

पाँवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 09.09.2011
Date of Reporting : 10.09.2011

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
30554	2309	32863	49.85	30377	653	31030	50.23	711.1	21.40

* 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:

State	State's Control Area Generation (Net MU)				Drawal Schedule (Net MU)	Actual Drawal (Net MU)	UI (Net MU)	Consumption (Net MU)	Shortages* (MU)
	Thermal	Hydro	Renewable/others	Total					
Punjab	41.07	19.71		60.78	89.79	78.26	-11.54	139.04	1.80
Haryana	67.39	0.80		68.18	40.60	32.73	-7.87	100.92	0.00
Rajasthan	55.36	3.26	5.13	63.75	33.93	40.07	6.15	103.83	0.60
Delhi	22.35			22.35	62.85	60.13	-2.72	82.48	0.22
UP	65.54	17.72	2.50	85.76	131.58	121.75	-9.82	207.51	17.22
Uttarakhand		22.56		22.56	8.18	6.16	-2.02	28.72	0.37
HP		23.92		23.92	1.68	-3.46	-5.15	20.45	0.00
J & K		13.98	0.00	13.98	15.68	9.32	-6.36	23.30	1.20
Chandigarh				0.00	5.61	4.86	-0.74	4.86	0.00
Total	251.72	101.93	7.63	361.28	389.90	349.83	-40.07	711.10	21.40

* Shortage furnished by the respective constituent.

II. B. State's Demand Met in MWs:

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy MU	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction	
Punjab	5556	600	-881	834	6690	0	106	1447	31.68	
Haryana	4415	0	-299	562	4321	0	-112	562	12.63	
Rajasthan	4135	206	135	-445	4380	0	315	-508	-11.81	
Delhi	3843	53	46	329	3037	3	-412	329	8.65	
UP	8716	1300	98	1573	9416	650	-591	1573	37.72	
Uttarakhand	1376	150	62	-200	1122	0	-111	-200	-4.80	
HP	920	0	-187	-1268	703	0	-356	-1332	-31.10	
J&K	1361	0	69	-375	540	0	-613	-275	-8.10	
Chandigarh	232	0	-25	30	168	0	-29	30	0.72	
Total	30554	2309	-982	1041	30377	653	-1803	1627	35.59	

* STOA figures are at sellers boundary & PX figures are at regional boundary.

III. Regional Entities :

Entity	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	1604	1407	1779	33.30	1388	33.01	0.29
	Rihand I STPS	1000	950	1032	937	19.91	830	19.36	0.55
	Rihand II STPS	1000	480	518	482	10.17	424	9.90	0.27
	Dadri I STPS	840	684	853	480	13.00	542	12.87	0.12
	Dadri II STPS	980	970	520	770	14.71	613	14.89	-0.18
	Unchahar I TPS	440	298	316	311	6.59	275	6.43	0.16
	Unchahar II TPS	440	323	333	309	6.62	276	6.43	0.19
	Unchahar III TPS	210	166	179	156	3.45	144	3.38	0.07
	ISTPP (Jhajjar)	500	470	0	0	0.00	0	0.25	-0.25
	Dadri GPS	830	799	374	491	9.98	416	10.33	-0.35
	Anta GPS	419	391	254	231	5.43	226	5.23	0.20
	Auraiya GPS	663	464	310	285	6.57	274	6.11	0.46
	Sub Total (A)	9322	7599	6096	6231	129.74	5406	128.19	1.55
	B. NPC	NAPS	440	184	222	229	4.51	188	4.42
RAPS- B		440	197	215	218	4.62	192	4.73	-0.11
RAPS- C		440	420	479	474	10.13	422	10.08	0.05
Sub Total (B)		1320	801	916	921	19.26	802	19.22	0.04
C. NHPC	Chamera I HPS	540	534	540	540	12.25	510	12.43	-0.18
	Chamera II HPS	300	297	302	293	7.12	296	7.18	-0.06
	Bairasuil HPS	180	179	179	80	3.21	134	3.17	0.04
	Salal-HPS	690	627	625	625	15.00	625	15.05	-0.05
	Tanakpur-HPS	94	94	95	82	2.15	90	2.24	-0.09
	Uri-HPS	480	290	359	208	6.92	288	6.80	0.12
	Dhauliganga-HPS	280	277	283	278	6.68	278	6.72	-0.04
	Dulhasti-HPS	390	387	407	263	8.71	363	8.71	0.00
	Sewa-II HPS	120	119	121	71	2.36	98	2.36	0.00
	Sub Total (C)	3074	2803	2911	2440	64.39	2683	64.64	-0.26
D. NJPC	Nathpa Jhakri	1500	1600	1607	1595	38.26	1594	38.39	-0.13
	Sub Total (D)	1500	1600	1607	1595	38.26	1594	38.39	-0.13
E. THDC	Tehri HPS	1000	1060	1057	914	24.63	1026	24.75	-0.12
	Sub Total (E)	1100	1147	1145	995	26.74	1114	26.80	-0.06
F. BBMB	Bhakra HPS	1480	1202	1255	1233	29.67	1236	28.85	0.82
	Dehar HPS	990	600	825	625	14.83	618	14.40	0.44
	Pong HPS	396	239	306	186	6.03	251	5.74	0.29
	Sub Total (F)	2866	2041	2386	2044	50.53	2105	48.98	1.55
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	100	83	2.03	84	1.88	0.15
	KWHEP HPS(IPP)	1000	0	700	700	13.91	580	16.54	-2.62
	Malana Stg-II HPS	100	0	0	87	1.31	55	0.00	1.31
	Shree Cement TPS	150	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1442	0	800	870	17.25	719	18.41	-1.16

