पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.09.2013
Date of Reporting : 14.09.2013

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
42097	3013	45110	50.12	40563	1775	42338	50.02	962.2	63.70

* 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	48.43	20.94		69.37	111.95	112.18	0.23	181.56	0.00
Haryana	88.08	0.67		88.75	68.03	67.85	-0.18	156.61	0.16
Rajasthan	106.51	0.59	5.68	112.78	79.74	79.84	0.11	192.63	3.30
Delhi	27.82			27.82	77.93	75.08	-2.85	102.91	0.09
UP	121.25	4.49	1.00	126.74	113.36	112.61	-0.75	239.35	56.16
Uttarakhand		19.08		19.08	9.26	10.98	1.73	30.06	1.94
HP		22.10		22.10	2.55	3.19	0.64	25.29	0.35
J & K		12.67	0.00	12.67	16.21	15.80	-0.41	28.47	1.70
Chandigarh				0.00	5.53	5.32	-0.22	5.32	0.00
Total	**392.09**	**80.53**	**6.68**	**479.31**	**484.56**	**482.86**	**-1.69**	**962.17**	**63.70**

*** 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	7839	0	-14	1670	7828	0	-84	1892	42.41
Haryana	7363	0	-314	-105	6628	0	53	-32	-6.52
Rajasthan	7944	251	78	746	8410	0	-310	924	17.02
Delhi	4635	0	-51	-15	3934	0	-175	-111	-0.36
UP	9890	2450	186	317	10487	1775	-205	1709	26.55
Uttarakhand	1500	195	188	-77	1291	0	133	-41	-1.43
HP	1182	17	56	-900	890	0	-61	-942	-21.14
J&K	1490	100	-5	-142	928	0	-117	-376	-5.90
Chandigarh	254	0	-13	0	169	0	-29	0	0.29
Total	**42097**	**3013**	**110**	**1494**	**40563**	**1775**	**-796**	**3024**	**50.92**

* 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	1740	1876	1867	41.90	1746	41.76	0.14
	Rihand I STPS	1000	929	1029	1003	22.46	936	22.29	0.18
	Rihand II STPS	1000	478	514	519	11.59	483	11.47	0.11
	Rihand III STPS	500	482	506	516	11.64	485	11.56	0.08
	Dadri I STPS	840	810	877	875	19.38	807	19.36	0.02
	Dadri II STPS	980	975	1013	1004	23.24	968	23.27	-0.03
	Unchahar I TPS	420	392	419	416	9.35	390	9.35	0.00
	Unchahar II TPS	420	403	438	439	9.61	401	9.54	0.08
	Unchahar III TPS	210	199	219	217	4.72	197	4.70	0.02
	ISTPP (Jhajjhar)	1500	1480	1032	957	22.34	931	22.69	-0.35
	Dadri GPS	830	796	375	388	8.90	371	9.75	-0.85
	Anta GPS	419	393	0	0	0.00	0	0.52	-0.52
	Auraiya GPS	663	624	151	153	3.52	147	3.52	0.01
	Sub Total (A)	**10782**	**9699**	**8449**	**8354**	**188.65**	**7861**	**189.76**	**-1.11**
B. NPC	NAPS	440	293	325	331	6.96	290	7.03	-0.07
	RAPS- B	440	194	218	217	4.64	194	4.66	-0.01
	RAPS- C	440	410	460	460	9.71	405	9.84	-0.13
	Sub Total (B)	**1320**	**897**	**1003**	**1008**	**21.32**	**888**	**21.53**	**-0.21**
C. NHPC	Chamera I HPS	540	534	540	180	6.45	269	6.32	0.12
	Chamera II HPS	300	300	302	299	5.51	230	5.67	-0.16
	Chamera III HPS	231	231	229	228	3.60	150	3.55	0.06
	Bairasuil HPS	180	182	120	60	1.75	73	1.75	0.01
	Salal-HPS	690	661	668	668	16.03	668	15.87	0.16
	Tanakpur-HPS	94	63	64	64	1.58	66	1.51	0.06
	Uri-HPS	480	307	330	320	7.85	327	7.60	0.25
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	401	404	9.39	391	9.39	0.00
	Sewa-II HPS	120	119	89	0	1.10	46	1.23	-0.13
	Sub Total (C)	**3305**	**2785**	**2743**	**2223**	**53.26**	**2219**	**52.88**	**0.39**
D.NJPC	Nathpa Jhakri	1500	1398	1214	1357	33.00	1375	33.08	-0.08
	Sub Total (D)	1500	1398	1214	1357	33.00	1375	33.08	-0.08
E. THDC	Tehri HPS	1000	1060	1066	231	10.84	452	10.50	0.34
	Koteshwar HPS	400	391	402	90	3.63	151	3.60	0.03
	Sub Total (E)	**1400**	**1451**	**1468**	**321**	**14.47**	**603**	**14.10**	**0.37**
F. BBMB	Bhakra HPS	1497	954	1141	824	23.21	967	22.91	0.31
	Dehar HPS	990	573	825	560	14.07	586	13.76	0.31
	Pong HPS	396	203	312	120	5.09	212	4.88	0.22
	Sub Total (F)	**2883**	**1731**	**2278**	**1504**	**42.37**	**1765**	**41.54**	**0.83**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	192	96	2.21	92	2.11	0.10
	KWHEP HPS(IPP)	1000	0	910	600	18.72	780	18.71	0.01
	Malana Stg-II HPS	100	0	70	70	1.54	64	1.45	0.09
	Shree Cement TPS	300	0	133	128	3.13	130	3.05	0.08
	Budhil HPS(IPP)	70	0	36	31	1.03	43	1.21	-0.18
	Sub Total (G)	1662	0	1341	925	26.64	1110	26.54	0.10
H. Total Regional Entities (A-G)		**22852**	**17961**	**18496**	**15692**	**379.71**	**15821**	**379.43**	**0.28**

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	1050	1050	23.17	965
	Guru Nanak Dev TPS(Bhatinda)	440	338	338	7.17	299
	Guru Hargobind Singh TPS(L.mbt)	920	725	957	18.10	754
	Goindwal(GVK)		0	0 0 0	0.00	0
	Thermal (Total)	2620	2113	2345	48.43	2018
	Total Hydro	1148	881	892	20.94	873
	Total Punjab	**3768**	**2994**	**3237**	**69.37**	**2891**
Haryana	Panipat TPS	1367	1080	1097	#VALUE!	#VALUE!
	DCRTPP (Yamuna nagar)	600	573	578	13.21	551
	Faridabad GPS (NTPC)	432	195	200	4.59	191
	RGTPP (khedar) (IPP)	1200	1123	1043	26.66	1111
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1114	747	23.25	969
	Thermal (Total)	4944	4085	3665	88.08	3670
	Total Hydro	62	28	28	0.67	28
	Total Haryana	**5006**	**4113**	**3693**	**88.75**	**3698**
Rajasthan	kota TPS	1240	1158	1154	27.69	1154
	suratgarh TPS	1500	1053	1075	25.46	1061
	Chabra TPS	500	432	444	10.26	428
	Dholpur GPS	330	111	111	2.66	111
	Ramgarh GPS	111	60	64	1.62	68
	RAPS A (NPC)	300	180	180	3.99	166
	Barsingsar (NLC)	250	84	83	1.91	79
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	811	772	18.58	774
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	660	580	600	14.34	597
	Thermal (Total)	6956	4469	4483	106.51	4438
	Total Hydro	550	0	24	0.59	25
	Wind power	2191	107	306	3.51	146
	Biomass	91	23	23	0.56	23
	Solar	201	0	0	1.62	68
	Renewable/Others (Total)	2483	130	329	5.68	237
	Total Rajasthan	**9989**	**4599**	**4836**	**112.78**	**4699**
UP	Anpara TPS	1630	1236	1227	29.50	1229
	Obra TPS	1288	440	451	10.40	433
	Paricha TPS	1140	788	776	17.30	721
	Panki TPS	210	126	144	3.30	138
	Harduaganj TPS	665	388	181	5.90	246
	Tanda TPS (NTPC)	440	294	298	7.28	303
	Roza TPS (IPP)	1200	824	810	19.79	825
	Anpara-C (IPP)	1200	835	832	20.03	835
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	323	324	7.74	323
	Thermal (Total)	8223	5254	5043	121.25	5052
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	188	218	4.49	187
	Cogeneration	981	40	40	1.00	42
	Total UP	**10131**	**5482**	**5301**	**126.74**	**5281**
Uttarakhand	Total Hydro	1303	799	800	19.08	795
	Total Uttarakhand	**1303**	**799**	**800**	**19.08**	**795**
Delhi	Rajghat TPS	135	81	44	1.32	55
	Delhi Gas Turbine	282	154	80	2.90	121
	Pragati Gas Turbine	330	292	267	6.81	284
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	277	277	6.90	287
	Badarpur TPS (NTPC)	705	445	485	9.90	413
	Thermal (Total)	2232	1249	1153	27.82	1159
	Total Delhi	**2232**	**1249**	**1153**	**27.82**	**1159**
HP	Baspa HPS (IPP)	330	277	306	6.82	284
	Malana HPS (IPP)	86	70	56	1.53	64
	Other Hydro	589	592	577	13.75	573
	Total HP	**1005**	**939**	**939**	**22.10**	**921**
J & K	Baglihar HPS (IPP)	450	438	436	9.47	394
	Other Hydro	323	132	128	3.20	133
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**570**	**564**	**12.67**	528
Total State Control Area Generation		**34390**	**20745**	**20523**	**479.31**	**19971**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**4590**	**5810**	**122.19**	**5091**
Total Regional Availability(Gross)		**57242**	**43831**	**42025**	**981.21**	**40884**

IV. Total Hydro Generation:

Regional Entities Hydro	**10380**	**8875**	**6171**	**165.57**	**6899**
State Control Area Hydro	**5368**	**3405**	**3465**	**80.53**	**3356**
Total Regional Hydro	**15748**	**12280**	**9636**	**246.11**	**10254**

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	150	500	500	0	6.56	0.00	6.56
Gwalior-Agra (D/C)	842	1432	1556	0	25.10	0.00	25.10
Zerda-Kankroli	114	67	114	101	0.63	0.25	0.37
Zerda-Bhinmal	174	130	200	64	2.30	0.00	2.30
Malanpur-Auraiya	-116	-60	0	123	0.00	2.01	-2.01
Badod-Kota/Morak	29	78	78	100	0.00	0.22	-0.22
Mundra-Mohindergarh(HVDC)	1447	1434	1450	0	34.79	0.00	34.79
Sub Total WR	**2640**	**3581**			**69.37**	**2.48**	**66.89**
Pusauli Bypass	-100	-67	135	250	0.00	1.23	-1.23
MZP- GKP (D/C)	645	839	863	0	18.91	0.00	18.91
Patna-Balia(D/C)	582	672	782	0	15.89	0.00	15.89
B'Sharif-Balia (D/C)	383	487	569	0	11.27	0.00	11.27
Pusauli-Balia	40	77	180	0	1.60	0.00	1.60
Gaya-Fatehpur (765 Kv)	293	204	389	0	6.42	0.00	6.42
Pusauli-Sahupuri	144	53	162	0	3.31	0.00	3.31
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-37	-36	33	0	0.00	0.87	-0.87
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	**1950**	**2229**			**57.40**	**2.10**	**55.30**
Total IR Exch	**4590**	**5810**			**126.77**	**4.58**	**122.19**

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
36.95	2.94	39.88	0.35	19.01	11.32	-2.74	4.09	-4.09

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
55.64	64.78	120.42	55.30	66.89	122.19	-0.35	2.11	1.76

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	4.30	99.00	10.80	94.70	23.20	1.00

<---------- 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)
50.31	6.04	49.58	14.24	49.92	0.21	0.12	50.19	49.76

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	411	16:03	401	00:19	0.0	0.0	0.0	0.0
Gorakhpur	400	424	20:02	402	23:54	0.0	0.0	9.2	0.0
Bareilly	400	417	18:20	395	11:20	0.0	0.0	0.0	0.0
Kanpur	400	414	05:01	399	23:42	0.0	0.0	0.0	0.0
Dadri	400	413	06:59	401	23:04	0.0	0.0	0.0	0.0
Ballabhgarh	400	419	05:13	403	23:41	0.0	0.0	0.0	0.0
Bawana	400	416	06:04	402	11:20	0.0	0.0	0.0	0.0
Bassi	400	413	04:03	388	10:48	0.0	0.6	0.0	0.0
Hissar	400	405	05:01	391	12:50	0.0	0.0	0.0	0.0
Moga	400	413	05:03	398	11:44	0.0	0.0	0.0	0.0
Abdullapur	400	412	06:04	397	12:49	0.0	0.0	0.0	0.0
Nalagarh	400	412	00:00	398	11:42	0.0	0.0	0.0	0.0
Kishenpur	400	416	05:01	403	11:20	0.0	0.0	0.0	0.0
Wagoora	400	415	04:04	396	19:10	0.0	0.0	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	10:00	743	23:41	0.0	0.0	0.0	0.0
Balia	765	779	18:20	726	23:49	0.5	15.0	0.0	0.0
Moga	765	788	05:02	761	11:20	0.0	0.0	0.0	0.0
Agra	765	796	05:02	765	14:09	0.0	0.0	0.0	0.0
Bhiwani	765	796	05:02	767	21:08	0.0	0.0	0.0	0.0
Unnao	765	763	18:22	737	23:42	0.0	3.8	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	511.53	1620.46	502.17	1192.70	744.68	656.53
Pong	426.72	384.05	423.79	1066.19	419.25	848.35	350.19	278.69
Tehri	829.79	740.04	821.25	1030.77	818.65	982.26	255.46	239.00
Koteshwar	612.50	598.50	610.90	4.96	NA	NA	239.00	241.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	196.44	174.45
Rihand	268.22	252.98	NA	NA	262.80	466.80	NA	NA
RPS	352.80	343.81	352.72	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.61	NA	NA	NA	NA	NA
RSD	527.91	487.91	521.39	144.00	515.42	144.00	203.60	428.26

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 13.09.2013 :

1. Normal weather in NR.

XIII. Synchronisation of new generating units :

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 Dec, 2013 .

Report for : 13.09.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**