पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.11.2014
Date of Reporting : 10.11.2014

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
35601	1350	36951	50.16	30401	1970	32371	50.08	771.0	48.79

* 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	29.39	7.42		36.82	55.57	55.66	0.09	92.47	0.00
Haryana	54.41	0.53		54.93	49.14	48.25	-0.89	103.18	0.00
Rajasthan	117.10	3.10	16.03	136.23	64.48	64.60	0.12	200.83	0.00
Delhi	22.72			22.72	37.04	37.90	0.86	60.62	0.00
UP	122.30	4.20	2.40	128.90	88.33	89.40	1.07	218.30	48.61
Uttarakhand		8.40		8.40	20.58	21.83	1.25	30.24	0.18
HP		6.56		6.56	15.39	17.04	1.65	23.60	0.00
J & K		7.62	0.00	7.62	27.48	31.05	3.57	38.67	0.00
Chandigarh				0.00	2.94	3.06	0.13	3.06	0.00
Total	**345.92**	**37.83**	**18.43**	**402.18**	**360.94**	**368.79**	**7.85**	**770.97**	**48.79**

* 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				# Max(hourly) Demand Met of Day (MW)
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	
Punjab	4156	0	-270	37	3480	0	-64	-226	4649
Haryana	5425	0	-202	-771	4035	0	56	-765	5574
Rajasthan	8209	0	-264	751	8039	0	9	900	9180
Delhi	3096	0	-40	-610	2010	0	77	-868	3184
UP	10114	1310	-42	112	9346	1970	290	76	10114
Uttarakhand	1514	40	-33	340	1094	0	69	413	1526
HP	1221	0	67	-31	786	0	63	325	1221
J&K	1701	0	-63	349	1520	0	174	246	1799
Chandigarh	166	0	-15	0	92	0	13	-30	166
Total	**35601**	**1350**	**-862**	**177**	**30401**	**1970**	**687**	**72**	**35601**

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

Diversity is 1.05

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	1423	1581	1430	36.47	1520	33.96	2.51
	Rihand I STPS (2*500)	1000	850	941	968	21.46	894	20.03	1.44
	Rihand II STPS (2*500)	1000	970	1040	1055	24.16	1007	22.82	1.34
	Rihand III STPS (2*500)	1000	463	511	438	11.54	481	10.77	0.77
	Dadri I STPS (4*210)	840	815	548	572	15.59	650	14.99	0.60
	Dadri II STPS (2*490)	980	980	676	687	18.14	756	18.01	0.13
	Unchahar I TPS (2*210)	420	383	363	424	9.57	399	8.81	0.76
	Unchahar II TPS (2*210)	420	192	176	213	4.71	196	4.28	0.43
	Unchahar III TPS (1*220)	210	192	147	212	4.69	195	4.29	0.40
	ISTPP (Jhajjhar) (3*500)	1500	1500	983	912	20.65	860	21.89	-1.24
	Dadri GPS (4*130.19+2*154.51)	830	811	186	195	4.56	190	4.56	0.00
	Anta GPS (3*88.71+1*153.2)	419	403	224	268	6.05	252	6.16	-0.11
	Auraiya GPS (4*111.19+2*109.30)	663	648	161	162	3.77	157	3.71	0.06
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	**11297**	**9633**	**7537**	**7536**	**181**	**7559**	**174**	**7**
B. NPC	NAPS (2*220)	440	286	323	325	6.82	284	6.86	-0.05
	RAPS- B (2*220)	440	402	449	449	9.70	404	9.65	0.05
	RAPS- C (2*220)	440	211	216	213	4.49	187	5.07	-0.59
	Sub Total (B)	**1320**	**899**	**988**	**987**	**21.00**	**875**	**21.58**	**-0.58**
C. NHPC	Chamera I HPS (3*180)	540	534	509	0	1.57	66	1.60	-0.03
	Chamera II HPS (3*100)	300	300	297	0	1.75	73	1.70	0.05
	Chamera III HPS (3*77)	231	231	217	0	1.01	42	1.00	0.01
	Bairasuil HPS(3*60)	180	178	172	0	0.82	34	0.79	0.03
	Salal-HPS (6*115)	690	184	216	224	4.67	195	4.43	0.25
	Tanakpur-HPS (3*40)	94	44	30	62	1.06	44	1.06	0.00
	Uri-I HPS (4*120)	480	257	323	273	6.53	272	6.17	0.37
	Uri-II HPS (4*60)	240	159	163	166	3.88	162	3.84	0.04
	Dhauliganga-HPS (4*70)	280	207	209	0	1.40	58	1.30	0.10
	Dulhasti-HPS (3*130)	390	387	393	224	4.31	179	4.10	0.21
	Sewa-II HPS (3*40)	120	119	119	0	0.38	16	0.38	0.00
	Parbati 3 (4*130)	520	260	254	0	0.55	23	0.55	0.00
	Sub Total (C)	**4065**	**2862**	**2901**	**949**	**28**	**1164**	**27**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1500	0	9.33	389	9.50	-0.17
	Rampur HEP (4*68.67)	275	131	349	0	2.41	100	2.50	-0.10
	Sub Total (D)	1775	1736	1849	0	11.73	489	12.00	-0.27
E. THDC	Tehri HPS (4*250)	1000	1060	1027	0	5.40	225	5.40	0.00
	Koteshwar HPS (4*100)	400	91	100	0	1.78	74	1.75	0.03
	Sub Total (E)	**1400**	**1151**	**1127**	**0**	**7.18**	**299**	**7.15**	**0.03**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	561	1071	367	13.48	562	13.47	0.01
	Dehar HPS (6*165)	990	170	495	0	4.33	181	4.08	0.25
	Pong HPS (6*66)	396	222	318	126	5.21	217	5.32	-0.11
	Sub Total (F)	**2900**	**953**	**1884**	**493**	**23.03**	**959**	**22.87**	**0.16**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	59	0	0.62	26	0.61	0.01
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	860	0	5.20	217	5.40	-0.20
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	103	110	2.49	104	2.44	0.05
	Budhil HPS(IPP)	70	0	70	0	0.15	6	0.14	0.00
	Sub Total (G)	1662	0	1092	110	8.46	352	8.58	-0.13
H. Total Regional Entities (A-G)		**24419**	**17234**	**17377**	**10076**	**280.72**	**11697**	**273.46**	**7.26**

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	180	160	3.77	157
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.73	72
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	370	361	8.00	333
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	707	707	15.90	663
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**1337**	**1308**	**29.39**	**1225**
	Total Hydro	1148	239	376	7.42	309
	Total Punjab	**5828**	**1576**	**1684**	**36.82**	**1534**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	0	211	4.54	189
	DCRTPP (Yamuna nagar) (2*300)	600	273	235	5.72	238
	Faridabad GPS (NTPC)	432	199	176	4.39	183
	RGTPP (khedar) (IPP) (2*600)	1200	991	726	18.38	766
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1112	744	21.38	891
	Thermal (Total)	**4944**	**2575**	**2092**	**54.41**	**2267**
	Total Hydro	62	16	18	0.53	22
	Total Haryana	**5006**	**2591**	**2110**	**54.93**	**2289**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	802	793	19.17	799
	suratgarh TPS (6*250)	1500	955	934	23.21	967
	Chabra TPS (3*250)	750	446	416	10.00	417
	Dholpur GPS (3*110)	330	97	121	2.74	114
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	43	43	1.25	52
	RAPS A (NPC) (1*100+1*200)	300	183	463	4.40	183
	Barsingsar (NLC) (2*125)	250	170	170	4.43	185
	Giral LTPS (2*125)	250	57	73	1.40	59
	Rajwest LTPS (IPP) (8*135)	1080	629	612	15.14	631
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	320	360	10.02	418
	Kawai(Adani) (2*660)	1320	1105	856	25.35	1056
	Thermal (Total)	**8026**	**4807**	**4841**	**117**	**4879**
	Total Hydro	550	110	108	3.10	129
	Wind power	2798	377	747	15.08	628
	Biomass	99	33	33	0.78	33
	Solar	730	2	0	0.16	7
	Renewable/Others (Total)	3627	412	780	16.03	668
	Total Rajasthan	**12203**	**5329**	**5729**	**136.23**	**5676**
UP	Anpara TPS (3*210+2*500)	1630	938	934	21.50	896
	Obra TPS (2*50+2*94+5*200)	1194	468	450	11.00	458
	Paricha TPS (2*110+2*220+2*250)	1140	779	761	18.60	775
	Panki TPS (2*105)	210	153	153	3.50	146
	Harduaganj TPS (1*60+1*105+2*250)	665	460	470	10.50	438
	Tanda TPS (NTPC) (4*110)	440	281	282	6.90	288
	Roza TPS (IPP) (4*300)	1200	840	792	18.40	767
	Anpara-C (IPP) (2*600)	1200	990	990	23.60	983
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	361	361	8.30	346
	Thermal (Total)	**8129**	**5270**	**5193**	**122.30**	**5096**
	Vishnuparyag HPS (IPP)	400	123	118	2.90	121
	Other Hydro	527	37	64	1.30	54
	Cogeneration	981	100	100	2.40	100
	Total UP	**10037**	**5530**	**5475**	**128.90**	**5250**
Uttarakhand	Total Hydro	1398	422	227	8.40	350
	Total Uttarakhand	**1398**	**422**	**227**	**8.40**	**350**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	77	79	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	260	264	6.38	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	260	247	6.67	278
	Badarpur TPS (NTPC) (3*95+2*210)	705	321	320	7.83	326
	Thermal (Total)	2917	918	910	22.72	947
	Total Delhi	**2917**	**918**	**910**	**22.72**	**947**
HP	Baspa HPS (IPP) (2*150)	300	30	0	1.44	60
	Malana HPS (IPP) (2*43)	86	43	0	0.37	15
	Other Hydro	728	239	167	4.76	198
	Total HP	**1114**	**312**	**167**	**6.56**	**273**
J & K	Baglihar HPS (IPP) (3*150)	450	296	148	5.12	213
	Other Hydro/IPP	436	105	105	2.50	104
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**401**	**253**	**7.62**	317
Total State Control Area Generation		**39597**	**17079**	**16555**	**402.18**	**16637**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3389**	**5301**	**111.86**	**4661**
Total Regional Availability(Gross)		**64017**	**37845**	**31932**	**794.76**	**32994**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**8680**	**1442**	**75.68**	**3153**
State Control Area Hydro	**5684**	**1537**	**1213**	**37.83**	**1456**
Total Regional Hydro	**17116**	**10217**	**2655**	**113.51**	**4609**

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	-50	150	300	50	1.23	0.69	0.53
Gwalior-Agra (D/C)	1072	1501	1844	0	32.60	0.00	32.60
Zerda-Kankroli	-141	-66	0	171	0.00	2.06	-2.06
Zerda-Bhinmal	-120	-19	101	203	0.00	0.74	-0.74
Malanpur-Auraiya	-115	-129	0	142	0.00	2.80	-2.80
Badod-Kota/Morak	-129	-168	0	114	0.00	4.38	-4.38
Mundra-Mohindergarh(HVDC)	1902	2100	2106	0	49.92	0.00	49.92
Vindhyachal - Rihand	442	404	497	0	10.83	0.00	10.83
Sub Total WR	**2861**	**3773**			**94.59**	**10.67**	**83.92**
Pusauli Bypass	200	200	200	0	4.84	0.00	4.84
MZP- GKP (D/C)	76	332	380	76	5.43	0.00	5.43
Patna-Balia(D/C)	260	474	546	0	6.26	0.00	6.26
B'Sharif-Balia (D/C)	31	123	169	0	2.25	0.00	2.25
Pusauli-Balia	-109	-84	0	118	0.00	1.93	-1.93
Gaya-Fatehpur (765 Kv)	62	288	400	0	6.77	0.00	6.77
Pusauli-Sahupuri	101	128	148	0	2.43	0.00	2.43
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	-47	0	47	0.00	0.98	-0.98
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-53	114	242	53	2.87	0.00	2.87
Sub Total ER	**528**	**1528**			**30.85**	**2.91**	**27.94**
Total IR Exch	**3389**	**5301**			**125.44**	**13.58**	**111.86**

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
28.33	1.03	29.36	5.24	-13.18	7.13	4.29	0.94	-0.94

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
42.67	61.08	103.75	27.94	83.92	111.86	-14.73	22.84	8.11

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	0.00	0.96	13.53	44.24	51.66	17.00	15.38	3.09	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)
50.32	21.57	49.73	9.12	50.01	0.10	0.10	50.09	49.94

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	416	21:24	408	16:35	0.0	0.0	0.0	0.0
Gorakhpur	400	234	21:50	224	13:46	100.0	100.0	0.0	0.0
Bareilly	400	422	21:48	403	16:35	0.0	0.0	0.6	0.0
Kanpur	400	421	21:43	406	16:45	0.0	0.0	0.6	0.0
Dadri	400	420	21:25	407	09:10	0.0	0.0	0.0	0.0
Ballabhgarh	400	422	01:00	419	00:00	0.0	0.0	45.9	0.0
Bawana	400	425	04:03	410	18:17	0.0	0.0	17.3	0.0
Bassi	400	427	20:58	397	08:38	0.0	0.0	11.2	0.0
Hissar	400	416	04:01	400	09:09	0.0	0.0	0.0	0.0
Moga	400	424	04:01	408	09:07	0.0	0.0	11.7	0.0
Abdullapur	400	424	04:02	396	18:43	0.0	0.0	10.9	0.0
Nalagarh	400	434	04:02	414	07:07	0.0	0.0	61.5	8.8
Kishenpur	400	427	04:00	402	18:18	0.0	0.0	25.4	0.0
Wagoora	400	411	04:03	378	19:12	2.9	18.3	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	778	21:45	748	13:50	0.0	0.0	0.0	0.0
Balia	765	769	20:58	752	17:40	0.0	0.0	0.0	0.0
Moga	765	803	04:03	772	09:08	0.0	0.0	0.5	0.0
Agra	765	796	05:03	764	16:48	0.0	0.0	0.0	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	775	21:45	748	16:48	0.0	0.0	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	505.98	1352.81	510.20	1560.04	120.03	395.56
Pong	426.72	384.05	412.52	577.87	419.18	848.35	77.19	329.04
Tehri	829.79	740.04	822.65	1056.00	823.25	1065.00	86.40	118.00
Koteshwar	612.50	598.50	609.01	4.21	611.75	5.46	118.00	118.00
Chamera-I	760.00	748.75	759.66	0.00	0.00	0.00	53.85	42.42
Rihand	268.22	252.98	0.00	0.00	0.00	0.00	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	510.38	0.97	517.08	2.91	36.00	19.00

*** NA: Not Available**

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

State	Off- Peak Hours (03:00 Hrs)			Peak Hours (19:00 Hrs)			Day Energy (MU)		
	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MW)	IEX (MW)	PXIL (MW)	Bilateral (MU)	IEX / PXIL (MU)	Total (MU)
Punjab	-239	13	0	-213	250	0	-5.32	5.41	0.09
Delhi	-830	-39	0	-600	-10	0	-14.83	-0.47	-15.29
Haryana	-883	118	0	-864	93	0	-22.44	2.37	-20.07
HP	325	0	0	300	-332	0	7.41	-3.34	4.07
J&K	297	-51	0	349	0	0	6.99	-0.25	6.74
CHD	-30	0	0	0	0	0	-0.24	0.00	-0.24
Rajasthan	491	408	1	491	259	1	11.78	8.39	20.17
UP	76	0	0	112	0	0	1.99	0.00	1.99
Uttarakhand	294	120	0	245	95	0	6.78	2.92	9.70
Total	**-499**	**569**	**1**	**-180**	**356**	**1**	**-7.89**	**15.04**	**7.15**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-213	-239	384	5	0	0
Delhi	-498	-830	78	-124	0	0
Haryana	-864	-1011	118	83	0	0
HP	325	300	0	-653	0	0
J&K	356	251	0	-51	0	0
CHD	0	-30	0	0	0	0
Rajasthan	491	491	552	-15	1	1
UP	114	51	0	0	0	0
Uttarakhand	294	245	309	39	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 09.11.2014 :

Normal

XIV. Synchronisation of new generating units :

0.00

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

XVI. Tripping of lines in pooling stations :

XVII. Complete generation loss in a generating station :

Report for : 09.11.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**