पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.10.2014
Date of Reporting : 25.10.2014

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
36431	480	36911	50.09	30247	960	31207	50.08	743.7	11.72

* 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	28.20	10.34		38.53	50.34	50.97	0.63	89.50	0.00
Haryana	52.84	0.58		53.42	52.80	52.96	0.16	106.38	0.00
Rajasthan	121.45	3.99	3.09	128.54	40.60	41.01	0.41	169.55	0.00
Delhi	24.37			24.37	38.25	37.98	-0.28	62.35	0.00
UP	114.40	7.20	1.20	122.80	126.65	122.67	-3.98	245.47	11.72
Uttarakhand		10.59		10.59	16.60	16.26	-0.33	26.85	0.00
HP		8.08		8.08	6.84	7.35	0.51	15.44	0.00
J & K		6.62	0.00	6.62	23.80	18.34	-5.46	24.96	0.00
Chandigarh				0.00	3.22	3.19	-0.04	3.19	0.00
Total	**341.26**	**47.39**	**4.29**	**392.95**	**359.10**	**350.74**	**-8.36**	**743.68**	**11.72**

* 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	4645	0	-171	-191	3633	0	-131	-127	4645
Haryana	5669	0	-128	-209	4154	0	240	9	5669
Rajasthan	6890	0	-188	-181	6978	0	106	49	8019
Delhi	3101	0	-51	-598	2419	0	-24	-558	3134
UP	12072	480	359	2622	10854	960	116	1262	12072
Uttarakhand	1488	0	-29	343	934	0	18	284	1545
HP	903	0	5	-488	441	0	39	-158	952
J&K	1488	0	-236	65	727	0	-409	33	1557
Chandigarh	176	0	-31	0	107	0	-3	0	177
Total	**36431**	**480**	**-471**	**1361**	**30247**	**960**	**-48**	**793**	**36431**

* 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	1416	1392	1539	35.04	1460	32.47	2.57
	Rihand I STPS (2*500)	1000	885	918	992	20.62	859	19.09	1.53
	Rihand II STPS (2*500)	1000	460	364	492	11.22	468	10.10	1.12
	Rihand III STPS (2*500)	1000	965	932	982	22.93	955	21.86	1.07
	Dadri I STPS (4*210)	840	815	614	552	15.32	638	14.47	0.85
	Dadri II STPS (2*490)	980	980	679	677	17.30	721	16.99	0.31
	Unchahar I TPS (2*210)	420	391	372	371	8.28	345	7.57	0.71
	Unchahar II TPS (2*210)	420	393	312	351	7.72	322	7.09	0.63
	Unchahar III TPS (1*220)	210	196	155	170	3.98	166	3.66	0.32
	ISTPP (Jhajjhar) (3*500)	1500	990	640	626	13.88	578	14.26	-0.38
	Dadri GPS (4*130.19+2*154.51)	830	801	406	190	7.45	310	7.46	-0.01
	Anta GPS (3*88.71+1*153.2)	419	393	232	220	5.76	240	5.69	0.07
	Auraiya GPS (4*111.19+2*109.30)	663	591	155	161	3.99	166	3.94	0.05
	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**	**9281**	**7171**	**7323**	**174**	**7231**	**165**	**9**
B. NPC	NAPS (2*220)	440	281	321	325	6.80	283	6.74	0.06
	RAPS- B (2*220)	440	400	444	449	9.60	400	9.60	0.00
	RAPS- C (2*220)	440	190	210	209	4.51	188	4.56	-0.05
	Sub Total (B)	**1320**	**871**	**975**	**983**	**20.91**	**871**	**20.90**	**0.00**
C. NHPC	Chamera I HPS (3*180)	540	534	266	0	1.77	74	1.80	-0.03
	Chamera II HPS (3*100)	300	300	302	0	2.07	86	2.00	0.07
	Chamera III HPS (3*77)	231	229	225	0	1.30	54	1.25	0.05
	Bairasuil HPS(3*60)	180	178	177	0	0.99	41	0.90	0.09
	Salal-HPS (6*115)	690	210	154	262	5.30	221	5.05	0.25
	Tanakpur-HPS (3*40)	94	56	50	56	1.36	57	1.35	0.01
	Uri-I HPS (4*120)	480	273	309	264	6.75	281	6.55	0.20
	Uri-II HPS (4*60)	240	161	168	162	3.96	165	3.85	0.11
	Dhauliganga-HPS (4*70)	280	69	208	70	1.71	71	1.66	0.06
	Dulhasti-HPS (3*130)	390	387	400	227	5.78	241	5.50	0.28
	Sewa-II HPS (3*40)	120	119	120	0	0.40	17	0.38	0.02
	Parbati 3 (4*130)	520	248	131	0	0.73	30	0.70	0.02
	Sub Total (C)	**4065**	**2764**	**2510**	**1041**	**32**	**1339**	**31**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1598	169	11.04	460	11.00	0.04
	Rampur HEP (4*68.67)	275	343	377	47	2.95	123	2.88	0.07
	Sub Total (D)	1775	1948	1975	216	13.99	583	13.88	0.11
E. THDC	Tehri HPS (4*250)	1000	1060	1055	0	5.45	227	5.40	0.05
	Koteshwar HPS (4*100)	400	92	101	0	1.77	74	1.75	0.02
	Sub Total (E)	**1400**	**1152**	**1156**	**0**	**7.22**	**301**	**7.15**	**0.07**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	629	1175	497	15.18	633	15.10	0.08
	Dehar HPS (6*165)	990	201	495	145	5.00	208	4.82	0.18
	Pong HPS (6*66)	396	238	384	192	5.60	233	5.71	-0.11
	Sub Total (F)	**2900**	**1068**	**2054**	**834**	**25.78**	**1074**	**25.63**	**0.15**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	112	0	0.85	36	0.83	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	820	180	6.51	271	6.42	0.09
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	300	236	5.77	241	5.79	-0.01
	Budhil HPS(IPP)	70	0	14	0	0.29	12	0.29	0.00
	Sub Total (G)	1662	0	1246	416	13.43	559	13.33	0.10
H. Total Regional Entities (A-G)		**24419**	**17084**	**17086**	**10813**	**286.99**	**11958**	**276.61**	**10.38**

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	510	470	11.30	471
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	160	160	3.40	142
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	403	405	4.94	206
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	367	390	8.56	357
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**1440**	**1425**	**28.20**	**1175**
	Total Hydro	1148	426	434	10.34	431
	Total Punjab	**5828**	**1866**	**1859**	**38.53**	**1606**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	207	425	7.17	299
	DCRTPP (Yamuna nagar) (2*300)	600	234	233	5.61	234
	Faridabad GPS (NTPC)	432	173	171	4.29	179
	RGTPP (khedar) (IPP) (2*600)	1200	718	714	17.38	724
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	740	738	18.39	766
	Thermal (Total)	**4944**	**2072**	**2281**	**52.84**	**2202**
	Total Hydro	62	21	28	0.58	24
	Total Haryana	**5006**	**2093**	**2309**	**53.42**	**2226**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	693	807	17.35	723
	suratgarh TPS (6*250)	1500	943	1172	25.21	1050
	Chabra TPS (3*250)	750	396	391	10.10	421
	Dholpur GPS (3*110)	330	112	117	2.68	112
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	186	146	4.37	182
	RAPS A (NPC) (1*100+1*200)	300	171	169	4.41	184
	Barsingsar (NLC) (2*125)	250	184	184	4.34	181
	Giral LTPS (2*125)	250	66	47	1.16	49
	Rajwest LTPS (IPP) (8*135)	1080	431	678	15.16	632
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	501	0	11.10	463
	Kawai(Adani) (2*660)	1320	1173	861	25.57	1065
	Thermal (Total)	**8026**	**4856**	**4572**	**121**	**5061**
	Total Hydro	550	147	99	3.99	166
	Wind power	2798	39	164	1.76	73
	Biomass	99	42	42	1.00	42
	Solar	730	0	0	0.33	14
	Renewable/Others (Total)	3627	81	206	3.09	129
	Total Rajasthan	**12203**	**5084**	**4877**	**128.54**	**5356**
UP	Anpara TPS (3*210+2*500)	1630	925	702	20.70	863
	Obra TPS (2*50+2*94+5*200)	1194	439	416	10.40	433
	Paricha TPS (2*110+2*220+2*250)	1140	762	572	15.10	629
	Panki TPS (2*105)	210	149	162	3.60	150
	Harduaganj TPS (1*60+1*105+2*250)	665	474	470	10.90	454
	Tanda TPS (NTPC) (4*110)	440	410	390	9.20	383
	Roza TPS (IPP) (4*300)	1200	581	836	17.50	729
	Anpara-C (IPP) (2*600)	1200	804	819	19.50	813
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	250	361	7.50	313
	Thermal (Total)	**8129**	**4794**	**4728**	**114.40**	**4767**
	Vishnuparyag HPS (IPP)	400	153	149	3.50	146
	Other Hydro	527	168	300	3.70	154
	Cogeneration	981	50	50	1.20	50
	Total UP	**10037**	**5165**	**5227**	**122.80**	**4971**
Uttarakhand	Total Hydro	1398	597	343	10.59	441
	Total Uttarakhand	**1398**	**597**	**343**	**10.59**	**441**
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	79	78	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	263	259	6.42	267
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	312	256	6.80	283
	Badarpur TPS (NTPC) (3*95+2*210)	705	378	385	9.33	389
	Thermal (Total)	2917	1032	978	24.37	1015
	Total Delhi	**2917**	**1032**	**978**	**24.37**	**1015**
HP	Baspa HPS (IPP) (2*150)	300	82	62	1.91	80
	Malana HPS (IPP) (2*43)	86	21	25	0.47	19
	Other Hydro	728	247	240	5.71	238
	Total HP	**1114**	**350**	**327**	**8.08**	**337**
J & K	Baglihar HPS (IPP) (3*150)	450	440	214	6.62	276
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**440**	**214**	**6.62**	276
Total State Control Area Generation		**39597**	**16627**	**16134**	**392.95**	**16227**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4255**	**4350**	**102.21**	**4259**
Total Regional Availability(Gross)		**64017**	**37968**	**31297**	**782.14**	**32443**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**8626**	**2271**	**86.48**	**3603**
State Control Area Hydro	**5684**	**2149**	**1745**	**47.39**	**1829**
Total Regional Hydro	**17116**	**10775**	**4016**	**133.87**	**5432**

