पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.10.2014
Date of Reporting : 21.10.2014

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
36195	2037	38232	50.07	29056	960	30016	50.12	778.2	50.58

* 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	34.13	11.13		45.26	56.99	58.92	1.93	104.19	4.34
Haryana	54.80	0.65		55.45	63.47	63.80	0.32	119.25	4.61
Rajasthan	129.85	5.28	3.60	138.74	42.77	45.91	3.14	184.64	0.00
Delhi	24.10			24.10	42.42	43.80	1.38	67.90	0.00
UP	111.28	6.42	1.20	118.90	94.70	92.80	-1.90	211.70	39.73
Uttarakhand		9.76		9.76	18.54	21.22	2.68	30.99	1.90
HP		8.30		8.30	14.25	15.55	1.29	23.85	0.00
J & K		7.00	0.00	7.00	22.58	25.13	2.55	32.13	0.00
Chandigarh				0.00	3.48	3.55	0.07	3.55	0.00
Total	**354.16**	**48.56**	**4.80**	**407.52**	**359.20**	**370.67**	**11.47**	**778.20**	**50.58**

* 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	5022	0	-8	0	3941	0	-85	2	5022
Haryana	6170	164	12	-6	4069	0	-119	2	6170
Rajasthan	7872	0	-105	-593	7058	0	225	-491	8545
Delhi	3432	8	-5	-206	1989	0	-43	-698	3606
UP	9014	1720	-610	397	8959	960	-381	1157	9491
Uttarakhand	1581	145	156	389	1102	0	72	362	1687
HP	1194	0	-42	-125	742	0	34	47	1251
J&K	1725	0	112	20	1100	0	48	-71	1792
Chandigarh	185	0	-13	0	96	0	-9	0	194
Total	**36195**	**2037**	**-503**	**-124**	**29056**	**960**	**-258**	**309**	**36707**

* 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	1463	1594	1475	37.63	1568	35.08	2.55
	Rihand I STPS (2*500)	1000	858	907	636	22.09	920	20.52	1.57
	Rihand II STPS (2*500)	1000	460	505	507	12.08	503	11.00	1.08
	Rihand III STPS (2*500)	1000	939	914	912	23.54	981	22.36	1.18
	Dadri I STPS (4*210)	840	815	627	611	15.42	643	14.50	0.92
	Dadri II STPS (2*490)	980	980	898	693	19.34	806	19.91	-0.57
	Unchahar I TPS (2*210)	420	152	159	155	3.92	163	3.54	0.38
	Unchahar II TPS (2*210)	420	307	325	316	7.58	316	6.85	0.73
	Unchahar III TPS (1*220)	210	155	161	160	3.80	158	3.45	0.35
	ISTPP (Jhajjhar) (3*500)	1500	1472	1451	912	25.79	1075	26.96	-1.17
	Dadri GPS (4*130.19+2*154.51)	830	800	197	202	4.69	196	4.72	-0.02
	Anta GPS (3*88.71+1*153.2)	419	393	0	0	0.00	0	0.00	0.00
	Auraiya GPS (4*111.19+2*109.30)	663	530	158	165	3.91	163	3.87	0.05
	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**	**9327**	**7896**	**6744**	**180**	**7494**	**173**	**7**
B. NPC	NAPS (2*220)	440	284	319	327	6.80	283	6.82	-0.01
	RAPS- B (2*220)	440	398	400	398	8.60	358	9.55	-0.95
	RAPS- C (2*220)	440	190	212	211	4.46	186	4.56	-0.10
	Sub Total (B)	**1320**	**872**	**931**	**936**	**19.86**	**828**	**20.93**	**-1.07**
C. NHPC	Chamera I HPS (3*180)	540	534	367	0	3.28	137	3.26	0.02
	Chamera II HPS (3*100)	300	292	200	0	1.88	78	2.00	-0.12
	Chamera III HPS (3*77)	231	229	228	0	1.31	55	1.30	0.01
	Bairasuil HPS(3*60)	180	178	122	0	1.07	44	0.95	0.12
	Salal-HPS (6*115)	690	230	185	318	5.70	237	5.51	0.19
	Tanakpur-HPS (3*40)	94	63	74	61	1.48	62	1.50	-0.02
	Uri-I HPS (4*120)	480	340	355	341	8.26	344	8.15	0.11
	Uri-II HPS (4*60)	240	185	194	200	4.57	190	4.44	0.13
	Dhauliganga-HPS (4*70)	280	86	207	70	2.07	86	2.07	0.00
	Dulhasti-HPS (3*130)	390	383	264	270	5.59	233	5.50	0.09
	Sewa-II HPS (3*40)	120	119	124	0	0.38	16	0.38	0.01
	Parbati 3 (4*130)	520	260	131	0	0.80	33	0.78	0.02
	Sub Total (C)	**4065**	**2899**	**2450**	**1260**	**36**	**1516**	**36**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	918	168	11.99	500	11.94	0.05
	Rampur HEP (4*68.67)	275	134	217	47	3.32	138	3.17	0.15
	Sub Total (D)	1775	1739	1135	215	15.31	638	15.11	0.20
E. THDC	Tehri HPS (4*250)	1000	1060	785	0	5.07	211	4.95	0.13
	Koteshwar HPS (4*100)	400	91	100	0	1.78	74	1.75	0.03
	Sub Total (E)	**1400**	**1151**	**885**	**0**	**6.85**	**285**	**6.70**	**0.16**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	621	1179	390	15.71	655	14.89	0.82
	Dehar HPS (6*165)	990	173	495	140	4.27	178	4.15	0.12
	Pong HPS (6*66)	396	237	318	186	5.47	228	5.70	-0.22
	Sub Total (F)	**2900**	**1031**	**1992**	**716**	**25.45**	**1061**	**24.73**	**0.72**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	94	54	1.01	42	0.98	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	810	180	6.41	267	6.48	-0.06
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	295	293	7.08	295	7.12	-0.05
	Budhil HPS(IPP)	70	0	35	0	0.25	11	0.25	0.00
	Sub Total (G)	1662	0	1234	527	14.75	615	14.83	-0.09
H. Total Regional Entities (A-G)		**24419**	**17020**	**16523**	**10398**	**298.45**	**12436**	**290.97**	**7.49**

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	210	160	4.34	181
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	100	80	2.02	84
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	253	218	5.11	213
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	919	965	22.66	944
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**1482**	**1423**	**34.13**	**1422**
	Total Hydro	1148	475	444	11.13	464
	Total Punjab	**5828**	**1957**	**1867**	**45.26**	**1886**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	655	603	13.84	576
	DCRTPP (Yamuna nagar) (2*300)	600	268	234	5.98	249
	Faridabad GPS (NTPC)	432	198	195	4.56	190
	RGTPP (khedar) (IPP) (2*600)	1200	971	750	19.46	811
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	617	270	10.97	457
	Thermal (Total)	**4944**	**2709**	**2052**	**54.80**	**2283**
	Total Hydro	62	21	29	0.65	27
	Total Haryana	**5006**	**2730**	**2081**	**55.45**	**2311**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	652	742	15.70	654
	suratgarh TPS (6*250)	1500	1356	1148	29.40	1225
	Chabra TPS (3*250)	750	443	402	10.50	438
	Dholpur GPS (3*110)	330	115	116	2.67	111
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	157	157	5.30	221
	RAPS A (NPC) (1*100+1*200)	300	178	175	4.38	183
	Barsingsar (NLC) (2*125)	250	184	184	4.10	171
	Giral LTPS (2*125)	250	0	0	0.00	0
	Rajwest LTPS (IPP) (8*135)	1080	802	677	19.90	829
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	451	451	9.60	400
	Kawai(Adani) (2*660)	1320	1175	995	28.30	1179
	Thermal (Total)	**8026**	**5513**	**5047**	**130**	**5410**
	Total Hydro	550	232	192	5.28	220
	Wind power	2798	56	140	2.58	107
	Biomass	99	32	32	0.77	32
	Solar	730	0	0	0.26	11
	Renewable/Others (Total)	3627	88	172	3.60	150
	Total Rajasthan	**12203**	**5833**	**5411**	**138.74**	**5781**
UP	Anpara TPS (3*210+2*500)	1630	941	924	22.30	929
	Obra TPS (2*50+2*94+5*200)	1194	439	448	10.60	442
	Paricha TPS (2*110+2*220+2*250)	1140	557	471	11.50	479
	Panki TPS (2*105)	210	81	77	1.80	75
	Harduaganj TPS (1*60+1*105+2*250)	665	457	488	11.40	475
	Tanda TPS (NTPC) (4*110)	440	280	286	7.09	296
	Roza TPS (IPP) (4*300)	1200	810	810	19.69	820
	Anpara-C (IPP) (2*600)	1200	797	787	19.14	798
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	361	360	7.76	323
	Thermal (Total)	**8129**	**4723**	**4651**	**111.28**	**4637**
	Vishnuparyag HPS (IPP)	400	168	163	3.82	159
	Other Hydro	527	94	86	2.60	108
	Cogeneration	981	50	50	1.20	50
	Total UP	**10037**	**5035**	**4950**	**118.90**	**4795**
Uttarakhand	Total Hydro	1398	505	321	9.76	407
	Total Uttarakhand	**1398**	**505**	**321**	**9.76**	**407**
Delhi	Rajghat TPS (2*67.5)	135	0	0	-0.01	-1
	Delhi Gas Turbine (6x30 + 3x34)	282	79	78	1.83	76
	Pragati Gas Turbine (2x104+ 1x122)	330	262	269	6.42	268
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	303	307	7.52	313
	Badarpur TPS (NTPC) (3*95+2*210)	705	303	340	8.34	347
	Thermal (Total)	2917	947	994	24.10	1004
	Total Delhi	**2917**	**947**	**994**	**24.10**	**1004**
HP	Baspa HPS (IPP) (2*150)	300	30	30	1.74	72
	Malana HPS (IPP) (2*43)	86	60	0	0.45	19
	Other Hydro	728	259	215	6.11	255
	Total HP	**1114**	**349**	**245**	**8.30**	**346**
J & K	Baglihar HPS (IPP) (3*150)	450	442	236	7.00	292
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**442**	**236**	**7.00**	292
Total State Control Area Generation		**39597**	**17798**	**16105**	**407.52**	**16821**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4023.81**	**3617.58**	**99.06**	**4127**
Total Regional Availability(Gross)		**64017**	**38345**	**30120**	**805.03**	**33384**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7367**	**2424**	**91.41**	**3809**
State Control Area Hydro	**5684**	**2118**	**1553**	**48.56**	**1864**
Total Regional Hydro	**17116**	**9485**	**3977**	**139.97**	**5673**

