

पॉवर सिस्टम ऑपरेशन कापोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 16.07.2011
Date of Reporting : 17.07.2011

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
33685	910	34595	49.78	31153	100	31253	50.17	770.6	13.63

* 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)	UI [OD:(+ve), UD:(-ve)]	
	Thermal	Hydro	Renewable/others	Total				Consumption (Net MU)	Shortages * (MU)
Punjab	46.98	19.18		66.15	109.40	103.47	-5.93	169.62	1.80
Haryana	63.83	1.00		64.82	59.44	58.54	-0.90	123.36	0.00
Rajasthan	64.05	0.00	4.71	68.76	34.05	38.72	4.67	107.48	0.00
Delhi	23.07			23.07	71.53	63.54	-7.99	86.60	0.01
UP	60.08	12.19	1.20	73.47	130.61	129.66	-0.95	203.13	11.82
Uttarakhand		19.27		19.27	8.33	9.19	0.85	28.46	0.00
HP		23.13		23.13	0.08	-1.48	-1.55	21.66	0.00
J & K		14.59	0.00	14.59	13.22	11.07	-2.15	25.66	0.00
Chandigarh				0.00	5.79	4.67	-1.12	4.67	0.00
Total	257.99	89.36	5.91	353.26	432.44	417.38	-15.07	770.64	13.63

* 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	7482	160	-190	1991	6681	0	-491	2750	59.64	
Haryana	5511	0	28	1166	4851	0	-107	779	20.53	
Rajasthan	4626	0	544	-290	4056	0	79	-530	-7.79	
Delhi	3991	0	-465	355	3182	0	-409	300	8.17	
UP	8412	750	-513	1763	9502	100	742	1761	35.78	
Uttarakhand	1342	0	121	-151	1135	0	4	-151	-3.62	
HP	822	0	-132	-1685	756	0	-144	-1701	-34.04	
J&K	1265	0	-118	-497	841	0	-339	-508	-12.69	
Chandigarh	234	0	-30	29	149	0	-76	54	1.10	
Total	33685	910	-755	2679	31153	100	-741	2753	67.09	

* 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)	UI [OG:(+ve), UG:(-ve)]	
								Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1720	1861	1621	39.62	1651	39.83	-0.21
	Rihand I STPS	1000	960	926	911	22.28	928	21.91	0.37
	Rihand II STPS	1000	950	999	1042	21.92	913	21.54	0.38
	Dadri I STPS	840	800	736	631	15.16	632	14.85	0.32
	Dadri II STPS	980	960	803	739	18.97	791	19.74	-0.77
	Unchahar I TPS	440	403	442	375	8.85	369	8.93	-0.08
	Unchahar II TPS	440	594	437	316	8.14	339	8.19	-0.05
	Unchahar III TPS	210	196	219	170	4.14	173	4.08	0.06
	I-STPP (Jhajjar)	500	430	495	139	7.00	292	9.49	-2.49
	Dadri GPS	830	483	365	294	7.49	312	7.57	-0.07
	Anta GPS	419	384	335	229	6.99	291	6.71	0.28
	Auraiya GPS	663	610	616	451	11.90	496	11.44	0.46
	Sub Total (A)	9322	8490	8234	6918	172.47	7186	174.28	-1.81
B. NPC	NAPS	440	185	225	229	4.52	189	4.44	0.08
	RAPS- B	440	385	430	435	9.33	389	9.24	0.09
	RAPS- C	440	385	452	455	9.90	413	9.24	0.66
	Sub Total (B)	1320	955	1107	1119	23.76	990	22.92	0.84
C. NHPC	Chamera I HPS	540	534	540	540	12.75	531	12.81	-0.06
	Chamera II HPS	300	297	303	303	7.21	300	7.27	-0.07
	Bairasuil HPS	180	179	179	0	2.40	100	2.21	0.19
	Salal-HPS	690	540	628	624	12.97	540	12.96	0.01
	Tanakpur-HPS	94	77	94	62	1.79	75	1.82	-0.03
	Uri-HPS	480	396	440	372	8.68	362	9.61	-0.93
	Dhauliganga-HPS	280	277	283	267	6.51	271	6.72	-0.21
	Dulhasti-HPS	390	387	412	267	9.11	380	9.27	-0.16
	Sewa-II HPS	120	119	120	0	0.81	34	0.81	0.00
	Sub Total (C)	3074	2806	2999	2435	62.22	2593	63.48	-1.26
	D. NJPC	Nathpa Jhakri	1500	953	1617	1605	22.87	953	22.91
Sub Total (D)		1500	953	1617	1605	22.87	953	22.91	-0.04
E. THDC	Tehri HPS	1000	689	550	480	16.15	673	16.00	0.15
	Koteshwar HPS	100	0	0	0	0.00	0	0.00	0.00
	Sub Total (E)	1100	689	550	480	16.15	673	16.00	0.15
F. BBMB	Bhakra HPS	1480	916	1126	861	22.42	934	21.98	0.44
	Dehar HPS	990	607	660	600	15.16	632	14.58	0.59
	Pong HPS	396	297	366	246	7.30	304	7.12	0.18
	Sub Total (F)	2866	1820	2152	1707	44.88	1870	43.68	1.20
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	166	117	2.84	118	3.02	-0.19
	KWHEP HPS(IPP)	500	0	600	600	11.92	497	14.25	-2.33
	Sub Total (G)	692	0	766	717	14.76	615	17.28	-2.52
H. Total Regional Entities (A-G)	19875	15712	17425	14981	357.11	14880	360.55	-3.44	

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	900.00	22.49	937	
	Guru Nanak Dev TPS(Bhatinda)	440	250.00	260.00	5.24	218	
	Guru Hargobind Singh TPS(L.mbt)	920	946.00	786.00	19.25	802	
	Thermal (Total)	2620	2246.00	1946.00	46.98	1957	
	Total Hydro	1148	936.00	758.00	19.18	799	
	Total Punjab	3768	3182	2704	66.15	2756	
Haryana	Panipat TPS	1360	1164.00	1119.00	27.98	1166	
	DCRTPP (Yamuna nagar)	600	270.00	271.00	5.10	213	
	Faridabad GPS (NTPC)	432	349.00	320.00	8.36	348	
	RGTPP (khedar) (IPP)	1200	969.00	768.00	22.38	933	
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0	
	Thermal (Total)	3617	2752.00	2478.00	63.83	2659	
	Total Hydro	62	40.00	40.00	1.00	42	
		Total Haryana	3679	2792	2518	64.82	2701
Rajasthan	kota TPS	1240	741.00	692.00	17.37	724	
	suratgarh TPS	1500	1191.00	1147.00	30.18	1257	
	Chabra TPS	500	220.00	191.00	4.96	207	
	Dholpur GPS	330	112.00	282.00	4.67	195	
	Ramgarh GPS	113	56.00	57.00	1.39	58	
	RAPS A (NPC)	300	173.00	174.00	4.29	179	
	Barsingsar (NLC)	250	8.00	67.00	0.85	35	
	Giral LTPS (IPP)	250	50.00	0.00	0.34	14	
	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	2551.00	2610.00	64.05	2669	
	Total Hydro	550	0.00	0.00	0.00	0	
	Wind power	1294	61.00	194.00	4.02	167	
	Biomass	71	29.00	29.00	0.69	29	
	Renewable/Others (Total)	1365	90	223	4.71	196	
		Total Rajasthan	6668	2641	2833	68.76	2865
	UP	Anpara TPS	1630	1503	992	26.24	1093
Obra TPS		1442	299	461	8.89	370	
Paricha TPS		640	62	242	3.17	132	
Panki TPS		210	81	88	1.79	75	
Harduaganj TPS		375	0	0	0.00	0	
Tanda TPS (NTPC)		440	289	288	7.18	299	
Roza TPS (IPP)		600	554	549	12.82	534	
Thermal (Total)		5337	2788	2620	60.08	2503	
Vishnuparyag HPS (IPP)		400	436	436	10.46	436	
Other Hydro		527	123	17	1.73	72	
Cogeneration		951	50	50	1.20	50	
		Total UP	7215	3397	3123	73.47	2625
Uttarakhand		Total Hydro	1303	861	855	19.27	803
		Total Uttarakhand	1303	861	855	19.27	803
Delhi	Rajghat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	146	153	3.61	150	
	Praagati Gas Turbine	330	297	302	7.21	301	
	Rithala GPS	108	39	29	0.93	39	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	520	485	11.32	471	
	Thermal (Total)	2000	1002	969	23.07	961	
		Total Delhi	2000	1002	969	23.07	961
HP	Baspa HPS (IPP)	300	330	330	7.92	330	
	Malana HPS (IPP)	86	100	80	2.13	89	
	Other Hydro	584	555	543	13.08	545	
		Total HP	970	985	953	23.13	964
J & K	Baglihar HPS (IPP)	450	442	441	10.23	426	
	Other Hydro	323	191	0	4.36	182	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	633	441	14.59	608
Total State Control Area Generation		26559	15493	14396	353.26	14283	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3014	2866	80.00	3333	
Total Regional Availability(Gross)		46434	35932	32243	790.37	32496	

IV. Total Hydro Generation:

Regional Entities Hydro	9233	8084	6944	160.89	6704
State Control Area Hydro	4497	3459	3063	64.28	2678
Total Regional Hydro	13729	11543	10007	225.17	9382

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	300	0	500	0	6.59	0.00	6.59
Gwalior-Agra (D/C)	975	1033	1550	0	27.46	0.00	27.46
Zerda-Kankroli	50	0	177	81	0.95	0.00	0.95
Zerda-Bhinmal	27	118	330	263	1.80	0.00	1.80
Malanpur-Auraiya	-39	-20	0	39	0.00	0.39	-0.39
Badod-Kota/Morak	23	4	153	40	0.82	0.00	0.82
Sub Total WR	1313	1131			36.79	0.39	36.41
Pusaali Bypass	-70	-131	30	190	0.10	2.00	-1.90
MZP- GKP (D/C)	970	954	1266	0	23.67	0.00	23.67
Patna-Balia(D/C)	341	477	680	0	10.35	0.00	10.35
B'Sharif-Balia (D/C)	299	247	744	0	6.97	0.00	6.97
Pusaali-Sahupuri	161	188	197	0	4.50	0.00	4.50
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	1701	1735			45.59	2.00	43.59
Total IR Exch	3014	2866			82.39	2.39	80.00

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
19.62	3.71	23.33	25.50	36.05	-0.41	2.61	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
48.41	38.28	86.69	43.59	36.41	80.00	-4.82	-1.87	-6.69

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	0.80	8.80	97.20	89.20	33.90	2.00

<----- 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				
50.74	15.53	49.31	20.10	49.92	0.31	0.16	50.23	49.69

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	03:44	399	14:25	0.0	0.0	0.0	0.0
Gorakhpur	400	441	07:18	396	16:18	0.0	0.0	46.0	11.9
Bareilly	400	416	08:00	400	03:00	0.0	1.0	0.0	0.0
Kanpur	400	418	07:15	393	22:16	0.0	0.0	0.0	0.0
Dadri	400	413	03:58	385	15:00	0.0	0.5	0.0	0.0
Ballabgarh	400	417	03:34	394	15:42	0.0	0.0	0.0	0.0
Bawana	400	414	03:40	389	12:44	0.0	0.5	0.0	0.0
Bassi	400	427	03:31	391	12:23	0.0	0.0	21.9	0.0
Hissar	400	410	03:33	388	12:43	0.0	0.9	0.0	0.0
Moga	400	412	00:35	392	09:55	0.0	0.0	0.0	0.0
Abdullapur	400	417	04:31	391	12:44	0.0	0.0	0.0	0.0
Nalagarh	400	421	06:02	397	14:59	0.0	0.0	1.6	0.0
Kishenpur	400	414	03:39	398	21:00	0.0	0.0	0.0	0.0
Wagoora	400	400	17:03	383	21:00	0.0	17.8	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	496.81	738.57	475.67	368.17	1549.50	779.17
Pong	426.72	384.05	412.48	577.87	394.30	116.59	622.12	451.94
Tehri	829.79	740.04	770.00	208.27	NA	NA	610.79	456.00
Koteswar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	756.70	11.61	755.00	NA	348.73	346.09
Rihand	268.22	252.98	256.82	NA	254.66	NA	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	508.92	NA	501.86	NA	368.49	266.83

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 16.07.2011 :

1 : Normal weather in 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 : 16.07.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER