पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 30.10.2014
Date of Reporting : 31.10.2014

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
36536	1860	38396	0.00	30348	2305	32653	50.04	780.8	55.05

* 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	37.37	6.57		43.95	54.07	55.02	0.95	98.97	11.03
Haryana	46.14	0.24		46.38	66.49	64.95	-1.54	111.33	0.00
Rajasthan	117.44	5.03	1.76	124.23	50.90	62.00	11.10	186.23	0.00
Delhi	23.27			23.27	44.51	45.42	0.90	68.69	0.00
UP	126.55	6.02	1.20	133.77	89.71	89.18	-0.52	222.95	41.44
Uttarakhand		8.86		8.86	19.22	21.06	1.84	29.92	2.59
HP		7.48		7.48	15.28	16.39	1.11	23.87	0.00
J & K		8.64	0.00	8.64	24.74	26.60	1.86	35.25	0.00
Chandigarh				0.00	3.30	3.58	0.28	3.58	0.00
Total	**350.78**	**42.85**	**2.96**	**396.58**	**368.23**	**384.20**	**15.98**	**780.78**	**55.05**

* 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	4840	0	-281	243	3584	0	121	55	4905
Haryana	5932	0	-465	91	4100	0	367	77	6113
Rajasthan	7695	0	610	-391	7755	0	-111	389	8669
Delhi	3375	0	34	-181	2178	0	48	-746	3485
UP	10190	1740	-200	402	9602	2305	182	532	10190
Uttarakhand	1462	120	5	385	1105	0	119	384	1569
HP	1164	0	-50	-128	776	0	62	130	1312
J&K	1695	0	-67	76	1148	0	20	81	1810
Chandigarh	183	0	-9	0	101	0	4	0	194
Total	**36536**	**1860**	**-422**	**497**	**30348**	**2305**	**812**	**901**	**36536**

* 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	1513	1640	1622	36.94	1539	36.31	0.63
	Rihand I STPS (2*500)	1000	865	948	948	22.60	941	20.63	1.96
	Rihand II STPS (2*500)	1000	470	513	524	12.49	520	11.21	1.28
	Rihand III STPS (2*500)	1000	965	1022	1008	24.26	1011	22.82	1.44
	Dadri I STPS (4*210)	840	815	616	582	16.44	685	15.56	0.88
	Dadri II STPS (2*490)	980	980	891	666	20.36	848	20.61	-0.25
	Unchahar I TPS (2*210)	420	302	324	332	8.04	335	7.14	0.90
	Unchahar II TPS (2*210)	420	325	344	325	8.19	341	7.41	0.78
	Unchahar III TPS (1*220)	210	160	177	174	2.03	85	3.72	-1.69
	ISTPP (Jhajjhar) (3*500)	1500	990	709	619	16.98	708	18.13	-1.15
	Dadri GPS (4*130.19+2*154.51)	830	801	192	178	4.41	184	4.43	-0.02
	Anta GPS (3*88.71+1*153.2)	419	402	224	264	6.05	252	5.92	0.13
	Auraiya GPS (4*111.19+2*109.30)	663	644	160	162	3.81	159	3.83	-0.02
	Dadri Solar	5	1	0	0	0.01	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.03	1	0.07	-0.04
	Sub Total (A)	**11297**	**9235**	**7760**	**7404**	**183**	**7610**	**178**	**5**
B. NPC	NAPS (2*220)	440	283	321	325	6.80	283	6.79	0.01
	RAPS- B (2*220)	440	399	445	445	9.64	402	9.58	0.06
	RAPS- C (2*220)	440	190	209	343	5.18	216	4.56	0.62
	Sub Total (B)	**1320**	**872**	**975**	**1113**	**21.62**	**901**	**20.93**	**0.69**
C. NHPC	Chamera I HPS (3*180)	540	534	171	0	1.65	69	1.60	0.05
	Chamera II HPS (3*100)	300	300	208	0	1.92	80	1.80	0.12
	Chamera III HPS (3*77)	231	231	222	0	1.22	51	1.18	0.04
	Bairasuil HPS(3*60)	180	178	180	0	0.81	34	0.70	0.11
	Salal-HPS (6*115)	690	192	342	246	4.92	205	4.60	0.32
	Tanakpur-HPS (3*40)	94	46	43	53	1.20	50	1.10	0.10
	Uri-I HPS (4*120)	480	246	253	253	6.22	259	5.90	0.32
	Uri-II HPS (4*60)	240	146	148	143	3.63	151	3.50	0.13
	Dhauliganga-HPS (4*70)	280	206	210	10	1.62	67	1.50	0.12
	Dulhasti-HPS (3*130)	390	387	374	230	4.73	197	4.50	0.23
	Sewa-II HPS (3*40)	120	119	121	0	0.46	19	0.38	0.08
	Parbati 3 (4*130)	520	260	251	0	0.67	28	0.65	0.02
	Sub Total (C)	**4065**	**2844**	**2523**	**935**	**29**	**1211**	**27**	**2**
D.SJVNL	NJPC (6*250)	1500	1605	1049	0	11.12	463	11.00	0.12
	Rampur HEP (4*68.67)	275	308	378	0	2.99	125	2.95	0.04
	Sub Total (D)	1775	1913	1427	0	14.11	588	13.95	0.16
E. THDC	Tehri HPS (4*250)	1000	1060	960	0	5.48	228	5.40	0.08
	Koteshwar HPS (4*100)	400	91	101	90	1.73	72	1.75	-0.02
	Sub Total (E)	**1400**	**1151**	**1061**	**90**	**7.21**	**300**	**7.15**	**0.06**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	565	1092	387	13.68	570	13.56	0.11
	Dehar HPS (6*165)	990	193	495	145	4.90	204	4.62	0.28
	Pong HPS (6*66)	396	204	324	126	4.98	208	4.89	0.09
	Sub Total (F)	**2900**	**961**	**1911**	**658**	**23.55**	**981**	**23.07**	**0.48**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	89	0	0.79	33	0.77	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	715	156	5.93	247	5.90	0.03
	Malana Stg-II HPS (2*50)	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS (2*150)	300	0	283	221	6.43	268	6.41	0.02
	Budhil HPS(IPP)	70	0	69	0	0.21	9	0.21	0.00
	Sub Total (G)	1662	0	1157	377	13.37	557	13.29	0.07
H. Total Regional Entities (A-G)		**24419**	**16977**	**16813**	**10576**	**291.57**	**12149**	**283.62**	**7.95**

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	160	3.98	166
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	80	1.89	79
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	410	406	9.29	387
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1022	715	22.21	926
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**1672**	**1361**	**37.37**	**1557**
	Total Hydro	1148	269	231	6.57	274
	Total Punjab	**5828**	**1941**	**1592**	**43.95**	**1831**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	428	407	9.80	408
	DCRTPP (Yamuna nagar) (2*300)	600	276	234	5.81	242
	Faridabad GPS (NTPC)	432	0	0	0.00	0
	RGTPP (khedar) (IPP) (2*600)	1200	541	352	9.25	385
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1114	744	21.28	887
	Thermal (Total)	**4944**	**2359**	**1737**	**46.14**	**1923**
	Total Hydro	62	11	16	0.24	10
	Total Haryana	**5006**	**2370**	**1753**	**46.38**	**1933**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	880	885	20.04	835
	suratgarh TPS (6*250)	1500	1139	1115	26.72	1113
	Chabra TPS (3*250)	750	226	221	5.36	223
	Dholpur GPS (3*110)	330	93	121	2.74	114
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	205	162	5.22	218
	RAPS A (NPC) (1*100+1*200)	300	186	171	4.39	183
	Barsingsar (NLC) (2*125)	250	184	184	4.31	180
	Giral LTPS (2*125)	250	70	72	1.47	61
	Rajwest LTPS (IPP) (8*135)	1080	832	832	20.36	848
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	155	512	5.57	232
	Kawai(Adani) (2*660)	1320	603	1168	21.27	886
	Thermal (Total)	**8026**	**4573**	**5443**	**117**	**4893**
	Total Hydro	550	142	229	5.03	210
	Wind power	2798	106	83	0.63	26
	Biomass	99	37	37	0.88	37
	Solar	730	0	0	0.25	10
	Renewable/Others (Total)	3627	143	120	1.76	73
	Total Rajasthan	**12203**	**4858**	**5792**	**124.23**	**5176**
UP	Anpara TPS (3*210+2*500)	1630	918	931	22.30	929
	Obra TPS (2*50+2*94+5*200)	1194	437	418	10.30	429
	Paricha TPS (2*110+2*220+2*250)	1140	753	789	19.00	792
	Panki TPS (2*105)	210	140	135	3.10	129
	Harduaganj TPS (1*60+1*105+2*250)	665	464	487	11.50	479
	Tanda TPS (NTPC) (4*110)	440	344	340	8.44	352
	Roza TPS (IPP) (4*300)	1200	1011	1035	23.37	974
	Anpara-C (IPP) (2*600)	1200	951	882	21.80	908
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	363	320	6.74	281
	Thermal (Total)	**8129**	**5381**	**5337**	**126.55**	**5273**
	Vishnuparyag HPS (IPP)	400	137	134	3.14	131
	Other Hydro	527	81	165	2.88	120
	Cogeneration	981	50	50	1.20	50
	Total UP	**10037**	**5649**	**5686**	**133.77**	**5443**
Uttarakhand	Total Hydro	1398	481	238	8.86	369
	Total Uttarakhand	**1398**	**481**	**238**	**8.86**	**369**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	77	78	1.84	77
	Pragati Gas Turbine (2x104+ 1x122)	330	264	266	6.39	266
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	315	269	7.05	294
	Badarpur TPS (NTPC) (3*95+2*210)	705	302	310	7.99	333
	Thermal (Total)	2917	958	923	23.27	970
	Total Delhi	**2917**	**958**	**923**	**23.27**	**970**
HP	Baspa HPS (IPP) (2*150)	300	27	73	1.59	66
	Malana HPS (IPP) (2*43)	86	44	0	0.34	14
	Other Hydro	728	236	227	5.55	231
	Total HP	**1114**	**307**	**300**	**7.48**	**312**
J & K	Baglihar HPS (IPP) (3*150)	450	384	214	6.17	257
	Other Hydro/IPP	436	105	105	2.47	103
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**489**	**319**	**8.64**	360
Total State Control Area Generation		**39597**	**17053**	**16603**	**396.58**	**16393**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3694**	**4493**	**118.12**	**4922**
Total Regional Availability(Gross)		**64017**	**37560**	**31672**	**806.27**	**33464**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**7726**	**1839**	**80.65**	**3360**
State Control Area Hydro	**5684**	**1780**	**1498**	**42.85**	**1654**
Total Regional Hydro	**17116**	**9506**	**3337**	**123.50**	**5015**

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	-200	100	200	0.56	2.23	-1.67
Gwalior-Agra (D/C)	993	1492	0	0	34.94	0.00	34.94
Zerda-Kankroli	-169	-207	0	242	0.00	3.07	-3.07
Zerda-Bhinmal	-102	-127	99	242	0.00	1.58	-1.58
Malanpur-Auraiya	-85	-108	0	132	0.00	2.09	-2.09
Badod-Kota/Morak	-165	-228	0	122	0.00	3.95	-3.95
Mundra-Mohindergarh(HVDC)	2197	1798	2204	0	46.08	0.00	46.08
Vindhyachal - Rihand	0	498	501	0	7.76	0.00	7.76
Sub Total WR	**2719**	**2918**			**89.34**	**12.93**	**76.41**
Pusauli Bypass	400	400	400	0	9.62	0.00	9.62
MZP- GKP (D/C)	164	336	648	0	9.47	0.00	9.47
Patna-Balia(D/C)	209	302	566	0	8.54	0.00	8.54
B'Sharif-Balia (D/C)	60	183	390	0	5.12	0.00	5.12
Pusauli-Balia	-106	-60	0	106	0.00	1.60	-1.60
Gaya-Fatehpur (765 Kv)	0	282	408	0	3.32	0.00	3.32
Pusauli-Sahupuri	164	99	165	0	2.71	0.00	2.71
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-38	-38	0	44	0.00	0.92	-0.92
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	122	71	430	0	5.45	0.00	5.45
Sub Total ER	**975**	**1575**			**44.23**	**2.51**	**41.71**
Total IR Exch	**3694**	**4493**			**133.56**	**15.44**	**118.12**

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
30.08	1.43	31.50	6.09	-0.82	5.85	3.16	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
44.07	55.92	99.99	41.71	76.41	118.12	-2.36	20.49	18.13

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	3.18	17.37	44.20	75.34	45.36	7.73	2.70	0.01	0.00

<---------- 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	13.03	49.57	5.41	49.91	0.20	0.11	50.11	0.00

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	414	20:29	408	06:42	0.0	0.0	0.0	0.0
Gorakhpur	400	408	20:30	395	14:20	0.0	0.0	0.0	0.0
Bareilly	400	418	21:29	400	14:24	0.0	0.0	0.0	0.0
Kanpur	400	417	20:30	400	14:26	0.0	0.0	0.0	0.0
Dadri	400	415	00:00	414	00:02	0.0	0.0	0.0	0.0
Ballabhgarh	400	425	01:28	407	14:18	0.0	0.0	25.9	0.0
Bawana	400	423	01:26	404	18:14	0.0	0.0	18.2	0.0
Bassi	400	428	20:28	392	07:12	0.0	0.0	21.4	0.0
Hissar	400	416	01:27	399	18:10	0.0	0.0	0.0	0.0
Moga	400	423	21:23	405	18:11	0.0	0.0	7.0	0.0
Abdullapur	400	424	01:28	396	18:18	0.0	0.0	13.4	0.0
Nalagarh	400	431	21:25	409	18:14	0.0	0.0	38.2	0.2
Kishenpur	400	424	13:01	398	18:18	0.0	0.0	3.2	0.0
Wagoora	400	414	02:32	379	18:19	0.2	11.6	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	20:28	733	14:18	0.0	21.5	0.0	0.0
Balia	765	763	20:30	742	14:26	0.0	0.0	0.0	0.0
Moga	765	800	21:27	765	18:11	0.0	0.0	0.0	0.0
Agra	765	793	20:31	753	10:37	0.0	0.0	0.0	0.0
Bhiwani	765	802	01:29	767	18:10	0.0	0.0	0.8	0.0
Unnao	765	763	20:29	729	10:36	0.0	38.4	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	507.22	1411.35	510.93	1590.18	222.91	388.22
Pong	426.72	384.05	413.83	633.63	420.28	902.94	83.51	308.14
Tehri	829.79	740.04	823.60	1079.00	824.30	1086.00	89.91	119.00
Koteshwar	612.50	598.50	608.77	3.99	612.00	5.46	119.00	115.00
Chamera-I	760.00	748.75	758.10	0.00	0.00	0.00	62.18	44.59
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	510.12	0.84	517.92	2.62	52.00	66.00

*** 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	55	0	0	243	0	0.00	2.49	2.49
Delhi	-528	-208	-10	-140	-30	-10	-6.22	-1.79	-8.01
Haryana	-24	101	0	-6	97	0	-0.47	2.18	1.72
HP	81	49	0	81	-209	0	1.94	0.44	2.38
J&K	81	0	0	27	49	0	1.60	1.35	2.96
CHD	0	0	0	0	0	0	0.00	0.21	0.21
Rajasthan	-64	450	3	-64	-330	3	-1.54	3.23	1.69
UP	532	0	0	402	0	0	10.32	0.00	10.32
Uttarakhand	318	66	0	220	165	0	5.77	3.51	9.28
Total	**395**	**513**	**-7**	**519**	**-15**	**-7**	**11.40**	**11.62**	**23.03**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	0	0	315	-252	0	0
Delhi	-121	-528	0	-273	-10	-10
Haryana	-6	-24	104	78	0	0
HP	81	81	221	-406	0	0
J&K	182	12	98	0	0	0
CHD	0	0	25	0	0	0
Rajasthan	-64	-64	568	-705	3	3
UP	545	366	0	0	0	0
Uttarakhand	318	220	294	44	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 30.10.2014 :

Normal

XIV. Synchronisation of new generating units :

0.00

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

1: 315 MVA ICT-3 first time charged at 15.30hrs of dt 30.10.2014 on no load at Allahabad (PG).

XVI. Tripping of lines in pooling stations :

XVII. Complete generation loss in a generating station :

Report for : 30.10.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**