पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 31.10.2013
Date of Reporting : 01.11.2013

I. Regional Availability/Demand:

Evening Peak (20:00 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
33431	2682	36112	50.13	26907	1180	28087	50.22	710.2	37.02

* 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	26.25	9.74		35.99	49.63	51.63	2.00	87.62	0.00
Haryana	52.61	0.71		53.33	44.11	42.62	-1.48	95.95	0.93
Rajasthan	69.85	4.72	7.30	81.87	86.97	85.06	-1.91	166.93	0.57
Delhi	18.24			18.24	47.40	47.20	-0.20	65.43	0.01
UP	130.95	3.43	1.20	135.58	75.61	72.20	-3.42	207.77	32.45
Uttarakhand		9.50		9.50	17.65	19.38	1.72	28.88	1.38
HP		8.78		8.78	12.21	14.14	1.93	22.92	0.00
J & K		7.57	0.00	7.57	21.20	23.88	2.68	31.44	1.70
Chandigarh				0.00	3.45	3.29	-0.16	3.29	0.00
Total	**297.89**	**44.47**	**8.50**	**350.86**	**358.23**	**359.39**	**1.16**	**710.25**	**37.02**

*** 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 (20:00 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	4340	0	53	131	3186	0	6	210	3.30
Haryana	4920	307	-95	-405	3425	0	-288	-439	-13.47
Rajasthan	7453	0	-339	1654	6555	0	-125	1490	39.73
Delhi	3278	0	-228	-661	1786	0	-76	-1320	-19.59
UP	9126	2200	-253	-143	9280	1180	216	344	-1.15
Uttarakhand	1424	75	16	329	1034	0	54	349	7.97
HP	1110	0	45	-326	767	0	120	61	-0.14
J&K	1605	100	59	236	780	0	-266	161	3.87
Chandigarh	175	0	-4	-36	93	0	-10	-20	-0.36
Total	**33431**	**2682**	**-745**	**780**	**26907**	**1180**	**-367**	**836**	**20.17**

* 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	1940	2072	2075	46.18	1924	45.99	0.19
	Rihand I STPS	1000	682	1005	676	16.30	679	15.87	0.42
	Rihand II STPS	1000	701	1034	687	16.53	689	16.27	0.25
	Rihand III STPS	1000	350	513	327	8.28	345	8.18	0.11
	Dadri I STPS	840	811	807	625	16.97	707	16.76	0.20
	Dadri II STPS	980	980	994	715	20.91	871	21.08	-0.16
	Unchahar I TPS	420	211	220	195	4.65	194	4.75	-0.10
	Unchahar II TPS	420	404	425	346	8.63	359	8.61	0.02
	Unchahar III TPS	210	201	212	163	4.30	179	4.32	-0.02
	ISTPP (Jhajjhar)	1500	1480	635	703	14.68	612	14.91	-0.23
	Dadri GPS	830	810	587	525	13.17	549	13.40	-0.23
	Anta GPS	419	407	406	289	8.78	366	6.77	2.01
	Auraiya GPS	663	644	156	160	3.65	152	3.69	-0.04
	Sub Total (A)	**11282**	**9619**	**9066**	**7486**	**183.02**	**7626**	**180.60**	**2.41**
B. NPC	NAPS	440	308	344	348	7.34	306	7.39	-0.05
	RAPS- B	440	411	453	457	9.89	412	9.86	0.02
	RAPS- C	440	425	475	478	10.12	422	10.20	-0.08
	Sub Total (B)	**1320**	**1144**	**1272**	**1283**	**27.35**	**1140**	**27.46**	**-0.10**
C. NHPC	Chamera I HPS	540	540	360	0	2.03	85	2.00	0.03
	Chamera II HPS	300	300	100	0	1.72	72	1.71	0.01
	Chamera III HPS	231	231	0	0	1.08	45	1.06	0.02
	Bairasuil HPS	180	182	20	0	0.86	36	0.70	0.16
	Salal-HPS	690	110	105	102	2.75	114	2.54	0.21
	Tanakpur-HPS	94	55	63	55	1.31	55	1.31	-0.01
	Uri-HPS	480	113	207	43	2.98	124	3.00	-0.03
	Uri-II HPS	120	71	121	46	1.76	73	1.71	0.05
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	406	30	4.81	200	4.48	0.33
	Sewa-II HPS	120	119	28	0	0.39	16	0.41	-0.01
	Sub Total (C)	**3425**	**2108**	**1410**	**276**	**19.68**	**820**	**18.92**	**0.76**
D.NJPC	Nathpa Jhakri	1500	1605	1257	164	12.64	527	12.38	0.26
	Sub Total (D)	1500	1605	1257	164	12.64	527	12.38	0.26
E. THDC	Tehri HPS	1000	1060	757	0	6.44	268	6.30	0.14
	Koteshwar HPS	400	92	100	90	2.24	93	2.20	0.04
	Sub Total (E)	**1400**	**1152**	**857**	**90**	**8.67**	**361**	**8.50**	**0.17**
F. BBMB	Bhakra HPS	1497	485	1029	372	11.98	499	11.65	0.33
	Dehar HPS	990	203	420	140	4.94	206	4.87	0.07
	Pong HPS	396	289	312	252	7.09	295	6.93	0.16
	Sub Total (F)	**2883**	**977**	**1761**	**764**	**24.01**	**1000**	**23.44**	**0.57**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	26	27	0.77	32	0.75	0.03
	KWHEP HPS(IPP)	1000	0	900	147	6.47	270	6.48	-0.01
	Malana Stg-II HPS	100	0	70	0	0.34	14	0.37	-0.03
	Shree Cement TPS	300	0	257	157	5.70	237	5.55	0.15
	Budhil HPS(IPP)	70	0	9	9	0.19	8	0.20	-0.01
	Sub Total (G)	1662	0	1262	340	13.47	561	13.34	0.13
H. Total Regional Entities (A-G)		**23472**	**16605**	**16885**	**10403**	**288.84**	**12035**	**284.65**	**4.19**

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	600	600	14.82	617
	Guru Nanak Dev TPS(Bhatinda)	440	80	80	2.23	93
	Guru Hargobind Singh TPS(L.mbt)	920	500	344	9.20	383
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	1180	1024	26.25	1094
	Total Hydro	1148	425	260	9.74	406
	Total Punjab	**3768**	**1605**	**1284**	**35.99**	**1500**
Haryana	Panipat TPS	1367	409	513	11.15	465
	DCRTPP (Yamuna nagar)	600	507	253	8.64	360
	Faridabad GPS (NTPC)	432	159	161	4.15	173
	RGTPP (khedar) (IPP)	1200	438	446	10.73	447
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	701	741	17.95	748
	Thermal (Total)	4944	2214	2114	52.61	2192
	Total Hydro	62	29	29	0.71	30
	Total Haryana	**5006**	**2243**	**2143**	**53.33**	**2222**
Rajasthan	kota TPS	1240	954	899	22.62	943
	suratgarh TPS	1500	1042	957	24.67	1028
	Chabra TPS	500	423	392	10.35	431
	Dholpur GPS	330	106	106	2.33	97
	Ramgarh GPS	111	136	126	3.31	138
	RAPS A (NPC)	300	179	179	3.96	165
	Barsingsar (NLC)	250	112	111	2.60	108
	Giral LTPS	250	0	0	0.00	0
	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)	660	0	0	0.00	0
	Thermal (Total)	6956	2952	2770	69.85	2910
	Total Hydro	550	187	187	4.72	197
	Wind power	2191	378	551	6.06	253
	Biomass	91	27	27	0.65	27
	Solar	201	0	0	0.59	25
	Renewable/Others (Total)	2483	405	578	7.30	304
	Total Rajasthan	**9989**	**3544**	**3535**	**81.87**	**3411**
UP	Anpara TPS	1630	1363	1380	32.50	1354
	Obra TPS	1288	465	500	10.20	425
	Paricha TPS	1140	657	625	15.80	658
	Panki TPS	210	63	72	1.60	67
	Harduaganj TPS	665	245	168	5.20	217
	Tanda TPS (NTPC)	440	396	398	9.77	407
	Roza TPS (IPP)	1200	788	1080	23.42	976
	Anpara-C (IPP)	1200	1026	1044	25.02	1043
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	255	363	7.44	310
	Thermal (Total)	8223	5258	5630	130.95	5456
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	171	195	3.43	143
	Cogeneration	981	50	50	1.20	50
	Total UP	**10131**	**5479**	**5875**	**135.58**	**5649**
Uttarakhand	Total Hydro	1303	528	317	9.50	396
	Total Uttarakhand	**1303**	**528**	**317**	**9.50**	**396**
Delhi	Rajghat TPS	135	54	52	1.25	52
	Delhi Gas Turbine	282	78	80	1.89	79
	Pragati Gas Turbine	330	260	264	6.62	276
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	395	410	8.48	353
	Thermal (Total)	2232	787	806	18.24	760
	Total Delhi	**2232**	**787**	**806**	**18.24**	**760**
HP	Baspa HPS (IPP)	330	98	33	2.11	88
	Malana HPS (IPP)	86	85	0	0.39	16
	Other Hydro	589	268	223	6.28	262
	Total HP	**1005**	**451**	**256**	**8.78**	**366**
J & K	Baglihar HPS (IPP)	450	282	0	4.77	199
	Other Hydro	323	110	116	2.80	117
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**392**	**116**	**7.57**	315
Total State Control Area Generation		**34390**	**15029**	**14332**	**350.86**	**14619**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3458**	**3805**	**92.17**	**3840**
Total Regional Availability(Gross)		**57862**	**35372**	**28540**	**731.87**	**30495**

IV. Total Hydro Generation:

Regional Entities Hydro	**10500**	**6281**	**1468**	**72.58**	**3024**
State Control Area Hydro	**5368**	**2183**	**1360**	**44.47**	**1853**
Total Regional Hydro	**15868**	**8464**	**2828**	**117.05**	**4877**

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	-250	-500	200	500	0.41	7.52	-7.10
Gwalior-Agra (D/C)	1067	1006	1378	0	22.40	0.00	22.40
Zerda-Kankroli	22	-123	68	156	0.00	1.07	-1.07
Zerda-Bhinmal	155	-20	216	80	1.70	0.00	1.70
Malanpur-Auraiya	-58	-64	0	149	0.00	1.72	-1.72
Badod-Kota/Morak	-68	-74	0	118	0.00	2.08	-2.08
Mundra-Mohindergarh(HVDC)	1498	1499	1504	0	34.19	0.00	34.19
Sub Total WR	**2366**	**1724**			**58.71**	**12.39**	**46.32**
Pusauli Bypass	-208	350	350	208	4.36	0.58	3.78
MZP- GKP (D/C)	424	555	852	0	13.84	0.00	13.84
Patna-Balia(D/C)	281	541	622	0	12.51	0.00	12.51
B'Sharif-Balia (D/C)	364	317	439	0	7.51	0.00	7.51
Pusauli-Balia	58	-45	98	74	0.32	0.00	0.32
Gaya-Fatehpur (765 Kv)	94	280	325	0	5.92	0.00	5.92
Pusauli-Sahupuri	114	116	170	0	2.82	0.00	2.82
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-33	0	37	0.00	0.85	-0.85
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	**1092**	**2081**			**47.28**	**1.43**	**45.85**
Total IR Exch	**3458**	**3805**			**105.99**	**13.82**	**92.17**

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
32.45	1.85	34.30	8.76	-8.91	4.42	5.06	0.94	-0.94

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
48.43	40.20	88.62	45.85	46.32	92.17	-2.58	6.12	3.55

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	1.20	99.60	9.60	98.40	30.10	0.40

<---------- 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)
50.25	9.03	49.61	16.51	49.93	0.16	0.11	50.28	49.89

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	410	07:11	407	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Bareilly	400	419	04:03	404	12:09	0.0	0.0	0.0	0.0
Kanpur	400	418	04:07	401	10:45	0.0	0.0	0.0	0.0
Dadri	400	421	23:55	403	18:10	0.0	0.0	0.5	0.0
Ballabhgarh	400	429	23:57	410	12:55	0.0	0.0	3.9	0.0
Bawana	400	427	04:01	407	18:11	0.0	0.0	26.8	0.0
Bassi	400	427	04:02	396	07:33	0.0	0.0	16.6	0.0
Hissar	400	419	04:01	399	12:12	0.0	0.0	0.0	0.0
Moga	400	425	02:01	400	18:23	0.0	0.0	7.3	0.0
Abdullapur	400	425	02:00	403	18:20	0.0	0.0	22.3	0.0
Nalagarh	400	429	23:59	405	18:24	0.0	0.0	26.3	0.0
Kishenpur	400	441	02:35	397	18:22	0.0	0.0	17.6	6.9
Wagoora	400	431	01:12	377	18:22	3.7	12.9	11.7	1.0

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	773	04:03	738	13:53	0.0	3.0	0.0	0.0
Balia	765	766	05:02	728	17:55	0.0	30.5	0.0	0.0
Moga	765	800	02:01	756	18:12	0.0	0.0	0.0	0.0
Agra	765	809	04:06	757	10:47	0.0	0.0	12.7	0.0
Bhiwani	765	809	04:01	769	11:05	0.0	0.0	15.8	0.0
Unnao	765	758	04:03	728	16:23	0.0	28.3	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	510.91	1590.18	504.13	1272.20	257.57	301.66
Pong	426.72	384.05	420.15	889.22	419.77	875.55	68.33	405.21
Tehri	829.79	740.04	824.10	1089.96	818.65	982.26	75.18	140.00
Koteshwar	612.50	598.50	611.80	4.95	599.95	0.45	140.00	148.00
Chamera-I	760.00	748.75	753.91	NA	NA	NA	67.49	55.18
Rihand	268.22	252.98	261.98	417.20	263.41	506.00	NA	217.56
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	517.86	144.00	521.01	144.00	83.82	115.79

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 31.10.2013 :
1. 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 :
1. 315 MVA ICT-III Charged first time at Nallagarh substation at 19:22 hrs.

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 : 31.10.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**