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	-500	-500	0	500	0.00	11.82	-11.82
Gwalior-Agra (D/C)	1228	1207	1888	0	30.26	0.00	30.26
Zerda-Kankroli	-201	-229	0	296	0.00	4.93	-4.93
Zerda-Bhinmal	-153	-169	22	253	0.00	3.29	-3.29
Malanpur-Auraiya	-67	-123	0	146	0.00	2.39	-2.39
Badod-Kota/Morak	-159	-208	0	241	0.00	4.34	-4.34
Mundra-Mohindergarh(HVDC)	1500	1198	1504	0	33.33	0.00	33.33
Vindhyachal - Rihand	484	502	510	0	8.06	0.00	8.06
Sub Total WR	**2132**	**1678**			**71.66**	**26.77**	**44.89**
Pusauli Bypass	400	400	400	0	9.69	0.00	9.69
MZP- GKP (D/C)	402	344	734	0	11.28	0.00	11.28
Patna-Balia(D/C)	690	599	872	0	17.29	0.00	17.29
B'Sharif-Balia (D/C)	188	125	334	0	5.03	0.00	5.03
Pusauli-Balia	-91	-87	0	109	0.00	1.77	-1.77
Gaya-Fatehpur (765 Kv)	0	329	487	0	4.41	0.00	4.41
Pusauli-Sahupuri	153	172	176	0	3.71	0.00	3.71
K'nasa-Sahupuri	-32	-26	0	32	0.00	0.73	-0.73
Son Ngr-Rihand	-40	-43	0	46	0.00	0.94	-0.94
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	222	127	438	0	6.19	0.00	6.19
Sub Total ER	**1892**	**1940**			**57.60**	**3.43**	**54.17**
Total IR Exch	**4024**	**3618**			**129.26**	**30.20**	**99.06**

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
30.41	1.48	31.89	5.53	-0.32	4.80	-3.60	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
42.84	41.21	84.05	54.17	44.89	99.06	11.33	3.67	15.01

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	0.96	7.30	42.07	59.21	18.02	11.26	4.24	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	0.00	49.72	6.15	50.02	0.09	0.09	50.33	49.90

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	21:59	406	09:17	0.0	0.0	0.0	0.0
Gorakhpur	400	412	00:00	395	09:32	0.0	0.0	0.0	0.0
Bareilly	400	418	20:56	404	05:49	0.0	0.0	0.0	0.0
Kanpur	400	419	00:00	401	09:45	0.0	0.0	0.0	0.0
Dadri	400	419	00:00	403	09:39	3.3	3.3	0.0	0.0
Ballabhgarh	400	424	00:00	406	09:45	0.0	0.0	24.2	0.0
Bawana	400	423	00:00	406	18:30	0.0	0.0	12.9	0.0
Bassi	400	426	20:51	401	08:15	0.0	0.0	27.9	0.0
Hissar	400	416	00:00	398	18:34	0.0	0.0	0.0	0.0
Moga	400	422	00:00	403	18:33	0.0	0.0	0.6	0.0
Abdullapur	400	424	23:29	396	18:33	0.0	0.0	17.1	0.0
Nalagarh	400	432	00:00	412	08:19	0.0	0.0	48.9	1.9
Kishenpur	400	422	02:07	395	18:41	0.0	0.0	3.0	0.0
Wagoora	400	414	23:43	378	18:41	1.4	8.4	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	771	00:01	732	09:38	0.0	10.8	0.0	0.0
Balia	765	765	05:05	739	09:45	0.0	3.2	0.0	0.0
Moga	765	800	00:00	764	09:31	0.0	0.0	0.0	0.0
Agra	765	790	00:01	754	09:38	0.0	0.0	0.0	0.0
Bhiwani	765	401	00:00	381	09:45	100.0	100.0	0.0	0.0
Unnao	765	759	00:00	736	16:21	0.0	22.0	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	508.23	1455.60	511.10	1605.30	249.16	447.55
Pong	426.72	384.05	414.95	668.52	421.48	961.02	79.40	339.80
Tehri	829.79	740.04	824.35	1086.79	824.75	1107.95	91.16	110.00
Koteshwar	612.50	598.50	608.90	4.21	609.90	4.44	110.00	118.00
Chamera-I	760.00	748.75	0.00	0.00	0.00	0.00	80.06	88.86
Rihand	268.22	252.98	0.00	0.00	261.76	404.60	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	511.08	3.22	518.53	2.55	70.28	144.16

*** 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	2	0	0	0	0	0.00	0.05	0.05
Delhi	-375	-284	-39	-140	-58	-8	-5.31	-2.67	-7.98
Haryana	-54	57	0	-32	26	0	-1.17	0.98	-0.19
HP	81	-34	0	81	-206	0	2.38	-1.95	0.43
J&K	-20	-51	0	20	0	0	0.84	-0.17	0.67
CHD	0	0	0	0	0	0	0.00	0.24	0.24
Rajasthan	-64	-434	6	-64	-529	1	-1.54	-0.88	-2.42
UP	545	589	24	397	0	0	10.48	6.37	16.85
Uttarakhand	318	44	0	220	169	0	5.77	3.05	8.82
Total	**429**	**-111**	**-8**	**481**	**-598**	**-7**	**11.45**	**5.01**	**16.46**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	32	0	0	0
Delhi	-121	-375	90	-435	-8	-39
Haryana	-32	-54	57	15	0	0
HP	228	81	114	-437	0	0
J&K	82	-20	98	-152	0	0
CHD	0	0	29	0	0	0
Rajasthan	-64	-64	363	-781	6	1
UP	556	372	785	0	24	0
Uttarakhand	318	220	258	-6	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 20.10.2014 :

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 : 20.10.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**