पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 17.11.2013
Date of Reporting : 18.11.2013

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
32063	855	32918	50.21	25758	750	26508	50.35	693.0	31.11

* 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	43.88	9.34		53.22	30.23	32.36	2.13	85.58	0.00
Haryana	57.92	0.64		58.56	33.04	34.10	1.06	92.66	0.00
Rajasthan	93.89	4.62	7.32	105.83	71.30	65.34	-5.97	171.17	0.00
Delhi	15.19			15.19	39.88	39.10	-0.78	54.29	0.02
UP	122.39	3.04	1.20	126.63	73.77	71.08	-2.69	197.71	28.55
Uttarakhand		9.40		9.40	19.04	19.68	0.65	29.09	0.84
HP		7.10		7.10	16.62	15.15	-1.47	22.25	0.00
J & K		6.67	0.00	6.67	28.79	30.61	1.82	37.28	1.70
Chandigarh				0.00	3.08	2.98	-0.10	2.98	0.00
Total	**333.27**	**40.81**	**8.52**	**382.60**	**315.73**	**310.39**	**-5.34**	**693.00**	**31.11**

*** 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	4211	0	3	-639	3280	0	200	-535	-8.63
Haryana	4588	0	-143	-1026	3271	0	121	-1037	-25.37
Rajasthan	7046	0	-685	1544	6489	0	-38	1603	38.80
Delhi	3016	0	148	-728	1410	0	-88	-1068	-19.97
UP	8653	680	-448	-256	7902	750	-193	-256	-7.25
Uttarakhand	1461	75	-86	379	1051	0	81	351	8.81
HP	1091	0	-136	-43	748	0	-89	270	4.06
J&K	1837	100	-14	374	1515	0	132	312	7.25
Chandigarh	161	0	-9	0	92	0	-5	0	-0.02
Total	**32063**	**855**	**-1369**	**-395**	**25758**	**750**	**121**	**-360**	**-2.32**

* 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	1630	2024	44.14	1839	44.06	0.08
	Rihand I STPS	1000	772	949	712	17.66	736	17.71	-0.04
	Rihand II STPS	1000	788	1011	661	17.83	743	17.78	0.05
	Rihand III STPS	1000	413	507	348	9.43	393	9.42	0.01
	Dadri I STPS	840	814	631	490	13.03	543	13.20	-0.17
	Dadri II STPS	980	985	925	700	20.64	860	20.97	-0.33
	Unchahar I TPS	420	405	414	385	9.07	378	9.27	-0.21
	Unchahar II TPS	420	404	374	307	8.74	364	8.71	0.03
	Unchahar III TPS	210	201	188	158	4.27	178	4.28	-0.01
	ISTPP (Jhajjhar)	1500	1480	636	635	14.11	588	14.21	-0.10
	Dadri GPS	830	821	572	492	12.82	534	13.00	-0.18
	Anta GPS	419	422	247	254	6.15	256	6.21	-0.06
	Auraiya GPS	663	494	150	160	3.62	151	3.71	-0.09
	Sub Total (A)	**11282**	**9939**	**8234**	**7326**	**181.49**	**7562**	**182.51**	**-1.02**
B. NPC	NAPS	440	320	356	356	7.63	318	7.68	-0.05
	RAPS- B	440	419	462	464	10.10	421	10.06	0.04
	RAPS- C	440	430	478	477	10.24	427	10.32	-0.08
	Sub Total (B)	**1320**	**1169**	**1296**	**1297**	**27.97**	**1166**	**28.06**	**-0.08**
C. NHPC	Chamera I HPS	540	540	360	0	2.27	95	2.20	0.07
	Chamera II HPS	300	300	273	0	1.34	56	1.42	-0.08
	Chamera III HPS	231	231	116	0	0.86	36	0.82	0.05
	Bairasuil HPS	180	182	182	10	0.67	28	0.60	0.07
	Salal-HPS	690	139	200	195	3.27	136	3.33	-0.07
	Tanakpur-HPS	94	42	48	40	0.99	41	1.02	-0.03
	Uri-HPS	480	124	230	45	3.06	128	3.24	-0.17
	Uri-II HPS	120	82	121	61	1.97	82	1.97	0.00
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	265	0	3.36	140	3.37	-0.01
	Sewa-II HPS	120	119	117	0	0.40	17	0.41	-0.01
	Sub Total (C)	**3425**	**2146**	**1912**	**351**	**18.18**	**758**	**18.36**	**-0.18**
D.NJPC	Nathpa Jhakri	1500	1605	1415	0	9.97	415	9.63	0.34
	Sub Total (D)	1500	1605	1415	0	9.97	415	9.63	0.34
E. THDC	Tehri HPS	1000	1060	750	0	6.28	262	6.20	0.08
	Koteshwar HPS	400	92	100	90	2.22	93	2.20	0.02
	Sub Total (E)	**1400**	**1152**	**850**	**90**	**8.51**	**354**	**8.40**	**0.11**
F. BBMB	Bhakra HPS	1497	597	1077	372	14.83	618	14.32	0.51
	Dehar HPS	990	204	330	145	4.94	206	4.90	0.04
	Pong HPS	396	208	312	126	5.40	225	4.99	0.41
	Sub Total (F)	**2883**	**1009**	**1719**	**643**	**25.17**	**1049**	**24.21**	**0.96**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	72	0	0.65	27	0.62	0.03
	KWHEP HPS(IPP)	1000	0	300	0	5.09	212	5.16	-0.07
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	122	85	2.68	112	2.84	-0.16
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	494	85	8.43	351	8.62	-0.20
H. Total Regional Entities (A-G)		**23472**	**17019**	**15920**	**9792**	**279.72**	**11655**	**279.78**	**-0.07**

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	1020	900	20.87	870
	Guru Nanak Dev TPS(Bhatinda)	440	170	170	3.94	164
	Guru Hargobind Singh TPS(L.mbt)	920	865	951	19.06	794
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2055	2021	43.88	1828
	Total Hydro	1148	442	354	9.34	389
	Total Punjab	**3768**	**2497**	**2375**	**53.22**	**2217**
Haryana	Panipat TPS	1367	453	435	10.20	425
	DCRTPP (Yamuna nagar)	600	557	503	12.00	500
	Faridabad GPS (NTPC)	432	166	167	3.88	162
	RGTPP (khedar) (IPP)	1200	541	478	11.91	496
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	981	701	19.95	831
	Thermal (Total)	4944	2698	2284	57.92	2413
	Total Hydro	62	26	29	0.64	26
	Total Haryana	**5006**	**2724**	**2313**	**58.56**	**2440**
Rajasthan	kota TPS	1240	1095	1047	26.11	1088
	suratgarh TPS	1500	1016	1013	23.28	970
	Chabra TPS	500	401	383	9.78	407
	Dholpur GPS	330	129	133	3.26	136
	Ramgarh GPS	111	151	155	3.78	158
	RAPS A (NPC)	300	175	175	3.97	165
	Barsingsar (NLC)	250	110	111	2.32	97
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	401	88	6.91	288
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	660	495	488	14.48	604
	Thermal (Total)	6956	3973	3593	93.89	3912
	Total Hydro	550	163	192	4.62	193
	Wind power	2191	188	306	5.88	245
	Biomass	91	26	26	0.63	26
	Solar	201	0	0	0.82	34
	Renewable/Others (Total)	2483	214	332	7.32	305
	Total Rajasthan	**9989**	**4350**	**4117**	**105.83**	**4410**
UP	Anpara TPS	1630	1413	1416	30.20	1258
	Obra TPS	1288	490	499	10.50	438
	Paricha TPS	1140	685	682	14.89	620
	Panki TPS	210	60	90	1.20	50
	Harduaganj TPS	665	406	460	7.90	329
	Tanda TPS (NTPC)	440	346	397	9.70	404
	Roza TPS (IPP)	1200	891	810	23.27	970
	Anpara-C (IPP)	1200	648	720	17.66	736
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	254	260	7.08	295
	Thermal (Total)	8223	5193	5334	122.39	5100
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	141	130	3.04	127
	Cogeneration	981	50	50	1.20	50
	Total UP	**10131**	**5384**	**5514**	**126.63**	**5276**
Uttarakhand	Total Hydro	1303	560	245	9.40	392
	Total Uttarakhand	**1303**	**560**	**245**	**9.40**	**392**
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	83	82	1.91	80
	Pragati Gas Turbine	330	315	266	7.31	305
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	275	260	5.97	249
	Thermal (Total)	2232	673	608	15.19	633
	Total Delhi	**2232**	**673**	**608**	**15.19**	**633**
HP	Baspa HPS (IPP)	330	61	31	1.66	69
	Malana HPS (IPP)	86	9	0	0.28	12
	Other Hydro	589	214	196	5.17	215
	Total HP	**1005**	**284**	**227**	**7.10**	**296**
J & K	Baglihar HPS (IPP)	450	294	126	4.19	175
	Other Hydro	323	86	119	2.48	103
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**380**	**245**	**6.67**	278
Total State Control Area Generation		**34390**	**16852**	**15644**	**382.60**	**15942**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**1718**	**1985**	**56.10**	**2337**
Total Regional Availability(Gross)		**57862**	**34490**	**27421**	**718.42**	**29934**

IV. Total Hydro Generation:

Regional Entities Hydro	**10500**	**6268**	**1084**	**67.57**	**2816**
State Control Area Hydro	**5368**	**1996**	**1422**	**40.81**	**1700**
Total Regional Hydro	**15868**	**8264**	**2506**	**108.38**	**4516**

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	-350	-500	0	500	0.00	11.88	-11.88
Gwalior-Agra (D/C)	477	707	1133	0	15.08	0.00	15.08
Zerda-Kankroli	-144	-179	0	297	0.00	4.33	-4.33
Zerda-Bhinmal	-72	-48	103	211	0.00	1.62	-1.62
Malanpur-Auraiya	-129	-118	0	160	0.00	3.13	-3.13
Badod-Kota/Morak	-72	-89	0	166	0.00	2.58	-2.58
Mundra-Mohindergarh(HVDC)	1002	1001	1203	0	25.43	0.00	25.43
Sub Total WR	**712**	**774**			**40.51**	**23.54**	**16.97**
Pusauli Bypass	300	300	300	0	7.19	0.00	7.19
MZP- GKP (D/C)	228	229	696	0	10.51	0.00	10.51
Patna-Balia(D/C)	225	351	573	0	9.22	0.00	9.22
B'Sharif-Balia (D/C)	166	223	410	0	6.43	0.00	6.43
Pusauli-Balia	-72	-35	35	81	0.00	0.56	-0.56
Gaya-Fatehpur (765 Kv)	61	88	397	0	4.69	0.00	4.69
Pusauli-Sahupuri	133	87	134	0	2.61	0.00	2.61
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-32	0	38	0.00	0.96	-0.96
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	**1006**	**1211**			**40.65**	**1.52**	**39.13**
Total IR Exch	**1718**	**1985**			**81.16**	**25.06**	**56.10**

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
31.70	1.16	32.86	6.54	-29.27	9.05	5.64	2.95	-2.95

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
51.39	1.30	52.69	39.13	16.97	56.10	-12.26	15.67	3.41

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	0.30	85.30	2.90	85.30	66.90	14.70

<---------- 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)
50.51	21.55	49.66	9.18	50.06	0.23	0.14	50.36	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	20:41	407	08:44	0.0	0.0	0.0	0.0
Gorakhpur	400	423	00:00	410	18:00	0.0	0.0	0.0	0.0
Bareilly	400	426	21:38	403	07:50	0.0	0.0	12.5	0.0
Kanpur	400	424	04:00	406	10:00	0.0	0.0	0.0	0.0
Dadri	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Ballabhgarh	400	434	02:00	413	09:28	0.0	0.0	80.5	44.4
Bawana	400	429	03:08	412	11:20	0.0	0.0	58.9	0.0
Bassi	400	421	04:02	389	08:59	0.0	1.4	4.4	0.0
Hissar	400	420	03:08	400	09:27	0.0	0.0	0.0	0.0
Moga	400	425	03:06	407	07:08	0.0	0.0	19.5	0.0
Abdullapur	400	424	07:00	407	18:00	0.0	0.0	0.0	0.0
Nalagarh	400	429	23:25	409	10:09	0.0	0.0	42.5	0.0
Kishenpur	400	426	23:27	395	18:18	0.0	0.0	3.5	0.0
Wagoora	400	417	16:01	379	18:19	0.3	18.5	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	764	21:39	732	09:29	0.0	23.1	0.0	0.0
Moga	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Agra	765	822	20:59	765	08:42	0.0	0.0	34.5	0.1
Bhiwani	765	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Unnao	765	771	20:58	736	09:15	0.0	15.3	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	509.42	1515.08	502.38	1192.70	241.46	417.79
Pong	426.72	384.05	418.46	821.32	417.48	781.19	77.73	312.79
Tehri	829.79	740.04	822.25	1050.00	818.65	982.26	79.47	137.00
Koteshwar	612.50	598.50	610.50	4.50	NA	NA	137.00	148.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	58.37	63.65
Rihand	268.22	252.98	261.82	407.50	262.98	478.20	NA	NA
RPS	352.80	343.81	352.88	NA	NA	NA	243.01	12.15
Jawahar Sagar	298.70	295.78	298.61	NA	NA	NA	253.41	163.81
RSD	527.91	487.91	516.48	144.00	520.95	144.00	86.28	222.34

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 17.11.2013 :
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 : 17.11.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**