पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 10.01.2014
Date of Reporting : 11.01.2014

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
37178	2209	39387	50.11	29252	0	29252	50.13	805.1	50.97

* 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	48.93	9.56		58.49	34.28	34.96	0.68	93.45	0.00
Haryana	51.33	0.37		51.70	59.47	61.21	1.74	112.91	1.29
Rajasthan	118.76	4.09	10.85	133.70	67.27	66.25	-1.02	199.95	1.10
Delhi	19.94			19.94	48.71	47.83	-0.88	67.77	1.07
UP	115.76	2.70	15.60	134.05	89.49	90.49	1.00	224.54	44.79
Uttarakhand		7.96		7.96	24.42	27.45	3.03	35.41	0.71
HP		4.37		4.37	20.87	21.60	0.73	25.97	0.32
J & K		6.55	0.00	6.55	31.56	34.69	3.13	41.24	1.70
Chandigarh				0.00	3.27	3.82	0.55	3.82	0.00
Total	**354.72**	**35.60**	**26.45**	**416.77**	**379.33**	**388.29**	**8.96**	**805.07**	**50.97**

*** 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	4685	0	-7	-815	3347	0	99	-148	-10.86
Haryana	5756	110	125	-549	3876	0	-36	-338	-12.67
Rajasthan	9125	0	-71	585	7195	0	-80	302	19.51
Delhi	3493	0	-273	-510	1525	0	-93	-1237	-18.78
UP	9146	1940	-336	1106	9475	0	438	554	15.20
Uttarakhand	1744	40	-3	594	1238	0	173	552	14.09
HP	1242	19	-26	393	810	0	10	425	9.40
J&K	1792	100	17	641	1693	0	93	580	11.94
Chandigarh	195	0	1	0	93	0	-4	0	0.00
Total	**37178**	**2209**	**-572**	**1445**	**29252**	**0**	**600**	**690**	**27.83**

* 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	1356	2060	1060	32.68	1361	32.46	0.21
	Rihand I STPS	1000	881	993	770	20.84	868	20.79	0.05
	Rihand II STPS	1000	933	1043	979	22.24	927	22.19	0.05
	Rihand III STPS	1000	465	522	500	11.15	464	11.13	0.01
	Dadri I STPS	840	815	881	625	17.57	732	17.84	-0.27
	Dadri II STPS	980	985	1008	718	21.34	889	21.83	-0.49
	Unchahar I TPS	420	408	444	305	9.84	410	9.17	0.67
	Unchahar II TPS	420	405	438	308	9.78	407	9.06	0.72
	Unchahar III TPS	210	201	211	154	4.91	205	4.53	0.38
	ISTPP (Jhajjhar)	1500	1500	1044	730	19.86	828	20.21	-0.35
	Dadri GPS	830	843	194	363	5.66	236	6.17	-0.51
	Anta GPS	419	430	234	254	6.00	250	6.09	-0.09
	Auraiya GPS	663	676	162	332	4.58	191	4.91	-0.33
	Sub Total (A)	**11282**	**9897**	**9234**	**7098**	**186.45**	**7769**	**186.39**	**0.05**
B. NPC	NAPS	440	324	360	364	7.79	325	7.78	0.01
	RAPS- B	440	395	463	408	9.71	405	9.47	0.24
	RAPS- C	440	430	476	475	10.27	428	10.32	-0.05
	Sub Total (B)	**1320**	**1149**	**1299**	**1247**	**27.77**	**1157**	**27.57**	**0.20**
C. NHPC	Chamera I HPS	540	540	360	0	1.67	69	1.64	0.03
	Chamera II HPS	300	300	120	0	0.87	36	0.90	-0.03
	Chamera III HPS	231	231	102	0	0.56	23	0.57	-0.01
	Bairasuil HPS	180	0	0	0	0.00	0	0.00	0.00
	Salal-HPS	690	101	194	92	2.65	110	2.43	0.22
	Tanakpur-HPS	94	24	30	25	0.60	25	0.58	0.01
	Uri-HPS	480	93	211	7	2.30	96	2.23	0.07
	Uri-II HPS	180	59	120	37	1.42	59	1.42	0.00
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	258	268	0	2.42	101	2.67	-0.25
	Sewa-II HPS	120	119	77	0	0.52	22	0.54	-0.01
	Sub Total (C)	**3485**	**1725**	**1482**	**161**	**13.00**	**542**	**12.99**	**0.01**
D.NJPC	Nathpa Jhakri	1500	1488	651	0	7.22	301	7.21	0.01
	Sub Total (D)	1500	1488	651	0	7.22	301	7.21	0.01
E. THDC	Tehri HPS	1000	1020	1018	0	10.03	418	10.00	0.03
	Koteshwar HPS	400	138	391	87	3.33	139	3.30	0.03
	Sub Total (E)	**1400**	**1158**	**1409**	**87**	**13.36**	**557**	**13.30**	**0.06**
F. BBMB	Bhakra HPS	1497	740	1014	512	17.94	748	17.77	0.17
	Dehar HPS	990	117	330	0	3.01	125	2.80	0.21
	Pong HPS	396	218	372	60	5.38	224	5.23	0.15
	Sub Total (F)	**2883**	**1075**	**1716**	**572**	**26.33**	**1097**	**25.80**	**0.53**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.37	16	0.36	0.01
	KWHEP HPS(IPP)	1000	0	360	0	3.72	155	3.72	0.00
	Malana Stg-II HPS	100	0	0	0	0.13	5	0.12	0.01
	Shree Cement TPS	300	0	123	129	3.23	135	3.64	-0.41
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	483	129	7.45	310	7.84	-0.39
H. Total Regional Entities (A-G)		**23532**	**16492**	**16274**	**9294**	**281.58**	**11732**	**281.10**	**0.47**

