पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.07.2011
Date of Reporting : 25.07.2011

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
34807	1103	35910	49.75	35264	70	35334	50.05	819.2	20.23

* 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:

UI [OD:(+ve), UD: (-ve)]

State	State's Control Area Generation (Net MU)				Drawal Schedule	Actual Drawal	UI	Consumption	Shortages *
	Thermal	Hydro	Renewable/others	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(MU)
Punjab	53.63	20.02		73.65	114.04	110.55	-3.49	184.21	1.80
Haryana	64.11	1.18		65.30	68.08	65.36	-2.71	130.66	0.00
Rajasthan	65.94	0.00	2.95	68.89	36.69	55.38	18.69	124.27	0.27
Delhi	22.15			22.15	73.77	62.43	-11.34	84.57	0.00
UP	63.66	12.13	1.20	76.99	137.48	137.90	0.42	214.88	16.36
Uttarakhand		18.43		18.43	8.62	9.89	1.27	28.33	0.00
HP		24.11		24.11	-0.86	-2.48	-1.62	21.63	0.00
J & K		14.79	0.00	14.79	10.67	11.49	0.82	26.28	1.80
Chandigarh				0.00	5.39	4.41	-0.98	4.41	0.00
Total	**269.49**	**90.67**	**4.15**	**364.31**	**453.87**	**454.92**	**1.05**	**819.23**	**20.23**

*** Shortage furnished by the respective constituent.**

II. B. State's Demand Met in MWs:

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)

State	Evening Peak (20:00 Hrs) MW				Off Peak (03:00 Hrs) MW				Day Energy MU
	Demand Met	Shortage	UI	STOA/PX transactio	Demand Met	Shortage	UI	STOA/PX transaction	STOA/PX transaction
Punjab	8076	150	-17	2148	7329	0	-768	2443	56.14
Haryana	5532	0	-374	1164	5661	0	-65	1182	24.59
Rajasthan	4770	0	307	-334	5288	0	866	-310	-8.33
Delhi	3743	3	-600	476	3484	0	-258	334	10.04
UP	9038	950	399	1763	10350	70	776	1763	42.29
Uttarakhand	1344	0	120	-151	1163	0	-5	-151	-3.62
HP	785	0	-145	-1708	867	0	-87	-1725	-41.10
J&K	1306	0	88	-597	945	0	-40	-590	-14.48
Chandigarh	213	0	-2	24	177	0	-42	14	0.82
Total	**34807**	**1103**	**-224**	**2785**	**35264**	**70**	**377**	**2961**	**66.35**

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

III. Regional Entities :

UI [OG:(+ve), UG: (-ve)]

	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	1700	1837	1821	41.31	1721	40.70	0.60
	Rihand I STPS	1000	770	888	766	18.48	770	18.00	0.48
	Rihand II STPS	1000	965	1047	1034	23.09	962	22.56	0.53
	Dadri I STPS	840	800	774	839	15.85	660	15.39	0.46
	Dadri II STPS	980	960	881	786	19.26	803	19.28	-0.01
	Unchahar I TPS	440	399	439	436	9.53	397	9.27	0.25
	Unchahar II TPS	440	366	220	438	8.09	337	8.33	-0.24
	Unchahar III TPS	210	196	222	216	4.64	193	4.46	0.18
	ISTPP (Jhajjar)	500	470	483	457	8.36	348	10.84	-2.48
	Dadri GPS	830	558	447	578	11.97	499	11.91	0.06
	Anta GPS	419	391	387	347	7.63	318	7.75	-0.12
	Auraiya GPS	663	611	471	630	11.70	488	11.12	0.58
	Sub Total (A)	**9322**	**8186**	**8096**	**8348**	**179.90**	**7496**	**179.61**	**0.29**
B. NPC	NAPS	440	185	225	223	4.50	188	4.44	0.06
	RAPS- B	440	376	420	423	9.10	379	9.02	0.08
	RAPS- C	440	410	465	474	10.17	424	9.84	0.33
	Sub Total (B)	**1320**	**971**	**1110**	**1120**	**23.78**	**991**	**23.30**	**0.47**
C. NHPC	Chamera I HPS	540	534	540	540	12.77	532	12.79	-0.02
	Chamera II HPS	300	297	304	301	7.22	301	7.25	-0.02
	Bairasuil HPS	180	179	179	60	3.34	139	3.44	-0.10
	Salal-HPS	690	631	633	631	15.07	628	15.15	-0.08
	Tanakpur-HPS	94	96	94	94	2.25	94	2.23	0.02
	Uri-HPS	480	353	359	321	7.89	329	8.04	-0.15
	Dhauliganga-HPS	280	277	281	279	6.65	277	7.01	-0.36
	Dulhasti-HPS	390	93	404	0	2.35	98	2.30	0.05
	Sewa-II HPS	120	119	121	0	1.42	59	1.33	0.08
	Sub Total (C)	**3074**	**2578**	**2915**	**2226**	**58.95**	**2456**	**59.54**	-0.59
D.NJPC	Nathpa Jhakri	1500	1600	1612	1610	38.33	1597	38.40	-0.07
	Sub Total (D)	1500	1600	1612	1610	38.33	1597	38.40	-0.07
E. THDC	Tehri HPS	1000	790	799	780	18.89	787	18.75	0.14
	Koteshwar HPS	100	0	0	0	0.00	0	0.00	0.00
	Sub Total (E)	**1100**	**790**	**799**	**780**	**18.89**	**787**	**18.75**	0.14
F. BBMB	Bhakra HPS	1480	965	1076	968	23.65	985	23.15	0.50
	Dehar HPS	990	608	660	615	15.10	629	14.60	0.50
	Pong HPS	396	294	366	246	7.37	307	7.07	0.30
	Sub Total (F)	**2866**	**1867**	**2102**	**1829**	**46.12**	**1922**	**44.81**	1.31
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	194	118	3.68	153	3.02	0.66
	KWHEP HPS(IPP)	500	0	600	600	14.01	584	14.29	-0.28
	Sub Total (G)	692	0	794	718	17.69	737	17.31	0.38
H. Total Regional Entities (A-G)		**19875**	**15992**	**17428**	**16631**	**383.66**	**15986**	**381.73**	**1.93**

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	27.77	1157
	Guru Nanak Dev TPS(Bhatinda)	440	215.00	291.00	5.00	209
	Guru Hargobind Singh TPS(L.mbt)	920	940.00	948.00	20.86	869
	Thermal (Total)	2620	2415.00	2499.00	53.63	2235
	Total Hydro	1148	1119.00	760.00	20.02	834
	Total Punjab	**3768**	**3534**	**3259**	**73.65**	**3069**
Haryana	Panipat TPS	1360	1159.00	974.00	24.73	1031
	DCRTPP (Yamuna nagar)	600	464.00	475.00	10.10	421
	Faridabad GPS (NTPC)	432	337.00	319.00	7.93	331
	RGTPP (khedar) (IPP)	1200	899.00	877.00	21.35	890
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0
	Thermal (Total)	3617	2859.00	2645.00	64.11	2671
	Total Hydro	62	45.00	45.00	1.18	49
	Total Haryana	**3679**	**2904**	**2690**	**65.30**	**2721**
Rajasthan	kota TPS	1240	876.00	954.00	21.45	894
	suratgarh TPS	1500	1095.00	1112.00	26.86	1119
	Chabra TPS	500	222.00	224.00	5.13	214
	Dholpur GPS	330	270.00	265.00	6.60	275
	Ramgarh GPS	113	65.00	65.00	1.62	67
	RAPS A (NPC)	300	178.00	179.00	4.29	179
	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	2706.00	2799.00	65.94	2748
	Total Hydro	550	0.00	0.00	0.00	0
	Wind power	1294	142.00	94.00	2.33	97
	Biomass	71	27.00	27.00	0.62	26
	Renewable/Others (Total)	1365	169	121	2.95	123
	Total Rajasthan	**6668**	**2875**	**2920**	**68.89**	**2871**
UP	Anpara TPS	1630	1518	1363	31.68	1320
	Obra TPS	1442	0	395	5.60	233
	Paricha TPS	640	394	392	8.36	348
	Panki TPS	210	65	66	1.40	58
	Harduaganj TPS	375	0	0	0.00	0
	Tanda TPS (NTPC)	440	162	197	4.79	200
	Roza TPS (IPP)	600	529	545	11.83	493
	Thermal (Total)	5337	2668	2958	63.66	2652
	Vishnuparyag HPS (IPP)	400	436	436	8.87	370
	Other Hydro	527	247	33	3.26	136
	Cogeneration	951	50	50	1.20	50
	Total UP	**7215**	**3401**	**3477**	**76.99**	**2838**
Uttarakhand	Total Hydro	1303	843	813	18.43	768
	Total Uttarakhand	**1303**	**843**	**813**	**18.43**	**768**
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	109	151	2.86	119
	Pragati Gas Turbine	330	294	302	7.11	296
	Rithala GPS	108	39	29	0.89	37
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	515	495	11.29	470
	Thermal (Total)	2000	957	977	22.15	923
	Total Delhi	**2000**	**957**	**977**	**22.15**	**923**
HP	Baspa HPS (IPP)	330	330	330	7.92	330
	Malana HPS (IPP)	101	105	104	2.52	105
	Other Hydro	571	573	570	13.67	570
	Total HP	**1002**	**1008**	**1004**	**24.11**	**1005**
J & K	Baglihar HPS (IPP)	450	438	436	10.50	438
	Other Hydro	323	188	192	4.29	179
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	**956**	**626**	**628**	**14.79**	616
Total State Control Area Generation		**26591**	**16148**	**15768**	**364.31**	**14810**
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			**3555**	**3810**	**86.50**	**3604**
Total Regional Availability(Gross)		**46466**	**37131**	**36209**	**834.47**	**34400**

IV. Total Hydro Generation:

Regional Entities Hydro	**9233**	**8222**	**7163**	**179.99**	**7499**
State Control Area Hydro	**5365**	**3888**	**3283**	**81.79**	**3408**
Total Regional Hydro	**14597**	**12110**	**10446**	**261.78**	**10907**

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(20:00 Hrs) MW	Off Peak(03:00 Hrs) MW	Maximum Interchange (MW) Import	Maximum Interchange (MW) Export	Energy (MU) Import	Energy (MU) Export	Net Energy MU
Vindhychal B/B	300	300	500	0	7.60	0.00	7.60
Gwalior-Agra (D/C)	912	1008	1182	0	22.54	0.00	22.54
Zerda-Kankroli	90	-14	148	149	0.03	0.00	0.03
Zerda-Bhinmal	170	138	379	168	3.84	0.00	3.84
Malanpur-Auraiya	-53	3	8	54	0.00	0.65	-0.65
Badod-Kota/Morak	41	67	186	48	1.47	0.00	1.47
Sub Total WR	**1419**	**1435**			**34.01**	**0.65**	**33.36**
Pusauli Bypass	20	-96	48	161	0.23	0.73	-0.50
MZP- GKP (D/C)	1094	1152	1294	0	27.02	0.00	27.02
Patna-Balia(D/C)	535	569	750	0	13.53	0.00	13.53
B'Sharif-Balia (D/C)	381	626	713	0	10.16	0.00	10.16
Pusauli-Sahupuri	142	156	165	0	3.73	0.00	3.73
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-32	0	38	0.00	0.80	-0.80
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	**2136**	**2375**			**54.67**	**1.52**	**53.14**
Total IR Exch	**3555**	**3810**			**88.67**	**2.17**	**86.50**

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
19.77	3.84	23.61	23.20	35.15	2.72	3.13	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
49.54	38.08	87.62	53.14	33.36	86.50	3.60	-4.72	-1.12

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	2.40	11.60	96.00	86.80	21.60	1.60

<---------- 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)
50.33	6.06	49.37	19.37	49.88	0.39	0.16	50.33	49.55

VII. Voltage profile

Station	Voltage Level (kV)	Maximum Voltage(KV)	Maximum Time	Minimum Voltage (KV)	Minimum Time	Voltage (in % of Time) <380 kV	<390 kV	>420 kV	>430 kV
Rihand	400	416	18:29	398	23:10	0.0	0.0	0.0	0.0
Gorakhpur	400	438	18:16	397	23:10	0.0	0.0	31.8	10.6
Bareilly	400	423	8:00	390	23:09	0.0	0.0	3.7	0.0
Kanpur	400	419	9:00	391	23:10	0.0	0.0	0.0	0.0
Dadri	400	399	20:45	391	23:09	0.0	0.0	0.0	0.0
Ballabhgarh	400	416	18:03	394	23:02	0.0	0.0	0.0	0.0
Bawana	400	412	17:03	395	9:38	23.4	23.4	0.0	0.0
Bassi	400	428	4:02	401	23:15	0.0	0.0	33.3	0.0
Hissar	400	407	3:44	390	23:04	0.0	0.0	0.0	0.0
Moga	400	412	3:52	396	20:56	0.0	0.0	0.0	0.0
Abdullapur	400	410	16:32	282	11:49	0.1	0.1	0.0	0.0
Nalagarh	400	413	3:44	401	23:08	0.0	0.0	0.0	0.0
Kishenpur	400	414	16:32	401	20:35	0.0	0.0	0.0	0.0
Wagoora	400	414	3:44	386	20:40	0.0	5.7	0.0	0.0

VIII. Reservior Parameters:

Name of Reservior	Parameters FRL (m)	Parameters MDDL (m)	Present Parameters Level (m)	Present Parameters Energy (MU)	Last Year Level (m)	Last Year Energy (MU)	Last day Inflow (m^3/s)	Last day Usage (m^3/s)
Bhakra	513.59	445.62	494.15	869.36	483.78	552.50	1496.54	763.31
Pong	426.72	384.05	413.25	611.20	397.67	174.24	1031.98	453.41
Tehri	829.79	740.04	777.00	297.05	NA	NA	793.10	525.00
Koteshwar	612.50	598.50	605.00	2.46	NA	NA	525.00	NA
Chamera-I	760.00	748.75	756.84	12.91	756.50	NA	342.76	349.80
Rihand	268.22	252.98	258.47	168.50	255.09	NA	NA	NA
RPS	352.80	343.81	345.65	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.03	NA	NA	NA	NA	67.90
RSD	527.91	487.91	509.40	NA	505.92	NA	476.03	335.70

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 24.07.2011 :

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 : 24.07.2011 **पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER**