पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 31.10.2014
Date of Reporting : 01.11.2014

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
37123	1840	38963	50.12	30948	2005	32953	0.00	798.8	48.34

* 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	38.60	5.91		44.51	53.71	54.71	1.00	99.22	1.75
Haryana	48.10	0.35		48.44	66.55	65.93	-0.63	114.37	0.00
Rajasthan	132.08	3.59	2.60	138.27	55.38	59.59	4.21	197.86	0.00
Delhi	23.23			23.23	43.70	43.29	-0.41	66.52	0.00
UP	130.83	4.94	1.20	136.96	87.67	89.57	1.90	226.53	43.97
Uttarakhand		8.85		8.85	19.24	21.28	2.04	30.14	2.62
HP		7.45		7.45	15.26	16.42	1.16	23.87	0.00
J & K		8.79	0.00	8.79	24.08	28.04	3.96	36.82	0.00
Chandigarh				0.00	3.34	3.47	0.13	3.47	0.00
Total	**372.83**	**39.87**	**3.80**	**416.51**	**368.92**	**382.30**	**13.38**	**798.81**	**48.34**

* 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				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4873	0	-375	209	3821	0	55	17	4936
Haryana	5897	0	-173	99	4168	0	21	83	5957
Rajasthan	8086	0	-138	39	8005	0	-56	432	9297
Delhi	3371	0	74	-179	2159	0	8	-656	3461
UP	10168	1760	-164	409	9520	2005	195	532	10448
Uttarakhand	1516	80	89	371	1087	0	75	377	1629
HP	1157	0	54	-126	773	0	111	130	1305
J&K	1878	0	115	76	1321	0	135	51	1878
Chandigarh	177	0	-14	0	95	0	-8	0	190
Total	**37123**	**1840**	**-532**	**898**	**30948**	**2005**	**535**	**964**	**37968**

* STOA figures are at sellers boundary & PX figures are at regional boundary. # figures may not be at simultaneous hour.

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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 (5*200+2*500)	2000	1396	1631	1633	33.66	1403	33.51	0.15
	Rihand I STPS (2*500)	1000	866	930	942	22.57	941	20.78	1.80
	Rihand II STPS (2*500)	1000	473	512	518	12.53	522	11.35	1.18
	Rihand III STPS (2*500)	1000	965	1006	1011	24.30	1013	23.14	1.16
	Dadri I STPS (4*210)	840	815	604	541	16.33	681	15.30	1.03
	Dadri II STPS (2*490)	980	980	836	718	20.57	857	20.31	0.26
	Unchahar I TPS (2*210)	420	289	306	319	7.62	317	6.77	0.85
	Unchahar II TPS (2*210)	420	298	303	338	7.59	316	6.84	0.74
	Unchahar III TPS (1*220)	210	149	148	162	3.76	157	3.40	0.36
	ISTPP (Jhajjhar) (3*500)	1500	990	639	622	16.31	680	17.02	-0.71
	Dadri GPS (4*130.19+2*154.51)	830	801	196	170	4.25	177	4.20	0.04
	Anta GPS (3*88.71+1*153.2)	419	402	215	219	5.33	222	5.26	0.07
	Auraiya GPS (4*111.19+2*109.30)	663	644	161	157	3.63	151	3.60	0.03
	Dadri Solar	5	1	0	0	0.01	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	**11297**	**9073**	**7487**	**7350**	**178**	**7437**	**172**	**7**
B. NPC	NAPS (2*220)	440	282	326	327	6.86	286	6.77	0.09
	RAPS- B (2*220)	440	399	447	448	9.65	402	9.58	0.07
	RAPS- C (2*220)	440	190	190	190	4.20	175	4.56	-0.36
	Sub Total (B)	**1320**	**871**	**963**	**965**	**20.70**	**863**	**20.90**	**-0.20**
C. NHPC	Chamera I HPS (3*180)	540	534	290	0	1.63	68	1.60	0.03
	Chamera II HPS (3*100)	300	300	300	0	1.91	80	1.80	0.11
	Chamera III HPS (3*77)	231	231	154	0	1.06	44	1.03	0.03
	Bairasuil HPS(3*60)	180	178	178	0	0.08	3	0.76	-0.68
	Salal-HPS (6*115)	690	181	173	242	4.73	197	4.35	0.37
	Tanakpur-HPS (3*40)	94	48	53	52	1.21	50	1.16	0.04
	Uri-I HPS (4*120)	480	242	319	257	6.14	256	5.90	0.23
	Uri-II HPS (4*60)	240	136	173	147	3.37	141	3.27	0.10
	Dhauliganga-HPS (4*70)	280	207	206	10	1.79	75	1.67	0.12
	Dulhasti-HPS (3*130)	390	387	401	226	4.67	194	4.50	0.17
	Sewa-II HPS (3*40)	120	119	109	0	0.52	22	0.38	0.15
	Parbati 3 (4*130)	520	260	262	0	0.64	27	0.62	0.02
	Sub Total (C)	**4065**	**2824**	**2618**	**935**	**28**	**1156**	**27**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1000	0	10.50	438	10.50	0.00
	Rampur HEP (4*68.67)	275	350	227	0	2.68	111	2.68	-0.01
	Sub Total (D)	1775	1955	1227	0	13.18	549	13.18	-0.01
E. THDC	Tehri HPS (4*250)	1000	1060	1041	0	5.43	226	5.40	0.03
	Koteshwar HPS (4*100)	400	91	89	0	1.78	74	1.75	0.03
	Sub Total (E)	**1400**	**1151**	**1130**	**0**	**7.21**	**300**	**7.15**	**0.06**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	567	1092	387	13.58	566	13.62	-0.03
	Dehar HPS (6*165)	990	188	495	145	4.66	194	4.52	0.14
	Pong HPS (6*66)	396	224	384	126	5.50	229	5.39	0.12
	Sub Total (F)	**2900**	**980**	**1971**	**658**	**23.74**	**989**	**23.52**	**0.22**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	83	0	0.80	33	0.78	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	220	155	5.73	239	5.75	-0.03
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	269	251	6.41	267	6.38	0.03
	Budhil HPS(IPP)	70	0	0	0	0.18	8	0.19	-0.01
	Sub Total (G)	1662	0	571	406	13.12	547	13.10	0.01
H. Total Regional Entities (A-G)		**24419**	**16855**	**15967**	**10314**	**284.18**	**11841**	**276.48**	**7.70**

