45.36
Sub Total WR	**3374**	**1764**			**81.41**	**9.28**	**72.13**
Pusauli Bypass	400	400	400	0	9.72	0.00	9.72
MZP- GKP (D/C)	152	222	459	0	6.12	0.00	6.12
Patna-Balia(D/C)	267	341	566	0	7.78	0.00	7.78
B'Sharif-Balia (D/C)	105	152	365	0	4.47	0.00	4.47
Pusauli-Balia	-148	-110	0	156	0.00	2.92	-2.92
Gaya-Fatehpur (765 Kv)	52	-8	194	51	1.38	0.00	1.38
Pusauli-Sahupuri	119	174	193	0	4.11	0.00	4.11
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	0	37	0.00	0.58	-0.58
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	142	50	318	3	3.51	0.00	3.51
Sub Total ER	**1057**	**1191**			**37.08**	**3.50**	**33.58**
Total IR Exch	**4431**	**2955**			**118.50**	**12.78**	**105.71**

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
32.89	0.33	33.22	23.84	3.94	0.09	-1.89	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
57.22	58.60	115.83	33.58	72.13	105.71	-23.64	13.53	-10.11

VI. Frequency Profile <---------- % of Time Frequency ---------->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.30	91.00	1.70	90.70	53.00	9.00

<---------- 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)
50.39	5.05	49.65	9.20	50.02	0.15	0.12	50.35	49.85

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	409	03:22	399	09:16	0.0	0.0	0.0	0.0
Gorakhpur	400	422	03:36	409	09:41	0.0	0.0	11.3	0.0
Bareilly	400	423	05:08	388	07:56	0.0	0.1	7.5	0.0
Kanpur	400	418	02:58	396	09:43	0.0	0.0	0.0	0.0
Dadri	400	425	03:03	401	09:13	0.0	0.0	17.4	0.0
Ballabhgarh	400	431	03:10	402	09:44	0.0	0.0	34.8	0.1
Bawana	400	428	03:03	404	09:43	0.0	0.0	32.4	0.0
Bassi	400	427	05:03	389	08:40	0.0	0.1	12.7	0.0
Hissar	400	416	03:04	390	07:18	0.0	0.0	0.0	0.0
Moga	400	416	03:13	386	09:46	0.0	3.1	0.0	0.0
Abdullapur	400	422	03:05	400	06:52	0.0	0.0	0.0	0.0
Nalagarh	400	424	03:02	402	09:37	0.0	0.0	13.1	0.0
Kishenpur	400	421	13:28	390	06:50	0.0	0.0	0.3	0.0
Wagoora	400	414	13:25	366	18:30	42.9	69.9	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	772	00:00	700	07:12	12.7	46.2	0.0	0.0
Balia	765	773	17:32	735	22:10	0.0	7.0	0.0	0.0
Moga	765	797	22:00	729	09:46	0.0	11.1	0.0	0.0
Agra	765	810	00:00	760	09:20	0.0	0.0	14.9	0.0
Bhiwani	765	809	22:58	764	15:36	0.0	0.0	9.5	0.0
Unnao	765	768	03:35	734	09:44	0.0	13.3	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	499.09	1053.16	491.85	798.09	178.26	525.14
Pong	426.72	384.05	410.33	504.32	409.17	464.36	56.07	352.97
Tehri	829.79	740.04	806.80	740.00	818.65	982.26	44.51	219.00
Koteshwar	612.50	598.50	610.22	4.95	609.40	4.21	219.00	221.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	260.42	328.10	261.00	360.60	NA	NA
RPS	352.80	343.81	348.92	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.58	NA	NA	NA	NA	NA
RSD	527.91	487.91	510.34	14.40	512.95	14.40	50.74	115.53

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 16.01.2014 :

1. Fog in Punjab,Haryana,Delhi & western Uttar pradesh.

XIII. Synchronisation of new generating units :

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 : 16.01.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**