पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 30.11.2013
Date of Reporting : 01.12.2013

I. Regional Availability/Demand:

Evening Peak (19:00 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
34408	2450	36858	50.22	27495	800	28295	50.11	736.5	60.26

* 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	46.18	9.73		55.91	38.33	40.72	2.39	96.63	0.00
Haryana	68.69	0.50		69.19	31.24	33.66	2.42	102.85	0.00
Rajasthan	98.32	4.70	4.71	107.74	79.99	78.15	-1.83	185.89	0.00
Delhi	19.55			19.55	36.78	36.23	-0.55	55.78	0.00
UP	122.01	3.31	1.20	126.52	75.96	76.79	0.83	203.31	55.55
Uttarakhand		8.74		8.74	18.60	19.42	0.82	28.15	3.01
HP		5.79		5.79	16.24	17.50	1.27	23.29	0.00
J & K		7.45	0.00	7.45	28.13	29.93	1.80	37.37	1.70
Chandigarh				0.00	3.12	3.28	0.15	3.28	0.00
Total	**354.75**	**40.22**	**5.91**	**400.88**	**328.39**	**335.67**	**7.28**	**736.55**	**60.26**

*** 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 (19:00 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	4514	0	-9	-476	3299	0	146	-579	-10.89
Haryana	5359	0	570	-951	3606	0	323	-988	-23.40
Rajasthan	8020	0	-343	1250	6713	0	93	1065	37.44
Delhi	2988	0	-28	-717	1388	0	-57	-1102	-22.73
UP	8891	2275	-174	152	9032	800	41	466	-1.39
Uttarakhand	1525	75	26	403	1033	0	-19	409	8.65
HP	1149	0	95	76	731	0	35	246	4.44
J&K	1785	100	32	517	1603	0	187	376	8.62
Chandigarh	178	0	0	0	89	0	-8	0	0.00
Total	**34408**	**2450**	**170**	**253**	**27495**	**800**	**741**	**-107**	**0.74**

* 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	1870	2078	2088	44.75	1864	44.89	-0.14
	Rihand I STPS	1000	817	988	769	19.64	818	19.08	0.56
	Rihand II STPS	1000	868	1037	812	20.68	862	20.31	0.37
	Rihand III STPS	1000	433	514	462	10.46	436	10.39	0.07
	Dadri I STPS	840	814	653	481	13.29	554	13.46	-0.18
	Dadri II STPS	980	985	1005	722	21.35	890	21.57	-0.22
	Unchahar I TPS	420	405	423	392	9.26	386	9.42	-0.16
	Unchahar II TPS	420	195	207	181	4.28	178	4.37	-0.09
	Unchahar III TPS	210	200	211	173	4.39	183	4.44	-0.05
	ISTPP (Jhajjhar)	1500	1480	806	636	16.14	672	16.27	-0.14
	Dadri GPS	830	824	192	412	5.51	230	5.74	-0.23
	Anta GPS	419	414	264	247	6.12	255	6.21	-0.09
	Auraiya GPS	663	657	160	148	3.73	155	3.82	-0.09
	Sub Total (A)	**11282**	**9962**	**8538**	**7523**	**179.59**	**7483**	**179.98**	**-0.39**
B. NPC	NAPS	440	318	358	354	7.66	319	7.63	0.03
	RAPS- B	440	418	462	464	10.05	419	10.03	0.02
	RAPS- C	440	430	473	473	10.19	424	10.32	-0.13
	Sub Total (B)	**1320**	**1166**	**1293**	**1291**	**27.90**	**1162**	**27.98**	**-0.09**
C. NHPC	Chamera I HPS	540	541	270	0	2.29	95	2.29	0.00
	Chamera II HPS	300	300	0	0	1.23	51	1.27	-0.04
	Chamera III HPS	231	231	142	0	0.78	32	0.84	-0.06
	Bairasuil HPS	180	182	60	0	0.49	21	0.52	-0.03
	Salal-HPS	690	139	307	230	3.81	159	3.34	0.47
	Tanakpur-HPS	94	34	33	30	0.85	36	0.81	0.05
	Uri-HPS	480	105	238	82	2.56	107	2.50	0.06
	Uri-II HPS	120	70	100	46	1.68	70	1.69	0.00
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	169	0	2.92	122	3.09	-0.17
	Sewa-II HPS	120	119	0	0	0.00	0	0.26	-0.26
	Sub Total (C)	**3425**	**2108**	**1319**	**388**	**16.61**	**692**	**16.60**	**0.01**
D.NJPC	Nathpa Jhakri	1500	1605	1447	0	8.85	369	8.72	0.12
	Sub Total (D)	1500	1605	1447	0	8.85	369	8.72	0.12
E. THDC	Tehri HPS	1000	1060	996	0	6.14	256	6.00	0.14
	Koteshwar HPS	400	92	100	90	2.28	95	2.20	0.08
	Sub Total (E)	**1400**	**1152**	**1096**	**90**	**8.42**	**351**	**8.20**	**0.22**
F. BBMB	Bhakra HPS	1497	639	1072	365	15.83	660	15.34	0.49
	Dehar HPS	990	140	330	0	3.55	148	3.36	0.19
	Pong HPS	396	229	372	126	7.16	298	5.49	1.67
	Sub Total (F)	**2883**	**1008**	**1774**	**491**	**26.54**	**1106**	**24.19**	**2.35**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.57	24	0.55	0.02
	KWHEP HPS(IPP)	1000	0	328	0	5.03	210	4.80	0.23
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	216	142	5.00	208	5.00	0.00
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	544	142	10.61	442	10.36	0.25
H. Total Regional Entities (A-G)		**23472**	**17000**	**16011**	**9925**	**278.52**	**11605**	**276.03**	**2.48**

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	830	655	18.96	790
	Guru Nanak Dev TPS(Bhatinda)	440	250	250	6.48	270
	Guru Hargobind Singh TPS(L.mbt)	920	941	959	20.74	864
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2021	1864	46.18	1924
	Total Hydro	1148	419	356	9.73	406
	Total Punjab	**3768**	**2440**	**2220**	**55.91**	**2330**
Haryana	Panipat TPS	1367	827	782	19.41	809
	DCRTPP (Yamuna nagar)	600	280	251	6.27	261
	Faridabad GPS (NTPC)	432	202	167	4.64	193
	RGTPP (khedar) (IPP)	1200	595	506	13.15	548
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1037	688	25.22	1051
	Thermal (Total)	4944	2941	2394	68.69	2862
	Total Hydro	62	20	23	0.50	21
	Total Haryana	**5006**	**2961**	**2417**	**69.19**	**2883**
Rajasthan	kota TPS	1240	1181	1173	29.10	1212
	suratgarh TPS	1500	852	836	20.67	861
	Chabra TPS	500	420	396	10.23	426
	Dholpur GPS	330	107	107	2.67	111
	Ramgarh GPS	111	151	61	3.51	146
	RAPS A (NPC)	300	175	175	4.03	168
	Barsingsar (NLC)	250	199	219	5.03	209
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	475	289	10.06	419
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	660	589	431	13.03	543
	Thermal (Total)	6956	4149	3687	98.32	4097
	Total Hydro	550	113	114	4.70	196
	Wind power	2191	93	149	3.12	130
	Biomass	91	30	30	0.72	30
	Solar	201	0	0	0.87	36
	Renewable/Others (Total)	2483	123	179	4.71	196
	Total Rajasthan	**9989**	**4385**	**3980**	**107.74**	**4489**
UP	Anpara TPS	1630	1265	1246	29.50	1229
	Obra TPS	1288	302	301	7.20	300
	Paricha TPS	1140	795	824	18.90	788
	Panki TPS	210	63	72	1.70	71
	Harduaganj TPS	665	414	391	10.10	421
	Tanda TPS (NTPC)	440	400	401	9.79	408
	Roza TPS (IPP)	1200	1003	1080	24.69	1029
	Anpara-C (IPP)	1200	437	428	10.63	443
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	402	402	9.51	396
	Thermal (Total)	8223	5081	5145	122.01	5084
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	136	143	3.31	138
	Cogeneration	981	50	50	1.20	50
	Total UP	**10131**	**5267**	**5338**	**126.52**	**5272**
Uttarakhand	Total Hydro	1303	452	256	8.74	364
	Total Uttarakhand	**1303**	**452**	**256**	**8.74**	**364**
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	82	82	1.93	80
	Pragati Gas Turbine	330	311	266	7.24	302
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	520	410	10.38	433
	Thermal (Total)	2232	913	758	19.55	815
	Total Delhi	**2232**	**913**	**758**	**19.55**	**815**
HP	Baspa HPS (IPP)	330	29	29	1.55	65
	Malana HPS (IPP)	86	6	0	0.21	9
	Other Hydro	589	155	134	4.03	168
	Total HP	**1005**	**190**	**163**	**5.79**	**241**
J & K	Baglihar HPS (IPP)	450	296	148	4.89	204
	Other Hydro	323	91	115	2.56	106
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**387**	**263**	**7.45**	310
Total State Control Area Generation		**34390**	**16995**	**15395**	**400.88**	**16703**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**2562**	**3256**	**64.21**	**2676**
Total Regional Availability(Gross)		**57862**	**35568**	**28577**	**743.61**	**30984**

IV. Total Hydro Generation:

Regional Entities Hydro	**10500**	**5964**	**969**	**66.03**	**2751**
State Control Area Hydro	**5368**	**1717**	**1318**	**40.22**	**1676**
Total Regional Hydro	**15868**	**7681**	**2287**	**106.25**	**4427**

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy
	MW	MW	Import	Export	Import	Export	MU
Vindhychal B/B	-300	-300	0	300	0.00	7.32	-7.32
Gwalior-Agra (D/C)	1000	1377	1568	0	16.95	0.00	16.95
Zerda-Kankroli	-63	-75	72	191	0.00	1.78	-1.78
Zerda-Bhinmal	19	42	215	95	0.99	0.00	0.99
Malanpur-Auraiya	-105	-61	0	131	0.00	2.25	-2.25
Badod-Kota/Morak	-83	-123	0	179	0.00	2.55	-2.55
Mundra-Mohindergarh(HVDC)	902	898	904	0	21.77	0.00	21.77
Sub Total WR	**1370**	**1758**			**39.71**	**13.90**	**25.81**
Pusauli Bypass	-200	-200	0	200	0.00	4.84	-4.84
MZP- GKP (D/C)	222	505	693	0	11.43	0.00	11.43
Patna-Balia(D/C)	660	567	770	0	14.39	0.00	14.39
B'Sharif-Balia (D/C)	259	314	512	0	8.17	0.00	8.17
Pusauli-Balia	19	61	143	11	1.53	0.00	1.53
Gaya-Fatehpur (765 Kv)	135	160	362	0	5.77	0.00	5.77
Pusauli-Sahupuri	129	121	155	0	2.81	0.00	2.81
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	0	37	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	**1192**	**1498**			**44.10**	**5.69**	**38.40**
Total IR Exch	**2562**	**3256**			**83.80**	**19.59**	**64.21**

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
35.02	0.77	35.79	5.13	-28.81	12.18	4.88	2.92	-2.92

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
56.02	12.40	68.42	38.40	25.81	64.21	-17.61	13.41	-4.20

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	0.00	0.10	93.40	2.20	93.30	51.50	6.60

<---------- 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)
50.39	8.04	49.66	7.35	50.01	0.15	0.12	50.35	49.86

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	20:57	405	07:08	0.0	0.0	0.0	0.0
Gorakhpur	400	431	23:48	414	08:32	0.0	0.0	44.5	0.8
Bareilly	400	426	21:40	400	07:33	25.2	25.2	13.0	0.0
Kanpur	400	424	20:53	402	07:18	0.0	0.0	12.0	0.0
Dadri	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Ballabhgarh	400	432	04:04	409	10:24	0.0	0.0	47.5	0.8
Bawana	400	425	04:02	405	12:49	0.0	0.0	25.5	0.0
Bassi	400	426	20:41	389	07:36	0.0	0.2	4.1	0.0
Hissar	400	415	04:04	392	12:49	0.0	0.0	0.0	0.0
Moga	400	419	04:03	395	10:04	0.0	0.0	0.0	0.0
Abdullapur	400	426	20:56	401	12:49	0.0	0.0	3.6	0.0
Nalagarh	400	428	04:04	402	10:38	0.0	0.0	30.0	0.0
Kishenpur	400	417	01:50	393	10:05	0.0	0.0	0.0	0.0
Wagoora	400	408	13:03	375	18:22	7.0	25.2	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	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Balia	765	769	23:30	735	07:34	0.0	7.9	0.0	0.0
Moga	765	787	04:05	742	10:08	0.0	0.0	0.0	0.0
Agra	765	815	20:56	748	07:13	0.0	0.0	13.3	0.0
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	768	23:38	747	12:18	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	508.34	1470.42	500.82	1127.29	204.90	386.78
Pong	426.72	384.05	417.36	768.49	415.97	718.14	59.49	371.97
Tehri	829.79	740.04	820.65	1012.00	818.65	982.26	71.55	145.00
Koteshwar	612.50	598.50	609.00	4.50	NA	NA	145.00	152.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	54.60	61.64
Rihand	268.22	252.98	261.64	397.40	262.80	466.80	NA	NA
RPS	352.80	343.81	350.29	NA	NA	NA	253.12	NA
Jawahar Sagar	298.70	295.78	297.79	NA	NA	NA	241.12	NA
RSD	527.91	487.91	515.12	144.00	520.54	144.00	61.28	165.31

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 30.11.2013 :
1. Normal weather in Northern Region.

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 : 30.11.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**