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) (6*210)	1260	160	160	4.09	171
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.99	83
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	384	413	9.48	395
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1272	1049	23.03	960
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**1896**	**1702**	**38.60**	**1608**
	Total Hydro	1148	228	192	5.91	246
	Total Punjab	**5828**	**2124**	**1894**	**44.51**	**1855**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	455	420	10.05	419
	DCRTPP (Yamuna nagar) (2*300)	600	277	232	5.85	244
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	574	355	9.64	402
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1229	742	22.56	940
	Thermal (Total)	**4944**	**2535**	**1749**	**48.10**	**2004**
	Total Hydro	62	11	11	0.35	14
	Total Haryana	**5006**	**2546**	**1760**	**48.44**	**2018**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	883	885	19.72	822
	suratgarh TPS (6*250)	1500	1118	1139	25.96	1082
	Chabra TPS (3*250)	750	380	295	9.48	395
	Dholpur GPS (3*110)	330	91	117	2.58	108
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	205	205	5.07	211
	RAPS A (NPC) (1*100+1*200)	300	184	172	4.42	184
	Barsingsar (NLC) (2*125)	250	184	184	4.29	179
	Giral LTPS (2*125)	250	70	71	1.46	61
	Rajwest LTPS (IPP) (8*135)	1080	832	832	19.49	812
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	505	505	11.49	479
	Kawai(Adani) (2*660)	1320	1166	1174	28.12	1171
	Thermal (Total)	**8026**	**5618**	**5579**	**132**	**5503**
	Total Hydro	550	108	107	3.59	150
	Wind power	2798	35	110	1.91	80
	Biomass	99	29	29	0.69	29
	Solar	730	0	0	0.00	0
	Renewable/Others (Total)	3627	64	139	2.60	109
	Total Rajasthan	**12203**	**5790**	**5825**	**138.27**	**5761**
UP	Anpara TPS (3*210+2*500)	1630	910	906	22.00	917
	Obra TPS (2*50+2*94+5*200)	1194	473	446	10.60	442
	Paricha TPS (2*110+2*220+2*250)	1140	776	783	19.20	800
	Panki TPS (2*105)	210	158	144	3.50	146
	Harduaganj TPS (1*60+1*105+2*250)	665	509	484	11.60	483
	Tanda TPS (NTPC) (4*110)	440	330	340	8.30	346
	Roza TPS (IPP) (4*300)	1200	1008	1031	24.34	1014
	Anpara-C (IPP) (2*600)	1200	981	993	23.75	990
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	362	361	7.54	314
	Thermal (Total)	**8129**	**5507**	**5488**	**130.83**	**5451**
	Vishnuparyag HPS (IPP)	400	137	129	3.11	129
	Other Hydro	527	41	91	1.83	76
	Cogeneration	981	50	50	1.20	50
	Total UP	**10037**	**5735**	**5758**	**136.96**	**5577**
Uttarakhand	Total Hydro	1398	484	294	8.85	369
	Total Uttarakhand	**1398**	**484**	**294**	**8.85**	**369**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.01	1
	Delhi Gas Turbine (6x30 + 3x34)	282	79	79	1.87	78
	Pragati Gas Turbine (2x104+ 1x122)	330	265	265	6.38	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	306	306	6.88	287
	Badarpur TPS (NTPC) (3*95+2*210)	705	326	316	8.08	337
	Thermal (Total)	2917	976	966	23.23	968
	Total Delhi	**2917**	**976**	**966**	**23.23**	**968**
HP	Baspa HPS (IPP) (2*150)	300	28	28	1.75	73
	Malana HPS (IPP) (2*43)	86	24	0	0.38	16
	Other Hydro	728	212	193	5.32	222
	Total HP	**1114**	**264**	**221**	**7.45**	**311**
J & K	Baglihar HPS (IPP) (3*150)	450	384	214	6.31	263
	Other Hydro/IPP	436	105	105	2.48	103
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**489**	**319**	**8.79**	366
Total State Control Area Generation		**39597**	**18408**	**17037**	**416.51**	**17225**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3436**	**4500**	**117.72**	**4905**
Total Regional Availability(Gross)		**64017**	**37811**	**31851**	**818.40**	**33971**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7249**	**1748**	**78.40**	**3267**
State Control Area Hydro	**5684**	**1625**	**1235**	**39.87**	**1532**
Total Regional Hydro	**17116**	**8874**	**2983**	**118.27**	**4798**

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	-150	-100	50	150	0.28	2.25	-1.97
Gwalior-Agra (D/C)	747	1031	1657	0	29.23	0.00	29.23
Zerda-Kankroli	-199	-176	0	203	0.00	3.20	-3.20
Zerda-Bhinmal	-159	-105	99	191	0.00	1.55	-1.55
Malanpur-Auraiya	-105	-149	0	149	0.00	2.44	-2.44
Badod-Kota/Morak	-143	-242	0	242	0.00	4.81	-4.81
Mundra-Mohindergarh(HVDC)	2202	2202	2204	0	52.47	0.00	52.47
Vindhyachal - Rihand	413	400	531	0	11.09	0.00	11.09
Sub Total WR	**2606**	**2861**			**93.06**	**14.24**	**78.81**
Pusauli Bypass	400	400	400	0	9.70	0.00	9.70
MZP- GKP (D/C)	134	320	576	0	8.28	0.00	8.28
Patna-Balia(D/C)	174	320	492	0	8.12	0.00	8.12
B'Sharif-Balia (D/C)	56	166	341	0	4.54	0.00	4.54
Pusauli-Balia	-106	-71	0	106	0.00	1.78	-1.78
Gaya-Fatehpur (765 Kv)	0	315	378	0	3.27	0.00	3.27
Pusauli-Sahupuri	116	105	160	0	2.68	0.00	2.68
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-38	0	45	0.00	0.91	-0.91
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	96	122	417	0	5.02	0.00	5.02
Sub Total ER	**830**	**1639**			**41.59**	**2.68**	**38.90**
Total IR Exch	**3436**	**4500**			**134.65**	**16.93**	**117.72**

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
27.97	1.39	29.37	7.13	-0.73	8.49	6.92	0.61	-0.61

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Incids Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
45.60	62.61	108.21	38.90	78.81	117.72	-6.69	16.20	9.51

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

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	50.10-50.20	>50.20	>50.50
0.00	4.51	12.64	36.25	68.19	44.65	9.65	8.76	0.69	0.00

<---------- 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)
50.27	18.02	49.60	9.23	49.94	0.19	0.12	50.26	0.00

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	414	20:29	408	06:42	0.0	0.0	0.0	0.0
Gorakhpur	400	408	20:30	395	14:20	0.0	0.0	0.0	0.0
Bareilly	400	418	21:29	400	14:24	0.0	0.0	0.0	0.0
Kanpur	400	417	20:30	400	14:26	0.0	0.0	0.0	0.0
Dadri	400	415	00:00	414	00:02	0.0	0.0	0.0	0.0
Ballabhgarh	400	425	01:28	407	14:18	0.0	0.0	25.9	0.0
Bawana	400	423	01:26	404	18:14	0.0	0.0	18.2	0.0
Bassi	400	428	20:28	392	07:12	0.0	0.0	21.4	0.0
Hissar	400	416	01:27	399	18:10	0.0	0.0	0.0	0.0
Moga	400	423	21:23	405	18:11	0.0	0.0	7.0	0.0
Abdullapur	400	424	01:28	396	18:18	0.0	0.0	13.4	0.0
Nalagarh	400	431	21:25	409	18:14	0.0	0.0	38.2	0.2
Kishenpur	400	424	13:01	398	18:18	0.0	0.0	3.2	0.0
Wagoora	400	414	02:32	379	18:19	0.2	11.6	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	770	20:28	733	14:18	0.0	21.5	0.0	0.0
Balia	765	763	20:30	742	14:26	0.0	0.0	0.0	0.0
Moga	765	800	21:27	765	18:11	0.0	0.0	0.0	0.0
Agra	765	793	20:31	753	10:37	0.0	0.0	0.0	0.0
Bhiwani	765	802	01:29	767	18:10	0.0	0.0	0.8	0.0
Unnao	765	763	20:29	729	10:36	0.0	38.4	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	510.91	1590.18	234.21	388.54
Pong	426.72	384.05	413.71	622.40	420.15	889.22	81.61	340.25
Tehri	829.79	740.04	823.55	1079.00	824.25	1086.00	90.51	118.00
Koteshwar	612.50	598.50	608.76	3.98	611.80	4.95	118.00	118.00
Chamera-I	760.00	748.75	758.28	0.00	0.00	0.00	61.71	44.11
Rihand	268.22	252.98	853.60	314.70	859.50	417.20	0.00	0.00
RPS	352.80	343.81	0.00	0.00	0.00	0.00	0.00	0.00
Jawahar Sagar	298.70	295.78	0.00	0.00	0.00	0.00	0.00	0.00
RSD	527.91	487.91	510.13	0.64	517.86	2.67	56.54	28.91

*** NA: Not Available**

X(A). Short-Term Open Access Details:

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (20:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	0	17	0	0	209	0	0.00	1.67	1.67
Delhi	-497	-152	-7	-141	-30	-7	-5.98	-1.46	-7.45
Haryana	-6	88	0	12	86	0	-0.03	1.88	1.84
HP	81	49	0	81	-206	0	2.53	0.43	2.96
J&K	51	0	0	26	49	0	1.37	1.57	2.94
CHD	0	0	0	0	0	0	0.00	0.20	0.20
Rajasthan	-64	495	1	-64	103	1	-1.54	9.73	8.19
UP	532	0	0	409	0	0	10.50	0.00	10.50
Uttarakhand	318	59	0	220	151	0	5.77	3.84	9.61
Total	**414**	**557**	**-7**	**543**	**361**	**-7**	**12.61**	**17.86**	**30.47**

X(B). Short-Term Open Access Details:

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	254	5	0	0
Delhi	-122	-497	0	-206	-7	-7
Haryana	12	-6	89	65	0	0
HP	228	81	216	-395	0	0
J&K	143	2	98	0	0	0
CHD	0	0	25	0	0	0
Rajasthan	-64	-64	736	-352	1	1
UP	560	366	0	0	0	0
Uttarakhand	318	220	312	55	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 31.10.2014 :

Normal

XIV. Synchronisation of new generating units :

0.00

XV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus / /substation :

1: 80 MVAR Bus Reactor first time charged at 20.32 hrs of dt 31.10.2014 at Gorakhpur(PG)
(originally line Reactor of 400kV Barh- Gorakhpur line.)

XVI. Tripping of lines in pooling stations :

XVII. Complete generation loss in a generating station :

Report for : 31.10.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**