H. Total Regional Entities (A-G)	20625	15991	15861	15096	346.17	14424	344.65	1.52
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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	1035.00	1110.00	23.40	975
	Guru Nanak Dev TPS(Bhatinda)	440	100.00	175.00	2.67	111
	Guru Hargobind Singh TPS(L.mbt)	920	690.00	800.00	15.00	625
	Thermal (Total)	2620	1825.00	2085.00	41.07	1711
	Total Hydro	1148	1030.00	680.00	19.71	821
	Total Punjab	3768	2855	2765	60.78	2533
Haryana	Panipat TPS	1360	679.00	1187.00	23.72	988
	DCRTPP (Yamuna nagar)	600	552.00	508.00	12.30	513
	Faridabad GPS (NTPC)	432	192.00	321.00	5.75	240
	RGTPP (khedar) (IPP)	1200	942.00	1029.00	25.61	1067
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0
	Thermal (Total)	3617	2365.00	3045.00	67.39	2808
	Total Hydro	62	29.00	30.00	0.80	33
	Total Haryana	3679	2394	3075	68.18	2841
	Rajasthan	kota TPS	1240	620.00	615.00	14.21
suratgarh TPS		1500	895.00	1046.00	22.75	948
Chabra TPS		500	225.00	226.00	5.00	208
Dholpur GPS		330	280.00	247.00	6.26	261
Ramgarh GPS		113	62.00	62.00	1.04	43
RAPS A (NPC)		300	176.00	181.00	4.30	179
Barsingar (NLC)		250	79.00	85.00	1.80	75
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	2337.00	2462.00	55.36	2307
Total Hydro		550	193.00	75.00	3.26	136
Wind power		1294	177.00	136.00	4.73	197
Biomass		71	17.00	17.00	0.40	17
Renewable/Others (Total)		1365	194	153	5.13	214
Total Rajasthan		6668	2724	2690	63.75	2656
UP		Anpara TPS	1630	1266	1166	26.80
	Obra TPS	1442	410	442	9.00	375
	Paricha TPS	640	397	390	8.40	350
	Panki TPS	210	75	60	1.30	54
	Harduaganj TPS	375	50	44	0.90	38
	Tanda TPS (NTPC)	440	293	288	6.84	285
	Roza TPS (IPP)	600	561	549	12.31	513
	Anpara-C (IPP)	600	0	0	0.00	0
	Thermal (Total)	5937	3052	2939	65.54	2731
	Vishnuparyag HPS (IPP)	400	436	436	10.46	436
	Other Hydro	527	363	0	7.26	303
	Cogeneration	951	25	25	2.50	104
	Total UP	7815	3876	3400	85.76	3138
Uttarakhand	Total Hydro	1303	976	877	22.56	940
	Total Uttarakhand	1303	976	877	22.56	940
Delhi	Rajghat TPS	135	45	64	1.32	55
	Delhi Gas Turbine	282	118	74	2.11	88
	Pragati Gas Turbine	330	298	290	7.36	307
	Rithala GPS	108	26	29	0.66	27
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	575	475	10.90	454
	Thermal (Total)	2000	1062	932	22.35	931
	Total Delhi	2000	1062	932	22.35	931
HP	Baspa HPS (IPP)	330	330	330	7.92	330
	Malana HPS (IPP)	101	87	93	2.12	88
	Other Hydro	571	584	589	13.88	578
	Total HP	1002	1001	1012	24	997
J & K	Baqilhar HPS (IPP)	450	440	438	10.60	441
	Other Hydro	323	119	166	3.38	141
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	559	604	13.98	582
Total State Control Area Generation		27191	15447	15355	361.28	14618
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			762	941	16.77	699
Total Regional Availability(Gross)		47816	32070	31392	724.22	29740

IV. Total Hydro Generation:

Regional Entities Hydro	9983	8849	7944	197.17	8215
State Control Area Hydro	5365	4151	3278	91.48	3812
Total Regional Hydro	15347	13000	11222	288.65	12027

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 MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	0	-100	0	400	0.00	3.21	-3.21
Gwalior-Agra (D/C)	110	318	879	0	5.67	0.00	5.67
Zerda-Kankroli	-120	-26	85	312	0.00	2.44	-2.44
Zerda-Bhinmal	-52	33	132	241	0.00	0.82	-0.82
Malanpur-Auraiya	-134	32	0	130	0.00	1.79	-1.79
Badod-Kota/Morak	0	0	0	0	0.00	0.00	0.00
Sub Total WR	-196	257			5.67	8.26	-2.59
Pusaui Bypass	-110	-173	10	226	0.07	3.35	-3.28
MZP- GKP (D/C)	634	419	844	0	12.27	0.00	12.27
Patna-Balia(D/C)	149	53	213	0	2.65	0.00	2.65
B'Sharif-Balia (D/C)	184	164	274	0	4.00	0.00	4.00
Barh - balia(D/C)	0	121	161	0	0.94	0.00	0.94
Pusaui-Sahupuri	137	132	162	0	3.35	0.00	3.35
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-32	0	38	0.00	0.57	-0.57
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	958	684			23.28	3.92	19.36
Total IR Exch	762	941			28.95	12.18	16.77

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
19.87	2.88	22.75	3.89	32.50	-3.82	2.87	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
22.82	34.94	57.77	19.36	-2.59	16.77	-3.46	-37.53	-40.99

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	1.00	2.00	4.90	9.50	88.60	84.00	44.30	6.50

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.40	4.06	48.82	19.17	49.94	0.56	0.23	50.36	49.19

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	422	07:57	412	00:00	0.0	0.0	11.6	0.0
Gorakhpur	400	431	07:56	413	14:40	0.0	0.0	71.3	0.8
Bareilly	400	423	08:00	399	18:42	0.0	0.0	3.0	0.0
Kanpur	400	424	09:00	406	18:40	0.0	0.0	6.9	0.0
Dadri	400	413	08:41	400	18:40	0.0	0.0	0.0	0.0
Ballabgarh	400	422	04:03	407	15:32	0.0	0.0	12.5	0.0
Bawana	400	417	07:57	400	18:40	0.0	0.0	0.0	0.0
Bassi	400	431	03:42	411	14:39	0.0	0.0	41.8	0.1
Hissar	400	414	04:00	400	18:41	0.0	0.0	0.0	0.0
Moga	400	421	03:49	409	18:39	0.0	0.0	1.5	0.0
Abdullapur	400	409	04:00	245	08:54	0.1	0.1	0.0	0.0
Nalagarh	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kishenpur	400	422	04:06	402	19:15	0.0	0.0	0.7	0.0
Wagoora	400	416	03:59	383	19:42	0.0	11.8	0.0	0.0

VIII. Reservoir Parameters:

Name of Reservoir	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	511.80	1635.65	512.23	1667.20	1535.31	921.29
Pong	426.72	384.05	422.79	1020.81	423.69	1066.19	1069.41	356.31
Tehri	829.79	740.04	817.50	952.25	NA	NA	544.44	553.00
Koteshwar	612.50	598.50	606.90	3.10	NA	NA	526.00	132.00
Chamera-I	760.00	748.75	751.90	12.30	752.00	NA	265.13	297.67
Rihand	268.22	252.98	259.08	255.50	256.28	127.50	NA	NA
RPS	352.80	343.81	349.18	NA	NA	NA	246.70	0.00
Jawahar Sagar	298.70	295.78	296.20	NA	NA	NA	88.80	230.56
RSD	527.91	487.91	524.45	NA	523.61	NA	463.86	394.40

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 09.09.2011 :

Rain in Northern Region.

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 :

1: Tehri Hydro generation (1060 MW) loss due to tripping of all four units at 23.55 hrs of 09.09.2011 due to shaft seal water discharge problem.

Report for : 09.09.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER