पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 10.10.2014
Date of Reporting : 11.10.2014

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
39923	3606	43528	50.05	35040	3395	38435	50.01	861.3	100.67

* 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	46.11	13.63		59.74	68.18	68.60	0.41	128.33	0.00
Haryana	67.91	0.66		68.57	66.62	66.64	0.02	135.21	0.01
Rajasthan	122.27	0.86	3.23	126.36	43.83	55.08	11.24	181.44	21.02
Delhi	30.78			30.78	57.46	56.87	-0.59	87.66	0.00
UP	110.50	11.70	0.36	122.56	112.23	115.95	3.72	238.51	74.05
Uttarakhand		11.13		11.13	15.33	17.99	2.66	29.11	5.17
HP		10.69		10.69	11.11	13.11	2.01	23.80	0.42
J & K		10.80	0.00	10.80	18.82	22.15	3.32	32.95	0.00
Chandigarh				0.00	3.91	4.26	0.35	4.26	0.00
Total	**377.58**	**59.46**	**3.59**	**440.62**	**397.49**	**420.64**	**23.15**	**861.26**	**100.67**

* 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	6329	0	-105	541	5241	0	36	344	6329
Haryana	6712	0	29	241	5321	0	3	188	6712
Rajasthan	7934	1046	256	-235	7603	495	485	-360	8008
Delhi	3916	0	-189	286	3402	0	20	-143	4058
UP	10441	2345	46	1097	10335	2900	150	2118	10949
Uttarakhand	1387	215	96	35	1212	0	144	280	1456
HP	1231	0	190	-583	790	0	25	-109	1231
J&K	1763	0	177	-174	1002	0	60	-495	1763
Chandigarh	209	0	-16	0	133	0	0	0	219
Total	**39923**	**3606**	**484**	**1207**	**35040**	**3395**	**924**	**1822**	**39923**

* 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	1370	1507	1499	33.03	1376	32.88	0.15
	Rihand I STPS (2*500)	1000	750	826	852	20.30	846	18.00	2.30
	Rihand II STPS (2*500)	1000	791	907	902	21.21	884	18.98	2.24
	Rihand III STPS (2*500)	1000	834	869	942	21.87	911	20.03	1.85
	Dadri I STPS (4*210)	840	603	607	532	14.57	607	14.19	0.38
	Dadri II STPS (2*490)	980	480	486	503	11.70	488	11.49	0.22
	Unchahar I TPS (2*210)	420	400	435	441	10.43	435	9.60	0.83
	Unchahar II TPS (2*210)	420	400	437	437	10.55	440	9.60	0.95
	Unchahar III TPS (1*220)	210	198	216	216	5.23	218	4.75	0.48
	ISTPP (Jhajjhar) (3*500)	1500	908	929	656	19.92	830	21.66	-1.74
	Dadri GPS (4*130.19+2*154.51)	830	787	193	165	4.39	183	4.51	-0.12
	Anta GPS (3*88.71+1*153.2)	419	390	-2	-3	0.00	0	0.07	-0.07
	Auraiya GPS (4*111.19+2*109.30)	663	481	161	162	3.84	160	3.72	0.12
	Dadri Solar	5	1	0	0	0.02	1	0.03	0.00
	Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
	Sub Total (A)	**11297**	**8396**	**7571**	**7304**	**177**	**7379**	**170**	**8**
B. NPC	NAPS (2*220)	440	276	315	322	6.72	280	6.62	0.09
	RAPS- B (2*220)	440	393	438	442	9.47	395	9.43	0.04
	RAPS- C (2*220)	440	175	204	200	4.27	178	4.20	0.07
	Sub Total (B)	**1320**	**844**	**957**	**964**	**20.45**	**852**	**20.26**	**0.20**
C. NHPC	Chamera I HPS (3*180)	540	534	542	0	3.85	160	3.70	0.15
	Chamera II HPS (3*100)	300	300	310	95	2.83	118	2.75	0.08
	Chamera III HPS (3*77)	231	229	226	0	1.87	78	1.80	0.07
	Bairasuil HPS(3*60)	180	120	120	0	1.20	50	1.14	0.07
	Salal-HPS (6*115)	690	335	456	378	8.62	359	8.05	0.57
	Tanakpur-HPS (3*40)	94	67	71	68	1.64	69	1.61	0.04
	Uri-I HPS (4*120)	480	438	451	471	11.17	465	10.52	0.65
	Uri-II HPS (4*60)	240	238	245	242	5.79	241	5.71	0.08
	Dhauliganga-HPS (4*70)	280	95	208	70	2.33	97	2.28	0.05
	Dulhasti-HPS (3*130)	390	387	404	395	8.79	366	8.70	0.09
	Sewa-II HPS (3*40)	120	119	131	0	0.76	31	0.60	0.16
	Parbati 3 (4*130)	520	260	0	0	0.00	0	0.91	-0.91
	Sub Total (C)	**4065**	**3123**	**3164**	**1719**	**49**	**2035**	**48**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1331	406	15.19	633	14.80	0.39
	Rampur HEP (4*68.67)	275	165	286	122	4.07	169	3.97	0.10
	Sub Total (D)	1775	1770	1617	528	19.26	802	18.77	0.49
E. THDC	Tehri HPS (4*250)	1000	1060	965	0	5.73	239	5.60	0.13
	Koteshwar HPS (4*100)	400	91	101	91	1.81	75	1.75	0.06
	Sub Total (E)	**1400**	**1151**	**1066**	**91**	**7.54**	**314**	**7.35**	**0.19**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	777	1248	651	18.65	777	18.65	0.00
	Dehar HPS (6*165)	990	277	660	160	6.66	277	6.66	0.00
	Pong HPS (6*66)	396	194	324	198	4.69	195	4.66	0.03
	Sub Total (F)	**2900**	**1248**	**2232**	**1009**	**30.00**	**1250**	**29.96**	**0.04**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	71	47	1.13	47	1.10	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	900	220	8.43	351	8.39	0.04
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	296	299	7.09	295	7.14	-0.04
	Budhil HPS(IPP)	70	0	25	10	0.45	19	0.46	0.00
	Sub Total (G)	1662	0	1292	576	17.10	713	17.09	0.01
H. Total Regional Entities (A-G)		**24419**	**16533**	**17898**	**12190**	**320.30**	**13346**	**310.76**	**9.54**

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	370	160	4.88	203
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	90	1.89	79
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	212	179	3.56	148
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1028	1390	25.61	1067
	Talwandi Saboo (1*660)	660	513	386	10.17	424
	Thermal (Total)	**4680**	**2203**	**2205**	**46.11**	**1921**
	Total Hydro	1148	500	517	13.63	568
	Total Punjab	**5828**	**2703**	**2722**	**59.74**	**2489**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	670	602	13.96	582
	DCRTPP (Yamuna nagar) (2*300)	600	275	234	5.84	243
	Faridabad GPS (NTPC)	432	195	173	4.37	182
	RGTPP (khedar) (IPP) (2*600)	1200	1094	666	18.99	791
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1144	943	24.76	1032
	Thermal (Total)	**4944**	**3378**	**2618**	**67.91**	**2830**
	Total Hydro	62	26	29	0.66	28
	Total Haryana	**5006**	**3404**	**2647**	**68.57**	**2857**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	861	947	21.73	905
	suratgarh TPS (6*250)	1500	1374	1351	31.87	1328
	Chabra TPS (3*250)	750	384	650	11.49	479
	Dholpur GPS (3*110)	330	109	105	2.77	115
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	176	179	5.36	223
	RAPS A (NPC) (1*100+1*200)	300	180	180	4.36	182
	Barsingsar (NLC) (2*125)	250	96	99	2.17	90
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	554	554	13.62	567
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	167	0	0.79	33
	Kawai(Adani) (2*660)	1320	1178	1153	28.12	1172
	Thermal (Total)	**8026**	**5079**	**5218**	**122**	**5095**
	Total Hydro	550	104	22	0.86	36
	Wind power	2798	143	161	2.38	99
	Biomass	99	26	26	0.61	26
	Solar	730	0	0	0.24	10
	Renewable/Others (Total)	3627	169	187	3.23	135
	Total Rajasthan	**12203**	**5352**	**5427**	**126.36**	**5265**
UP	Anpara TPS (3*210+2*500)	1630	840	785	19.50	813
	Obra TPS (2*50+2*94+5*200)	1194	363	375	8.70	363
	Paricha TPS (2*110+2*220+2*250)	1140	578	595	13.90	579
	Panki TPS (2*105)	210	153	162	3.50	146
	Harduaganj TPS (1*60+1*105+2*250)	665	452	402	10.30	429
	Tanda TPS (NTPC) (4*110)	440	267	267	6.60	275
	Roza TPS (IPP) (4*300)	1200	833	834	19.90	829
	Anpara-C (IPP) (2*600)	1200	851	858	20.50	854
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	320	320	7.60	317
	Thermal (Total)	**8129**	**4657**	**4598**	**110.50**	**4604**
	Vishnuparyag HPS (IPP)	400	277	277	6.40	267
	Other Hydro	527	210	277	5.30	221
	Cogeneration	981	15	15	0.36	15
	Total UP	**10037**	**5159**	**5167**	**122.56**	**4840**
Uttarakhand	Total Hydro	1398	595	420	11.13	464
	Total Uttarakhand	**1398**	**595**	**420**	**11.13**	**464**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	113	113	2.65	110
	Pragati Gas Turbine (2x104+ 1x122)	330	282	303	6.94	289
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	483	452	11.28	470
	Badarpur TPS (NTPC) (3*95+2*210)	705	391	407	9.93	414
	Thermal (Total)	2917	1269	1275	30.78	1283
	Total Delhi	**2917**	**1269**	**1275**	**30.78**	**1283**
HP	Baspa HPS (IPP) (2*150)	300	61	81	2.73	114
	Malana HPS (IPP) (2*43)	86	55	0	0.51	21
	Other Hydro	728	305	301	7.44	310
	Total HP	**1114**	**421**	**382**	**10.69**	**445**
J & K	Baglihar HPS (IPP) (3*150)	450	450	450	10.80	450
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**450**	**450**	**10.80**	450
Total State Control Area Generation		**39597**	**19353**	**18490**	**440.62**	**18093**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3555**	**5423**	**119.04**	**4960**
Total Regional Availability(Gross)		**64017**	**40806**	**36103**	**879.97**	**36399**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**9050**	**3614**	**115.19**	**4800**
State Control Area Hydro	**5684**	**2306**	**2097**	**59.46**	**2211**
Total Regional Hydro	**17116**	**11356**	**5711**	**174.65**	**7011**

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	-300	100	250	400	1.07	4.22	-3.15
Gwalior-Agra (D/C)	734	1622	1855	0	32.36	0.00	32.36
Zerda-Kankroli	-216	-155	0	292	0.00	4.53	-4.53
Zerda-Bhinmal	-148	-82	50	261	0.00	2.78	-2.78
Malanpur-Auraiya	-79	-93	0	130	0.00	1.87	-1.87
Badod-Kota/Morak	-64	-41	0	117	0.00	1.25	-1.25
Mundra-Mohindergarh(HVDC)	2002	2002	2007	0	48.37	0.00	48.37
Vindhyachal - Rihand	497	332	500	0	9.80	0.00	9.80
Sub Total WR	**2426**	**3685**			**91.61**	**14.64**	**76.97**
Pusauli Bypass	400	400	400	0	9.80	0.00	9.80
MZP- GKP (D/C)	316	408	666	0	10.94	0.00	10.94
Patna-Balia(D/C)	151	295	472	0	8.02	0.00	8.02
B'Sharif-Balia (D/C)	147	225	386	0	6.58	0.00	6.58
Pusauli-Balia	-118	-75	0	118	0.00	1.88	-1.88
Gaya-Fatehpur (765 Kv)	0	284	363	0	1.26	0.00	1.26
Pusauli-Sahupuri	173	173	209	0	4.05	0.00	4.05
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-39	-40	0	40	0.00	0.79	-0.79
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	99	68	382	7	4.11	0.00	4.11
Sub Total ER	**1129**	**1738**			**44.75**	**2.67**	**42.08**
Total IR Exch	**3555**	**5423**			**136.36**	**17.31**	**119.04**

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
31.43	3.02	34.46	6.18	11.34	1.10	7.91	0.00	0.00

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
41.74	60.06	101.80	42.08	76.97	119.04	0.34	16.91	17.24

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	2.94	22.96	64.70	90.23	32.23	2.23	0.86	0.00	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)
50.16	21.46	49.61	18.27	49.87	0.26	0.09	50.14	49.81

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	00:00	404	18:26	0.0	0.0	0.0	0.0
Gorakhpur	400	414	06:05	391	08:25	0.0	0.0	0.0	0.0
Bareilly	400	417	04:05	398	01:52	0.0	0.0	0.0	0.0
Kanpur	400	416	06:02	404	06:42	0.0	0.0	0.0	0.0
Dadri	400	415	04:00	402	12:23	0.0	0.0	0.0	0.0
Ballabhgarh	400	421	03:59	406	18:34	0.0	0.0	0.1	0.0
Bawana	400	416	02:37	403	18:34	0.0	0.0	0.0	0.0
Bassi	400	422	21:49	401	10:06	0.0	0.0	2.3	0.0
Hissar	400	412	02:36	398	18:34	0.0	0.0	0.0	0.0
Moga	400	419	03:42	406	10:06	0.0	0.0	0.0	0.0
Abdullapur	400	421	02:34	396	18:35	0.0	0.0	0.9	0.0
Nalagarh	400	433	04:02	412	19:08	0.0	0.0	57.5	5.6
Kishenpur	400	424	03:59	404	19:03	0.0	0.0	10.0	0.0
Wagoora	400	414	02:31	383	19:04	0.0	10.3	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	770	06:03	741	06:42	0.0	0.3	0.0	0.0
Balia	765	0	00:00	0	00:00	0.0	0.0	0.0	0.0
Moga	765	794	03:46	767	19:08	0.0	0.0	0.0	0.0
Agra	765	786	03:44	763	06:46	0.0	0.0	0.0	0.0
Bhiwani	765	797	03:46	0	10:40	52.1	52.2	0.0	0.0
Unnao	765	771	13:31	746	01:32	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	509.26	1515.08	510.78	1590.18	328.05	543.00
Pong	426.72	384.05	415.93	718.14	422.13	990.81	97.41	283.39
Tehri	829.79	740.04	824.55	1098.00	825.00	1107.95	124.67	124.00
Koteshwar	612.50	598.50	609.05	4.21	610.65	4.80	124.00	120.00
Chamera-I	760.00	748.75	757.29	7.62	0.00	0.00	103.53	104.41
Rihand	268.22	252.98	855.10	340.20	856.80	369.40	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	512.18	5.16	518.71	3.37	112.00	217.00

*** 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	344	0	0	541	0	0	11.01	0.00	11.01
Delhi	-231	108	-20	-2	287	0	0.43	5.12	5.56
Haryana	180	8	0	231	11	0	4.58	0.07	4.65
HP	0	-109	0	0	-583	0	0.00	-5.20	-5.20
J&K	-146	-349	0	-155	-19	0	-3.56	-2.37	-5.93
CHD	0	0	0	0	0	0	0.00	0.04	0.04
Rajasthan	-18	-343	0	-18	-218	0	-0.43	-3.96	-4.39
UP	368	1750	0	131	966	0	4.69	23.26	27.95
Uttarakhand	98	182	0	49	-14	0	2.21	2.11	4.32
Total	**595**	**1247**	**-20**	**777**	**430**	**0**	**18.93**	**19.10**	**38.02**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	541	344	0	0	0	0
Delhi	293	-231	560	-177	0	-20
Haryana	248	129	45	-192	0	0
HP	0	0	82	-686	0	0
J&K	-146	-155	-14	-399	0	0
CHD	0	0	49	0	0	0
Rajasthan	-18	-18	-5	-509	0	0
UP	384	121	1967	0	0	0
Uttarakhand	147	49	188	-18	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 10.10.2014 :

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 : 10.10.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**