पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 26.10.2013
Date of Reporting : 27.10.2013

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
33690	1905	35595	50.21	28448	750	29198	50.14	730.9	43.25

* 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	29.73	10.04		39.77	59.75	61.12	1.37	100.89	0.00
Haryana	53.90	0.71		54.62	55.88	56.17	0.29	110.78	0.00
Rajasthan	74.77	2.53	5.81	83.11	79.61	76.68	-2.92	159.79	0.00
Delhi	18.21			18.21	48.53	46.52	-2.01	64.73	0.00
UP	126.47	3.23	1.20	130.89	78.54	76.85	-1.69	207.74	40.01
Uttarakhand		11.13		11.13	16.56	18.01	1.46	29.14	1.09
HP		9.26		9.26	12.00	13.74	1.73	23.00	0.45
J & K		8.36	0.00	8.36	21.99	22.95	0.96	31.31	1.70
Chandigarh				0.00	3.59	3.50	-0.10	3.50	0.00
Total	**303.06**	**45.26**	**7.01**	**355.34**	**376.46**	**375.54**	**-0.91**	**730.88**	**43.25**

*** 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				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transactior	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	4415	0	-114	104	3835	0	129	9	5.72
Haryana	5152	0	-296	-843	4356	0	42	-443	-13.57
Rajasthan	7127	0	-302	1574	6116	0	-156	1144	33.19
Delhi	3274	0	-242	-391	1995	0	-203	-1071	-14.91
UP	9481	1730	-133	186	9025	750	44	660	1.54
Uttarakhand	1463	75	69	166	1063	0	26	346	7.04
HP	1092	0	33	-334	741	0	22	37	-0.75
J&K	1507	100	-121	143	1212	0	48	150	3.17
Chandigarh	180	0	-16	-41	106	0	3	-20	-0.35
Total	**33690**	**1905**	**-1122**	**564**	**28448**	**750**	**-46**	**811**	**21.07**

* STOA figures are at sellers boundary & PX figures are at regional boundary.

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	2000	1940	2096	2093	46.58	1941	46.56	0.02
	Rihand I STPS	1000	675	942	735	16.21	676	16.21	0.01
	Rihand II STPS	1000	701	510	361	16.79	699	16.82	-0.03
	Rihand III STPS	1000	350	507	356	8.43	351	8.41	0.03
	Dadri I STPS	840	810	664	641	14.31	596	14.23	0.08
	Dadri II STPS	980	975	1024	712	20.40	850	20.42	-0.02
	Unchahar I TPS	420	201	217	215	4.76	198	4.79	-0.04
	Unchahar II TPS	420	404	431	428	9.53	397	9.60	-0.08
	Unchahar III TPS	210	201	219	214	4.72	197	4.78	-0.06
	ISTPP (Jhajjhar)	1500	1480	636	634	14.20	592	14.21	-0.01
	Dadri GPS	830	804	589	594	13.80	575	14.19	-0.39
	Anta GPS	419	404	396	412	9.68	403	9.70	-0.02
	Auraiya GPS	663	643	156	158	3.64	152	3.65	-0.02
	Sub Total (A)	**11282**	**9589**	**8387**	**7553**	**183.05**	**7627**	**183.56**	**-0.52**
B. NPC	NAPS	440	300	340	345	7.28	303	7.20	0.08
	RAPS- B	440	410	454	457	9.83	410	9.84	-0.01
	RAPS- C	440	425	478	477	10.15	423	10.20	-0.05
	Sub Total (B)	**1320**	**1135**	**1272**	**1279**	**27.26**	**1136**	**27.24**	**0.02**
C. NHPC	Chamera I HPS	540	539	360	0	2.75	115	2.70	0.05
	Chamera II HPS	300	300	269	0	1.98	83	1.98	0.00
	Chamera III HPS	231	231	73	0	1.30	54	1.25	0.05
	Bairasuil HPS	180	182	10	0	0.80	33	0.80	0.00
	Salal-HPS	690	193	317	206	4.42	184	4.64	-0.21
	Tanakpur-HPS	94	63	69	63	1.47	61	1.50	-0.03
	Uri-HPS	480	138	234	112	3.19	133	3.11	0.08
	Uri-II HPS	120	83	110	60	1.98	82	1.99	-0.01
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	290	0	5.42	226	5.37	0.05
	Sewa-II HPS	120	119	64	0	0.52	22	0.49	0.03
	Sub Total (C)	**3425**	**2235**	**1796**	**441**	**23.82**	**993**	**23.82**	**0.01**
D.NJPC	Nathpa Jhakri	1500	1605	1465	163	12.99	541	13.00	-0.02
	Sub Total (D)	1500	1605	1465	163	12.99	541	13.00	-0.02
E. THDC	Tehri HPS	1000	1060	1000	0	6.64	277	6.50	0.14
	Koteshwar HPS	400	92	99	91	2.24	93	2.20	0.04
	Sub Total (E)	**1400**	**1152**	**1099**	**91**	**8.88**	**370**	**8.70**	**0.18**
F. BBMB	Bhakra HPS	1497	483	1025	369	12.33	514	11.60	0.73
	Dehar HPS	990	230	470	140	5.53	230	5.51	0.02
	Pong HPS	396	263	312	126	6.50	271	6.32	0.18
	Sub Total (F)	**2883**	**976**	**1807**	**635**	**24.36**	**1015**	**23.42**	**0.94**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	99	27	0.93	39	0.89	0.05
	KWHEP HPS(IPP)	1000	0	898	150	6.60	275	6.71	-0.11
	Malana Stg-II HPS	100	0	106	0	0.41	17	0.40	0.00
	Shree Cement TPS	300	0	145	124	2.98	124	2.90	0.07
	Budhil HPS(IPP)	70	0	26	10	0.30	12	0.30	0.00
	Sub Total (G)	1662	0	1274	311	11.22	467	11.20	0.02
H. Total Regional Entities (A-G)		**23472**	**16691**	**17100**	**10473**	**291.57**	**12149**	**290.95**	**0.62**

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)	1260	630	740	17.00	708
	Guru Nanak Dev TPS(Bhatinda)	440	80	85	1.98	83
	Guru Hargobind Singh TPS(L.mbt)	920	441	505	10.74	448
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	1151	1330	29.73	1239
	Total Hydro	1148	427	398	10.04	418
	Total Punjab	**3768**	**1578**	**1728**	**39.77**	**1657**
Haryana	Panipat TPS	1367	84	91	2.11	88
	DCRTPP (Yamuna nagar)	600	556	501	11.98	499
	Faridabad GPS (NTPC)	432	191	159	4.14	172
	RGTPP (khedar) (IPP)	1200	572	424	11.09	462
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1052	705	24.59	1024
	Thermal (Total)	4944	2455	1880	53.90	2246
	Total Hydro	62	24	29	0.71	30
	Total Haryana	**5006**	**2479**	**1909**	**54.62**	**2276**
Rajasthan	kota TPS	1240	1151	1144	27.30	1137
	suratgarh TPS	1500	993	1098	25.09	1045
	Chabra TPS	500	434	194	8.67	361
	Dholpur GPS	330	101	101	2.49	104
	Ramgarh GPS	111	136	71	2.73	114
	RAPS A (NPC)	300	179	179	4.00	167
	Barsingsar (NLC)	250	112	113	2.62	109
	Giral LTPS	250	61	80	1.86	78
	Rajwest LTPS (IPP)	1080	0	0	0.00	0
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	660	0	0	0.00	0
	Thermal (Total)	6956	3167	2980	74.77	3115
	Total Hydro	550	111	30	2.53	105
	Wind power	2191	113	177	4.11	171
	Biomass	91	24	24	0.58	24
	Solar	201	0	0	1.12	47
	Renewable/Others (Total)	2483	137	201	5.81	242
	Total Rajasthan	**9989**	**3415**	**3211**	**83.11**	**3463**
UP	Anpara TPS	1630	1360	1410	33.30	1388
	Obra TPS	1288	437	464	11.00	458
	Paricha TPS	1140	654	675	15.70	654
	Panki TPS	210	72	77	1.70	71
	Harduaganj TPS	665	227	232	5.50	229
	Tanda TPS (NTPC)	440	395	390	9.67	403
	Roza TPS (IPP)	1200	1080	1098	26.07	1086
	Anpara-C (IPP)	1200	833	544	15.79	658
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	364	322	7.74	323
	Thermal (Total)	8223	5422	5212	126.47	5269
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	174	146	3.23	134
	Cogeneration	981	50	50	1.20	50
	Total UP	**10131**	**5646**	**5408**	**130.89**	**5454**
Uttarakhand	Total Hydro	1303	553	371	11.13	464
	Total Uttarakhand	**1303**	**553**	**371**	**11.13**	**464**
Delhi	Rajghat TPS	135	48	53	1.03	43
	Delhi Gas Turbine	282	81	81	1.87	78
	Pragati Gas Turbine	330	253	268	6.46	269
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	420	425	8.85	369
	Thermal (Total)	2232	802	827	18.21	759
	Total Delhi	**2232**	**802**	**827**	**18.21**	**759**
HP	Baspa HPS (IPP)	330	72	60	2.43	101
	Malana HPS (IPP)	86	94	0	0.47	20
	Other Hydro	589	298	292	6.36	265
	Total HP	**1005**	**464**	**352**	**9.26**	**386**
J & K	Baglihar HPS (IPP)	450	242	238	5.79	241
	Other Hydro	323	100	128	2.57	107
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**342**	**366**	**8.36**	348
Total State Control Area Generation		**34390**	**15279**	**14172**	**355.34**	**14806**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**2813**	**4790**	**99.06**	**4128**
Total Regional Availability(Gross)		**57862**	**35192**	**29435**	**745.96**	**31082**

IV. Total Hydro Generation:

Regional Entities Hydro	**10500**	**7270**	**1507**	**77.99**	**3249**
State Control Area Hydro	**5368**	**2095**	**1692**	**45.26**	**1886**
Total Regional Hydro	**15868**	**9365**	**3199**	**123.25**	**5135**

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	0	-400	0	400	0.00	7.72	-7.72
Gwalior-Agra (D/C)	652	1571	1654	0	29.11	0.00	29.11
Zerda-Kankroli	-10	-86	39	129	0.00	0.65	-0.65
Zerda-Bhinmal	155	31	211	34	2.38	0.00	2.38
Malanpur-Auraiya	-96	-29	0	112	0.00	1.37	-1.37
Badod-Kota/Morak	-27	-33	0	113	0.00	1.20	-1.20
Mundra-Mohindergarh(HVDC)	1499	1499	1505	0	36.27	0.00	36.27
Sub Total WR	**2173**	**2553**			**67.76**	**10.94**	**56.82**
Pusauli Bypass	-100	-100	0	100	0.00	2.40	-2.40
MZP- GKP (D/C)	251	836	836	0	15.64	0.00	15.64
Patna-Balia(D/C)	201	542	554	0	10.53	0.00	10.53
B'Sharif-Balia (D/C)	159	450	472	0	8.78	0.00	8.78
Pusauli-Balia	-23	81	89	47	0.81	0.00	0.81
Gaya-Fatehpur (765 Kv)	75	343	371	0	6.57	0.00	6.57
Pusauli-Sahupuri	113	120	153	0	3.16	0.00	3.16
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-35	0	36	0.00	0.85	-0.85
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	0	0	0		0.00	0.00	0.00
Sub Total ER	**640**	**2237**			**45.49**	**3.25**	**42.24**
Total IR Exch	**2813**	**4790**			**113.25**	**14.19**	**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
34.59	2.24	36.84	8.53	-9.18	5.97	7.21	0.94	-0.94

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
52.27	49.67	101.95	42.24	56.82	99.06	-10.03	7.15	-2.89

VI. Frequency Profile <---------- % of Time Frequency ---------->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.50	1.90	96.40	1.70	95.00	57.00	3.10

<---------- 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)
50.33	13.05	49.36	18.08	50.01	0.15	0.12	50.31	49.78

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	00:00	405	13:34	0.0	0.0	0.0	0.0
Gorakhpur	400	418	05:00	405	19:00	0.0	0.0	0.0	0.0
Bareilly	400	419	00:00	388	12:10	0.0	0.0	0.0	0.0
Kanpur	400	417	00:00	399	18:30	0.0	0.0	0.0	0.0
Dadri	400	422	01:54	403	18:30	0.0	0.0	12.9	0.0
Ballabhgarh	400	427	23:50	408	18:32	0.0	0.0	20.8	0.0
Bawana	400	426	04:01	406	18:09	0.0	0.0	35.1	0.0
Bassi	400	427	04:01	396	08:23	0.0	0.0	18.9	0.0
Hissar	400	417	04:01	396	18:26	0.0	0.0	0.0	0.0
Moga	400	421	00:11	400	09:27	0.0	0.0	2.7	0.0
Abdullapur	400	425	01:00	411	19:00	0.0	0.0	0.0	0.0
Nalagarh	400	428	03:58	406	18:07	0.0	0.0	34.3	0.0
Kishenpur	400	431	02:57	403	18:05	0.0	0.0	22.1	0.2
Wagoora	400	426	03:01	387	19:18	0.0	0.5	8.0	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	763	13:02	742	13:46	0.0	0.0	0.0	0.0
Balia	765	758	00:00	723	18:36	1.7	35.4	0.0	0.0
Moga	765	797	04:04	756	18:08	0.0	0.0	0.0	0.0
Agra	765	808	20:44	764	08:44	0.0	0.0	13.5	0.0
Bhiwani	765	807	04:04	772	12:12	0.0	0.0	27.4	0.0
Unnao	765	759	00:00	728	18:36	0.0	6.0	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	511.04	1605.30	504.06	1272.20	296.25	307.27
Pong	426.72	384.05	420.76	916.71	420.39	902.94	74.42	369.25
Tehri	829.79	740.04	NA	NA	818.65	982.26	NA	NA
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	261.82	407.50	263.56	516.00	NA	196.65
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	518.14	144.00	520.80	144.00	76.88	122.13

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 26.10.2013 :
1. Normal weather in NR.

XIII. Synchronisation of new generating units :
0.00

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

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :
Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.
Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood Vishnuprayag and Dhauliganga expected by Mar, 2014 .

Report for : 26.10.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**