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	1045	1070	24.26	1011
	Guru Nanak Dev TPS(Bhatinda)	440	250	250	5.70	238
	Guru Hargobind Singh TPS(L.mbt)	920	938	948	18.97	790
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	0		0.00	0
	Talwandi Saboo	660	0		0.00	0
	Thermal (Total)	3980	2233	2268	48.93	2039
	Total Hydro	1148	444	402	9.56	398
	Total Punjab	**5128**	**2677**	**2670**	**58.49**	**2437**
Haryana	Panipat TPS	1367	814	784	19.09	795
	DCRTPP (Yamuna nagar)	600	543	0	5.12	213
	Faridabad GPS (NTPC)	432	169	153	4.09	170
	RGTPP (khedar) (IPP)	1200	74	0	2.12	88
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	930	744	20.93	872
	Thermal (Total)	4944	2530	1681	51.33	2139
	Total Hydro	62	16	12	0.37	15
	Total Haryana	**5006**	**2546**	**1693**	**51.70**	**2154**
Rajasthan	kota TPS	1240	1148	1087	27.90	1163
	suratgarh TPS	1500	1088	1026	25.90	1079
	Chabra TPS	750	450	380	10.32	430
	Dholpur GPS	330	108	108	2.51	105
	Ramgarh GPS	221	150	147	3.51	146
	RAPS A (NPC)	300	175	175	4.10	171
	Barsingsar (NLC)	250	209	210	4.97	207
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	476	388	10.84	452
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	1320	1198	1137	28.71	1196
	Thermal (Total)	7976	5002	4658	118.76	4948
	Total Hydro	550	264	54	4.09	171
	Wind power	2191	229	624	10.06	419
	Biomass	91	21	21	0.51	21
	Solar	201	0	0	0.29	12
	Renewable/Others (Total)	2483	250	645	10.85	452
	Total Rajasthan	**11009**	**5516**	**5357**	**133.70**	**5571**
UP	Anpara TPS	1630	1113	1521	28.40	1183
	Obra TPS	1288	511	427	9.90	413
	Paricha TPS	1140	891	875	20.22	843
	Panki TPS	210	85	85	1.80	75
	Harduaganj TPS	665	491	447	10.30	429
	Tanda TPS (NTPC)	440	398	400	9.76	407
	Roza TPS (IPP)	1200	810	653	18.43	768
	Anpara-C (IPP)	1200	0	1076	16.96	707
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	0	0	0.00	0
	Thermal (Total)	8223	4299	5484	115.76	4823
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	167	90	2.70	112
	Cogeneration	981	650	650	15.60	650
	Total UP	**10131**	**5116**	**6224**	**134.05**	**5586**
Uttarakhand	Total Hydro	1303	489	182	7.96	332
	Total Uttarakhand	**1303**	**489**	**182**	**7.96**	**332**
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	165	163	3.90	162
	Pragati Gas Turbine	330	308	162	5.46	227
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	452	373	10.59	441
	Thermal (Total)	2232	925	698	19.94	831
	Total Delhi	**2232**	**925**	**698**	**19.94**	**831**
HP	Baspa HPS (IPP)	330	0	0	1.10	46
	Malana HPS (IPP)	86	0	0	0.22	9
	Other Hydro	589	177	59	3.05	127
	Total HP	**1005**	**177**	**59**	**4.37**	**182**
J & K	Baglihar HPS (IPP)	450	150	150	3.60	150
	Other Hydro	323	84	116	2.95	123
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**234**	**266**	**6.55**	273
Total State Control Area Generation		**36770**	**17680**	**17149**	**416.77**	**17366**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4825**	**4276**	**119.13**	**4964**
Total Regional Availability(Gross)		**60303**	**38779**	**30719**	**817.48**	**34062**

