

पॉवर सिस्टम ऑपरेशन कापोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.07.2011
Date of Reporting : 21.07.2011

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
36135	2315	38450	49.81	35866	0	35866	50.05	852.9	18.32

* 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	44.17	22.97		67.14	119.65	117.25	-2.40	184.39	6.30
Haryana	67.04	1.06		68.11	71.41	72.18	0.77	140.29	0.02
Rajasthan	62.11	0.47	23.83	86.42	34.52	39.05	4.53	125.46	0.00
Delhi	22.65			22.65	80.79	76.06	-4.73	98.70	0.23
UP	68.94	12.79	1.20	82.94	135.76	135.53	-0.22	218.47	10.99
Uttarakhand		21.32		21.32	8.45	8.71	0.25	30.03	0.11
HP		23.83		23.83	-1.43	-2.05	-0.62	21.78	0.68
J & K		14.75	0.00	14.75	12.30	13.06	0.77	27.82	0.00
Chandigarh				0.00	6.32	5.95	-0.37	5.95	0.00
Total	264.92	97.21	25.03	387.15	467.77	465.75	-2.02	852.90	18.32

* 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	7991	1400	213	2032	7960	0	-246	2736	61.13
Haryana	5922	0	-289	1174	5425	0	-77	1185	25.16
Rajasthan	5165	0	-194	-39	5078	0	119	-552	-10.29
Delhi	4258	50	-240	350	3692	0	-572	371	9.43
UP	9032	795	111	1763	10476	0	1233	1763	42.30
Uttarakhand	1318	70	66	-151	1240	0	-34	-151	-3.62
HP	888	0	-19	-1704	876	0	-28	-1721	-41.33
J&K	1285	0	81	-597	916	0	-122	-590	-14.53
Chandigarh	276	0	-4	29	203	0	-17	54	1.20
Total	36135	2315	-275	2855	35866	0	256	3096	69.45

* 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	1715	1858	1862	41.61	1734	41.13	0.48
	Rihand I STPS	1000	960	1048	1048	23.13	964	22.97	0.16
	Rihand II STPS	1000	965	1037	1038	23.36	974	23.11	0.26
	Dadri I STPS	840	800	870	767	16.85	702	16.90	-0.05
	Dadri II STPS	980	960	1020	940	22.41	934	22.52	-0.12
	Unchahar I TPS	440	201	218	220	4.87	203	4.81	0.06
	Unchahar II TPS	440	397	436	426	9.57	399	9.44	0.13
	Unchahar III TPS	210	196	222	216	4.72	197	4.61	0.11
	I-STPP (Jhajjar)	500	470	484	457	10.42	434	11.05	-0.64
	Dadri GPS	830	549	555	509	11.86	494	11.99	-0.13
	Anta GPS	419	383	254	251	5.79	241	6.53	-0.74
	Auraiya GPS	663	611	467	441	10.53	439	10.26	0.27
	Sub Total (A)	9322	8208	8469	8175	185.12	7713	185.34	-0.22
B. NPC	NAPS	440	185	221	216	4.34	181	4.44	-0.10
	RAPS- B	440	389	430	433	9.30	388	9.34	-0.03
	RAPS- C	440	410	466	478	10.16	423	9.84	0.32
	Sub Total (B)	1320	984	1117	1127	23.80	992	23.62	0.18
C. NHPC	Chamera I HPS	540	538	540	540	12.86	536	12.80	0.06
	Chamera II HPS	300	297	304	300	7.14	298	7.19	-0.05
	Bairasui HPS	180	179	179	30	2.09	87	2.08	0.00
	Salal-HPS	690	631	631	631	15.19	633	15.12	0.07
	Tanakpur-HPS	94	98	92	92	2.26	94	2.15	0.10
	Uri-HPS	480	368	401	360	8.98	374	8.83	0.15
	Dhauliganga-HPS	280	277	283	281	6.41	267	6.62	-0.22
	Dulhasti-HPS	390	387	409	332	8.92	372	8.95	-0.03
	Sewa-II HPS	120	119	102	0	0.55	23	0.68	-0.13
	Sub Total (C)	3074	2894	2941	2566	64.40	2683	64.44	-0.04
	D. NJPC	Nathpa Jhakri	1500	1600	1611	1615	38.38	1599	38.40
Sub Total (D)		1500	1600	1611	1615	38.38	1599	38.40	-0.02
E. THDC	Tehri HPS	1000	760	760	761	17.84	743	17.75	0.09
	Koteshwar HPS	100	0	0	0	0.00	0	0.00	0.00
	Sub Total (E)	1100	760	760	761	17.84	743	17.75	0.09
F. BBMB	Bhakra HPS	1480	898	1053	849	21.85	910	21.56	0.29
	Dehar HPS	990	608	660	630	14.96	623	14.60	0.36
	Ponq HPS	396	294	366	246	7.26	303	7.07	0.19
	Sub Total (F)	2866	1801	2079	1725	44.07	1836	43.22	0.85
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	170	171	3.34	139	3.16	0.18
	KWHEP HPS(IPP)	500	0	600	600	12.53	522	14.23	-1.70
	Sub Total (G)	692	0	770	771	15.88	661	17.39	-1.52
H. Total Regional Entities (A-G)		19875	16247	17747	16740	389.48	16228	390.16	-0.67

