पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 23.09.2011
Date of Reporting : 24.09.2011

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
32667	3157	35824	49.69	31783	1052	32835	50.01	768.4	39.52

* Half hourly (two 15 minutes block--one block each before and after the designated time) average frequency

II. A. State's Load Energy 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	53.88	14.76		68.64	87.94	82.95	-4.99	151.59	1.88
Haryana	70.50	1.02		71.52	42.52	45.38	2.86	116.90	2.71
Rajasthan	59.20	1.12	3.60	63.91	35.29	48.31	13.02	112.22	6.56
Delhi	25.71			25.71	67.01	61.62	-5.40	87.33	0.00
UP	61.29	18.63	0.60	80.52	125.28	135.93	10.65	216.45	26.91
Uttarakhand		19.78		19.78	5.47	8.47	2.99	28.25	1.12
HP		18.87		18.87	2.80	4.23	1.44	23.11	0.34
J & K		14.24	0.00	14.24	16.23	13.33	-2.90	27.57	0.00
Chandigarh				0.00	5.24	4.95	-0.29	4.95	0.00
Total	**270.58**	**88.42**	**4.20**	**363.20**	**387.78**	**405.16**	**17.38**	**768.36**	**39.52**

*** Shortage furnished by the respective constituent.**

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 transactio	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	6284	600	-346	883	6108	0	-472	941	21.45
Haryana	5049	730	137	262	4692	0	166	382	7.90
Rajasthan	5003	162	807	-355	4985	22	805	-408	-9.46
Delhi	3998	0	-297	353	3139	0	61	303	8.12
UP	8650	1335	-16	1294	9898	1030	828	1002	27.56
Uttarakhand	1020	290	-186	-200	1108	0	169	-200	-4.80
HP	1055	40	51	-1569	820	0	99	-1207	-32.21
J&K	1369	0	-18	-375	871	0	-339	-275	-8.10
Chandigarh	239	0	-12	30	162	0	-9	30	0.72
Total	**32667**	**3157**	**120**	**323**	**31783**	**1052**	**1309**	**568**	**11.18**

* 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	1727	1861	1868	41.85	1744	41.45	0.39
	Rihand I STPS	1000	950	1033	1039	22.97	957	22.80	0.17
	Rihand II STPS	1000	475	510	513	11.51	479	11.40	0.11
	Dadri I STPS	840	800	869	866	18.69	779	18.00	0.69
	Dadri II STPS	980	967	1025	1029	22.75	948	22.52	0.24
	Unchahar I TPS	440	391	436	420	9.38	391	9.33	0.05
	Unchahar II TPS	440	195	219	210	4.69	195	4.64	0.05
	Unchahar III TPS	210	194	220	209	4.69	195	4.64	0.05
	ISTPP (Jhajjar)	500	470	0	0	0.00	0	0.00	0.00
	Dadri GPS	830	780	767	670	16.22	676	16.30	-0.09
	Anta GPS	419	391	387	345	8.62	359	8.07	0.55
	Auraiya GPS	663	620	458	469	10.76	448	11.36	-0.60
	Sub Total (A)	**9322**	**7960**	**7785**	**7638**	**172.13**	**7172**	**170.51**	**1.62**
B. NPC	NAPS	440	190	224	230	4.53	189	4.56	-0.03
	RAPS- B	440	218	216	220	4.65	194	5.22	-0.57
	RAPS- C	440	420	474	476	10.19	424	10.08	0.11
	Sub Total (B)	**1320**	**828**	**914**	**926**	**19.37**	**807**	**19.86**	**-0.49**
C. NHPC	Chamera I HPS	540	534	540	540	12.94	539	12.80	0.14
	Chamera II HPS	300	297	299	200	5.72	238	5.66	0.06
	Bairasuil HPS	180	135	120	60	2.18	91	2.04	0.13
	Salal-HPS	690	525	527	526	12.66	528	12.60	0.06
	Tanakpur-HPS	94	94	95	95	2.28	95	2.24	0.04
	Uri-HPS	480	469	480	480	11.61	484	11.52	0.08
	Dhauliganga-HPS	280	277	215	208	4.79	200	4.69	0.10
	Dulhasti-HPS	390	388	415	344	9.22	384	9.47	-0.25
	Sewa-II HPS	120	112	128	125	2.80	117	2.75	0.05
	Sub Total (C)	**3074**	**2831**	**2819**	**2578**	**64.19**	**2674**	**63.77**	0.41
D.NJPC	Nathpa Jhakri	1500	1600	1585	722	28.08	1170	27.59	0.50
	Sub Total (D)	1500	1600	1585	722	28.08	1170	27.59	0.50
E. THDC	Tehri HPS	1000	919	1017	231	12.47	520	12.00	0.47
	Koteshwar HPS	100	87	89	89	2.09	87	2.09	0.00
	Sub Total (E)	**1100**	**1006**	**1106**	**320**	**14.56**	**607**	**14.09**	0.47
F. BBMB	Bhakra HPS	1480	1052	1255	966	26.06	1086	25.24	0.82
	Dehar HPS	990	576	825	600	14.64	610	13.84	0.81
	Pong HPS	396	239	306	186	6.04	252	5.74	0.30
	Sub Total (F)	**2866**	**1867**	**2386**	**1752**	**46.74**	**1948**	**44.82**	1.92
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	56	56	1.35	56	1.31	0.04
	KWHEP HPS(IPP)	1000	0	670	650	15.71	655	15.72	-0.01
	Malana Stg-II HPS	100	0	69	62	1.38	58	0.00	1.38
	Shree Cement TPS	150	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1442	0	795	768	18.44	768	17.03	1.41
H. Total Regional Entities (A-G)		**20625**	**16091**	**17390**	**14704**	**363.50**	**15146**	**357.66**	**5.84**

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	1230.00	1230.00	27.19	1133
	Guru Nanak Dev TPS(Bhatinda)	440	293.00	233.00	5.86	244
	Guru Hargobind Singh TPS(L.mbt)	920	945.00	946.00	20.83	868
	Thermal (Total)	2620	2468.00	2409.00	53.88	2245
	Total Hydro	1148	618.00	372.00	14.76	615
	Total Punjab	**3768**	**3086**	**2781**	**68.64**	**2860**
Haryana	Panipat TPS	1360	1086.00	1097.00	26.17	1090
	DCRTPP (Yamuna nagar)	600	503.00	532.00	11.86	494
	Faridabad GPS (NTPC)	432	398.00	303.00	8.51	355
	RGTPP (khedar) (IPP)	1200	851.00	893.00	23.96	998
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0
	Thermal (Total)	3617	2838.00	2825.00	70.50	2937
	Total Hydro	62	39.00	40.00	1.02	43
	Total Haryana	**3679**	**2877**	**2865**	**71.52**	**2980**
Rajasthan	kota TPS	1240	776.00	779.00	18.50	771
	suratgarh TPS	1500	1153.00	1114.00	26.38	1099
	Chabra TPS	500	225.00	198.00	5.26	219
	Dholpur GPS	330	127.00	131.00	3.13	130
	Ramgarh GPS	113	62.00	62.00	1.63	68
	RAPS A (NPC)	300	180.00	179.00	4.29	179
	Barsingsar (NLC)	250	0.00	0.00	0.00	0
	Giral LTPS (IPP)	250	0.00	0.00	0.00	0
	Rajwest LTPS (IPP)	135	0.00	0.00	0.00	0
	VSLP LTPS (IPP)	135	0.00	0.00	0.00	0
	Thermal (Total)	4753	2523.00	2463.00	59.20	2466
	Total Hydro	550	46.00	56.00	1.12	47
	Wind power	1294	75.00	146.00	3.10	129
	Biomass	71	22.00	22.00	0.51	21
	Renewable/Others (Total)	1365	97	168	3.60	150
	Total Rajasthan	**6668**	**2666**	**2687**	**63.91**	**2663**
UP	Anpara TPS	1630	1273	1086	25.60	1067
	Obra TPS	1442	372	554	10.40	433
	Paricha TPS	640	393	402	8.50	354
	Panki TPS	210	75	70	1.50	63
	Harduaganj TPS	375	44	144	1.80	75
	Tanda TPS (NTPC)	440	284	261	6.62	276
	Roza TPS (IPP)	600	279	270	6.87	286
	Anpara-C (IPP)	600	0	0	0.00	0
	Thermal (Total)	5937	2720	2787	61.29	2554
	Vishnuparyag HPS (IPP)	400	436	436	10.46	436
	Other Hydro	527	363	0	8.17	341
	Cogeneration	951	25	25	0.60	25
	Total UP	**7815**	**3544**	**3248**	**80.52**	**2919**
Uttarakhand	Total Hydro	1303	821	804	19.78	824
	Total Uttarakhand	**1303**	**821**	**804**	**19.78**	**824**
Delhi	Rajghat TPS	135	101	93	2.73	114
	Delhi Gas Turbine	282	110	102	2.68	112
	Pragati Gas Turbine	330	296	300	7.36	307
	Rithala GPS	108	26	29	0.64	27
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	620	505	12.30	513
	Thermal (Total)	2000	1153	1029	25.71	1071
	Total Delhi	**2000**	**1153**	**1029**	**25.71**	**1071**
HP	Baspa HPS (IPP)	330	322	141	5.35	223
	Malana HPS (IPP)	101	52	52	1.21	50
	Other Hydro	571	548	432	12.31	513
	Total HP	**1002**	**922**	**625**	**19**	**786**
J & K	Baglihar HPS (IPP)	450	442	442	10.64	443
	Other Hydro	323	112	138	3.60	150
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**554**	**580**	**14.24**	593
Total State Control Area Generation		**27191**	**15623**	**14619**	**363.20**	**14698**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**1234**	**3461**	**56.99**	**2375**
Total Regional Availability(Gross)		**47816**	**34247**	**32784**	**783.69**	**32218**

IV. Total Hydro Generation:

Regional Entities Hydro	**9983**	**8691**	**6140**	**172.01**	**7167**
State Control Area Hydro	**5365**	**3363**	**2477**	**77.97**	**3249**
Total Regional Hydro	**15347**	**12054**	**8617**	**249.98**	**10416**

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	100	100	100	0	2.44	0.00	2.44
Gwalior-Agra (D/C)	234	1108	1110	0	19.43	0.00	19.43
Zerda-Kankroli	-7	269	269	114	2.27	0.00	2.27
Zerda-Bhinmal	55	257	274	61	3.16	0.00	3.16
Malanpur-Auraiya	-73	10	0	88	0.00	0.83	-0.83
Badod-Kota/Morak	0	0	0	0	0.00	0.00	0.00
Sub Total WR	**309**	**1744**			**27.29**	**0.83**	**26.46**
Pusauli Bypass	-127	69	147	135	0.63	0.79	-0.16
MZP- GKP (D/C)	464	862	916	0	16.66	0.00	16.66
Patna-Balia(D/C)	56	259	297	0	4.05	0.00	4.05
B'Sharif-Balia (D/C)	146	419	441	0	6.70	0.00	6.70
Barh - balia(D/C)	87	0	168	0	0.94	0.00	0.94
Pusauli-Sahupuri	176	140	180	0	3.34	0.00	3.34
K'nasa-Sahupuri	158	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-32	0	38	0.00	0.99	-0.99
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	**925**	**1717**			**32.31**	**1.78**	**30.53**
Total IR Exch	**1234**	**3461**			**59.60**	**2.61**	**56.99**

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
20.20	3.56	23.76	-2.24	14.59	-0.22	7.15	0.00	0.00

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
21.30	20.90	42.20	30.53	26.46	56.99	9.23	5.56	14.79

VI. Frequency Profile <---------- % of Time Frequency ---------->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.90	8.70	41.40	91.20	58.50	3.20	0.10

<---------- Frequency (Hz) ---------->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.35	18.46	49.10	18.39	49.73	1.04	0.17	50.07	49.53

VII. Voltage profile

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	01:12	407	15:06	0.0	0.0	0.0	0.0
Gorakhpur	400	436	08:03	414	22:47	0.0	0.0	78.0	6.9
Bareilly	400	420	08:00	391	14:05	0.0	0.0	0.0	0.0
Kanpur	400	420	09:00	396	15:09	0.0	0.0	0.0	0.0
Dadri	400	408	09:11	392	15:10	0.0	0.0	0.0	0.0
Ballabhgarh	400	420	08:02	394	15:13	0.0	0.0	0.0	0.0
Bawana	400	417	08:01	394	14:25	0.0	0.0	0.0	0.0
Bassi	400	424	04:01	400	13:38	0.0	0.0	9.1	0.0
Hissar	400	413	08:01	393	14:26	0.0	0.0	0.0	0.0
Moga	400	418	04:03	399	15:15	0.0	0.0	0.0	0.0
Abdullapur	400	416	08:02	395	15:16	0.0	0.0	0.0	0.0
Nalagarh	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kishenpur	400	417	04:05	401	14:25	0.0	0.0	0.0	0.0
Wagoora	400	407	04:18	390	07:04	0.0	0.0	0.0	0.0

VIII. 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	512.15	1650.87	512.53	1683.57	731.00	512.53
Pong	426.72	384.05	423.82	1066.19	424.62	1114.45	264.54	336.14
Tehri	829.79	740.04	817.15	942.25	NA	NA	282.40	366.00
Koteshwar	612.50	598.50	608.30	3.76	NA	NA	476.00	138.00
Chamera-I	760.00	748.75	756.00	NA	NA	NA	278.00	350.16
Rihand	268.22	252.98	265.66	661.20	258.07	205.10	NA	NA
RPS	352.80	343.81	349.76	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.48	NA	NA	NA	31.09	68.92
RSD	527.91	487.91	524.97	NA	524.09	NA	364.55	300.10

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 23.09.2011 :

Normal weather

XII. Synchronisation of new generating units :

XIII. Synchronisation of new 400 / 765 KV lines and energising of bus / /substation :

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 23.09.2011 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**