पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.10.2014
Date of Reporting : 23.10.2014

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
39036	1505	40541	50.12	32656	1183	33839	50.13	826.1	56.40

* 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	46.06	11.19		57.25	55.35	56.59	1.23	113.84	28.70
Haryana	58.55	0.65		59.20	61.70	60.44	-1.26	119.63	0.00
Rajasthan	128.45	4.12	2.78	135.35	48.57	53.20	4.63	188.54	0.00
Delhi	25.48			25.48	44.11	46.84	2.72	72.32	0.00
UP	116.80	6.80	1.20	124.80	114.47	116.73	2.26	241.53	26.21
Uttarakhand		10.26		10.26	19.71	20.40	0.69	30.66	1.50
HP		8.46		8.46	14.12	14.67	0.54	23.13	0.00
J & K		6.81	0.00	6.81	22.96	26.10	3.14	32.91	0.00
Chandigarh				0.00	3.41	3.50	0.09	3.50	0.00
Total	**375.34**	**48.29**	**3.98**	**427.60**	**384.41**	**398.46**	**14.04**	**826.06**	**56.40**

* 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	5553	0	39	-102	4477	123	38	-91	5553
Haryana	6177	0	-546	30	4561	0	-23	77	6261
Rajasthan	7663	0	-44	-363	7918	0	293	352	9027
Delhi	3445	0	-34	-404	2304	0	95	-724	3557
UP	11654	1340	6	2092	10231	1060	0	1189	11654
Uttarakhand	1526	165	101	370	1154	0	-14	401	1619
HP	1072	0	-160	-177	785	0	46	65	1210
J&K	1763	0	121	65	1126	0	106	-69	1815
Chandigarh	183	0	-23	0	100	0	5	0	186
Total	**39036**	**1505**	**-541**	**1510**	**32656**	**1183**	**546**	**1200**	**39036**

* 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	1263	1391	1294	30.59	1275	30.31	0.28
	Rihand I STPS (2*500)	1000	860	914	922	20.46	852	20.49	-0.04
	Rihand II STPS (2*500)	1000	543	722	486	12.45	519	12.93	-0.48
	Rihand III STPS (2*500)	1000	945	990	990	22.59	941	22.53	0.06
	Dadri I STPS (4*210)	840	815	740	707	18.82	784	18.69	0.13
	Dadri II STPS (2*490)	980	980	875	777	21.95	915	22.74	-0.79
	Unchahar I TPS (2*210)	420	198	215	211	5.21	217	4.66	0.55
	Unchahar II TPS (2*210)	420	383	413	416	9.82	409	9.00	0.83
	Unchahar III TPS (1*220)	210	192	204	205	4.82	201	4.47	0.35
	ISTPP (Jhajjhar) (3*500)	1500	990	642	625	15.28	637	16.03	-0.75
	Dadri GPS (4*130.19+2*154.51)	830	800	185	187	4.56	190	4.55	0.01
	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	590	134	162	3.77	157	3.69	0.07
	Dadri Solar	5	1	0	0	0.02	1	0.03	-0.01
	Unchahar Solar	10	3	0	0	0.02	1	0.07	-0.05
	Sub Total (A)	**11297**	**8957**	**7425**	**6982**	**170**	**7098**	**170**	**0**
B. NPC	NAPS (2*220)	440	284	313	324	6.72	280	6.82	-0.09
	RAPS- B (2*220)	440	399	442	445	9.60	400	9.58	0.02
	RAPS- C (2*220)	440	190	210	211	4.44	185	4.56	-0.12
	Sub Total (B)	**1320**	**873**	**965**	**980**	**20.76**	**865**	**20.95**	**-0.19**
C. NHPC	Chamera I HPS (3*180)	540	534	353	0	2.63	110	2.58	0.05
	Chamera II HPS (3*100)	300	300	308	0	1.86	77	1.77	0.09
	Chamera III HPS (3*77)	231	229	162	0	1.31	55	1.30	0.01
	Bairasuil HPS(3*60)	180	178	122	0	0.90	37	0.81	0.09
	Salal-HPS (6*115)	690	216	185	313	5.38	224	5.19	0.19
	Tanakpur-HPS (3*40)	94	57	69	50	1.41	59	1.36	0.05
	Uri-I HPS (4*120)	480	300	309	322	7.41	309	7.21	0.21
	Uri-II HPS (4*60)	240	174	201	172	4.22	176	4.18	0.04
	Dhauliganga-HPS (4*70)	280	86	207	70	2.10	87	2.05	0.05
	Dulhasti-HPS (3*130)	390	387	404	218	5.68	237	5.40	0.28
	Sewa-II HPS (3*40)	120	119	123	0	0.38	16	0.38	0.00
	Parbati 3 (4*130)	520	260	0	0	0.70	29	0.68	0.02
	Sub Total (C)	**4065**	**2841**	**2442**	**1146**	**34**	**1416**	**33**	**1**
D.SJVNL	NJPC (6*250)	1500	1605	1600	155	11.52	480	11.31	0.21
	Rampur HEP (4*68.67)	275	207	374	45	2.67	111	3.01	-0.33
	Sub Total (D)	1775	1812	1974	200	14.19	591	14.32	-0.13
E. THDC	Tehri HPS (4*250)	1000	1060	480	0	5.56	232	5.00	0.56
	Koteshwar HPS (4*100)	400	91	99	0	1.77	74	1.75	0.02
	Sub Total (E)	**1400**	**1151**	**579**	**0**	**7.32**	**305**	**6.75**	**0.57**
F. BBMB	Bhakra HPS (3*108+2*126+6*157)	1514	636	1180	498	15.63	651	15.26	0.37
	Dehar HPS (6*165)	990	191	495	140	4.84	202	4.58	0.26
	Pong HPS (6*66)	396	244	384	126	6.00	250	5.86	0.14
	Sub Total (F)	**2900**	**1071**	**2059**	**764**	**26.47**	**1103**	**25.70**	**0.77**
G. IPP(s)/JV(s)	ALLAIN DUHANGAN HPS(IPP) (2*96)	192	0	107	0	0.89	37	0.87	0.02
	KARCHAM WANGTOO HPS(IPP) (4*250)	1000	0	848	180	6.64	277	6.58	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	298	240	6.64	277	6.59	0.05
	Budhil HPS(IPP)	70	0	61	0	0.25	10	0.27	-0.02
	Sub Total (G)	1662	0	1314	420	14.42	601	14.31	0.11
H. Total Regional Entities (A-G)		**24419**	**16704**	**16757**	**10492**	**287.51**	**11979**	**285.12**	**2.39**

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	230	210	4.65	194
	Guru Nanak Dev TPS(Bhatinda) (4*110)	440	80	100	2.08	87
	Guru Hargobind Singh TPS(L.mbt) (2*210+2*250)	920	382	244	8.28	345
	Goindwal(GVK)		0	0	0.00	0
	Rajpura (2*700)	1400	1364	1383	31.06	1294
	Talwandi Saboo (1*660)	660	0	0	0.00	0
	Thermal (Total)	**4680**	**2056**	**1937**	**46.06**	**1919**
	Total Hydro	1148	440	469	11.19	466
	Total Punjab	**5828**	**2496**	**2406**	**57.25**	**2385**
Haryana	Panipat TPS (4*110+2*210+2*250)	1367	625	590	13.59	566
	DCRTPP (Yamuna nagar) (2*300)	600	237	447	6.23	260
	Faridabad GPS (NTPC)	432	193	186	4.40	183
	RGTPP (khedar) (IPP) (2*600)	1200	730	749	17.59	733
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP) (2*660)	1320	1125	392	16.74	698
	Thermal (Total)	**4944**	**2910**	**2364**	**58.55**	**2439**
	Total Hydro	62	23	29	0.65	27
	Total Haryana	**5006**	**2933**	**2393**	**59.20**	**2467**
Rajasthan	kota TPS (2*110+2*195+3*210)	1240	797	791	18.60	775
	suratgarh TPS (6*250)	1500	1138	1364	29.90	1246
	Chabra TPS (3*250)	750	437	441	10.50	438
	Dholpur GPS (3*110)	330	111	118	2.60	108
	Ramgarh GPS (1*3 + 1*35.5 +2*37.5 +1*110 +1*50)	271	169	169	4.63	193
	RAPS A (NPC) (1*100+1*200)	300	177	166	4.39	183
	Barsingsar (NLC) (2*125)	250	184	184	4.10	171
	Giral LTPS (2*125)	250	48	12	0.54	23
	Rajwest LTPS (IPP) (8*135)	1080	845	950	19.80	825
	VS LIGNITE LTPS (IPP) (1*135)	135	0	0	0.00	0
	Kalisindh Thermal(1*600)	600	166	0	4.09	170
	Kawai(Adani) (2*660)	1320	1176	1167	29.30	1221
	Thermal (Total)	**8026**	**5248**	**5362**	**128**	**5352**
	Total Hydro	550	159	114	4.12	172
	Wind power	2798	0	319	1.90	79
	Biomass	99	29	29	0.69	29
	Solar	730	0	0	0.19	8
	Renewable/Others (Total)	3627	29	348	2.78	116
	Total Rajasthan	**12203**	**5436**	**5824**	**135.35**	**5639**
UP	Anpara TPS (3*210+2*500)	1630	935	933	22.30	929
	Obra TPS (2*50+2*94+5*200)	1194	438	327	8.80	367
	Paricha TPS (2*110+2*220+2*250)	1140	608	574	14.10	588
	Panki TPS (2*105)	210	144	131	3.30	138
	Harduaganj TPS (1*60+1*105+2*250)	665	540	484	11.60	483
	Tanda TPS (NTPC) (4*110)	440	375	391	9.30	388
	Roza TPS (IPP) (4*300)	1200	815	824	19.60	817
	Anpara-C (IPP) (2*600)	1200	810	805	19.30	804
	Bajaj Energy Pvt.Ltd(IPP) TPS (10*45)	450	361	361	8.50	354
	Thermal (Total)	**8129**	**5026**	**4830**	**116.80**	**4867**
	Vishnuparyag HPS (IPP)	400	158	153	3.60	150
	Other Hydro	527	298	116	3.20	133
	Cogeneration	981	50	50	1.20	50
	Total UP	**10037**	**5532**	**5149**	**124.80**	**5050**
Uttarakhand	Total Hydro	1398	579	388	10.26	427
	Total Uttarakhand	**1398**	**579**	**388**	**10.26**	**427**
Delhi	Rajghat TPS (2*67.5)	135	0	0	0.00	0
	Delhi Gas Turbine (6x30 + 3x34)	282	78	81	1.91	80
	Pragati Gas Turbine (2x104+ 1x122)	330	298	268	6.96	290
	Rithala GPS (3*36)	95	0	0	0.00	0
	Bawana GPS (6*250)	1370	310	314	7.85	327
	Badarpur TPS (NTPC) (3*95+2*210)	705	369	307	8.75	365
	Thermal (Total)	2917	1055	970	25.48	1062
	Total Delhi	**2917**	**1055**	**970**	**25.48**	**1062**
HP	Baspa HPS (IPP) (2*150)	300	60	30	1.67	70
	Malana HPS (IPP) (2*43)	86	44	0	0.45	19
	Other Hydro	728	260	233	6.33	264
	Total HP	**1114**	**364**	**263**	**8.46**	**352**
J & K	Baglihar HPS (IPP) (3*150)	450	442	214	6.81	284
	Other Hydro/IPP	436	0	0	0.00	0
	Gas/Diesel/Others	209	0	0	0.00	0
	Total J & K	**1094**	**442**	**214**	**6.81**	284
Total State Control Area Generation		**39597**	**18837**	**17607**	**427.60**	**17667**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4201.8**	**5671.54**	**132.36**	**5515**
Total Regional Availability(Gross)		**64017**	**39796**	**33770**	**847.46**	**35161**

IV. Total Hydro Generation:

Regional Entities Hydro	**11432**	**8008**	**2290**	**89.50**	**3729**
State Control Area Hydro	**5684**	**2305**	**1593**	**48.29**	**1862**
Total Regional Hydro	**17116**	**10313**	**3883**	**137.79**	**5591**

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	-400	500	500	400	6.72	1.49	5.23
Gwalior-Agra (D/C)	1341	1793	2146	0	40.29	0.00	40.29
Zerda-Kankroli	-209	-158	0	210	0.00	3.11	-3.11
Zerda-Bhinmal	-155	-92	148	208	0.00	1.39	-1.39
Malanpur-Auraiya	-80	-76	0	96	0.00	1.81	-1.81
Badod-Kota/Morak	-148	-118	0	206	0.00	3.17	-3.17
Mundra-Mohindergarh(HVDC)	2101	1902	2303	0	47.28	0.00	47.28
Vindhyachal - Rihand	383	0	443	0	3.89	0.00	3.89
Sub Total WR	**2833**	**3751**			**98.17**	**10.97**	**87.21**
Pusauli Bypass	400	400	400	0	9.64	0.00	9.64
MZP- GKP (D/C)	290	432	630	0	9.81	0.00	9.81
Patna-Balia(D/C)	385	494	614	0	12.19	0.00	12.19
B'Sharif-Balia (D/C)	163	290	411	0	6.28	0.00	6.28
Pusauli-Balia	-67	-68	0	86	0.00	1.48	-1.48
Gaya-Fatehpur (765 Kv)	0	0	355	0	0.58	0.00	0.58
Pusauli-Sahupuri	132	180	191	0	3.94	0.00	3.94
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-42	0	45	0.00	0.89	-0.89
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	96	235	345	-46	5.08	0.00	5.08
Sub Total ER	**1369**	**1921**			**47.52**	**2.37**	**45.15**
Total IR Exch	**4202**	**5672**			**145.69**	**13.33**	**132.36**

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
22.89	1.63	24.52	11.11	8.12	6.31	3.68	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
42.56	73.03	115.58	45.15	87.21	132.36	2.60	14.18	16.78

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	0.35	4.32	17.70	48.12	51.10	16.56	12.75	1.89	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)
50.44	18.03	49.65	8.11	49.99	0.11	0.11	50.33	49.84

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	413	21:38	407	09:42	0.0	0.0	0.0	0.0
Gorakhpur	400	410	05:03	392	18:22	0.0	0.0	0.0	0.0
Bareilly	400	420	13:04	329	12:38	0.6	0.6	0.0	0.0
Kanpur	400	417	02:29	406	18:24	0.0	0.0	0.0	0.0
Dadri	400	417	03:26	409	05:48	55.4	55.4	0.0	0.0
Ballabhgarh	400	423	01:57	410	09:38	0.0	0.0	16.3	0.0
Bawana	400	421	02:56	408	18:25	0.0	0.0	2.8	0.0
Bassi	400	424	03:15	403	08:22	0.0	0.0	27.5	0.0
Hissar	400	414	00:58	401	18:24	0.0	0.0	0.0	0.0
Moga	400	422	00:54	406	18:26	0.0	0.0	8.9	0.0
Abdullapur	400	424	21:54	396	18:26	0.0	0.0	20.5	0.0
Nalagarh	400	430	21:55	415	07:17	0.0	0.0	60.8	0.0
Kishenpur	400	423	13:02	399	18:26	0.0	0.0	8.7	0.0
Wagoora	400	417	13:03	382	18:46	0.0	11.3	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	765	23:58	741	08:16	0.0	0.2	0.0	0.0
Balia	765	765	05:03	742	18:23	0.0	0.0	0.0	0.0
Moga	765	798	13:03	771	07:17	0.0	0.0	0.0	0.0
Agra	765	787	17:31	761	08:21	0.0	0.0	0.0	0.0
Bhiwani	765	796	17:02	758	08:16	64.0	64.0	0.0	0.0
Unnao	765	768	13:08	750	08:22	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	0.00	0.00	0.00	0.00	0.00	0.00
Pong	426.72	384.05	0.00	0.00	0.00	0.00	0.00	0.00
Tehri	829.79	740.04	824.25	1086.79	824.70	1102.00	84.94	120.00
Koteshwar	612.50	598.50	609.61	4.30	609.70	4.44	120.00	117.00
Chamera-I	760.00	748.75	756.43	0.00	0.00	0.00	73.87	71.23
Rihand	268.22	252.98	854.60	331.50	858.80	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	510.84	3.35	518.43	2.93	102.00	146.00

*** 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	-102	10	0	-102	0	0	-2.44	1.75	-0.69
Delhi	-630	-85	-9	-243	-129	-33	-9.40	-1.76	-11.15
Haryana	-12	89	0	13	16	0	-1.11	-0.43	-1.54
HP	81	-16	0	81	-258	0	2.33	-1.16	1.17
J&K	-18	-51	0	20	45	0	0.88	0.07	0.96
CHD	0	0	0	0	0	0	0.00	0.20	0.20
Rajasthan	-64	409	6	-64	-298	0	-1.54	5.35	3.80
UP	1189	0	0	1464	628	0	30.41	5.25	35.66
Uttarakhand	318	83	0	220	150	0	5.77	4.08	9.85
Total	**762**	**440**	**-2**	**1389**	**154**	**-33**	**24.91**	**13.34**	**38.25**

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

State	Bilateral (MW)		IEX (MW)		PXIL (MW)	
	Maximum	Minimum	Maximum	Minimum	Maximum	Minimum
Punjab	-102	-102	273	0	0	0
Delhi	-223	-630	-5	-189	-2	-33
Haryana	13	-137	91	-436	0	0
HP	228	81	162	-476	0	0
J&K	84	-18	98	-51	0	0
CHD	0	0	29	0	0	0
Rajasthan	-64	-64	411	-629	6	0
UP	1779	923	981	0	0	0
Uttarakhand	318	220	318	54	0	0

XI. System Constraints:

XII. Grid Disturbance / Any Other Significant Event:

XIII. Weather Conditions For 22.10.2014 :

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 : 22.10.2014 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**