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	1050.00	22.89	954	
	Guru Nanak Dev TPS(Bhatinda)	440	245.00	280.00	4.06	169	
	Guru Hargobind Singh TPS(L.mbt)	920	896.00	947.00	17.22	717	
	Thermal (Total)	2620	2191.00	2277.00	44.17	1840	
	Total Hydro	1148	1116.00	759.00	22.97	957	
	Total Punjab	3768	3307	3036	67.14	2798	
Haryana	Panipat TPS	1360	1127.00	1148.00	27.53	1147	
	DCRTPP (Yamuna nagar)	600	421.00	271.00	7.05	294	
	Faridabad GPS (NTPC)	432	394.00	398.00	9.56	398	
	RGTPP (khedar) (IPP)	1200	992.00	939.00	22.90	954	
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0	
	Thermal (Total)	3617	2934.00	2756.00	67.04	2793	
	Total Hydro	62	41.00	39.00	1.06	44	
		Total Haryana	3679	2975	2795	68.11	2838
Rajasthan	kota TPS	1240	766.00	727.00	18.97	790	
	suratgarh TPS	1500	1113.00	1126.00	25.40	1058	
	Chabra TPS	500	213.00	212.00	5.13	214	
	Dholpur GPS	330	280.00	273.00	6.77	282	
	Ramgarh GPS	113	63.00	63.00	1.59	66	
	RAPS A (NPC)	300	171.00	171.00	4.25	177	
	Barsingsar (NLC)	250	0.00	0.00	0.00	0	
	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	2606.00	2572.00	62.11	2588	
	Total Hydro	550	7.00	0.00	0.47	20	
	Wind power	1294	922.00	1023.00	23.39	975	
	Biomass	71	19.00	19.00	0.44	18	
	Renewable/Others (Total)	1365	941	1042	23.83	993	
		Total Rajasthan	6668	3554	3614	86.42	3601
	UP	Anpara TPS	1630	1534	1565	33.50	1396
Obra TPS		1442	196	332	6.00	250	
Paricha TPS		640	386	356	8.50	354	
Panki TPS		210	66	77	1.50	63	
Harduaganj TPS		375	0	0	0.00	0	
Tanda TPS (NTPC)		440	281	278	6.78	283	
Roza TPS (IPP)		600	554	540	12.66	528	
Thermal (Total)		5337	3017	3148	68.94	2873	
Vishnuparyag HPS (IPP)		400	436	436	10.46	436	
Other Hydro		527	97	24	2.33	97	
Cogeneration		951	50	50	1.20	50	
		Total UP	7215	3600	3658	82.94	3020
Uttarakhand		Total Hydro	1303	898	910	21.32	889
	Total Uttarakhand	1303	898	910	21.32	889	
Delhi	Rajghat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	141	108	3.16	132	
	Praagati Gas Turbine	330	293	294	7.28	303	
	Rithala GPS	108	27	29	0.80	33	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	595	505	11.40	475	
	Thermal (Total)	2000	1056	936	22.65	944	
	Total Delhi	2000	1056	936	22.65	944	
HP	Baspa HPS (IPP)	330	330	330	7.92	330	
	Malana HPS (IPP)	101	105	105	2.49	104	
	Other Hydro	571	571	569	13.42	559	
		Total HP	1002	1006	1004	23.83	993
J & K	Baglihar HPS (IPP)	450	437	437	10.55	440	
	Other Hydro	323	174	144	4.20	175	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	611	581	14.75	615
Total State Control Area Generation		26591	17007	16534	387.15	15696	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3639	4356	100.52	4188	
Total Regional Availability(Gross)		46466	38393	37630	877.15	36112	

IV. Total Hydro Generation:

Regional Entities Hydro	9233	8161	7438	180.57	7524
State Control Area Hydro	5365	3776	3317	86.75	3615
Total Regional Hydro	14597	11937	10755	267.32	11138

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	500	500	0	8.33	0.00	8.33
Gwalior-Agra (D/C)	1024	1044	1536	0	28.70	0.00	28.70
Zerda-Kankroli	298	269	543	0	6.96	0.00	6.96
Zerda-Bhinmal	0	193	296	0	2.49	0.00	2.49
Malanpur-Auraiya	-16	-43	0	65	0.90	0.00	0.90
Badod-Kota/Morak	-9	60	209	42	2.01	0.00	2.01
Sub Total WR	1706	1963			47.37	0.00	47.37
Pusauli Bypass	-120	80	171	216	1.08	0.97	0.11
MZP- GKP (D/C)	1002	1122	1480	0	26.41	0.00	26.41
Patna-Balia(D/C)	409	469	661	0	11.05	0.00	11.05
B'Sharif-Balia (D/C)	469	542	736	0	11.53	0.00	11.53
Pusauli-Sahupuri	173	180	186	0	4.05	0.00	4.05
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	1933	2393			54.11	0.97	53.14
Total IR Exch	3639	4356			101.48	0.97	100.52

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
22.50	3.84	26.33	25.09	35.15	3.08	3.88	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
54.50	38.85	93.35	53.14	47.37	100.52	-1.36	8.53	7.17

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	0.60	4.30	99.00	95.30	23.50	0.40

<----- 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				
50.28	13.01	49.27	19.34	49.92	0.22	0.12	50.19	49.67

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	408	07:09	397	00:03	0.0	0.0	0.0	0.0
Gorakhpur	400	436	07:08	405	14:53	0.0	0.0	56.1	2.1
Bareilly	400	417	08:00	389	12:09	0.0	0.3	0.0	0.0
Kanpur	400	413	09:00	390	14:41	0.0	0.0	0.0	0.0
Dadri	400	409	08:03	387	14:40	0.0	2.8	0.0	0.0
Ballabgarh	400	412	07:05	386	14:41	0.0	2.3	0.0	0.0
Bawana	400	408	07:02	383	14:41	0.0	7.5	0.0	0.0
Bassi	400	424	18:05	393	14:41	0.0	0.0	1.0	0.0
Hissar	400	401	03:42	380	14:42	0.0	13.4	0.0	0.0
Moga	400	407	04:02	384	12:11	0.0	7.4	0.0	0.0
Abdullapur	400	409	07:04	245	15:50	0.1	2.9	0.0	0.0
Nalagarh	400	409	04:03	384	13:41	0.0	7.9	0.0	0.0
Kishenpur	400	405	04:01	389	12:07	0.0	0.6	0.0	0.0
Wagoora	400	406	03:41	387	20:16	0.0	15.0	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	492.42	817.99	479.72	454.47	1154.58	702.80
Pong	426.72	384.05	412.57	588.94	395.58	136.17	514.88	453.64
Tehri	829.79	740.04	772.75	240.72	NA	NA	505.61	512.00
Koteswar	612.50	598.50	605.24	2.46	NA	NA	512.00	NA
Chamera-I	760.00	748.75	756.74	12.95	756.50	NA	350.48	348.72
Rihand	268.22	252.98	257.16	NA	254.94	NA	NA	NA
RPS	352.80	343.81	345.62	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.61	NA	NA	NA	NA	67.90
RSD	527.91	487.91	508.89	NA	502.95	NA	358.21	474.17

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 20.07.2011 :

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 :

1. Leramohbat (PSEB) 800 MW tripped at 10.12 hrs/20.07.2011 to 12.32 hrs/20.07.2011.
2. Bhatinda (PSEB) 300MW tripped at 10.12 hrs /20.07.2011 to 15.40 hrs /20.07.2011.

Report for : 20.07.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER