पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 10.12.2013
Date of Reporting : 11.12.2013

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
35608	1670	37278	50.09	28679	0	28679	50.19	764.5	29.74

* 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	40.58	9.66		50.24	45.90	47.88	1.98	98.12	0.00
Haryana	60.45	0.44		60.89	45.17	46.58	1.41	107.47	0.00
Rajasthan	99.25	5.57	4.10	108.93	76.73	73.98	-2.75	182.91	0.00
Delhi	17.55			17.55	42.60	40.88	-1.72	58.43	0.00
UP	127.36	3.71	4.80	135.87	87.13	84.07	-3.06	219.94	25.94
Uttarakhand		10.00		10.00	19.42	20.55	1.14	30.55	2.10
HP		5.61		5.61	18.55	18.63	0.08	24.24	0.00
J & K		5.90	0.00	5.90	30.03	33.59	3.56	39.50	1.70
Chandigarh				0.00	3.26	3.35	0.09	3.35	0.00
Total	**345.20**	**40.88**	**8.90**	**394.98**	**368.79**	**369.53**	**0.74**	**764.51**	**29.74**

*** 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	4895	0	-15	-212	3067	0	102	-409	-2.01
Haryana	5543	0	222	-732	3855	0	135	-761	-22.10
Rajasthan	7964	0	-639	378	6898	0	-182	508	29.36
Delhi	3097	0	-53	-697	1372	0	-123	-1229	-22.56
UP	9293	1495	-263	230	9966	0	40	1052	6.21
Uttarakhand	1628	75	84	423	1043	0	2	367	8.84
HP	1211	0	41	198	733	0	-14	320	6.60
J&K	1800	100	137	555	1659	0	167	461	9.34
Chandigarh	178	0	-3	0	88	0	-1	-10	-0.13
Total	**35608**	**1670**	**-490**	**143**	**28679**	**0**	**127**	**299**	**13.56**

* 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	1924	2094	2049	46.70	1946	46.19	0.51
	Rihand I STPS	1000	859	997	800	20.27	845	20.00	0.27
	Rihand II STPS	1000	925	1049	764	21.85	910	21.26	0.58
	Rihand III STPS	1000	460	519	470	10.96	457	10.73	0.23
	Dadri I STPS	840	815	660	495	13.27	553	13.22	0.05
	Dadri II STPS	980	985	1027	702	21.43	893	21.61	-0.18
	Unchahar I TPS	420	405	440	335	9.08	378	9.05	0.03
	Unchahar II TPS	420	402	432	308	8.72	363	8.80	-0.09
	Unchahar III TPS	210	201	219	154	4.37	182	4.38	-0.01
	ISTPP (Jhajjhar)	1500	1480	894	636	14.90	621	15.05	-0.15
	Dadri GPS	830	830	379	323	8.63	359	8.67	-0.05
	Anta GPS	419	425	265	236	6.25	260	6.33	-0.08
	Auraiya GPS	663	663	160	168	3.74	156	3.81	-0.07
	Sub Total (A)	**11282**	**10375**	**9135**	**7440**	**190.15**	**7923**	**189.09**	**1.06**
B. NPC	NAPS	440	359	355	360	7.70	321	8.62	-0.92
	RAPS- B	440	420	463	462	10.04	418	10.08	-0.04
	RAPS- C	440	430	474	476	10.20	425	10.32	-0.12
	Sub Total (B)	**1320**	**1209**	**1292**	**1298**	**27.94**	**1164**	**29.02**	**-1.08**
C. NHPC	Chamera I HPS	540	360	236	0	1.60	67	1.65	-0.05
	Chamera II HPS	300	300	236	0	1.30	54	1.22	0.08
	Chamera III HPS	231	231	68	0	0.72	30	0.69	0.03
	Bairasuil HPS	180	182	10	0	0.51	21	0.50	0.01
	Salal-HPS	690	113	110	147	2.61	109	2.80	-0.20
	Tanakpur-HPS	94	31	32	32	0.78	32	0.74	0.04
	Uri-HPS	480	88	212	38	2.45	102	2.40	0.05
	Uri-II HPS	120	65	120	35	1.60	67	1.55	0.05
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	258	267	0	2.16	90	3.03	-0.87
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**3425**	**1628**	**1291**	**252**	**13.72**	**572**	**14.58**	**-0.86**
D.NJPC	Nathpa Jhakri	1500	1080	1084	0	8.89	370	8.74	0.15
	Sub Total (D)	1500	1080	1084	0	8.89	370	8.74	0.15
E. THDC	Tehri HPS	1000	1060	1004	0	6.54	272	6.40	0.13
	Koteshwar HPS	400	92	90	90	2.23	93	2.20	0.03
	Sub Total (E)	**1400**	**1152**	**1094**	**90**	**8.76**	**365**	**8.60**	**0.16**
F. BBMB	Bhakra HPS	1497	762	987	479	18.43	768	18.30	0.13
	Dehar HPS	990	121	330	0	2.95	123	2.91	0.05
	Pong HPS	396	313	372	180	7.76	323	7.51	0.25
	Sub Total (F)	**2883**	**1196**	**1689**	**659**	**29.14**	**1214**	**28.71**	**0.43**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.48	20	0.46	0.02
	KWHEP HPS(IPP)	1000	0	210	0	4.80	200	4.81	-0.01
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	281	154	5.54	231	5.60	-0.06
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	491	154	10.83	451	10.88	-0.05
H. Total Regional Entities (A-G)		**23472**	**16640**	**16076**	**9893**	**289.42**	**12059**	**289.60**	**-0.18**

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	950	780	18.51	771
	Guru Nanak Dev TPS(Bhatinda)	440	160	160	3.41	142
	Guru Hargobind Singh TPS(L.mbt)	920	968	661	18.66	778
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2078	1601	40.58	1691
	Total Hydro	1148	447	429	9.66	402
	Total Punjab	**3768**	**2525**	**2030**	**50.24**	**2093**
Haryana	Panipat TPS	1367	821	784	19.28	803
	DCRTPP (Yamuna nagar)	600	279	251	6.31	263
	Faridabad GPS (NTPC)	432	0	166	0.90	38
	RGTPP (khedar) (IPP)	1200	557	503	12.78	533
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	891	744	21.18	882
	Thermal (Total)	4944	2548	2448	60.45	2519
	Total Hydro	62	15	18	0.44	18
	Total Haryana	**5006**	**2563**	**2466**	**60.89**	**2537**
Rajasthan	kota TPS	1240	1154	1083	26.71	1113
	suratgarh TPS	1500	1092	1017	25.50	1063
	Chabra TPS	500	516	475	11.71	488
	Dholpur GPS	330	105	105	2.60	108
	Ramgarh GPS	111	140	157	2.98	124
	RAPS A (NPC)	300	175	175	4.08	170
	Barsingsar (NLC)	250	220	219	5.08	212
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	372	316	8.30	346
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	660	481	479	12.30	513
	Thermal (Total)	6956	4255	4026	99.25	4136
	Total Hydro	550	243	166	5.57	232
	Wind power	2191	19	193	3.13	131
	Biomass	91	21	21	0.49	21
	Solar	201	5	0	0.47	20
	Renewable/Others (Total)	2483	40	214	4.10	171
	Total Rajasthan	**9989**	**4538**	**4406**	**108.93**	**4539**
UP	Anpara TPS	1630	1274	1246	29.80	1242
	Obra TPS	1288	311	307	7.50	313
	Paricha TPS	1140	598	725	15.10	629
	Panki TPS	210	72	59	1.50	63
	Harduaganj TPS	665	439	456	10.80	450
	Tanda TPS (NTPC)	440	407	402	9.81	409
	Roza TPS (IPP)	1200	843	711	19.15	798
	Anpara-C (IPP)	1200	1065	1019	25.28	1053
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	403	402	8.42	351
	Thermal (Total)	8223	5412	5327	127.36	5307
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	163	162	3.71	155
	Cogeneration	981	200	200	4.80	200
	Total UP	**10131**	**5775**	**5689**	**135.87**	**5661**
Uttarakhand	Total Hydro	1303	560	305	10.00	416
	Total Uttarakhand	**1303**	**560**	**305**	**10.00**	**416**
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	82	81	1.91	80
	Pragati Gas Turbine	330	316	264	6.99	291
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	420	365	8.65	361
	Thermal (Total)	2232	818	710	17.55	731
	Total Delhi	**2232**	**818**	**710**	**17.55**	**731**
HP	Baspa HPS (IPP)	330	80	30	1.48	62
	Malana HPS (IPP)	86	0	0	0.28	12
	Other Hydro	589	212	120	3.85	160
	Total HP	**1005**	**292**	**150**	**5.61**	**234**
J & K	Baglihar HPS (IPP)	450	246	118	3.46	144
	Other Hydro	323	90	116	2.44	102
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**336**	**234**	**5.90**	246
Total State Control Area Generation		**34390**	**17407**	**15990**	**394.98**	**16458**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3175**	**3491**	**87.73**	**3655**
Total Regional Availability(Gross)		**57862**	**36658**	**29374**	**772.13**	**32172**

IV. Total Hydro Generation:

Regional Entities Hydro	**10500**	**5368**	**1001**	**65.79**	**2741**
State Control Area Hydro	**5368**	**2056**	**1464**	**40.88**	**1703**
Total Regional Hydro	**15868**	**7424**	**2465**	**106.67**	**4445**

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	-300	50	200	300	0.83	2.02	-1.19
Gwalior-Agra (D/C)	1147	927	1545	0	23.93	0.00	23.93
Zerda-Kankroli	-77	-220	32	323	0.00	1.92	-1.92
Zerda-Bhinmal	43	-109	181	268	0.77	0.00	0.77
Malanpur-Auraiya	-117	-94	0	150	0.00	2.66	-2.66
Badod-Kota/Morak	-107	-75	0	229	0.00	4.45	-4.45
Mundra-Mohindergarh(HVDC)	1601	1701	1703	0	40.05	0.00	40.05
Sub Total WR	**2190**	**2180**			**65.58**	**11.05**	**54.53**
Pusauli Bypass	200	200	200	0	4.85	0.00	4.85
MZP- GKP (D/C)	99	329	488	0	5.76	0.00	5.76
Patna-Balia(D/C)	449	502	753	0	12.69	0.00	12.69
B'Sharif-Balia (D/C)	212	147	481	0	5.19	0.00	5.19
Pusauli-Balia	-55	-58	28	117	0.00	1.01	-1.01
Gaya-Fatehpur (765 Kv)	-7	112	277	29	3.12	0.00	3.12
Pusauli-Sahupuri	119	109	200	0	3.44	0.00	3.44
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	0	37	0.00	0.84	-0.84
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	0	0	0		0.00	0.00	0.00
Sub Total ER	**985**	**1311**			**35.05**	**1.85**	**33.20**
Total IR Exch	**3175**	**3491**			**100.63**	**12.90**	**87.73**

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
33.12	0.63	33.75	17.03	-16.46	4.73	1.40	4.11	-4.11

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
59.62	37.90	97.52	33.20	54.53	87.73	-26.43	16.63	-9.80

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	1.50	95.20	4.90	93.70	42.60	4.80

<---------- 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)
50.35	16.03	49.54	17.42	49.98	0.16	0.12	50.29	49.86

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	415	00:00	405	13:16	0.0	0.0	0.0	0.0
Gorakhpur	400	426	21:57	409	12:47	0.0	0.0	31.6	0.0
Bareilly	400	423	20:01	394	15:29	0.0	0.0	2.3	0.0
Kanpur	400	423	04:02	400	09:18	0.0	0.0	11.9	0.0
Dadri	400	424	04:01	404	09:46	0.0	0.0	15.1	0.0
Ballabhgarh	400	432	04:02	405	09:18	0.0	0.0	45.5	0.8
Bawana	400	427	04:02	406	09:18	0.0	0.0	30.4	0.0
Bassi	400	424	04:02	389	10:18	0.0	0.2	2.5	0.0
Hissar	400	414	04:01	392	09:18	0.0	0.0	0.0	0.0
Moga	400	421	23:59	393	11:43	0.0	0.0	0.1	0.0
Abdullapur	400	425	20:59	404	10:25	0.0	0.0	3.5	0.0
Nalagarh	400	426	20:47	400	09:18	0.0	0.0	10.8	0.0
Kishenpur	400	420	23:25	388	11:43	0.0	0.3	0.0	0.0
Wagoora	400	409	13:02	366	11:43	17.9	58.2	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	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Balia	765	767	20:04	721	14:47	10.0	35.6	0.0	0.0
Moga	765	788	23:59	739	11:43	0.0	1.1	0.0	0.0
Agra	765	814	04:03	761	09:18	0.0	0.0	21.2	0.0
Bhiwani	765	798	04:03	754	09:18	0.0	0.0	0.0	0.0
Unnao	765	763	23:58	731	09:20	0.0	24.0	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	506.18	1367.40	498.31	1029.80	171.85	563.11
Pong	426.72	384.05	415.37	693.24	413.83	633.63	66.37	468.13
Tehri	829.79	740.04	818.40	970.25	818.65	982.26	48.62	146.00
Koteshwar	612.50	598.50	608.15	4.55	NA	NA	146.00	148.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	55.46	48.42
Rihand	268.22	252.98	261.52	390.50	262.65	457.50	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	514.28	144.00	520.13	144.00	63.74	122.36

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 10.12.2013 :

1. Dense Fog reported in some part of punjab near Patiala , Malerkotla , Amritshar, Rest is Normal.

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 : 10.12.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER