पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.10.2014
Date of Reporting : 27.10.2014

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
35621	990	36611	50.13	29682	1145	30827	50.03	761.9	25.18

* 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	27.06	9.91		36.97	59.78	60.83	1.05	97.80	0.00
Haryana	43.24	0.50		43.74	62.72	63.50	0.78	107.24	0.00
Rajasthan	121.02	4.32	3.91	129.25	50.57	53.74	3.17	182.99	0.00
Delhi	23.08			23.08	38.26	39.46	1.20	62.54	0.00
UP	118.20	7.90	1.20	127.30	99.45	99.06	-0.38	226.36	25.18
Uttarakhand		9.34		9.34	18.70	19.05	0.35	28.38	0.00
HP		7.72		7.72	12.73	13.02	0.29	20.74	0.00
J & K		6.22	0.00	6.22	25.10	26.47	1.36	32.69	0.00
Chandigarh				0.00	3.23	3.14	-0.09	3.14	0.00
Total	**332.59**	**45.90**	**5.11**	**383.61**	**370.51**	**378.26**	**7.75**	**761.87**	**25.18**

* 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	4594	0	-176	251	3793	0	114	154	4594
Haryana	5738	0	-199	65	4254	0	75	43	6039
Rajasthan	7555	0	-29	-20	7219	0	-73	273	8435
Delhi	3053	0	-238	-140	2209	0	-24	-595	3122
UP	10486	990	199	392	9244	1145	-131	518	10486
Uttarakhand	1425	0	-44	275	1001	0	-20	372	1572
HP	1027	0	-58	-400	665	0	-49	65	1116
J&K	1574	0	-103	76	1193	0	55	0	1754
Chandigarh	169	0	-25	0	104	0	-5	0	172
Total	**35621**	**990**	**-672**	**500**	**29682**	**1145**	**-58**	**830**	**35621**

* 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	1426	1592	1191	36.68	1528	34.23	2.45
	Rihand I STPS (2*500)	1000	879	868	891	21.84	910	20.46	1.39
	Rihand II STPS (2*500)	1000	470	481	485	11.72	488	10.80	0.92
	Rihand III STPS (2*500)	1000	965	924	998	23.06	961	22.00	1.06
	Dadri I STPS (4*210)	840	815	603	600	14.74	614	13.79	0.95
	Dadri II STPS (2*490)	980	980	702	705	17.16	715	16.86	0.30
	Unchahar I TPS (2*210)	420	398	392	336	9.03	376	8.48	0.55
	Unchahar II TPS (2*210)	420	404	348	309	8.26	344	7.60	0.67
	Unchahar III TPS (1*220)	210	202	162	153	4.05	169	3.72	0.33
	ISTPP (Jhajjhar) (3*500)	1500	990	630	642	14.09	587	14.66	-0.57
	Dadri GPS (4*130.19+2*154.51)	830	801	395	413	9.48	395	9.38	0.10
	Anta GPS (3*88.71+1*153.2)	419	398	249	235	6.06	253	6.05	0.01
	Auraiya GPS (4*111.19+2*109.30)	663	641	325	316	7.64	318	7.53	0.11
	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**	**9373**	**7671**	**7274**	**184**	**7661**	**176**	**8**
B. NPC	NAPS (2*220)	440	283	321	321	6.83	285	6.79	0.04
	RAPS- B (2*220)	440	400	443	443	9.62	401	9.60	0.02
	RAPS- C (2*220)	440	190	208	210	4.31	180	4.56	-0.25
	Sub Total (B)	**1320**	**873**	**972**	**974**	**20.76**	**865**	**20.95**	**-0.20**
C. NHPC	Chamera I HPS (3*180)	540	534	374	0	1.56	65	1.60	-0.05
	Chamera II HPS (3*100)	300	300	301	0	2.13	89	2.10	0.03
	Chamera III HPS (3*77)	231	229	152	0	1.32	55	1.30	0.02
	Bairasuil HPS(3*60)	180	178	180	0	0.85	35	0.81	0.04
	Salal-HPS (6*115)	690	199	160	305	4.91	205	4.76	0.15
	Tanakpur-HPS (3*40)	94	54	65	50	1.32	55	1.29	0.03
	Uri-I HPS (4*120)	480	261	312	278	6.49	271	6.28	0.22
	Uri-II HPS (4*60)	240	156	202	164	3.87	161	3.74	0.13
	Dhauliganga-HPS (4*70)	280	72	211	70	1.79	75	1.73	0.07
	Dulhasti-HPS (3*130)	390	387	402	217	5.64	235	5.50	0.14
	Sewa-II HPS (3*40)	120	119	115	0	0.40	16	0.38	0.02
	Parbati 3 (4*130)	520	260	261	0	0.82	34	0.78	0.04
	Sub Total (C)	**4065**	**2749**	**2733**	**1084**	**31**	**1296**	**30**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1608	399	12.73	530	12.76	-0.03
	Rampur HEP (4*68.67)	275	242	300	130	3.29	137	3.24	0.05
	Sub Total (D)	1775	1847	1908	529	16.01	667	15.99	0.02
E. THDC	Tehri HPS (4*250)	1000	1060	728	0	5.33	222	5.30	0.03
	Koteshwar HPS (4*100)	400	78	100	0	1.34	56	1.34	0.00
	Sub Total (E)	**1400**	**1138**	**828**	**0**	**6.67**	**278**	**6.64**	**0.03**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	601	1020	497	14.54	606	14.42	0.12
	Dehar HPS (6*165)	990	195	495	145	4.99	208	4.69	0.30
	Pong HPS (6*66)	396	226	324	126	5.35	223	5.43	-0.08
	Sub Total (F)	**2900**	**1022**	**1839**	**768**	**24.88**	**1037**	**24.54**	**0.35**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	112	0	0.86	36	0.84	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	730	175	6.37	265	6.48	-0.12
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	240	235	5.72	238	5.77	-0.05
	Budhil HPS(IPP)	70	0	69	0	0.21	9	0.21	0.00
	Sub Total (G)	1662	0	1151	410	13.15	548	13.30	-0.15
H. Total Regional Entities (A-G)		**24419**	**17002**	**17102**	**11039**	**296.43**	**12351**	**287.32**	**9.11**

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	480	7.73	322
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.72	72
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	206	207	4.39	183
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	697	362	13.23	551
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**1143**	**1129**	**27.06**	**1128**
	Total Hydro	1148	410	415	9.91	413
	Total Punjab	**5828**	**1553**	**1544**	**36.97**	**1540**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	206	212	4.99	208
	DCRTPP (Yamuna nagar) (2*300)	600	246	231	5.60	234
	Faridabad GPS (NTPC)	432	174	172	4.16	173
	RGTPP (khedar) (IPP) (2*600)	1200	369	355	8.70	362
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1109	739	19.79	825
	Thermal (Total)	**4944**	**2104**	**1709**	**43.24**	**1802**
	Total Hydro	62	22	20	0.50	21
	Total Haryana	**5006**	**2126**	**1729**	**43.74**	**1822**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	867	834	19.61	817
	suratgarh TPS (6*250)	1500	917	922	23.90	996
	Chabra TPS (3*250)	750	224	215	5.37	224
	Dholpur GPS (3*110)	330	110	117	2.60	108
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	163	163	4.19	174
	RAPS A (NPC) (1*100+1*200)	300	180	169	4.41	184
	Barsingsar (NLC) (2*125)	250	184	184	4.33	180
	Giral LTPS (2*125)	250	59	59	1.25	52
	Rajwest LTPS (IPP) (8*135)	1080	832	554	19.87	828
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	515	500	11.38	474
	Kawai(Adani) (2*660)	1320	1144	1061	24.11	1005
	Thermal (Total)	**8026**	**5195**	**4778**	**121**	**5042**
	Total Hydro	550	154	145	4.32	180
	Wind power	2798	33	206	2.97	124
	Biomass	99	35	35	0.83	35
	Solar	730	0	0	0.12	5
	Renewable/Others (Total)	3627	68	241	3.91	163
	Total Rajasthan	**12203**	**5417**	**5164**	**129.25**	**5385**
UP	Anpara TPS (3*210+2*500)	1630	920	925	21.60	900
	Obra TPS (2*50+2*94+5*200)	1194	449	408	10.40	433
	Paricha TPS (2*110+2*220+2*250)	1140	754	630	17.00	708
	Panki TPS (2*105)	210	151	149	3.50	146
	Harduaganj TPS (1*60+1*105+2*250)	665	492	487	12.40	517
	Tanda TPS (NTPC) (4*110)	440	338	333	8.30	346
	Roza TPS (IPP) (4*300)	1200	594	810	18.60	775
	Anpara-C (IPP) (2*600)	1200	846	801	19.70	821
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	218	320	6.70	279
	Thermal (Total)	**8129**	**4762**	**4863**	**118.20**	**4925**
	Vishnuparyag HPS (IPP)	400	153	144	3.40	142
	Other Hydro	527	131	260	4.50	188
	Cogeneration	981	50	50	1.20	50
	Total UP	**10037**	**5096**	**5317**	**127.30**	**5163**
Uttarakhand	Total Hydro	1398	537	283	9.34	389
	Total Uttarakhand	**1398**	**537**	**283**	**9.34**	**389**
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	0
	Delhi Gas Turbine (6x30 + 3x34)	282	77	79	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	265	271	6.42	268
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	307	258	6.63	276
	Badarpur TPS (NTPC) (3*95+2*210)	705	312	326	8.20	342
	Thermal (Total)	2917	961	934	23.08	962
	Total Delhi	**2917**	**961**	**934**	**23.08**	**962**
HP	Baspa HPS (IPP) (2*150)	300	30	61	1.76	73
	Malana HPS (IPP) (2*43)	86	39	0	0.35	15
	Other Hydro	728	227	234	5.61	234
	Total HP	**1114**	**296**	**295**	**7.72**	**322**
J & K	Baglihar HPS (IPP) (3*150)	450	382	214	0.00	0
	Other Hydro/IPP	436	382	214	6.22	259
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**764**	**428**	**6.22**	259
Total State Control Area Generation		**39597**	**16750**	**15694**	**383.61**	**15842**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3667**	**4583**	**112.55**	**4690**
Total Regional Availability(Gross)		**64017**	**37519**	**31316**	**792.59**	**32883**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**8150**	**2556**	**85.89**	**3579**
State Control Area Hydro	**5684**	**2314**	**1846**	**45.90**	**1771**
Total Regional Hydro	**17116**	**10464**	**4402**	**131.79**	**5350**

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	150	300	0	4.08	0.00	4.08
Gwalior-Agra (D/C)	1521	1618	1933	0	37.98	0.00	37.98
Zerda-Kankroli	-195	-179	0	250	0.00	3.84	-3.84
Zerda-Bhinmal	-163	-112	57	253	0.00	2.25	-2.25
Malanpur-Auraiya	-105	-34	0	-185	0.00	3.68	-3.68
Badod-Kota/Morak	-147	-216	0	266	0.00	4.55	-4.55
Mundra-Mohindergarh(HVDC)	1902	1902	1905	0	45.96	0.00	45.96
Vindhyachal - Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total WR	**2863**	**3129**			**88.02**	**14.32**	**73.70**
Pusauli Bypass	400	400	400	0	9.72	0.00	9.72
MZP- GKP (D/C)	184	320	604	0	9.50	0.00	9.50
Patna-Balia(D/C)	158	275	481	0	8.01	0.00	8.01
B'Sharif-Balia (D/C)	66	182	146	0	5.24	0.00	5.24
Pusauli-Balia	-70	-57	0	80	0.00	1.41	-1.41
Gaya-Fatehpur (765 Kv)	84	218	304	0	2.64	0.00	2.64
Pusauli-Sahupuri	102	142	153	0	2.77	0.00	2.77
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-46	-40	0	46	0.00	0.94	-0.94
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-74	14	366	74	3.34	0.00	3.34
Sub Total ER	**804**	**1454**			**41.20**	**2.35**	**38.85**
Total IR Exch	**3667**	**4583**			**129.22**	**16.67**	**112.55**

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
22.27	1.58	23.84	5.65	-0.63	4.54	2.23	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
34.66	64.88	99.54	38.85	73.70	112.55	4.19	8.82	13.01

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	0.76	6.49	39.93	57.78	19.94	14.75	1.79	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)
50.27	14.06	49.74	11.19	50.02	0.07	0.08	50.29	49.74

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	03:05	410	10:18	0.0	0.0	0.0	0.0
Gorakhpur	400	414	14:05	398	18:12	0.0	0.0	0.0	0.0
Bareilly	400	422	21:54	402	10:29	0.0	0.0	0.6	0.0
Kanpur	400	420	21:46	405	10:31	0.0	0.0	0.0	0.0
Dadri	400	420	03:20	408	10:17	0.0	0.0	0.0	0.0
Ballabhgarh	400	425	03:23	410	10:27	0.0	0.0	33.8	0.0
Bawana	400	423	00:59	410	10:18	0.0	0.0	35.3	0.0
Bassi	400	426	21:44	404	08:22	0.0	0.0	30.2	0.0
Hissar	400	416	03:24	401	10:28	0.0	0.0	0.0	0.0
Moga	400	422	00:00	407	10:29	0.0	0.0	8.3	0.0
Abdullapur	400	424	00:00	396	18:32	0.0	0.0	32.5	0.0
Nalagarh	400	431	23:41	414	18:18	0.0	0.0	76.3	0.6
Kishenpur	400	422	02:59	398	19:10	0.0	0.0	1.0	0.0
Wagoora	400	414	03:24	384	19:12	0.0	13.3	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	775	21:55	739	10:23	0.0	2.3	0.0	0.0
Balia	765	770	14:04	748	18:11	0.0	0.0	0.0	0.0
Moga	765	798	03:24	770	10:28	0.0	0.0	0.0	0.0
Agra	765	793	21:54	759	10:22	0.0	0.0	0.0	0.0
Bhiwani	765	801	21:52	770	10:22	0.0	0.0	0.5	0.0
Unnao	765	761	04:01	739	10:22	0.0	4.3	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	507.60	1426.07	511.04	1605.30	244.01	409.32
Pong	426.72	384.05	414.28	644.91	420.76	916.71	82.06	333.91
Tehri	829.79	740.04	823.95	1086.79	824.60	1107.95	86.00	116.00
Koteshwar	612.50	598.50	609.33	4.21	611.70	5.46	116.00	89.00
Chamera-I	760.00	748.75	757.24	30.68	0.00	0.00	66.73	42.10
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	510.39	3.02	518.14	2.89	61.00	132.00

*** 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	154	0	0	251	0	0.00	6.05	6.05
Delhi	-449	-126	-21	-91	-27	-21	-5.49	-2.93	-8.42
Haryana	-42	85	0	-24	89	0	-0.90	-0.52	-1.42
HP	81	-16	0	81	-480	0	1.94	-1.96	-0.02
J&K	51	-51	0	27	49	0	2.04	-0.17	1.87
CHD	0	0	0	0	0	0	0.00	0.00	0.00
Rajasthan	-64	335	2	-64	43	2	-1.54	6.42	4.88
UP	518	0	0	392	0	0	9.74	0.00	9.74
Uttarakhand	318	55	0	220	55	0	5.77	1.90	7.67
Total	**413**	**436**	**-19**	**540**	**-21**	**-19**	**11.56**	**8.79**	**20.35**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	385	3	2	0
Delhi	-91	-449	-4	-266	-21	-23
Haryana	-24	-42	89	-399	0	0
HP	81	81	104	-555	0	0
J&K	153	12	49	-51	0	0
CHD	0	0	0	0	0	0
Rajasthan	-64	-64	349	-262	2	2
UP	518	335	0	0	0	0
Uttarakhand	318	220	163	26	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 26.10.2014 :

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 : 26.10.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**