पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 29.09.2013
Date of Reporting : 30.09.2013

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
35611	2268	37879	50.14	34800	1250	36050	0.00	809.9	33.49

* 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	47.27	12.78		60.05	101.49	101.63	0.13	161.67	0.00
Haryana	53.96	0.54		54.50	66.18	66.19	0.01	120.68	0.02
Rajasthan	66.37	5.59	12.71	84.68	47.53	36.31	-11.22	120.98	0.00
Delhi	20.18			20.18	66.49	63.87	-2.61	84.05	0.00
UP	119.40	4.25	1.70	125.35	113.45	110.19	-3.26	235.54	31.12
Uttarakhand		18.34		18.34	11.53	11.72	0.19	30.06	0.52
HP		17.03		17.03	5.83	5.21	-0.62	22.24	0.14
J & K		13.53	0.00	13.53	17.78	16.74	-1.04	30.27	1.70
Chandigarh				0.00	4.61	4.38	-0.23	4.38	0.00
Total	**307.18**	**72.05**	**14.41**	**393.64**	**434.89**	**416.24**	**-18.65**	**809.88**	**33.49**

*** 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	7256	0	8	1744	6667	0	8	1729	43.84
Haryana	5383	18	110	242	5012	0	-135	203	2.68
Rajasthan	5885	0	-326	570	5135	0	-243	319	8.58
Delhi	3798	0	-125	-199	3472	0	19	-495	-7.83
UP	9201	2150	-502	641	11272	1250	67	1685	27.85
Uttarakhand	1312	0	-105	84	1272	0	81	-44	1.33
HP	1102	0	-278	-883	823	0	166	-535	-13.00
J&K	1456	100	-52	-82	982	0	-85	-300	-2.51
Chandigarh	218	0	-23	-20	165	0	-15	-20	-0.22
Total	**35611**	**2268**	**-1292**	**2098**	**34800**	**1250**	**-137**	**2542**	**60.71**

* 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	1782	1877	37.88	1578	38.12	-0.24
	Rihand I STPS	1000	920	867	855	17.14	714	17.47	-0.33
	Rihand II STPS	1000	478	441	417	8.60	358	9.04	-0.43
	Rihand III STPS	500	485	469	406	9.43	393	9.58	-0.15
	Dadri I STPS	840	600	478	512	11.62	484	12.27	-0.65
	Dadri II STPS	980	975	889	922	19.63	818	20.51	-0.88
	Unchahar I TPS	420	357	342	340	6.57	274	6.63	-0.06
	Unchahar II TPS	420	403	311	330	6.92	288	6.76	0.16
	Unchahar III TPS	210	199	152	174	3.63	151	3.34	0.30
	ISTPP (Jhajjhar)	1500	1480	681	680	15.03	626	15.27	-0.24
	Dadri GPS	830	800	553	565	13.10	546	13.15	-0.05
	Anta GPS	419	399	255	256	6.02	251	6.17	-0.15
	Auraiya GPS	663	624	159	157	3.59	150	3.61	-0.01
	Sub Total (A)	**10782**	**9460**	**7379**	**7491**	**159.18**	**6632**	**161.91**	**-2.74**
B. NPC	NAPS	440	294	333	333	7.05	294	7.06	0.00
	RAPS- B	440	400	444	424	9.40	392	9.60	-0.20
	RAPS- C	440	412	464	465	9.89	412	9.89	0.00
	Sub Total (B)	**1320**	**1106**	**1241**	**1222**	**26.34**	**1097**	**26.54**	**-0.21**
C. NHPC	Chamera I HPS	540	537	540	180	4.52	189	4.64	-0.11
	Chamera II HPS	300	300	298	100	4.46	186	4.59	-0.13
	Chamera III HPS	231	231	227	74	2.84	118	3.01	-0.17
	Bairasuil HPS	180	182	150	60	1.31	55	1.47	-0.16
	Salal-HPS	690	545	601	577	12.64	527	13.13	-0.49
	Tanakpur-HPS	94	94	92	93	2.23	93	2.21	0.02
	Uri-HPS	480	223	232	238	5.01	209	5.12	-0.11
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	408	401	9.11	380	9.33	-0.22
	Sewa-II HPS	120	119	117	0	0.82	34	0.90	-0.08
	Sub Total (C)	**3305**	**2617**	**2665**	**1723**	**42.95**	**1790**	**44.39**	**-1.44**
D.NJPC	Nathpa Jhakri	1500	1605	1623	765	22.73	947	22.90	-0.17
	Sub Total (D)	1500	1605	1623	765	22.73	947	22.90	-0.17
E. THDC	Tehri HPS	1000	1060	1059	230	6.96	290	6.85	0.11
	Koteshwar HPS	400	100	101	100	2.36	99	2.40	-0.04
	Sub Total (E)	**1400**	**1160**	**1160**	**330**	**9.33**	**389**	**9.25**	**0.08**
F. BBMB	Bhakra HPS	1497	817	1355	668	19.93	830	19.61	0.32
	Dehar HPS	990	536	660	470	13.17	549	12.86	0.31
	Pong HPS	396	289	372	252	6.70	279	6.93	-0.23
	Sub Total (F)	**2883**	**1641**	**2387**	**1390**	**39.80**	**1658**	**39.39**	**0.41**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	60	73	1.63	68	1.53	0.09
	KWHEP HPS(IPP)	1000	0	874	380	11.82	492	12.47	-0.66
	Malana Stg-II HPS	100	0	108	0	1.01	42	0.97	0.04
	Shree Cement TPS	300	0	249	124	4.81	200	5.78	-0.98
	Budhil HPS(IPP)	70	0	35	35	0.82	34	0.84	-0.01
	Sub Total (G)	1662	0	1326	612	20.09	837	21.60	-1.51
H. Total Regional Entities (A-G)		**22852**	**17590**	**17781**	**13533**	**320.40**	**13350**	**325.99**	**-5.59**

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	1060	1050	23.99	999
	Guru Nanak Dev TPS(Bhatinda)	440	343	340	6.78	282
	Guru Hargobind Singh TPS(L.mbt)	920	795	784	16.51	688
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2198	2174	47.27	1969
	Total Hydro	1148	539	528	12.78	533
	Total Punjab	**3768**	**2737**	**2702**	**60.05**	**2502**
Haryana	Panipat TPS	1367	404	408	9.96	415
	DCRTPP (Yamuna nagar)	600	259	259	5.93	247
	Faridabad GPS (NTPC)	432	284	279	6.89	287
	RGTPP (khedar) (IPP)	1200	494	485	12.39	516
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	744	744	18.79	783
	Thermal (Total)	4944	2185	2175	53.96	2248
	Total Hydro	62	12	13	0.54	22
	Total Haryana	**5006**	**2197**	**2188**	**54.50**	**2271**
Rajasthan	kota TPS	1240	735	936	19.73	822
	suratgarh TPS	1500	766	769	18.41	767
	Chabra TPS	500	196	388	6.56	273
	Dholpur GPS	330	107	103	2.35	98
	Ramgarh GPS	111	24	27	0.36	15
	RAPS A (NPC)	300	168	168	4.01	167
	Barsingsar (NLC)	250	186	187	4.37	182
	Giral LTPS	250	0	0	0.00	0
	Rajwest LTPS (IPP)	1080	410	491	10.59	441
	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	2592	3069	66.37	2766
	Total Hydro	550	232	181	5.59	233
	Wind power	2191	515	316	10.44	435
	Biomass	91	27	27	0.64	27
	Solar	201	0	0	1.63	68
	Renewable/Others (Total)	2483	542	343	12.71	530
	Total Rajasthan	**9989**	**3366**	**3593**	**84.68**	**3528**
UP	Anpara TPS	1630	1183	1179	29.00	1208
	Obra TPS	1288	401	385	9.10	379
	Paricha TPS	1140	764	825	18.40	767
	Panki TPS	210	63	72	1.20	50
	Harduaganj TPS	665	367	365	8.80	367
	Tanda TPS (NTPC)	440	296	295	7.31	305
	Roza TPS (IPP)	1200	589	1067	22.40	933
	Anpara-C (IPP)	1200	713	810	16.10	671
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	230	363	7.09	296
	Thermal (Total)	8223	4606	5361	119.40	4975
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	180	255	4.25	177
	Cogeneration	981	70	70	1.70	71
	Total UP	**10131**	**4856**	**5686**	**125.35**	**5223**
Uttarakhand	Total Hydro	1303	769	774	18.34	764
	Total Uttarakhand	**1303**	**769**	**774**	**18.34**	**764**
Delhi	Rajghat TPS	135	37	43	0.83	34
	Delhi Gas Turbine	282	160	157	3.76	157
	Pragati Gas Turbine	330	265	141	4.38	182
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	505	505	11.22	467
	Thermal (Total)	2232	967	846	20.18	841
	Total Delhi	**2232**	**967**	**846**	**20.18**	**841**
HP	Baspa HPS (IPP)	330	519	0	4.36	182
	Malana HPS (IPP)	86	49	41	1.02	43
	Other Hydro	589	527	509	11.65	485
	Total HP	**1005**	**1095**	**550**	**17.03**	**710**
J & K	Baglihar HPS (IPP)	450	438	436	10.48	437
	Other Hydro	323	102	128	3.05	127
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**540**	**564**	**13.53**	564
Total State Control Area Generation		**34390**	**16527**	**16903**	**393.64**	**16402**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3598**	**5094**	**109.42**	**4559**
Total Regional Availability(Gross)		**57242**	**37906**	**35530**	**823.46**	**34311**

