

पावर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.07.2011

Date of Reporting : 23.07.2011

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
36349	3083	39432	49.59	36166	1234	37400	50.13	858.2	41.09

* 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	54.29	20.90		75.18	117.45	117.41	-0.04	192.60	12.77
Haryana	66.71	1.18		67.89	71.81	70.48	-1.34	138.37	1.03
Rajasthan	68.02	0.17	16.43	84.62	34.25	45.22	10.97	129.84	3.96
Delhi	23.15			23.15	80.23	75.42	-4.81	98.57	0.15
UP	57.79	13.03	1.20	72.02	136.90	139.26	2.35	211.27	22.96
Uttarakhand		19.88		19.88	7.29	10.09	2.80	29.97	0.00
HP		23.48		23.48	-1.24	-0.04	1.20	23.44	0.22
J & K		14.79	0.00	14.79	12.42	13.44	1.02	28.23	0.00
Chandigarh				0.00	6.36	5.91	-0.45	5.91	0.00
Total	269.95	93.42	17.63	381.00	465.49	477.19	11.71	858.19	41.09

* 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	8026	925	-45	2024	8307	100	-36	2646	59.39
Haryana	5889	79	159	1171	5763	0	-81	1180	26.03
Rajasthan	5090	1064	290	-392	5706	244	726	-536	-10.91
Delhi	4392	30	3	301	3816	0	-68	137	9.68
UP	9162	985	490	1763	9474	890	373	1763	42.30
Uttarakhand	1345	0	113	-151	1108	0	20	-151	-3.62
HP	940	0	88	-1708	847	0	-29	-1775	-41.45
J&K	1240	0	-1	-597	934	0	-127	-591	-14.53
Chandigarh	265	0	-13	29	211	0	-12	54	1.24
Total	36349	3083	1084	2439	36166	1234	766	2726	68.12

* 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	1497	1378	1859	35.75	1489	35.93	-0.19
	Rihand I STPS	1000	920	925	1042	22.11	921	22.04	0.07
	Rihand II STPS	1000	965	1042	1030	23.31	971	23.14	0.17
	Dadri I STPS	840	800	869	860	17.75	740	17.84	-0.09
	Dadri II STPS	980	901	775	1005	20.52	855	20.95	-0.43
	Unchahar I TPS	440	330	332	359	7.93	331	7.91	0.02
	Unchahar II TPS	440	398	437	434	9.58	399	9.53	0.05
	Unchahar III TPS	210	196	224	212	4.72	197	4.70	0.02
	ISTPP (Jhajjar)	500	465	483	457	10.11	421	11.12	-1.00
	Dadri GPS	830	556	553	530	12.45	519	12.64	-0.19
	Anta GPS	419	385	380	257	7.01	292	7.48	-0.47
	Auraiya GPS	663	611	466	459	11.23	468	11.96	-0.73
	Sub Total (A)	9322	8024	7864	8504	182.48	7603	185.24	-2.76
	B. NPC	NAPS	440	185	220	224	4.42	184	4.44
RAPS- B		440	381	418	421	9.04	377	9.14	-0.10
RAPS- C		440	410	465	477	10.17	424	9.84	0.33
Sub Total (B)		1320	976	1103	1122	23.63	985	23.42	0.21
C. NHPC	Chamera I HPS	540	534	540	540	12.91	538	12.82	0.10
	Chamera II HPS	300	297	304	302	7.22	301	7.23	-0.02
	Bairasuil HPS	180	179	179	30	2.20	92	2.33	-0.13
	Salal-HPS	690	631	631	631	15.17	632	15.14	0.03
	Tanakpur-HPS	94	93	94	94	2.17	90	2.24	-0.08
	Uri-HPS	480	364	400	348	8.59	358	8.31	0.28
	Dhauliganga-HPS	280	277	281	276	6.19	258	6.67	-0.48
	Dulhasti-HPS	390	387	409	407	9.18	382	9.31	-0.13
	Sewa-II HPS	120	119	127	0	0.77	32	0.69	0.08
	Sub Total (C)	3074	2880	2965	2628	64.39	2683	64.74	-0.35
D.NJPC	Nathpa Jhakri	1500	1600	1611	1616	38.32	1597	38.39	-0.07
	Sub Total (D)	1500	1600	1611	1616	38.32	1597	38.39	-0.07
E. THDC	Tehri HPS	1000	780	779	570	18.05	752	18.00	0.05
	Koteshwar HPS	100	0	0	0	0.00	0	0.00	0.00
	Sub Total (E)	1100	780	779	570	18.05	752	18.00	0.05
F. BBMB	Bhakra HPS	1480	927	1076	860	22.75	948	22.26	0.49
	Dehar HPS	990	608	660	620	14.94	623	14.60	0.35
	Pong HPS	396	294	366	240	7.25	302	7.07	0.18
	Sub Total (F)	2866	1830	2102	1720	44.94	1873	43.92	1.02
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	181	165	3.40	142	3.37	0.03
	KWHEP HPS(IPP)	500	0	600	595	13.42	559	14.29	-0.87
	Sub Total (G)	692	0	781	760	16.82	701	17.65	-0.83
H. Total Regional Entities (A-G)	19875	16090	17205	16920	388.62	16193	391.37	-2.75	

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	1260.00	1260.00	27.78	1157
	Guru Nanak Dev TPS(Bhatinda)	440	289.00	260.00	5.94	248
	Guru Hargobind Singh TPS(L.mbt)	920	945.00	953.00	20.57	857
	Thermal (Total)	2620	2494.00	2473.00	54.29	2262
	Total Hydro	1148	1119.00	812.00	20.90	871
	Total Punjab	3768	3613	3285	75.18	3133
Haryana	Panipat TPS	1360	976.00	1105.00	24.56	1023
	DCRTPP (Yamuna nagar)	600	406.00	460.00	10.77	449
	Faridabad GPS (NTPC)	432	386.00	322.00	8.63	359
	RGTPP (khedar) (IPP)	1200	804.00	881.00	22.76	948
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0
	Thermal (Total)	3617	2572.00	2768.00	66.71	2780
	Total Hydro	62	44.00	45.00	1.18	49
	Total Haryana	3679	2616	2813	67.89	2829
Rajasthan	kota TPS	1240	951.00	935.00	22.52	938
	suratgarh TPS	1500	1146.00	1105.00	27.55	1148
	Chabra TPS	500	224.00	213.00	5.29	220
	Dholpur GPS	330	277.00	260.00	6.74	281
	Ramgarh GPS	113	67.00	66.00	1.61	67
	RAPS A (NPC)	300	174.00	174.00	4.31	180
	Barsingsar (NLC)	250	0.00	0.00	0.00	0
	Giral LTTPS (IPP)	250	0.00	0.00	0.00	0
	Rajwest LTTPS (IPP)	135	0.00	0.00	0.00	0
	VSLP LTTPS (IPP)	135	0.00	0.00	0.00	0
	Thermal (Total)	4753	2839.00	2753.00	68.02	2834
	Total Hydro	550	31.00	0.00	0.17	7
	Wind power	1294	521.00	781.00	15.95	665
	Biomass	71	20.00	20.00	0.48	20
	Renewable/Others (Total)	1365	541	801	16.43	685
	Total Rajasthan	6668	3411	3554	84.62	3526
	UP	Anpara TPS	1630	1076	1060	22.90
Obra TPS		1442	439	321	7.30	304
Paricha TPS		640	381	399	8.40	350
Panki TPS		210	70	70	1.60	67
Harduaganj TPS		375	0	0	0.00	0
Tanda TPS (NTPC)		440	197	196	4.86	202
Roza TPS (IPP)		600	558	549	12.73	530
Thermal (Total)		5337	2721	2595	57.79	2408
Vishnuparyag HPS (IPP)		400	436	436	10.46	436
Other Hydro		527	154	27	2.57	107
Cogeneration		951	50	50	1.20	50
Total UP		7215	3361	3108	72.02	2565
Uttarakhand		Total Hydro	1303	898	812	19.88
	Total Uttarakhand	1303	898	812	19.88	828
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	144	147	3.58	149
	Pragati Gas Turbine	330	289	296	7.10	296
	Rithala GPS	108	34	29	0.84	35
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	509	427	11.63	485
	Thermal (Total)	2000	976	899	23.15	964
Total Delhi	2000	976	899	23.15	964	
HP	Baspa HPS (IPP)	330	330	330	7.92	330
	Malana HPS (IPP)	101	105	105	2.51	105
	Other Hydro	571	503	537	13.05	544
	Total HP	1002	938	972	23.48	978
J & K	Baglihar HPS (IPP)	450	436	437	10.50	438
	Other Hydro	323	188	192	4.29	179
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	624	629	14.79	616
Total State Control Area Generation		26591	16437	16072	381.00	15439
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4108	4128	100.96	4206
Total Regional Availability(Gross)		46466	37750	37120	870.57	35838

IV. Total Hydro Generation:

Regional Entities Hydro	9233	8238	7294	182.52	7605
State Control Area Hydro	5365	3808	3297	82.96	3457
Total Regional Hydro	14597	12046	10591	265.48	11062

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	500	400	500	0	9.70	0.00	9.70
Gwalior-Agra (D/C)	1123	853	1500	0	30.04	0.00	30.04
Zerda-Kankroli	165	183	355	0	5.01	0.00	5.01
Zerda-Bhinmal	200	146	253	0	3.68	0.00	3.68
Malanpur-Auraiya	88	44	101	0	1.28	0.00	1.28
Badod-Kota/Morak	54	181	251	0	2.41	0.00	2.41
Sub Total WR	2076	1626			49.72	0.00	49.72
Pusauli Bypass	-56	103	103	127	0.36	0.84	-0.48
MZP- GKP (D/C)	1040	1100	1276	0	27.59	0.00	27.59
Patna-Balia(D/C)	408	531	635	0	11.39	0.00	11.39
B'Sharif-Balia (D/C)	489	622	746	0	9.39	0.00	9.39
Pusauli-Sahupuri	181	178	186	0	4.04	0.00	4.04
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-30	-32	0	36	0.00	0.69	-0.69
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	2032	2502			52.76	1.52	51.24
Total IR Exch	4108	4128			102.48	1.52	100.96

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
21.91	3.72	25.63	25.31	35.15	0.45	3.51	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
51.38	38.47	89.85	51.24	49.72	100.96	-0.15	11.25	11.10

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	0.60	5.90	18.20	93.60	81.30	21.50	0.50

<----- 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				
50.37	14.06	49.07	19.12	49.85	0.58	0.19	50.27	49.41

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	412	11:24	399	00:32	0.0	0.0	0.0	0.0
Gorakhpur	400	437	14:06	410	22:36	0.0	0.0	89.2	15.4
Bareilly	400	421	08:00	371	10:08	0.0	0.0	0.4	0.0
Kanpur	400	416	09:00	397	22:35	0.0	0.0	0.0	0.0
Dadri	400	411	07:47	390	14:49	0.0	0.0	0.0	0.0
Ballabgarh	400	415	07:40	392	14:48	0.0	0.0	0.0	0.0
Bawana	400	410	07:46	387	14:47	0.0	2.0	0.0	0.0
Bassi	400	425	03:20	400	12:12	0.0	0.0	10.9	0.0
Hissar	400	401	03:04	381	12:46	0.0	18.1	0.0	0.0
Moga	400	406	03:58	383	12:47	0.0	6.9	0.0	0.0
Abdullapur	400	408	07:32	245	11:00	0.1	0.3	0.0	0.0
Nalagarh	400	406	07:40	383	14:52	0.0	10.0	0.0	0.0
Kishenpur	400	405	03:59	390	12:47	0.0	0.0	0.0	0.0
Wagoora	400	407	03:29	0	10:40	54.2	55.9	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	493.18	838.00	481.98	503.43	1240.96	728.73
Pong	426.72	384.05	412.73	588.94	396.68	151.67	710.50	451.83
Tehri	829.79	740.04	776.06	262.91	NA	NA	647.86	509.00
Koteswar	612.50	598.50	604.80	2.25	NA	NA	507.00	NA
Chamera-I	760.00	748.75	756.91	12.91	756.50	NA	342.76	349.80
Rihand	268.22	252.98	257.40	168.50	255.06	NA	NA	NA
RPS	352.80	343.81	345.60	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	296.88	NA	NA	NA	NA	67.90
RSD	527.91	487.91	508.72	NA	504.84	NA	329.66	369.25

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 22.07.2011 :

1 : Hot & Humid 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 : 22.07.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER