पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 17.10.2014
Date of Reporting : 18.10.2014

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
35414	2636	38050	50.12	28690	1310	30000	49.95	755.2	56.87

* 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	45.03	10.39		55.42	51.37	52.36	0.99	107.78	6.65
Haryana	48.47	0.66		49.13	63.67	63.16	-0.51	112.29	0.12
Rajasthan	120.96	3.95	7.63	132.53	38.61	38.86	0.25	171.39	0.00
Delhi	28.10			28.10	43.20	42.10	-1.10	70.20	0.00
UP	101.30	7.50	1.20	110.00	90.61	93.24	2.63	203.24	47.93
Uttarakhand		10.96		10.96	18.00	19.65	1.65	30.60	2.17
HP		9.76		9.76	13.37	14.33	0.96	24.10	0.00
J & K		7.13	0.00	7.13	21.43	24.96	3.53	32.09	0.00
Chandigarh				0.00	3.59	3.52	-0.07	3.52	0.00
Total	**343.86**	**50.35**	**8.83**	**403.03**	**343.84**	**352.18**	**8.34**	**755.21**	**56.87**

* 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	5383	0	-59	15	4331	210	141	0	5383
Haryana	5531	491	17	103	4283	0	130	105	5531
Rajasthan	7887	0	436	-635	6455	0	-82	53	7887
Delhi	3394	0	-191	-218	2145	0	-53	-753	3624
UP	8680	2070	-437	408	8355	1100	87	566	9182
Uttarakhand	1505	75	46	284	1156	0	65	398	1603
HP	1169	0	44	-326	780	0	39	60	1304
J&K	1680	0	88	-63	1086	0	196	-154	1752
Chandigarh	185	0	-19	0	98	0	-13	0	194
Total	**35414**	**2636**	**-75**	**-433**	**28690**	**1310**	**510**	**276**	**35414**

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

Diversity is 1.03

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	1050	1131	1161	27.67	1153	25.20	2.47
	Rihand I STPS (2*500)	1000	625	946	476	15.17	632	15.00	0.17
	Rihand II STPS (2*500)	1000	454	523	520	11.06	461	10.91	0.15
	Rihand III STPS (2*500)	1000	948	1016	990	22.94	956	22.66	0.28
	Dadri I STPS (4*210)	840	815	644	802	17.94	747	17.66	0.28
	Dadri II STPS (2*490)	980	980	847	955	22.10	921	22.00	0.10
	Unchahar I TPS (2*210)	420	163	208	169	4.30	179	3.87	0.44
	Unchahar II TPS (2*210)	420	328	429	334	8.63	360	7.76	0.86
	Unchahar III TPS (1*220)	210	163	207	168	4.29	179	3.85	0.44
	ISTPP (Jhajjhar) (3*500)	1500	990	958	604	18.60	775	19.50	-0.90
	Dadri GPS (4*130.19+2*154.51)	830	800	199	168	4.48	187	4.49	-0.01
	Anta GPS (3*88.71+1*153.2)	419	393	-1	-1	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	484	154	163	3.79	158	3.68	0.11
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.04	2	0.07	-0.03
	Sub Total (A)	**11297**	**8196**	**7261**	**6509**	**161**	**6710**	**157**	**4**
B. NPC	NAPS (2*220)	440	283	324	325	6.82	284	6.79	0.03
	RAPS- B (2*220)	440	395	441	442	9.52	397	9.48	0.04
	RAPS- C (2*220)	440	192	208	207	4.39	183	4.61	-0.22
	Sub Total (B)	**1320**	**870**	**973**	**974**	**20.73**	**864**	**20.88**	**-0.15**
C. NHPC	Chamera I HPS (3*180)	540	534	353	0	3.18	133	3.10	0.08
	Chamera II HPS (3*100)	300	300	100	0	2.18	91	2.10	0.08
	Chamera III HPS (3*77)	231	229	229	0	1.42	59	1.35	0.07
	Bairasuil HPS(3*60)	180	114	120	0	0.99	41	0.93	0.06
	Salal-HPS (6*115)	690	228	204	282	6.02	251	5.48	0.55
	Tanakpur-HPS (3*40)	94	73	84	79	1.80	75	1.75	0.05
	Uri-I HPS (4*120)	480	363	406	441	9.04	377	8.71	0.33
	Uri-II HPS (4*60)	240	203	237	180	5.14	214	4.87	0.27
	Dhauliganga-HPS (4*70)	280	86	207	69	2.91	121	2.07	0.84
	Dulhasti-HPS (3*130)	390	387	403	266	6.63	276	6.50	0.13
	Sewa-II HPS (3*40)	120	119	124	20	0.66	28	0.50	0.16
	Parbati 3 (4*130)	520	260	260	0	0.75	31	0.85	-0.09
	Sub Total (C)	**4065**	**2897**	**2728**	**1337**	**41**	**1697**	**38**	**3**
D.SJVNL	NJPC (6*250)	1500	1605	1010	257	13.41	559	13.07	0.34
	Rampur HEP (4*68.67)	275	150	295	69	3.85	161	3.59	0.26
	Sub Total (D)	1775	1755	1305	326	17.27	719	16.67	0.60
E. THDC	Tehri HPS (4*250)	1000	1060	1064	0	5.47	228	5.40	0.07
	Koteshwar HPS (4*100)	400	91	101	0	1.75	73	1.65	0.10
	Sub Total (E)	**1400**	**1151**	**1165**	**0**	**7.22**	**301**	**7.05**	**0.17**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	644	1177	390	15.68	653	15.47	0.21
	Dehar HPS (6*165)	990	212	660	140	4.99	208	5.09	-0.09
	Pong HPS (6*66)	396	229	318	192	5.54	231	5.50	0.04
	Sub Total (F)	**2900**	**1085**	**2155**	**722**	**26.21**	**1092**	**26.05**	**0.16**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	65	0	0.92	38	0.89	0.03
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	830	210	7.34	306	7.30	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	149	149	3.56	148	3.55	0.00
	Budhil HPS(IPP)	70	0	26	0	0.31	13	0.31	0.00
	Sub Total (G)	1662	0	1071	359	12.12	505	12.05	0.07
H. Total Regional Entities (A-G)		**24419**	**15954**	**16657**	**10227**	**285.31**	**11888**	**277.57**	**7.75**

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	380	190	6.56	273
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	85	100	1.91	79
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	211	242	4.97	207
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1392	1384	31.60	1316
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**2068**	**1916**	**45.03**	**1876**
	Total Hydro	1148	481	485	10.39	433
	Total Punjab	**5828**	**2549**	**2401**	**55.42**	**2309**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	229	435	7.13	297
	DCRTPP (Yamuna nagar) (2*300)	600	279	231	5.90	246
	Faridabad GPS (NTPC)	432	262	261	6.40	267
	RGTPP (khedar) (IPP) (2*600)	1200	716	725	17.64	735
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	598	376	11.40	475
	Thermal (Total)	**4944**	**2084**	**2028**	**48.47**	**2020**
	Total Hydro	62	25	30	0.66	28
	Total Haryana	**5006**	**2109**	**2058**	**49.13**	**2047**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	415	828	17.31	721
	suratgarh TPS (6*250)	1500	1154	905	24.84	1035
	Chabra TPS (3*250)	750	556	569	9.68	403
	Dholpur GPS (3*110)	330	117	122	2.68	112
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	38	38	2.19	91
	RAPS A (NPC) (1*100+1*200)	300	180	89	4.37	182
	Barsingsar (NLC) (2*125)	250	184	184	4.30	179
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	832	465	19.11	796
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	462	462	9.68	403
	Kawai(Adani) (2*660)	1320	1172	846	26.79	1116
	Thermal (Total)	**8026**	**5110**	**4508**	**121**	**5040**
	Total Hydro	550	234	154	3.95	165
	Wind power	2798	115	474	6.56	273
	Biomass	99	27	27	0.65	27
	Solar	730	0	0	0.42	18
	Renewable/Others (Total)	3627	142	501	7.63	318
	Total Rajasthan	**12203**	**5486**	**5163**	**132.53**	**5522**
UP	Anpara TPS (3*210+2*500)	1630	867	890	21.10	879
	Obra TPS (2*50+2*94+5*200)	1194	358	324	8.40	350
	Paricha TPS (2*110+2*220+2*250)	1140	520	583	13.50	563
	Panki TPS (2*105)	210	108	108	2.40	100
	Harduaganj TPS (1*60+1*105+2*250)	665	461	434	10.60	442
	Tanda TPS (NTPC) (4*110)	440	240	174	5.30	221
	Roza TPS (IPP) (4*300)	1200	824	819	19.60	817
	Anpara-C (IPP) (2*600)	1200	536	545	12.80	533
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	321	322	7.60	317
	Thermal (Total)	**8129**	**4235**	**4199**	**101.30**	**4221**
	Vishnuparyag HPS (IPP)	400	188	169	4.20	175
	Other Hydro	527	129	106	3.30	138
	Cogeneration	981	50	50	1.20	50
	Total UP	**10037**	**4602**	**4524**	**110.00**	**4408**
Uttarakhand	Total Hydro	1398	563	411	10.96	456
	Total Uttarakhand	**1398**	**563**	**411**	**10.96**	**456**
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.02	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	76	80	1.86	78
	Pragati Gas Turbine (2x104+ 1x122)	330	267	260	6.46	269
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	440	448	10.67	445
	Badarpur TPS (NTPC) (3*95+2*210)	705	390	368	9.13	380
	Thermal (Total)	2917	1173	1156	28.10	1171
	Total Delhi	**2917**	**1173**	**1156**	**28.10**	**1171**
HP	Baspa HPS (IPP) (2*150)	300	57	29	2.17	90
	Malana HPS (IPP) (2*43)	86	23	0	0.45	19
	Other Hydro	728	303	287	7.15	298
	Total HP	**1114**	**383**	**316**	**9.76**	**407**
J & K	Baglihar HPS (IPP) (3*150)	450	450	240	7.13	297
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**450**	**240**	**7.13**	297
Total State Control Area Generation		**39597**	**17315**	**16269**	**403.03**	**16618**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**2604**	**3581**	**95.34**	**3973**
Total Regional Availability(Gross)		**64017**	**36576**	**30077**	**783.69**	**32479**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**8248**	**2595**	**99.69**	**4154**
State Control Area Hydro	**5684**	**2265**	**1742**	**50.35**	**1923**
Total Regional Hydro	**17116**	**10513**	**4337**	**150.04**	**6077**

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	-50	50	150	300	0.62	1.20	-0.58
Gwalior-Agra (D/C)	125	492	1190	0	14.93	0.00	14.93
Zerda-Kankroli	-290	-326	0	371	0.00	6.46	-6.46
Zerda-Bhinmal	-235	-249	0	326	0.00	4.45	-4.45
Malanpur-Auraiya	71	55	0	88	0.00	1.42	-1.42
Badod-Kota/Morak	-109	-220	0	248	0.00	3.78	-3.78
Mundra-Mohindergarh(HVDC)	1401	1699	1705	0	39.07	0.00	39.07
Vindhyachal - Rihand	497	503	509	0	11.97	0.00	11.97
Sub Total WR	**1410**	**2004**			**66.59**	**17.31**	**49.28**
Pusauli Bypass	400	400	400	0	9.78	0.00	9.78
MZP- GKP (D/C)	124	255	601	0	8.60	0.00	8.60
Patna-Balia(D/C)	522	476	711	0	14.44	0.00	14.44
B'Sharif-Balia (D/C)	90	135	339	0	5.30	0.00	5.30
Pusauli-Balia	-123	-105	0	123	0.00	2.38	-2.38
Gaya-Fatehpur (765 Kv)	0	255	417	0	3.02	0.00	3.02
Pusauli-Sahupuri	150	154	163	0	3.42	0.00	3.42
K'nasa-Sahupuri	-32	-24	0	32	0.00	0.63	-0.63
Son Ngr-Rihand	-30	-46	0	46	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	93	77	402	0	5.40	0.00	5.40
Sub Total ER	**1194**	**1577**			**49.96**	**3.90**	**46.07**
Total IR Exch	**2604**	**3581**			**116.55**	**21.21**	**95.34**

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
32.36	2.09	34.45	5.77	0.82	-6.36	-0.26	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
34.49	46.48	80.97	46.07	49.28	95.34	11.58	2.80	14.37

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	1.54	12.01	39.66	75.47	50.53	7.25	2.89	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)
50.20	13.01	49.57	18.11	49.92	0.16	0.10	50.19	49.85

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	418	02:01	408	15:49	0.0	0.0	0.0	0.0
Gorakhpur	400	413	13:32	400	10:24	0.0	0.0	0.0	0.0
Bareilly	400	423	04:04	394	11:17	0.0	0.0	4.1	0.0
Kanpur	400	419	21:43	404	18:36	0.0	0.0	0.0	0.0
Dadri	400	421	04:00	400	11:17	0.0	0.0	0.5	0.0
Ballabhgarh	400	429	04:03	406	10:24	0.0	0.0	34.0	0.0
Bawana	400	427	04:01	407	10:24	0.0	0.0	31.4	0.0
Bassi	400	429	04:03	406	10:24	0.0	0.0	30.9	0.0
Hissar	400	419	04:01	398	18:33	0.0	0.0	0.0	0.0
Moga	400	423	04:03	404	09:31	0.0	0.0	10.9	0.0
Abdullapur	400	428	02:28	396	18:36	0.0	0.0	28.7	0.0
Nalagarh	400	431	02:30	409	10:21	0.0	0.0	33.7	0.7
Kishenpur	400	423	02:28	396	18:32	0.0	0.0	9.2	0.0
Wagoora	400	415	01:30	380	18:45	0.0	9.7	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	780	04:01	742	10:25	0.0	0.0	0.0	0.0
Balia	765	769	06:04	747	10:24	0.0	0.0	0.0	0.0
Moga	765	802	04:00	744	10:18	0.0	0.0	1.2	0.0
Agra	765	795	04:04	759	10:25	0.0	0.0	0.0	0.0
Bhiwani	765	799	23:53	381	10:24	91.4	91.4	0.0	0.0
Unnao	765	768	04:01	0	10:30	2.7	3.7	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	508.53	1470.42	511.06	1605.30	289.11	448.93
Pong	426.72	384.05	415.28	680.86	421.77	975.89	57.82	340.54
Tehri	829.79	740.04	824.55	1107.95	824.75	1107.95	91.21	118.00
Koteshwar	612.50	598.50	608.78	3.98	610.30	4.72	118.00	116.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	82.98	86.50
Rihand	268.22	252.98	854.70	333.20	858.70	402.80	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	511.34	3.23	518.58	2.90	67.00	142.00

*** 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	0	0	0	0	15	0	0.00	0.27	0.27
Delhi	-314	-403	-36	-110	-104	-5	-3.22	-4.83	-8.06
Haryana	22	83	0	45	58	0	0.67	-0.48	0.18
HP	81	-21	0	81	-407	0	1.94	-2.78	-0.85
J&K	-128	-25	0	-59	-4	0	-1.34	-0.08	-1.42
CHD	0	0	0	0	0	0	0.00	0.30	0.30
Rajasthan	-145	197	2	-145	-491	2	-3.49	0.58	-2.91
UP	566	0	0	408	0	0	10.85	0.00	10.85
Uttarakhand	318	80	0	220	63	0	5.78	3.00	8.78
Total	**399**	**-90**	**-33**	**440**	**-870**	**-3**	**11.17**	**-4.02**	**7.15**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	122	0	0	0
Delhi	30	-340	124	-513	-5	-36
Haryana	45	22	84	-382	0	0
HP	81	81	139	-409	0	0
J&K	-27	-128	99	-102	0	0
CHD	0	0	39	0	0	0
Rajasthan	-145	-145	391	-563	2	0
UP	577	398	0	0	0	0
Uttarakhand	318	220	293	-4	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 17.10.2014 :

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 : 17.10.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**