IV. Total Hydro Generation:

Regional Entities Hydro	**10380**	**8877**	**4661**	**129.26**	**5386**
State Control Area Hydro	**5368**	**3367**	**2865**	**72.05**	**3002**
Total Regional Hydro	**15748**	**12244**	**7526**	**201.31**	**8388**

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	300	500	500	50	5.94	0.45	5.48
Gwalior-Agra (D/C)	1212	1459	1728	0	35.81	0.00	35.81
Zerda-Kankroli	-79	-180	16	256	0.00	3.73	-3.73
Zerda-Bhinmal	-56	-172	79	283	0.00	3.52	-3.52
Malanpur-Auraiya	-70	-60	0	108	0.00	1.48	-1.48
Badod-Kota/Morak	20	-100	32	173	0.00	2.02	-2.02
Mundra-Mohindergarh(HVDC)	989	1051	1093	0	22.53	0.00	22.53
Sub Total WR	**2316**	**2498**			**64.28**	**11.21**	**53.07**
Pusauli Bypass	-100	-100	0	100	0.00	2.44	-2.44
MZP- GKP (D/C)	500	843	1050	0	19.87	0.00	19.87
Patna-Balia(D/C)	467	828	894	0	17.21	0.00	17.21
B'Sharif-Balia (D/C)	276	739	776	0	13.88	0.00	13.88
Pusauli-Balia	-22	125	134	22	1.61	0.00	1.61
Gaya-Fatehpur (765 Kv)	40	68	213	0	3.09	0.00	3.09
Pusauli-Sahupuri	158	129	196	0	4.01	0.00	4.01
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-37	-36	0	37	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	**1282**	**2596**			**59.66**	**3.31**	**56.35**
Total IR Exch	**3598**	**5094**			**123.94**	**14.52**	**109.42**

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
35.28	2.20	37.48	-0.04	23.22	18.51	-0.03	2.87	-2.87

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
58.83	64.72	123.55	56.35	53.07	109.42	-2.48	-11.65	-14.13

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	65.00	0.50	64.90	85.10	35.00

<---------- 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)
50.56	6.09	49.69	18.38	50.14	0.37	0.13	50.50	0.00

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	17:46	402	19:05	0.0	0.0	0.0	0.0
Gorakhpur	400	422	09:12	406	01:30	0.0	0.0	1.8	0.0
Bareilly	400	421	17:39	404	14:39	0.0	0.0	0.1	0.0
Kanpur	400	414	00:46	411	00:18	0.0	0.0	0.0	0.0
Dadri	400	418	06:08	405	19:08	0.0	0.0	0.0	0.0
Ballabhgarh	400	426	06:08	410	19:06	0.0	0.0	19.0	0.0
Bawana	400	424	06:20	409	19:06	0.0	0.0	4.4	0.0
Bassi	400	429	06:05	411	19:06	0.0	0.0	67.0	0.0
Hissar	400	413	06:05	399	00:00	0.0	0.0	0.0	0.0
Moga	400	413	06:04	400	19:03	0.0	0.0	0.0	0.0
Abdullapur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Nalagarh	400	417	06:06	405	12:11	0.0	0.0	0.0	0.0
Kishenpur	400	418	23:59	402	19:03	0.0	0.0	0.0	0.0
Wagoora	400	420	23:58	385	19:09	0.0	5.6	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	780	06:20	724	14:41	0.4	43.3	0.0	0.0
Balia	765	759	09:04	730	01:30	0.0	21.1	0.0	0.0
Moga	765	783	06:05	757	19:06	0.0	0.0	0.0	0.0
Agra	765	813	06:09	783	18:38	0.0	0.0	23.2	0.0
Bhiwani	765	801	06:05	774	19:06	0.0	0.0	0.2	0.0
Unnao	765	752	07:15	748	00:00	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	511.16	1605.30	505.18	1312.37	567.38	567.38
Pong	426.72	384.05	422.94	1035.89	263.40	372.90	422.59	1005.78
Tehri	829.79	740.04	824.55	1099.49	818.65	982.26	147.27	151.00
Koteshwar	612.50	598.50	608.20	4.96	NA	NA	138.00	158.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	152.52	122.62
Rihand	268.22	252.98	260.70	343.60	264.14	554.30	NA	NA
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	518.90	144.00	521.08	144.00	139.77	127.77

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 29.09.2013 :
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 : 29.09.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**