

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.09.2011
Date of Reporting : 16.09.2011

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
31015	2065	33080	50.07	32990	1005	33995	49.93	735.0	23.69

* 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	46.42	18.51		64.94	88.14	77.86	-10.28	142.80	1.80
Haryana	62.40	0.80		63.20	46.92	38.08	-8.84	101.29	0.00
Rajasthan	61.89	1.35	6.03	69.27	35.19	44.45	9.26	113.72	0.00
Delhi	24.18			24.18	67.77	66.39	-1.38	90.57	0.31
UP	57.58	17.61	0.60	75.79	133.80	132.67	-1.13	208.46	21.15
Uttarakhand		22.30		22.30	8.55	5.55	-3.00	27.85	0.23
HP		23.23		23.23	0.77	-0.79	-1.56	22.45	0.21
J & K		13.57	0.00	13.57	17.89	9.68	-8.22	23.24	0.00
Chandigarh				0.00	5.83	4.61	-1.22	4.61	0.00
Total	252.47	97.38	6.63	356.47	404.87	378.50	-26.37	734.97	23.69

* 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	5471	600	-947	980	7049	0	-233	1043	23.82
Haryana	4322	0	-146	562	4799	0	-102	412	10.01
Rajasthan	4739	0	330	-445	4959	0	375	-508	-11.81
Delhi	3952	0	240	384	3635	0	-40	384	9.97
UP	8861	1315	326	1575	9551	1005	455	1555	37.74
Uttarakhand	1174	150	-103	-200	1109	0	-179	-200	-4.80
HP	1041	0	-16	-1421	838	0	-115	-1391	-33.35
J&K	1237	0	-146	-375	857	0	-429	-275	-8.10
Chandigarh	218	0	-43	30	193	0	-31	30	0.72
Total	31015	2065	-505	1090	32990	1005	-299	1050	24.20

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

III. Regional Entities :

A. NTPC	Station/ Constituent	Inst. Capacity (Effective) MW	Declared Capacity(MW)	Peak MW (Gross)	Off Peak MW (Gross)	Energy (Net MU)	Average Soutout(MW)	Schedule Net MU	UI Net MU
	Singrauli STPS	2000	1660	1756	1813	38.31	1596	37.88	0.43
	Rihand I STPS	1000	930	939	1010	21.42	893	21.14	0.29
	Rihand II STPS	1000	480	494	514	11.13	464	10.94	0.19
	Dadri I STPS	840	682	633	442	12.63	526	13.20	-0.56
	Dadri II STPS	980	970	836	966	19.93	830	20.34	-0.41
	Unchahar I TPS	440	291	350	311	6.68	278	6.47	0.21
	Unchahar II TPS	440	343	377	353	7.32	305	7.11	0.22
	Unchahar III TPS	210	169	169	160	3.77	157	3.65	0.12
	ISTPP (Jhajjar)	500	470	0	0	0.00	0	0.00	0.00
	Dadri GPS	830	780	577	648	13.84	577	14.05	-0.20
	Anta GPS	419	389	242	322	7.25	302	7.04	0.21
	Auraiya GPS	663	611	463	554	10.33	430	10.31	0.02
	Sub Total (A)	9322	7776	6836	7093	152.61	6359	152.11	0.50
B. NPC	NAPS	440	186	226	224	4.53	189	4.46	0.07
	RAPS- B	440	196	152	209	4.31	180	4.70	-0.39
	RAPS- C	440	420	474	473	10.15	423	10.08	0.07
	Sub Total (B)	1320	802	852	906	19.00	791	19.25	-0.25
C. NHPC	Chamera I HPS	540	534	540	360	11.91	496	12.33	-0.43
	Chamera II HPS	300	297	299	300	7.11	296	7.17	-0.06
	Bairasuil HPS	180	150	120	60	1.99	83	2.04	-0.05
	Salal-HPS	690	627	625	625	15.04	627	15.05	-0.01
	Tanakpur-HPS	94	94	94	93	2.16	90	2.24	-0.08
	Uri-HPS	480	342	441	441	8.47	353	8.60	-0.13
	Dhauliganga-HPS	280	277	280	280	6.71	280	6.79	-0.08
	Dulhasti-HPS	390	387	388	184	8.71	363	8.99	-0.28
	Sewa-II HPS	120	119	116	0	1.31	55	1.36	-0.05
	Sub Total (C)	3074	2825	2903	2343	63.41	2642	64.59	-1.18
D. NJPC	Natpha Jhakri	1500	1600	1599	1601	38.03	1585	38.40	-0.37
	Sub Total (D)	1500	1600	1599	1601	38.03	1585	38.40	-0.37
E. THDC	Tehri HPS	1000	867	1058	799	20.55	856	20.40	0.15
	Koteshwar HPS	100	87	88	88	2.09	87	2.07	0.02
	Sub Total (E)	1100	954	1146	887	22.64	943	22.47	0.17
F. BBMB	Bhakra HPS	1480	1227	1254	1255	30.08	1253	29.45	0.63
	Dehar HPS	990	600	825	600	14.69	612	14.40	0.29
	Pong HPS	396	239	306	186	5.99	250	5.74	0.25
	Sub Total (F)	2866	2066	2385	2041	50.76	2115	49.59	1.17
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	92	92	1.96	81	1.91	0.05
	KWHEP HPS(IPP)	1000	0	700	700	16.80	700	16.80	0.01
	Malana Stg-II HPS	100	0	89	79	1.36	57	0.00	1.36
	Shree Cement TPS	150	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1442	0	881	871	20.12	838	18.70	1.41
H. Total Regional Entities (A-G)		20625	16023	16602	15742	366.57	15274	365.11	1.46

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	865.00	1240.00	24.29	1012
	Guru Nanak Dev TPS(Bhatinda)	440	195.00	235.00	4.79	200
	Guru Hargobind Singh TPS(L.mbt)	920	592.00	946.00	17.35	723
	Thermal (Total)	2620	1652.00	2421.00	46.42	1934
	Total Hydro	1148	1027.00	727.00	18.51	771
Total Punjab	3768	2679	3148	64.94	2706	
Haryana	Panipat TPS	1360	905.00	915.00	22.11	921
	DCRTPP (Yamuna nagar)	600	461.00	540.00	11.40	475
	Faridabad GPS (NTPC)	432	263.00	389.00	6.69	279
	RGTPP (khedar) (IPP)	1200	829.00	841.00	22.21	925
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0
	Thermal (Total)	3617	2458.00	2685.00	62.40	2600
	Total Hydro	62	29.00	33.00	0.80	33
	Total Haryana	3679	2487	2718	63.20	2633
Rajasthan	kota TPS	1240	871.00	872.00	19.67	820
	suratgarh TPS	1500	1096.00	1140.00	23.59	983
	Chabra TPS	500	195.00	222.00	5.18	216
	Dholpur GPS	330	276.00	272.00	6.38	266
	Ramgarh GPS	113	62.00	62.00	1.62	68
	RAPS A (NPC)	300	152.00	209.00	4.31	180
	Barsingsar (NLC)	250	67.00	52.00	1.14	47
	Giral LTPS (IPP)	250	0.00	0.00	0.00	0
	Rajwst LTPS (IPP)	135	0.00	0.00	0.00	0
	VSLP LTPS (IPP)	135	0.00	0.00	0.00	0
	Thermal (Total)	4753	2719.00	2829.00	61.89	2579
	Total Hydro	550	49.00	56.00	1.35	56
	Wind power	1294	197.00	255.00	5.67	236
	Biomass	71	15.00	15.00	0.36	15
	Renewable/Others (Total)	1365	212	270	6.03	251
	Total Rajasthan	6668	2980	3155	69.27	2886
	UP	Anpara TPS	1630	1025	986	22.00
Obra TPS		1442	602	643	12.50	521
Paricha TPS		640	385	397	8.40	350
Panki TPS		210	45	60	1.30	54
Harduaganj TPS		375	40	44	0.60	25
Tanda TPS (NTPC)		440	284	272	6.58	274
Roza TPS (IPP)		600	279	279	6.21	259
Anpara-C (IPP)		600	0	0	0.00	0
Thermal (Total)		5937	2660	2681	57.58	2399
Vishnuparyag HPS (IPP)		400	436	436	10.45	435
Other Hydro		527	294	0	7.16	298
Cogeneration		951	25	25	0.60	25
Total UP		7815	3415	3142	75.79	2722
Uttarakhand		Total Hydro	1303	904	945	22.30
	Total Uttarakhand	1303	904	945	22.30	929
Delhi	Rajghat TPS	135	111	108	2.56	106
	Delhi Gas Turbine	282	111	108	2.76	115
	Pragati Gas Turbine	330	300	297	7.40	308
	Rithala GPS	108	27	29	0.65	27
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	490	440	10.81	451
	Thermal (Total)	2000	1039	982	24.18	1007
	Total Delhi	2000	1039	982	24.18	1007
HP	Baspa HPS (IPP)	330	330	330	7.92	330
	Malana HPS (IPP)	101	85	82	1.67	70
	Other Hydro	571	584	578	13.64	568
	Total HP	1002	999	990	23	968
J & K	Baglihar HPS (IPP)	450	440	441	10.19	424
	Other Hydro	323	119	166	3.38	141
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	559	607	13.57	565
Total State Control Area Generation		27191	15062	15687	356.47	14418
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			725	2707	26.57	1107
Total Regional Availability(Gross)		47816	32389	34136	749.61	30798

IV. Total Hydro Generation:

Regional Entities Hydro	9983	8914	7743	194.96	8123
State Control Area Hydro	5365	3861	3358	86.93	3622
Total Regional Hydro	15347	12775	11101	281.89	11745

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	-400	0	400	450	0.86	7.17	-6.31
Gwalior-Agra (D/C)	323	960	1028	0	14.45	0.00	14.45
Zerda-Kankroli	62	292	292	97	1.69	0.00	1.69
Zerda-Bhinmal	94	270	278	52	2.34	0.00	2.34
Malanpur-Auraiya	-84	-29	84	126	0.00	0.72	-0.72
Badod-Kota/Morak	0	0	0	0	0.00	0.00	0.00
Sub Total WR	-5	1493			19.34	7.89	11.46
Pusauli Bypass	-166	-88	95	363	0.04	4.43	-4.39
MZP- GKP (D/C)	450	770	916	0	10.75	0.00	10.75
Patna-Balia(D/C)	152	190	236	0	2.74	0.00	2.74
B'Sharif-Balia (D/C)	190	220	259	0	3.12	0.00	3.12
Barh - balia(D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	140	154	166	0	3.46	0.00	3.46
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	730	1214			20.11	5.00	15.11
Total IR Exch	725	2707			39.46	12.89	26.57

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
17.63	3.82	21.45	2.91	21.27	5.59	1.95	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
29.94	22.32	52.26	15.11	11.46	26.57	-14.83	-10.86	-25.69

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	0.00	0.10	3.80	95.30	91.60	44.20	4.60

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				
50.33	8.04	49.44	18.58	49.97	0.21	0.14	50.30	49.81

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	420	04:05	408	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	435	06:39	412	13:50	0.0	0.0	67.5	3.9
Bareilly	400	419	08:00	407	22:15	0.0	0.0	0.0	0.0
Kanpur	400	418	09:00	409	22:33	0.0	0.0	0.0	0.0
Dadri	400	412	20:27	403	00:01	0.0	0.0	0.0	0.0
Ballabgarh	400	416	17:05	406	00:00	0.0	0.0	0.0	0.0
Bawana	400	417	08:01	404	00:02	0.0	0.0	0.0	0.0
Bassi	400	429	20:30	416	11:18	0.0	0.0	76.7	0.0
Hissar	400	414	08:02	402	00:03	0.0	0.0	0.0	0.0
Moga	400	420	08:00	407	10:47	0.0	0.0	0.0	0.0
Abdullapur	400	411	08:01	246	15:53	0.3	0.3	0.0	0.0
Nalagarh	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kishenpur	400	419	08:01	407	10:47	0.0	0.0	0.0	0.0
Wagoora	400	411	03:05	388	19:17	0.0	2.9	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	512.34	1667.20	512.33	1667.20	1145.00	911.49
Pong	426.72	384.05	423.38	1051.02	425.04	1130.65	519.73	334.39
Tehri	829.79	740.04	818.30	962.25	NA	NA	448.17	459.00
Koteshwar	612.50	598.50	609.00	3.98	NA	NA	613.00	138.00
Chamera-I	760.00	748.75	755.55	12.81	756.20	NA	290.17	325.36
Rihand	268.22	252.98	265.60	656.80	257.28	169.80	NA	NA
RPS	352.80	343.81	349.14	NA	349.41	NA	23.76	NA
Jawahar Sagar	298.70	295.78	298.00	NA	297.27	NA	44.46	NA
RSD	527.91	487.91	524.58	NA	523.92	NA	347.99	337.25

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 15.09.2011 :
Rains in Pujab, Haryana , HP, J&K , NCR 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 :

Report for : 15.09.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER