

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 10.07.2011
Date of Reporting : 11.07.2011

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
32715	1387	34102	49.76	32666	0	32666	50.10	776.7	6.83

* 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	51.02	20.67		71.69	106.74	106.96	0.22	178.65	1.80
Haryana	58.82	0.99		59.81	60.34	55.99	-4.35	115.80	0.08
Rajasthan	65.75	0.00	9.22	74.97	28.38	33.50	5.12	108.47	0.30
Delhi	21.50			21.50	59.68	58.90	-0.78	80.40	0.00
UP	68.79	12.89	1.20	82.88	132.48	130.07	-2.42	212.94	4.42
Uttarakhand		19.00		19.00	10.39	8.44	-1.95	27.44	0.23
HP		22.08		22.08	-2.69	-1.19	1.49	20.89	0.00
J & K		15.37	0.00	15.37	15.37	12.33	-3.04	27.71	0.00
Chandigarh				0.00	5.42	4.42	-1.01	4.42	0.00
Total	265.89	91.00	10.42	367.31	416.12	409.42	-6.71	776.72	6.83

* 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	7636	600	133	1686	7495	0	-240	2396	51.67
Haryana	4819	0	-101	1311	4574	0	-574	1318	27.88
Rajasthan	4342	207	50	-735	4386	0	81	-572	-14.80
Delhi	3644	0	390	510	3315	0	-255	254	10.68
UP	8837	500	303	1723	9883	0	775	1723	41.34
Uttarakhand	1263	80	-70	-100	1174	0	-41	-100	-2.40
HP	692	0	-192	-1633	836	0	67	-1643	-39.11
J&K	1275	0	-72	-497	830	0	-281	-490	-12.03
Chandigarh	207	0	-19	14	173	0	-47	5	0.51
Total	32715	1387	422	2280	32666	0	-515	2891	63.75

* 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	1705	1834	1835	38.84	1618	36.60	2.24
	Rihand I STPS	1000	960	1049	997	21.54	897	20.81	0.72
	Rihand II STPS	1000	970	1029	971	21.67	903	20.96	0.71
	Dadri I STPS	840	550	180	582	10.14	423	9.58	0.57
	Dadri II STPS	980	309	0	425	5.88	245	6.92	-1.04
	Unchahar I TPS	440	403	454	399	8.96	373	8.76	0.20
	Unchahar II TPS	440	560	396	363	8.00	333	7.69	0.31
	Unchahar III TPS	210	170	0	185	3.23	135	3.21	0.02
	ISTPP (Jhajjar)	500	441	427	340	7.78	324	8.03	-0.25
	Dadri GPS	830	409	455	380	9.34	389	7.13	2.21
	Anta GPS	419	392	387	239	6.72	280	6.97	-0.24
	Auraiya GPS	663	613	407	410	9.53	397	9.23	0.30
	Sub Total (A)	9322	7482	6618	7126	151.63	6318	145.89	5.74
	B. NPC	NAPS	440	185	209	228	4.48	187	4.44
RAPS- B		440	386	432	436	9.36	390	9.26	0.10
RAPS- C		440	6	104	0	0.00	0	0.15	-0.15
Sub Total (B)		1320	577	745	664	13.84	577	13.85	-0.01
C. NHPC	Chamera I HPS	540	534	540	540	12.57	524	12.83	-0.26
	Chamera II HPS	300	297	303	301	7.15	298	7.23	-0.08
	Bairasuil HPS	180	159	179	110	2.47	103	2.71	-0.24
	Salal-HPS	690	625	626	626	15.04	627	14.99	0.04
	Tanakpur-HPS	94	94	94	94	2.22	93	2.24	-0.02
	Uri-HPS	480	476	478	477	11.51	480	11.51	0.00
	Dhauliganga-HPS	280	277	281	277	6.70	279	6.64	0.06
	Dulhasti-HPS	390	387	411	407	8.87	369	9.07	-0.20
	Sewa-II HPS	120	79	85	72	1.73	72	1.88	-0.15
	Sub Total (C)	3074	2928	2997	2904	68.24	2844	69.10	-0.85
D.NJPC	Nathpa Jhakri	1500	1593	1613	1618	38.26	1594	38.22	0.04
	Sub Total (D)	1500	1593	1613	1618	38.26	1594	38.22	0.04
E. THDC	Tehri HPS	1000	705	710	599	16.56	690	16.50	0.06
	Koteshwar HPS	100	98	100	98	2.21	92	2.20	0.01
	Sub Total (E)	1100	803	810	697	18.76	782	18.70	0.06
F. BBMB	Bhakra HPS	1480	1015	1076	967	25.10	1046	24.37	0.73
	Dehar HPS	990	609	660	645	15.20	633	14.61	0.59
	Pong HPS	396	277	366	186	6.80	283	6.64	0.16
	Sub Total (F)	2866	1900	2102	1798	47.10	1963	45.61	1.49
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	199	137	3.75	156	3.55	0.20
	KWHEP HPS(IPP)	500	0	600	600	13.78	574	14.25	-0.47
	Sub Total (G)	692	0	799	737	17.53	730	17.80	-0.27
H. Total Cental (A-G)	19875	15283	15684	15544	355.37	14807	349.17	6.20	

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	1050.00	1260.00	24.55	1023	
	Guru Nanak Dev TPS(Bhatinda)	440	288.00	288.00	6.12	255	
	Guru Hargobind Singh TPS(L.mbt)	920	939.00	946.00	20.35	848	
	Thermal (Total)	2620	2277.00	2494.00	51.02	2126	
	Total Hydro	1148	1115.00	754.00	20.67	861	
	Total Punjab	3768	3392	3248	71.69	2987	
Haryana	Panipat TPS	1360	992.00	1011.00	24.16	1007	
	DCRTPP (Yamuna nagar)	600	427.00	380.00	9.59	400	
	Faridabad GPS (NTPC)	432	192.00	195.00	5.10	213	
	RGTPP (khedar) (IPP)	1200	252.00	1009.00	19.97	832	
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0	
	Thermal (Total)	3617	1863.00	2595.00	58.82	2451	
	Total Hydro	62	38.00	38.00	0.99	41	
	Total Haryana	3679	1901	2633	59.81	2492	
Rajasthan	kota TPS	1240	653.00	642.00	15.44	643	
	suratgarh TPS	1500	1329.00	1338.00	31.63	1318	
	Chabra TPS	500	230.00	196.00	5.04	210	
	Dholpur GPS	330	284.00	285.00	6.75	281	
	Ramgarh GPS	113	67.00	55.00	1.51	63	
	RAPS A (NPC)	300	228.00	233.00	4.26	178	
	Barsingsar (NLC)	250	0.00	0.00	0.00	0	
	Giral LTTPS (IPP)	250	0.00	0.00	0.27	11	
	Rajwest LTTPS (IPP)	135	0.00	0.00	0.00	0	
	VSLP LTTPS (IPP)	135	36.00	36.00	0.86	36	
	Thermal (Total)	4753	2827.00	2785.00	65.75	2739	
	Total Hydro	550	0.00	0.00	0.00	0	
	Wind power	1294	307.00	454.00	8.66	361	
	Biomass	71	24.00	24.00	0.56	23	
	Renewable/Others (Total)	1365	331	478	9.22	384	
	Total Rajasthan	6668	3158	3263	74.97	3124	
	UP	Anpara TPS	1630	1168	1181	28.37	1182
Obra TPS		1442	450	578	11.54	481	
Paricha TPS		640	249	242	5.82	243	
Panki TPS		210	160	160	3.86	161	
Harduaganj TPS		375	0	0	0.00	0	
Tanda TPS (NTPC)		440	287	289	6.99	291	
Roza TPS (IPP)		600	563	540	12.21	509	
Thermal (Total)		5337	2877	2990	68.79	2866	
Vishnuparyag HPS (IPP)		400	437	436	10.46	436	
Other Hydro		527	88	0	2.43	101	
Cogeneration		951	50	50	1.20	50	
Total UP		7215	3452	3476	82.88	3018	
Uttarakhand		Total Hydro	1303	903	827	19.00	792
		Total Uttarakhand	1303	903	827	19.00	792
Delhi	Rajghat TPS	135	44	94	1.81	75	
	Delhi Gas Turbine	282	135	74	2.20	92	
	Pragati Gas Turbine	330	297	273	6.97	290	
	Rithala GPS	108	50	29	0.91	38	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	510	405	9.62	401	
	Thermal (Total)	2000	1036	875	21.50	896	
	Total Delhi	2000	1036	875	21.50	896	
HP	Baspa HPS (IPP)	300	330	330	7.92	330	
	Malana HPS (IPP)	86	106	105	1.92	80	
	Other Hydro	584	517	538	12.24	510	
	Total HP	970	953	973	22.08	920	
J & K	Baglihar HPS (IPP)	450	442	442	10.60	442	
	Other Hydro	323	166	49	4.78	199	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	608	491	15.37	641	
Total State Generation		26559	15403	15786	367.31	14869	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3345	2256	70.89	2954	
Total Regional Availability(Gross)		46434	34432	33586	793.57	32630	

IV. Total Hydro Generation:

Central +BBMB Hydro	8541	7522	7017	172.37	7182
State Hydro	4497	3598	3321	83.67	3486
Regional Hydro	13037	11120	10338	256.03	10668

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	100	200	500	200	3.67	0.36	3.30
Gwalior-Agra (D/C)	1076	882	1528	0	25.59	0.00	25.59
Zerda-Kankroli	0	124	146	0	0.942	0.00	0.94
Zerda-Bhinmal	256	104	507	16	4.37	0.00	4.37
Malanpur-Auraiya	7	12	0	5	0.68	0.00	0.68
Badod-Kota/Morak	203	160	243	0	4.40	0.00	4.40
Sub Total WR	1439	1322			34.31	0.36	33.95
Pusauli Bypass	76	-279	76	327	0.051	3.53	-3.48
MZP- GKP (D/C)	976	660	1320	0	21.07	0.00	21.07
Patna-Balia(D/C)	394	192	553	0	7.38	0.00	7.38
B'Sharif-Balia (D/C)	460	177	556	0	7.85	0.00	7.85
Pusauli-Sahupuri	0	184	192	0	4.11	0.00	4.11
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	0	0	0	0	0.00	0.00	0.00
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1906	934			40.42	3.53	36.94
Total IR Exch	3345	2256			74.73	3.89	70.89

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
19.85	3.51	23.36	25.88	42.14	-3.21	-6.44	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
46.04	35.41	81.44	36.94	33.95	70.89	-9.09	-1.46	-10.56

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	0.70	1.70	7.00	95.70	90.40	36.60	2.60

<----- 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)		
50.37	06.03	49.13	21.01	49.93	0.34	0.17	50.25	49.44

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	07:00	400	23:33	0.0	0.0	0.0	0.0
Gorakhpur	400	426	08:14	399	23:31	0.0	0.0	69.8	18.8
Bareilly	400	421	07:01	388	23:31	0.0	0.7	0.2	0.0
Kanpur	400	421	07:01	392	23:30	0.0	0.0	0.7	0.0
Dadri	400	415	07:01	0	13:55	9.5	9.5	0.0	0.0
Ballabgarh	400	421	06:02	395	23:30	0.0	0.0	1.4	0.0
Bawana	400	415	08:02	393	23:26	0.0	0.0	0.0	0.0
Bassi	400	431	06:02	398	14:43	0.0	0.0	41.8	0.1
Hissar	400	411	03:51	393	14:43	0.0	0.0	0.0	0.0
Moga	400	414	06:03	398	10:40	0.0	0.0	0.0	0.0
Abdullapur	400	415	06:03	292	07:05	0.0	0.0	0.0	0.0
Nalagarh	400	417	03:42	403	14:43	0.0	0.0	0.0	0.0
Kishenpur	400	413	04:12	398	10:37	0.0	0.0	0.0	0.0
Wagoora	400	410	03:41	391	21:25	0.0	0.0	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	489.47	719.44	472.61	313.90	1228.67	849.50
Pong	426.72	384.05	412.42	577.87	393.96	11.75	694.87	429.40
Tehri	829.79	740.04	766.30	171.98	NA	NA	681.63	495.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	756.55	12.96	754.58	NA	355.78	346.99
Rihand	268.22	252.98	256.64	NA	253.72	NA	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	399.89	381.00	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	NA	NA	NA	NA	NA	NA

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 10.07.2011 :

1 : Partil rains and cloudy weather in NR.

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 : 10.07.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER