पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.12.2013
Date of Reporting : 10.12.2013

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
35005	3096	38101	50.17	27292	15	27307	50.29	749.7	50.70

* 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	39.68	10.28		49.96	44.99	46.64	1.64	96.60	0.00
Haryana	64.79	0.41		65.20	40.70	40.75	0.05	105.96	0.00
Rajasthan	99.96	5.00	7.94	112.90	78.19	73.99	-4.19	186.90	0.00
Delhi	17.63			17.63	41.45	39.73	-1.72	57.36	0.09
UP	126.68	3.63	1.20	131.51	78.42	76.50	-1.92	208.01	47.00
Uttarakhand		9.70		9.70	19.08	19.48	0.39	29.17	1.91
HP		5.49		5.49	18.23	18.16	-0.07	23.64	0.00
J & K		5.94	0.00	5.94	29.84	32.87	3.03	38.80	1.70
Chandigarh				0.00	3.15	3.30	0.16	3.30	0.00
Total	**348.74**	**40.44**	**9.14**	**398.32**	**354.05**	**351.42**	**-2.63**	**749.74**	**50.70**

*** 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	4796	0	161	-242	3148	0	164	-422	-1.49
Haryana	5643	0	-17	-748	3405	0	24	-802	-22.47
Rajasthan	7982	0	-247	604	6628	0	37	1539	36.30
Delhi	3043	1	-4	-642	1324	0	-157	-1289	-22.77
UP	9013	2920	-306	129	9454	15	-55	806	1.39
Uttarakhand	1497	75	17	418	951	0	-32	364	8.85
HP	1164	0	-84	175	697	0	0	300	6.82
J&K	1689	100	44	555	1602	0	130	461	9.10
Chandigarh	180	0	8	0	82	0	4	-20	-0.15
Total	**35005**	**3096**	**-427**	**248**	**27292**	**15**	**115**	**936**	**15.58**

* 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	1526	1859	1275	35.67	1486	35.27	0.41
	Rihand I STPS	1000	836	985	714	19.21	800	19.14	0.07
	Rihand II STPS	1000	895	1046	724	20.64	860	20.51	0.14
	Rihand III STPS	1000	447	516	363	10.40	433	10.28	0.12
	Dadri I STPS	840	815	657	490	13.39	558	13.40	-0.01
	Dadri II STPS	980	985	1027	698	21.23	885	21.43	-0.21
	Unchahar I TPS	420	404	443	324	8.93	372	9.01	-0.08
	Unchahar II TPS	420	404	415	307	8.74	364	8.85	-0.11
	Unchahar III TPS	210	201	198	155	4.27	178	4.31	-0.03
	ISTPP (Jhajjhar)	1500	1480	633	623	14.10	588	14.54	-0.44
	Dadri GPS	830	830	382	369	8.49	354	8.63	-0.14
	Anta GPS	419	422	254	253	6.13	256	6.28	-0.15
	Auraiya GPS	663	665	158	163	3.75	156	3.86	-0.12
	Sub Total (A)	**11282**	**9910**	**8573**	**6458**	**174.95**	**7290**	**175.50**	**-0.55**
B. NPC	NAPS	440	359	359	361	7.67	320	8.62	-0.94
	RAPS- B	440	420	463	466	10.08	420	10.08	0.00
	RAPS- C	440	430	472	476	10.22	426	10.32	-0.10
	Sub Total (B)	**1320**	**1209**	**1294**	**1303**	**27.98**	**1166**	**29.02**	**-1.04**
C. NHPC	Chamera I HPS	540	360	180	0	1.60	67	1.56	0.05
	Chamera II HPS	300	225	163	0	1.15	48	1.21	-0.06
	Chamera III HPS	231	231	57	0	0.75	31	0.72	0.03
	Bairasuil HPS	180	182	10	0	0.45	19	0.50	-0.06
	Salal-HPS	690	120	228	100	2.78	116	2.88	-0.10
	Tanakpur-HPS	94	31	32	30	0.78	33	0.74	0.04
	Uri-HPS	480	88	147	41	2.46	103	2.78	-0.32
	Uri-II HPS	120	61	71	40	1.52	63	1.46	0.05
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	258	275	0	3.56	149	3.39	0.17
	Sewa-II HPS	120	0	0	0	0.00	0	0.00	0.00
	Sub Total (C)	**3425**	**1556**	**1163**	**211**	**15.05**	**627**	**15.25**	**-0.20**
D.NJPC	Nathpa Jhakri	1500	1235	1083	0	8.41	351	8.51	-0.10
	Sub Total (D)	1500	1235	1083	0	8.41	351	8.51	-0.10
E. THDC	Tehri HPS	1000	1060	989	0	6.29	262	6.40	-0.11
	Koteshwar HPS	400	92	100	91	2.22	92	2.20	0.02
	Sub Total (E)	**1400**	**1152**	**1089**	**91**	**8.51**	**354**	**8.60**	**-0.10**
F. BBMB	Bhakra HPS	1497	735	986	510	17.72	738	17.64	0.08
	Dehar HPS	990	124	330	0	3.06	128	2.98	0.09
	Pong HPS	396	311	372	180	7.72	322	7.46	0.26
	Sub Total (F)	**2883**	**1170**	**1688**	**690**	**28.50**	**1188**	**28.08**	**0.42**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	6	0	0.48	20	0.46	0.02
	KWHEP HPS(IPP)	1000	0	347	0	4.57	190	4.56	0.01
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	281	154	5.52	230	5.48	0.03
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	634	154	10.56	440	10.50	0.06
H. Total Regional Entities (A-G)		**23472**	**16231**	**15524**	**8907**	**273.96**	**11415**	**275.46**	**-1.49**

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	1010	750	18.57	774
	Guru Nanak Dev TPS(Bhatinda)	440	215	160	3.62	151
	Guru Hargobind Singh TPS(L.mbt)	920	964	673	17.49	729
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2189	1583	39.68	1653
	Total Hydro	1148	313	432	10.28	428
	Total Punjab	**3768**	**2502**	**2015**	**49.96**	**2082**
Haryana	Panipat TPS	1367	834	779	18.68	779
	DCRTPP (Yamuna nagar)	600	280	250	6.00	250
	Faridabad GPS (NTPC)	432	204	164	4.23	176
	RGTPP (khedar) (IPP)	1200	525	512	12.17	507
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1059	690	23.71	988
	Thermal (Total)	4944	2902	2395	64.79	2700
	Total Hydro	62	17	20	0.41	17
	Total Haryana	**5006**	**2919**	**2415**	**65.20**	**2717**
Rajasthan	kota TPS	1240	1154	1071	26.77	1115
	suratgarh TPS	1500	1128	992	24.80	1034
	Chabra TPS	500	520	465	12.15	506
	Dholpur GPS	330	105	105	2.61	109
	Ramgarh GPS	111	157	156	2.94	123
	RAPS A (NPC)	300	175	175	4.36	182
	Barsingsar (NLC)	250	220	222	5.19	216
	Giral LTPS	250	0	56	0.43	18
	Rajwest LTPS (IPP)	1080	373	248	7.94	331
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	660	592	477	12.77	532
	Thermal (Total)	6956	4424	3967	99.96	4165
	Total Hydro	550	242	100	5.00	208
	Wind power	2191	38	167	1.89	79
	Biomass	91	17	17	0.41	17
	Solar	201	0	0	0.65	27
	Renewable/Others (Total)	2483	55	184	7.94	331
	Total Rajasthan	**9989**	**4721**	**4251**	**112.90**	**4704**
UP	Anpara TPS	1630	1364	1285	27.80	1158
	Obra TPS	1288	338	318	7.30	304
	Paricha TPS	1140	805	809	17.60	733
	Panki TPS	210	75	70	1.40	58
	Harduaganj TPS	665	486	485	10.30	429
	Tanda TPS (NTPC)	440	401	397	9.75	406
	Roza TPS (IPP)	1200	816	783	19.13	797
	Anpara-C (IPP)	1200	1076	956	24.56	1023
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	403	401	8.84	368
	Thermal (Total)	8223	5764	5504	126.68	5278
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	158	156	3.63	151
	Cogeneration	981	50	50	1.20	50
	Total UP	**10131**	**5972**	**5710**	**131.51**	**5480**
Uttarakhand	Total Hydro	1303	517	270	9.70	404
	Total Uttarakhand	**1303**	**517**	**270**	**9.70**	**404**
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	82	82	1.98	82
	Pragati Gas Turbine	330	315	267	7.20	300
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	415	355	8.45	352
	Thermal (Total)	2232	812	704	17.63	735
	Total Delhi	**2232**	**812**	**704**	**17.63**	**735**
HP	Baspa HPS (IPP)	330	74	32	1.37	57
	Malana HPS (IPP)	86	0	0	0.29	12
	Other Hydro	589	237	128	3.83	160
	Total HP	**1005**	**311**	**160**	**5.49**	**229**
J & K	Baglihar HPS (IPP)	450	248	120	3.50	146
	Other Hydro	323	90	116	2.44	102
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**338**	**236**	**5.94**	247
Total State Control Area Generation		**34390**	**18092**	**15761**	**398.32**	**16597**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**2755**	**3645**	**86.34**	**3598**
Total Regional Availability(Gross)		**57862**	**36371**	**28313**	**758.63**	**31609**

IV. Total Hydro Generation:

Regional Entities Hydro	**10500**	**5376**	**992**	**65.52**	**2730**
State Control Area Hydro	**5368**	**1896**	**1374**	**40.44**	**1685**
Total Regional Hydro	**15868**	**7272**	**2366**	**105.96**	**4415**

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	200	-200	200	200	1.82	1.63	0.19
Gwalior-Agra (D/C)	503	1289	1372	0	22.78	0.00	22.78
Zerda-Kankroli	-94	-144	68	210	0.00	1.82	-1.82
Zerda-Bhinmal	20	-38	205	134	0.00	0.94	-0.94
Malanpur-Auraiya	-142	-73	0	158	0.00	2.81	-2.81
Badod-Kota/Morak	-164	-114	0	158	0.00	3.13	-3.13
Mundra-Mohindergarh(HVDC)	1701	1100	1703	0	35.32	0.00	35.32
Sub Total WR	**2024**	**1820**			**59.92**	**10.34**	**49.58**
Pusauli Bypass	200	200	200	0	4.81	0.00	4.81
MZP- GKP (D/C)	16	448	512	0	7.37	0.00	7.37
Patna-Balia(D/C)	397	647	762	0	13.62	0.00	13.62
B'Sharif-Balia (D/C)	122	296	425	0	5.57	0.00	5.57
Pusauli-Balia	-72	-16	18	111	0.00	0.81	-0.81
Gaya-Fatehpur (765 Kv)	3	167	369	0	4.59	0.00	4.59
Pusauli-Sahupuri	97	113	127	0	2.44	0.00	2.44
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	**731**	**1825**			**38.41**	**1.65**	**36.76**
Total IR Exch	**2755**	**3645**			**98.33**	**11.99**	**86.34**

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
32.36	0.62	32.98	17.26	-16.51	4.45	3.79	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
58.80	37.45	96.26	36.76	49.58	86.34	-22.05	12.13	-9.91

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	3.30	87.50	5.20	84.20	56.60	12.50

<---------- Frequency (Hz) ---------->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.43	4.04	49.54	17.52	50.02	0.25	0.16	50.42	49.76

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	417	03:01	406	15:34	0.0	0.0	0.0	0.0
Gorakhpur	400	427	00:00	410	12:56	0.0	0.0	51.6	0.0
Bareilly	400	427	04:04	400	14:35	0.0	0.0	11.8	0.0
Kanpur	400	429	04:03	403	11:19	0.0	0.0	25.5	0.0
Dadri	400	427	03:07	403	10:20	0.0	0.0	23.3	0.0
Ballabhgarh	400	436	04:03	407	10:11	0.0	0.0	47.6	9.3
Bawana	400	429	03:05	405	12:10	0.0	0.0	30.5	0.0
Bassi	400	425	04:02	390	10:18	0.0	0.0	7.0	0.0
Hissar	400	417	03:08	392	12:09	0.0	0.0	0.0	0.0
Moga	400	421	03:04	396	10:12	0.0	0.0	0.9	0.0
Abdullapur	400	424	03:04	402	12:17	0.0	0.0	3.3	0.0
Nalagarh	400	424	03:04	399	12:16	0.0	0.0	16.7	0.0
Kishenpur	400	418	03:04	393	10:13	0.0	0.0	0.0	0.0
Wagoora	400	412	16:19	366	19:35	17.5	38.8	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	765	04:03	731	12:20	0.0	16.9	0.0	0.0
Moga	765	791	04:03	742	10:13	0.0	0.0	0.0	0.0
Agra	765	821	04:03	766	09:13	0.0	0.0	37.1	0.0
Bhiwani	765	803	04:04	756	12:17	0.0	0.0	1.1	0.0
Unnao	765	774	04:04	736	14:36	0.0	8.4	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	507.14	1411.35	499.33	1064.89	172.73	519.90
Pong	426.72	384.05	416.19	718.14	414.64	656.23	55.67	445.54
Tehri	829.79	740.04	819.30	986.00	818.65	982.26	48.96	144.00
Koteshwar	612.50	598.50	609.05	4.56	NA	NA	144.00	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 09.12.2013 :

1. Normal weather in Northern Region.

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 : 09.12.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**