पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.09.2013
Date of Reporting : 20.09.2013

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
41601	2353	43953	50.19	39502	1400	40902	50.11	948.0	64.14

* 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	54.82	16.28		71.10	99.78	99.68	-0.10	170.78	0.00
Haryana	88.08	0.65		88.73	69.97	69.43	-0.54	158.16	1.15
Rajasthan	100.06	1.19	3.99	105.25	83.47	82.83	-0.63	188.08	0.93
Delhi	31.97			31.97	65.74	64.82	-0.92	96.79	0.05
UP	126.74	3.81	1.00	131.55	114.39	110.88	-3.51	242.43	57.00
Uttarakhand		16.21		16.21	11.47	15.15	3.68	31.36	3.13
HP		17.70		17.70	5.97	6.83	0.86	24.53	0.19
J & K		13.63	0.00	13.63	16.06	17.21	1.15	30.84	1.70
Chandigarh				0.00	4.83	5.06	0.23	5.06	0.00
Total	**401.66**	**69.48**	**4.99**	**476.13**	**471.68**	**471.89**	**0.22**	**948.02**	**64.14**

*** 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	7723	0	105	1635	7085	0	-11	2032	38.62
Haryana	7094	128	77	424	6121	0	-76	51	-2.23
Rajasthan	7955	0	86	1696	7918	0	-6	1313	33.57
Delhi	4427	0	15	-249	3555	0	-169	-245	-6.90
UP	9879	1920	-305	1331	11520	1400	-176	2061	32.08
Uttarakhand	1506	205	249	-25	1239	0	80	118	1.68
HP	1168	0	47	-822	870	0	-28	-646	-13.66
J&K	1604	100	54	-82	1036	0	-16	-275	-2.99
Chandigarh	245	0	4	-25	158	0	-12	-15	0.05
Total	**41601**	**2353**	**332**	**3882**	**39502**	**1400**	**-413**	**4394**	**80.21**

* 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	1705	1658	1868	40.78	1699	40.92	-0.14
	Rihand I STPS	1000	858	1003	960	19.99	833	20.60	-0.61
	Rihand II STPS	1000	475	518	521	11.69	487	11.39	0.30
	Rihand III STPS	500	481	500	514	11.42	476	11.55	-0.14
	Dadri I STPS	840	600	643	645	14.30	596	14.39	-0.10
	Dadri II STPS	980	972	1014	1020	22.88	953	23.06	-0.18
	Unchahar I TPS	420	394	426	434	9.31	388	9.46	-0.15
	Unchahar II TPS	420	403	437	440	9.56	398	9.63	-0.08
	Unchahar III TPS	210	199	216	216	4.74	198	4.76	-0.02
	ISTPP (Jhajjhar)	1500	1461	850	676	19.30	804	19.33	-0.03
	Dadri GPS	830	796	542	375	11.08	462	11.35	-0.27
	Anta GPS	419	399	0	0	0.00	0	0.00	0.00
	Auraiya GPS	663	621	153	156	3.56	148	3.57	-0.01
	Sub Total (A)	**10782**	**9363**	**7960**	**7825**	**178.60**	**7442**	**180.01**	**-1.41**
B. NPC	NAPS	440	296	329	335	7.03	293	7.10	-0.08
	RAPS- B	440	194	218	220	4.61	192	4.66	-0.05
	RAPS- C	440	410	464	464	9.80	408	9.84	-0.04
	Sub Total (B)	**1320**	**900**	**1011**	**1019**	**21.43**	**893**	**21.60**	**-0.17**
C. NHPC	Chamera I HPS	540	535	540	360	4.54	189	4.50	0.04
	Chamera II HPS	300	200	173	202	4.12	172	3.78	0.34
	Chamera III HPS	231	231	212	75	2.64	110	2.75	-0.11
	Bairasuil HPS	180	182	30	50	1.50	62	1.46	0.04
	Salal-HPS	690	357	575	330	9.39	391	8.78	0.61
	Tanakpur-HPS	94	90	93	93	2.21	92	2.18	0.03
	Uri-HPS	480	328	357	350	8.38	349	8.30	0.08
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	393	407	9.37	391	9.40	-0.03
	Sewa-II HPS	120	119	122	0	0.78	33	0.80	-0.02
	Sub Total (C)	**3305**	**2430**	**2495**	**1867**	**42.93**	**1789**	**41.94**	**0.98**
D.NJPC	Nathpa Jhakri	1500	1605	1596	1217	25.11	1046	24.70	0.40
	Sub Total (D)	1500	1605	1596	1217	25.11	1046	24.70	0.40
E. THDC	Tehri HPS	1000	1060	1051	505	9.33	389	9.00	0.33
	Koteshwar HPS	400	281	400	0	3.12	130	3.10	0.02
	Sub Total (E)	**1400**	**1341**	**1451**	**505**	**12.45**	**519**	**12.10**	**0.35**
F. BBMB	Bhakra HPS	1497	827	1200	614	20.22	843	19.84	0.38
	Dehar HPS	990	492	660	560	11.88	495	11.81	0.07
	Pong HPS	396	127	186	126	3.11	130	3.05	0.07
	Sub Total (F)	**2883**	**1445**	**2046**	**1300**	**35.21**	**1467**	**34.69**	**0.52**
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	65	64	1.59	66	1.53	0.05
	KWHEP HPS(IPP)	1000	0	700	460	13.20	550	13.16	0.04
	Malana Stg-II HPS	100	0	102	50	1.09	45	0.97	0.11
	Shree Cement TPS	300	0	113	124	2.89	121	3.05	-0.16
	Budhil HPS(IPP)	70	0	35	35	0.78	32	0.81	-0.04
	Sub Total (G)	1662	0	1015	733	19.54	814	19.54	0.00
H. Total Regional Entities (A-G)		**22852**	**17084**	**17574**	**14466**	**335.26**	**13969**	**334.59**	**0.67**

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	1260	1050	27.13	1130
	Guru Nanak Dev TPS(Bhatinda)	440	330	275	6.76	281
	Guru Hargobind Singh TPS(L.mbt)	920	948	852	20.94	872
	Goindwal(GVK)		0	0 0 0	0.00	0
	Thermal (Total)	2620	2538	2177	54.82	2284
	Total Hydro	1148	742	664	16.28	679
	Total Punjab	**3768**	**3280**	**2841**	**71.10**	**2963**
Haryana	Panipat TPS	1367	814	758	19.22	801
	DCRTPP (Yamuna nagar)	600	574	576	12.92	538
	Faridabad GPS (NTPC)	432	195	185	4.53	189
	RGTPP (khedar) (IPP)	1200	1080	837	23.22	967
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	579	741	18.64	777
	Thermal (Total)	4944	3242	3097	88.08	3670
	Total Hydro	62	17	18	0.65	27
	Total Haryana	**5006**	**3259**	**3115**	**88.73**	**3697**
Rajasthan	kota TPS	1240	928	951	22.74	948
	suratgarh TPS	1500	1091	1083	28.31	1180
	Chabra TPS	500	225	226	5.39	225
	Dholpur GPS	330	30	78	1.10	46
	Ramgarh GPS	111	23	34	0.83	35
	RAPS A (NPC)	300	180	173	4.02	168
	Barsingsar (NLC)	250	87	69	2.23	93
	Giral LTPS	250	53	53	1.08	45
	Rajwest LTPS (IPP)	1080	850	846	20.08	837
	VSLP LTPS (IPP)	135	0	0	0.00	0
	Kalisindh Thermal	600	0	0	0.00	0
	Kawai(Adani)	660	615	580	14.28	595
	Thermal (Total)	6956	4082	4093	100.06	4169
	Total Hydro	550	35	24	1.19	50
	Wind power	2191	95	205	2.22	92
	Biomass	91	27	27	0.65	27
	Solar	201	0	0	1.13	47
	Renewable/Others (Total)	2483	122	232	3.99	166
	Total Rajasthan	**9989**	**4239**	**4349**	**105.25**	**4385**
UP	Anpara TPS	1630	1186	1201	28.30	1179
	Obra TPS	1288	428	446	10.50	438
	Paricha TPS	1140	761	858	19.20	800
	Panki TPS	210	131	149	2.90	121
	Harduaganj TPS	665	366	389	9.00	375
	Tanda TPS (NTPC)	440	296	295	7.33	305
	Roza TPS (IPP)	1200	810	803	19.36	807
	Anpara-C (IPP)	1200	972	981	23.18	966
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	324	365	6.97	291
	Thermal (Total)	8223	5274	5487	126.74	5281
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	145	166	3.81	159
	Cogeneration	981	40	40	1.00	42
	Total UP	**10131**	**5459**	**5693**	**131.55**	**5481**
Uttarakhand	Total Hydro	1303	715	652	16.21	676
	Total Uttarakhand	**1303**	**715**	**652**	**16.21**	**676**
Delhi	Rajghat TPS	135	90	91	2.25	94
	Delhi Gas Turbine	282	159	78	2.81	117
	Pragati Gas Turbine	330	294	266	6.82	284
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	294	278	6.53	272
	Badarpur TPS (NTPC)	705	650	575	13.56	565
	Thermal (Total)	2232	1487	1288	31.97	1332
	Total Delhi	**2232**	**1487**	**1288**	**31.97**	**1332**
HP	Baspa HPS (IPP)	330	199	90	4.45	185
	Malana HPS (IPP)	86	51	41	1.06	44
	Other Hydro	589	525	526	12.19	508
	Total HP	**1005**	**775**	**657**	**17.70**	**737**
J & K	Baglihar HPS (IPP)	450	438	436	10.49	437
	Other Hydro	323	126	128	3.14	131
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**564**	**564**	**13.63**	568
Total State Control Area Generation		**34390**	**19778**	**19159**	**476.13**	**19839**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**5966**	**7171**	**159.96**	**6665**
Total Regional Availability(Gross)		**57242**	**43318**	**40796**	**971.36**	**40473**

IV. Total Hydro Generation:

Regional Entities Hydro	**10380**	**8455**	**5463**	**131.57**	**5482**
State Control Area Hydro	**5368**	**2993**	**2745**	**69.48**	**2895**
Total Regional Hydro	**15748**	**11448**	**8208**	**201.05**	**8377**

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	200	500	500	0	11.59	0.00	11.59
Gwalior-Agra (D/C)	1558	1836	1836	0	32.69	0.00	32.69
Zerda-Kankroli	103	-14	146	174	0.00	0.92	-0.92
Zerda-Bhinmal	161	34	203	106	0.59	0.00	0.59
Malanpur-Auraiya	-87	-38	0	87	0.00	1.02	-1.02
Badod-Kota/Morak	134	109	181	0	2.04	0.00	2.04
Mundra-Mohindergarh(HVDC)	1383	1418	1421	0	34.27	0.00	34.27
Sub Total WR	**3452**	**3845**			**81.18**	**1.94**	**79.24**
Pusauli Bypass	5	400	400	124	13.25	0.30	12.95
MZP- GKP (D/C)	753	949	968	0	20.49	0.00	20.49
Patna-Balia(D/C)	750	941	1037	0	20.94	0.00	20.94
B'Sharif-Balia (D/C)	552	694	820	0	15.81	0.00	15.81
Pusauli-Balia	101	47	170	0	2.27	0.00	2.27
Gaya-Fatehpur (765 Kv)	247	195	325	0	5.72	0.00	5.72
Pusauli-Sahupuri	143	136	164	0	3.18	0.00	3.18
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-37	-36	0	37	0.00	0.64	-0.64
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	**2514**	**3326**			**81.66**	**0.94**	**80.72**
Total IR Exch	**5966**	**7171**			**162.84**	**2.88**	**159.96**

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
39.32	2.66	41.98	3.96	28.63	20.87	10.57	6.36	-6.36

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
73.18	78.92	152.09	80.72	79.24	159.96	7.55	0.32	7.87

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	1.60	91.70	4.50	90.10	47.80	8.30

<---------- 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)
50.41	8.09	49.58	16.25	50.01	0.19	0.14	50.36	49.75

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	407	07:38	399	01:22	0.0	0.0	0.0	0.0
Gorakhpur	400	427	08:05	397	01:26	0.0	0.0	15.7	0.0
Bareilly	400	422	07:35	392	01:27	0.0	0.0	0.5	0.0
Kanpur	400	420	08:06	400	14:18	0.0	0.0	0.0	0.0
Dadri	400	415	07:33	395	14:30	0.0	0.0	0.0	0.0
Ballabhgarh	400	423	07:34	403	11:43	0.0	0.0	7.7	0.0
Bawana	400	414	18:02	402	11:43	0.0	0.0	0.0	0.0
Bassi	400	418	18:01	394	23:15	0.0	0.0	0.0	0.0
Hissar	400	410	07:31	389	14:19	0.0	0.3	0.0	0.0
Moga	400	411	07:33	393	14:19	0.0	0.0	0.0	0.0
Abdullapur	400	416	06:06	400	19:08	0.0	0.0	0.0	0.0
Nalagarh	400	419	07:34	398	14:19	0.0	0.0	0.0	0.0
Kishenpur	400	415	03:11	400	19:08	0.0	0.0	0.0	0.0
Wagoora	400	414	03:13	390	19:13	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	777	18:01	741	14:19	0.0	0.2	0.0	0.0
Balia	765	773	08:03	718	01:26	10.1	48.2	0.0	0.0
Moga	765	780	07:34	744	14:20	0.0	0.0	0.0	0.0
Agra	765	804	07:18	758	14:19	0.0	0.0	0.6	0.0
Bhiwani	765	795	07:34	761	11:46	0.0	0.0	0.0	0.0
Unnao	765	773	07:39	732	01:30	0.0	13.2	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	511.62	1635.65	502.94	1219.07	679.41	618.81
Pong	426.72	384.05	423.78	1066.19	420.00	889.22	325.73	388.22
Tehri	829.79	740.04	822.05	1045.00	818.65	982.26	220.85	224.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	168.15	200.46
Rihand	268.22	252.98	NA	NA	263.50	512.00	NA	NA
RPS	352.80	343.81	352.74	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.70	NA	NA	NA	NA	NA
RSD	527.91	487.91	520.90	144.00	516.82	144.00	165.60	185.62

*** NA: Not Available**

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 19.09.2013 :

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 : 19.09.2013 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**