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	-200	50	400	300	1.58	4.00	-2.42
Gwalior-Agra (D/C)	1525	1444	2046	0	32.86	0.00	32.86
Zerda-Kankroli	-158	-215	0	277	0.00	4.87	-4.87
Zerda-Bhinmal	-90	-137	4	246	0.00	2.92	-2.92
Malanpur-Auraiya	-52	-81	0	127	0.00	1.82	-1.82
Badod-Kota/Morak	-194	-434	0	481	0.00	7.15	-7.15
Mundra-Mohindergarh(HVDC)	1898	2098	2303	0	48.54	0.00	48.54
Vindhyachal - Rihand	373	360	425	0	8.46	0.00	8.46
Sub Total WR	**3102**	**3085**			**91.44**	**20.76**	**70.68**
Pusauli Bypass	400	400	400	0	9.55	0.00	9.55
MZP- GKP (D/C)	324	220	530	0	7.31	0.00	7.31
Patna-Balia(D/C)	232	211	420	0	6.49	0.00	6.49
B'Sharif-Balia (D/C)	171	148	307	0	4.33	0.00	4.33
Pusauli-Balia	-45	-67	0	80	0.00	1.23	-1.23
Gaya-Fatehpur (765 Kv)	79	202	239	0	2.09	0.00	2.09
Pusauli-Sahupuri	147	158	142	0	3.42	0.00	3.42
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-40	0	0	45	0.00	0.88	-0.88
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-115	-7	216	157	0.45	0.00	0.45
Sub Total ER	**1153**	**1265**			**33.64**	**2.11**	**31.53**
Total IR Exch	**4255**	**4350**			**125.08**	**22.87**	**102.21**

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
22.16	1.57	23.73	10.80	6.99	-4.84	6.52	0.62	-0.62

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
30.32	68.17	98.48	31.53	70.68	102.21	1.21	2.51	3.72

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	0.08	0.96	8.89	47.77	64.14	17.22	8.82	0.86	NA

<---------- 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	18.01	49.67	17.43	50.00	0.06	0.08	50.25	49.93

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	02:58	407	22:03	0.0	0.0	0.0	0.0
Gorakhpur	400	421	06:08	390	18:08	0.0	0.0	0.1	0.0
Bareilly	400	421	04:01	404	18:08	0.0	0.0	1.4	0.0
Kanpur	400	424	05:02	407	18:09	0.0	0.0	21.9	0.0
Dadri	400	421	03:01	409	18:12	0.0	0.0	0.3	0.0
Ballabhgarh	400	428	01:57	414	18:10	0.0	0.0	61.7	0.0
Bawana	400	425	01:57	412	18:12	0.0	0.0	40.7	0.0
Bassi	400	426	05:01	410	07:23	0.0	0.0	51.9	0.0
Hissar	400	418	01:54	403	18:12	0.0	0.0	0.0	0.0
Moga	400	425	00:58	406	18:09	0.0	0.0	18.1	0.0
Abdullapur	400	423	16:17	396	18:11	0.0	0.0	17.6	0.0
Nalagarh	400	433	00:20	415	18:10	0.0	0.0	85.0	12.7
Kishenpur	400	424	01:23	396	18:27	0.0	0.0	14.3	0.0
Wagoora	400	419	03:59	381	18:33	0.0	14.1	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	783	05:03	736	18:10	0.0	2.3	0.0	0.0
Balia	765	747	23:21	743	23:02	0.0	0.0	0.0	0.0
Moga	765	804	00:58	771	18:26	0.0	0.0	10.8	0.0
Agra	765	794	05:02	767	22:08	0.0	0.0	0.0	0.0
Bhiwani	765	808	02:00	780	18:12	0.0	0.0	19.7	0.0
Unnao	765	778	02:00	738	18:10	0.0	6.5	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	507.79	1440.82	511.06	1605.30	232.17	436.08
Pong	426.72	384.05	414.51	656.23	420.96	931.43	82.86	346.26
Tehri	829.79	740.04	824.00	1086.79	824.70	1102.00	83.74	118.00
Koteshwar	612.50	598.50	608.92	3.98	611.60	5.36	118.00	118.00
Chamera-I	760.00	748.75	756.70	0.00	0.00	0.00	65.87	48.28
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	510.61	2.96	518.27	3.08	69.00	124.00

*** 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	-203	76	0	-203	12	0	-4.88	3.34	-1.54
Delhi	-479	-78	-1	-193	-405	0	-6.78	-3.75	-10.53
Haryana	-42	51	0	-17	-191	0	-0.96	0.12	-0.84
HP	-72	-86	0	-143	-345	0	-1.91	-3.26	-5.18
J&K	84	-51	0	20	45	0	1.39	0.08	1.47
CHD	0	0	0	0	0	0	0.00	0.00	0.00
Rajasthan	-64	112	1	-64	-117	0	-1.54	0.37	-1.17
UP	1262	0	0	1641	981	0	33.01	4.60	37.61
Uttarakhand	220	64	0	220	123	0	5.28	2.36	7.64
Total	**705**	**88**	**0**	**1260**	**101**	**0**	**23.62**	**3.84**	**27.46**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-203	-203	262	3	0	0
Delhi	-173	-479	0	-405	0	-30
Haryana	-17	-119	68	-354	0	0
HP	-72	-143	-20	-474	0	0
J&K	84	20	98	-51	0	0
CHD	0	0	0	0	0	0
Rajasthan	-64	-64	182	-1038	1	0
UP	1870	1058	981	0	28	0
Uttarakhand	220	220	191	26	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 24.10.2014 :

Normal

XIV. Synchronisation of new generating units :

0.00

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

XVI. Tripping of lines in pooling stations :

XVII. Complete generation loss in a generating station :

Report for : 24.10.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**