IV. Total Hydro Generation:

Regional Entities Hydro	**10560**	**5618**	**820**	**64.13**	**2672**
State Control Area Hydro	**5368**	**1791**	**1065**	**35.60**	**1483**
Total Regional Hydro	**15928**	**7409**	**1885**	**99.73**	**4156**

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	200	500	0	7.98	0.00	7.98
Gwalior-Agra (D/C)	1410	1264	1740	0	33.59	0.00	33.59
Zerda-Kankroli	37	231	61	267	0.00	1.35	-1.35
Zerda-Bhinmal	41	-130	228	204	1.03	0.00	1.03
Malanpur-Auraiya	-162	-132	0	165	0.00	2.52	-2.52
Badod-Kota/Morak	-26	-192	0	213	0.00	2.47	-2.47
Mundra-Mohindergarh(HVDC)	1825	1825	1828	0	44.17	0.00	44.17
Sub Total WR	**3225**	**3066**			**86.77**	**6.33**	**80.44**
Pusauli Bypass	300	100	400	0	4.30	0.00	4.30
MZP- GKP (D/C)	320	357	547	0	8.48	0.00	8.48
Patna-Balia(D/C)	539	442	726	0	13.50	0.00	13.50
B'Sharif-Balia (D/C)	119	171	386	0	5.63	0.00	5.63
Pusauli-Balia	-123	-29	0	154	0.00	1.26	-1.26
Gaya-Fatehpur (765 Kv)	105	25	253	16	2.02	0.00	2.02
Pusauli-Sahupuri	109	44	114	0	1.77	0.00	1.77
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	0	37	0.00	0.85	-0.85
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	263	130	447	0	5.11	0.00	5.11
Sub Total ER	**1600**	**1210**			**40.80**	**2.11**	**38.69**
Total IR Exch	**4825**	**4276**			**127.57**	**8.44**	**119.13**

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
34.12	0.26	34.38	20.49	2.98	1.45	0.72	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
56.38	67.78	124.17	38.69	80.44	119.13	-17.69	12.65	-5.04

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	0.20	0.50	88.60	4.00	88.30	63.00	11.20

<---------- 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)
50.43	23.53	49.40	15.20	50.03	0.19	0.13	50.47	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	408	03:00	397	12:14	0.0	0.0	0.0	0.0
Gorakhpur	400	430	16:54	409	10:52	0.0	0.0	31.0	0.0
Bareilly	400	424	16:06	399	10:50	0.0	0.0	1.6	0.0
Kanpur	400	419	16:05	396	10:48	0.0	0.0	0.0	0.0
Dadri	400	424	03:03	397	10:48	0.0	0.0	15.9	0.0
Ballabhgarh	400	429	02:59	405	10:12	0.0	0.0	36.3	0.0
Bawana	400	427	02:59	401	11:44	0.0	0.0	24.1	0.0
Bassi	400	421	20:00	386	10:12	0.0	1.1	0.3	0.0
Hissar	400	415	03:03	387	10:45	0.0	1.4	0.0	0.0
Moga	400	415	02:59	388	10:48	0.0	0.5	0.0	0.0
Abdullapur	400	423	02:59	405	10:12	0.0	0.0	15.2	0.0
Nalagarh	400	423	03:01	401	11:49	0.0	0.0	11.5	0.0
Kishenpur	400	418	14:34	390	10:14	0.0	0.0	0.0	0.0
Wagoora	400	412	14:34	365	21:03	41.0	86.1	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	775	23:50	732	10:48	0.0	8.7	0.0	0.0
Balia	765	775	16:05	727	10:11	0.6	23.1	0.0	0.0
Moga	765	790	03:00	740	10:49	0.0	0.5	0.0	0.0
Agra	765	811	23:48	755	10:49	0.0	0.0	11.1	0.0
Bhiwani	765	803	03:01	752	10:49	0.0	0.0	1.7	0.0
Unnao	765	792	16:05	734	10:48	0.0	9.4	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	500.94	1127.29	493.67	858.11	146.34	510.69
Pong	426.72	384.05	411.36	544.90	410.16	504.32	56.04	356.34
Tehri	829.79	740.04	810.20	804.00	818.65	982.26	63.37	227.00
Koteshwar	612.50	598.50	608.86	4.03	NA	NA	227.00	198.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	48.18	46.43
Rihand	268.22	252.98	260.63	340.20	261.43	385.10	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	511.04	14.40	514.74	14.40	60.77	117.91

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 10.01.2014 :

1. Shallow fog in Punjab ,Haryana and UP& Rains in East UP.

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 : 10.01.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**