

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.09.2011
Date of Reporting : 21.09.2011

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
31795	3095	34890	49.88	29017	1030	30047	49.94	714.0	33.23

* 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	26.67	18.23		44.90	82.39	77.72	-4.67	122.62	1.80
Haryana	59.98	1.02		61.01	43.15	40.54	-2.60	101.55	1.19
Rajasthan	59.30	2.41	5.35	67.06	36.74	41.27	4.53	108.34	1.86
Delhi	25.62			25.62	63.60	61.73	-1.87	87.35	0.02
UP	59.63	18.41	0.60	78.64	121.74	132.32	10.58	210.95	27.90
Uttarakhand		21.62		21.62	6.24	7.64	1.40	29.26	0.37
HP		20.90		20.90	1.71	1.50	-0.21	22.39	0.09
J & K		14.02	0.00	14.02	15.45	12.61	-2.85	26.63	0.00
Chandigarh				0.00	5.49	4.92	-0.57	4.92	0.00
Total	231.20	96.61	5.95	333.76	376.51	380.25	3.74	714.01	33.23

* 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	
Punjab	5657	600	-221	1008	4668	0	-401	1071	24.51
Haryana	4948	570	89	462	3894	0	-153	462	10.23
Rajasthan	4750	0	346	-355	4572	0	230	-408	-9.46
Delhi	4046	0	-38	349	3159	0	5	299	8.03
UP	8568	1715	21	1294	9822	1030	1244	1101	29.05
Uttarakhand	1249	150	-16	-200	1158	0	224	-200	-4.80
HP	981	60	20	-1379	750	0	-82	-1121	-29.20
J&K	1358	0	34	-450	827	0	-370	-275	-8.93
Chandigarh	238	0	-22	30	167	0	-16	30	0.72
Total	31795	3095	213	759	29017	1030	681	959	20.15

* 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	1712	1872	1835	41.78	1741	41.08	0.71
	Rihand I STPS	1000	950	1035	1036	23.02	959	22.43	0.59
	Rihand II STPS	1000	457	507	513	11.18	466	10.79	0.39
	Dadri I STPS	840	800	868	648	17.33	722	17.34	-0.01
	Dadri II STPS	980	470	479	409	10.76	448	10.52	0.24
	Unchahar I TPS	440	315	425	332	7.35	306	7.20	0.15
	Unchahar II TPS	440	160	211	149	3.46	144	3.44	0.02
	Unchahar III TPS	210	158	218	160	3.57	149	3.47	0.10
	ISTPP (Jhajjar)	500	470	0	0	0.00	0	0.00	0.00
	Dadri GPS	830	779	621	520	13.90	579	14.23	-0.33
	Anta GPS	419	389	388	258	6.70	279	6.60	0.10
	Auraiya GPS	663	619	455	399	10.29	429	10.66	-0.37
	Sub Total (A)	9322	7279	7079	6259	149.35	6223	147.75	1.59
	B. NPC	NAPS	440	190	226	222	4.53	189	4.56
RAPS- B		440	185	214	218	4.66	194	4.44	0.22
RAPS- C		440	420	472	476	10.18	424	10.08	0.10
Sub Total (B)		1320	795	912	916	19.37	807	19.08	0.29
C. NHPC	Chamera I HPS	540	534	540	540	12.86	536	12.82	0.04
	Chamera II HPS	300	278	300	300	6.42	268	6.66	-0.24
	Bairasui HPS	180	179	170	80	2.61	109	2.59	0.02
	Salal-HPS	690	632	629	629	15.12	630	15.17	-0.05
	Tanakpur-HPS	94	100	95	94	2.28	95	2.25	0.03
	Uri-HPS	480	450	478	480	11.05	460	10.56	0.48
	Dhauliganga-HPS	280	277	213	287	5.76	240	5.65	0.12
	Dulhasti-HPS	390	387	414	418	9.57	399	8.84	0.73
	Sewa-II HPS	120	119	124	124	2.97	124	2.94	0.02
	Sub Total (C)	3074	2955	2963	2952	68.63	2860	67.47	1.17
D. NJPC	Nathpa Jhakri	1500	1600	1598	1076	30.79	1283	30.69	0.09
	Sub Total (D)	1500	1600	1598	1076	30.79	1283	30.69	0.09
E. THDC	Tehri HPS	1000	858	1052	526	19.68	820	19.37	0.32
	Koteshwar HPS	100	87	88	88	2.09	87	2.09	0.00
	Sub Total (E)	1100	945	1140	614	21.77	907	21.45	0.32
F. BBMB	Bhakra HPS	1480	1227	1254	1256	30.14	1256	29.45	0.69
	Dehar HPS	990	577	825	620	14.57	607	13.85	0.72
	Pong HPS	396	239	306	186	6.02	251	5.74	0.28
	Sub Total (F)	2866	2043	2385	2062	50.73	2114	49.04	1.69
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	69	69	1.63	68	1.58	0.05
	KWHEP HPS(IPP)	1000	0	709	762	17.02	709	16.80	0.22
	Malana Stg-II HPS	100	0	69	61	1.39	58	0.00	1.39
	Shree Cement TPS	150	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1442	0	847	892	20.04	835	18.38	1.66
H. Total Regional Entities (A-G)	20625	15617	16924	14771	360.68	15028	353.86	6.82	

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	760.00	615.00	13.57	565	
	Guru Nanak Dev TPS(Bhatinda)	440	110.00	90.00	2.01	84	
	Guru Hargobind Singh TPS(L.mbt)	920	818.00	474.00	11.09	462	
	Thermal (Total)	2620	1688.00	1179.00	26.67	1111	
	Total Hydro	1148	901.00	759.00	18.23	760	
	Total Punjab	3768	2589	1938	44.90	1871	
Haryana	Panipat TPS	1360	787.00	842.00	19.43	810	
	DCRTPP (Yamuna nagar)	600	533.00	528.00	11.91	496	
	Faridabad GPS (NTPC)	432	398.00	197.00	7.02	293	
	RGTPP (khedar) (IPP)	1200	887.00	833.00	21.63	901	
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0	
	Thermal (Total)	3617	2605.00	2400.00	59.98	2499	
	Total Hydro	62	38.00	39.00	1.02	43	
	Total Haryana	3679	2643	2439	61.01	2542	
Rajasthan	kota TPS	1240	778.00	669.00	17.90	746	
	suratgarh TPS	1500	1181.00	1049.00	26.29	1095	
	Chabra TPS	500	220.00	210.00	4.93	205	
	Dholpur GPS	330	133.00	122.00	3.10	129	
	Ramgarh GPS	113	62.00	62.00	1.62	68	
	RAPS A (NPC)	300	192.00	211.00	4.32	180	
	Barsingsar (NLC)	250	45.00	74.00	1.15	48	
	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	2611.00	2397.00	59.30	2471	
	Total Hydro	550	149.00	77.00	2.41	100	
	Wind power	1294	207.00	325.00	4.72	197	
	Biomass	71	27.00	27.00	0.63	26	
	Renewable/Others (Total)	1365	234	352	5.35	223	
		Total Rajasthan	6668	2994	2826	67.06	2794
	UP	Anpara TPS	1630	1004	1175	27.60	1150
Obra TPS		1442	565	455	12.70	529	
Paricha TPS		640	234	188	2.40	100	
Panki TPS		210	63	59	1.40	58	
Harduaganj TPS		375	152	97	2.20	92	
Tanda TPS (NTPC)		440	276	289	6.81	284	
Roza TPS (IPP)		600	284	281	6.52	272	
Anpara-C (IPP)		600	0	0	0.00	0	
Thermal (Total)		5937	2578	2544	59.63	2484	
Vishnuparyag HPS (IPP)		400	436	436	10.46	436	
Other Hydro		527	334	0	7.96	332	
Cogeneration		951	25	25	0.60	25	
		Total UP	7815	3373	3005	78.64	2841
Uttarakhand	Total Hydro	1303	898	904	21.62	901	
	Total Uttarakhand	1303	898	904	21.62	901	
Delhi	Rajghat TPS	135	104	101	2.40	100	
	Delhi Gas Turbine	282	158	111	3.27	136	
	Pragati Gas Turbine	330	295	300	7.20	300	
	Rithala GPS	108	26	29	0.63	26	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	565	525	12.11	505	
	Thermal (Total)	2000	1148	1066	25.62	1067	
	Total Delhi	2000	1148	1066	25.62	1067	
HP	Baspa HPS (IPP)	330	216	196	5.86	244	
	Malana HPS (IPP)	101	60	50	1.27	53	
	Other Hydro	571	604	549	13.77	574	
		Total HP	1002	880	795	21	871
J & K	Baglihar HPS (IPP)	450	442	442	10.64	443	
	Other Hydro	323	119	166	3.38	141	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	561	608	14.02	584
Total State Control Area Generation		27191	15086	13581	333.76	13471	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1450	1119	36.37	1516	
Total Regional Availability(Gross)		47816	33460	29471	730.81	30015	

IV. Total Hydro Generation:

Regional Entities Hydro	9983	8933	7596	191.96	7998
State Control Area Hydro	5365	3761	3182	86.16	3590
Total Regional Hydro	15347	12694	10778	278.12	11588

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	300	0.00	2.65	-2.65
Gwalior-Agra (D/C)	152	276	889	0	11.78	0.00	11.78
Zerda-Kankroli	-87	100	160	87	1.87	0.00	1.87
Zerda-Bhinmal	20	-110	20	231	0.00	2.49	-2.49
Malanpur-Auraiya	-87	-62	0	112	0.00	1.45	-1.45
Badod-Kota/Morak	0	0	0	0	0.00	0.00	0.00
Sub Total WR	-2	104			13.65	6.59	7.06
Pusauli Bypass	-83	-153	37	159	0.04	1.90	-1.86
MZP- GKP (D/C)	790	740	928	0	18.47	0.00	18.47
Patna-Balia(D/C)	222	146	261	0	4.73	0.00	4.73
B' Sharif-Balia (D/C)	263	188	324	0	5.59	0.00	5.59
Barh - balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	137	126	158	0	3.37	0.00	3.37
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	1452	1015			32.21	2.89	29.31
Total IR Exch	1450	1119			45.86	9.48	36.37

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
18.80	3.67	22.47	-0.75	22.11	-2.34	-5.32	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
19.38	15.89	35.26	29.31	7.06	36.37	9.94	-8.82	1.11

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	0.30	3.60	21.50	96.20	78.30	6.90	0.20

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz	Index	(Hz)	(Hz)	
50.24	7.59	49.25	18.53	49.81	0.60	0.16	50.14	49.50

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	07:07	408	10:45	0.0	0.0	0.0	0.0
Gorakhpur	400	433	07:28	4	20:45	0.1	0.1	42.5	2.3
Bareilly	400	419	08:00	392	11:25	0.0	0.0	0.0	0.0
Kanpur	400	420	09:00	398	22:12	0.0	0.0	0.0	0.0
Dadri	400	416	07:59	395	18:52	0.0	0.0	0.0	0.0
Ballabgarh	400	421	07:55	400	14:40	0.0	0.0	0.7	0.0
Bawana	400	419	07:55	396	18:51	0.0	0.0	0.0	0.0
Bassi	400	428	04:01	402	12:10	0.0	0.0	14.8	0.0
Hissar	400	418	07:59	399	18:51	0.0	0.0	0.0	0.0
Moga	400	422	04:05	407	11:21	0.0	0.0	1.5	0.0
Abdullapur	400	415	08:03	393	18:52	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	420	04:04	402	19:11	0.0	0.0	0.0	0.0
Wagoora	400	411	04:03	386	19:11	0.0	6.7	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	512.24	1667.20	512.39	1667.20	777.47	914.63
Pong	426.72	384.05	423.85	1082.23	424.60	1114.45	361.18	334.37
Tehri	829.79	740.04	817.55	952.25	NA	NA	333.62	441.00
Koteswar	612.50	598.50	607.30	4.21	NA	NA	441.00	139.00
Chamera-I	760.00	748.75	757.95	11.97	756.20	NA	306.33	348.55
Rihand	268.22	252.98	265.60	656.80	257.80	192.40	NA	NA
RPS	352.80	343.81	349.75	349.17	NA	NA	35.99	47.71
Jawahar Sagar	298.70	295.78	297.64	298.09	NA	NA	NA	NA
RSD	527.91	487.91	524.88	NA	524.00	NA	404.17	374.29

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 20.09.2011 :

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 : 20.09.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER