

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 31.07.2011
Date of Reporting : 01.08.2011

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
35742	1843	37585	49.86	37027	13	37040	49.89	852.3	27.33

* 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		Actual Drawal		UI [OD:(+ve), UD:(-ve)]	
	Thermal	Hydro	Renewable/others	Total	(Net MU)	(Net MU)	(Net MU)	(Net MU)	(MU)	Shortages *
Punjab	54.21	21.85		76.06	117.72	118.71	1.00	194.77	6.83	
Haryana	61.64	0.95		62.59	70.36	75.26	4.90	137.85	1.47	
Rajasthan	67.69	0.54	9.00	77.23	33.49	47.63	14.14	124.86	0.75	
Delhi	25.11			25.11	80.09	67.68	-12.41	92.79	0.05	
UP	58.12	13.78	1.20	73.10	149.47	145.39	-4.08	218.49	16.78	
Uttarakhand		20.98		20.98	9.05	6.94	-2.11	27.92	0.04	
HP		23.57		23.57	-0.73	-0.55	0.18	23.01	0.00	
J & K		14.55	0.00	14.55	12.90	13.08	0.18	27.63	1.40	
Chandigarh				0.00	5.88	5.02	-0.86	5.02	0.00	
Total	266.77	96.22	10.20	373.19	478.22	479.16	0.93	852.34	27.33	

* 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				UI [OD:(+ve), UD:(-ve)]	
	Demand Met	Shortage	UI	STOA/PX transaction	Demand Met	Shortage	UI	STOA/PX transaction	Day Energy MU	
Punjab	8242	640	-25	2098	8114	0	-220	2446	56.05	
Haryana	6075	0	396	1165	5924	0	231	986	25.00	
Rajasthan	5025	0	546	-720	5393	0	385	-544	-14.61	
Delhi	4092	3	-774	725	3693	13	-933	372	10.09	
UP	8537	1200	-523	1763	10755	0	834	2363	47.26	
Uttarakhand	1352	0	87	-151	1150	0	-130	-151	-3.63	
HP	835	0	-134	-1686	897	0	-73	-1703	-40.57	
J&K	1340	0	73	-592	906	0	-146	-585	-14.35	
Chandigarh	244	0	-5	23	195	0	-41	5	0.61	
Total	35742	1843	-359	2625	37027	13	-93	3189	65.86	

* 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	1910	2069	2063	46.37	1932	45.60	0.77
	Rihand I STPS	1000	960	1047	1050	23.07	961	22.70	0.38
	Rihand II STPS	1000	957	1022	1050	23.11	963	22.62	0.48
	Dadri I STPS	840	800	785	806	15.76	657	15.33	0.43
	Dadri II STPS	980	960	1007	1005	21.44	893	21.67	-0.23
	Unchahar I TPS	440	400	440	440	9.52	397	9.51	0.01
	Unchahar II TPS	440	398	432	435	9.54	398	9.32	0.22
	Unchahar III TPS	210	197	215	220	4.73	197	4.63	0.10
	I-STPP (Jhajjar)	500	470	349	378	7.88	328	10.83	-2.95
	Dadri GPS	830	718	603	568	13.43	559	14.55	-1.12
	Anta GPS	419	390	392	344	8.03	335	7.92	0.11
	Auraiya GPS	663	616	459	468	10.21	425	10.68	-0.47
	Sub Total (A)	9322	8776	8820.46	8827	193.09	8045	195.37	-2.28
B. NPC	NAPS	440	187	222	223	4.43	185	4.49	-0.06
	RAPS- B	440	380	224	224	9.14	381	9.12	0.02
	RAPS- C	440	420	464	472	10.02	417	10.08	-0.06
	Sub Total (B)	1320	987	910	919	23.59	983	23.69	-0.10
C. NHPC	Chamera I HPS	540	534	540	540	12.77	532	12.82	-0.05
	Chamera II HPS	300	297	301	302	7.13	297	7.24	-0.11
	Bairasuil HPS	180	175	120	20	2.14	89	2.38	-0.24
	Salal-HPS	690	632	631	631	15.17	632	15.16	0.01
	Tanakpur-HPS	94	94	95	95	2.27	94	2.24	0.02
	Uri-HPS	480	297	360	260	7.23	301	7.23	0.00
	Dhauliganga-HPS	280	87	0	279	2.08	87	2.08	0.00
	Dulhasti-HPS	390	390	409	408	9.06	377	9.27	-0.22
	Sewa-II HPS	120	119	120	0	0.76	32	0.70	0.06
	Sub Total (C)	3074	2624	2576	2535	58.61	2442	59.13	-0.52
	D. NJPC	Nathpa Jhakri	1500	1600	1622	1619	38.57	1607	38.40
Sub Total (D)		1500	1600	1622	1619	38.57	1607	38.40	0.16
E. THDC	Tehri HPS	1000	851	853	703	19.96	832	20.00	-0.04
	Koteshwar HPS	100	19	70	0	0.48	20	0.48	0.00
	Sub Total (E)	1100	871	923	703	20.44	852	20.48	-0.04
F. BBMB	Bhakra HPS	1480	1012	1233	1076	24.90	1038	24.29	0.61
	Dehar HPS	990	613	660	660	15.40	642	14.70	0.70
	Pong HPS	396	302	366	246	7.00	292	7.26	-0.26
	Sub Total (F)	2866	1927	2259	1982	47.30	1971	46.24	1.06
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	154	116	2.89	120	2.98	-0.09
	KWHEP HPS(IPP)	500	0	595	504	14.28	595	14.28	0.00
	Sub Total (G)	692	0	749	620	17.17	715	17.26	-0.09
H. Total Regional Entities (A-G)	19875	16784	17859	17205	398.76	16615	400.56	-1.81	

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	1250.00	27.05	1127	
	Guru Nanak Dev TPS(Bhatinda)	440	295.00	295.00	6.26	261	
	Guru Hargobind Singh TPS(L.mbt)	920	940.00	939.00	20.89	871	
	Thermal (Total)	2620	2285.00	2484.00	54.21	2259	
	Total Hydro	1148	968.00	818.00	21.85	910	
	Total Punjab	3768	3253	3302	76.06	3169	
Haryana	Panipat TPS	1360	1170.00	1164.00	28.21	1175	
	DCRTPP (Yamuna nagar)	600	485.00	480.00	10.62	442	
	Faridabad GPS (NTPC)	432	384.00	323.00	8.48	353	
	RGTPP (khedar) (IPP)	1200	416.00	721.00	14.34	597	
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0	
	Thermal (Total)	3617	2455.00	2688.00	61.64	2568	
	Total Hydro	62	38.00	29.00	0.95	40	
		Total Haryana	3679	2493	2717	62.59	2608
Rajasthan	kota TPS	1240	922.00	932.00	22.14	922	
	suratgarh TPS	1500	1126.00	1125.00	26.20	1092	
	Chabra TPS	500	213.00	217.00	4.96	207	
	Dholpur GPS	330	282.00	289.00	6.60	275	
	Ramgarh GPS	113	65.00	65.00	1.61	67	
	RAPS A (NPC)	300	166.00	175.00	4.25	177	
	Barsingsar (NLC)	250	0.00	69.00	0.63	26	
	Giral LTPS (IPP)	250	59.00	39.00	1.32	55	
	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	2833.00	2911.00	67.69	2821	
	Total Hydro	550	0.00	55.00	0.54	22	
	Wind power	1294	282.00	540.00	8.26	344	
	Biomass	71	31.00	31.00	0.75	31	
	Renewable/Others (Total)	1365	313	571	9.00	375	
		Total Rajasthan	6668	3146	3537	77.23	3218
	UP	Anpara TPS	1630	1037	991	22.20	925
Obra TPS		1442	282	348	6.60	275	
Paricha TPS		640	398	396	8.50	354	
Panki TPS		210	73	60	1.30	54	
Harduaganj TPS		375	0	0	0.00	0	
Tanda TPS (NTPC)		440	292	295	7.14	298	
Roza TPS (IPP)		600	546	535	12.38	516	
Thermal (Total)		5337	2628	2625	58.12	2422	
Vishnuparyag HPS (IPP)		400	397	436	10.45	435	
Other Hydro		527	99	31	3.33	139	
Cogeneration		951	50	50	1.20	50	
		Total UP	7215	3174	3142	73.10	2611
Uttarakhand		Total Hydro	1303	870	881	20.98	874
	Total Uttarakhand	1303	870	881	20.98	874	
Delhi	Rajghat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	141	143	3.59	150	
	Praqati Gas Turbine	330	285	204	7.21	300	
	Rithala GPS	108	45	29	0.92	38	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	555	650	13.39	558	
	Thermal (Total)	2000	1026	1026	25.11	1046	
		Total Delhi	2000	1026	1026	25.11	1046
HP	Baspa HPS (IPP)	330	330	330	7.92	330	
	Malana HPS (IPP)	101	102	105	2.45	102	
	Other Hydro	571	567	588	13.19	550	
		Total HP	1002	999	1023	23.57	982
J & K	Baglihar HPS (IPP)	450	436	437	10.49	437	
	Other Hydro	323	159	185	4.06	169	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	595	622	14.55	606
Total State Control Area Generation		26591	15556	16250	373.19	15114	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4331	4340	92.21	3842	
Total Regional Availability(Gross)		46466	37746	37795	864.15	35571	

IV. Total Hydro Generation:

Regional Entities Hydro	9233	8129	7459	182.08	7587
State Control Area Hydro	5365	3569	3459	85.77	3574
Total Regional Hydro	14597	11698	10918	267.85	11160

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	400	400	0	9.31	0.00	9.31
Gwalior-Agra (D/C)	1034	1248	1276	0	26.82	0.00	26.82
Zerda-Kankroli	139	234	245	18	3.31	0.00	3.31
Zerda-Bhinmal	220	160	325	8	4.20	0.00	4.20
Malanpur-Auraiya	-8	25	0	45	0.00	0.39	-0.39
Badod-Kota/Morak	34	130	162	12	1.38	0.00	1.38
Sub Total WR	1785	2067			43.64	0.39	43.25
Pusaui Bypass	120	-4	335	87	1.92	0.13	1.79
MZP- GKP (D/C)	1490	1004	1230	0	23.20	0.00	23.20
Patna-Balia(D/C)	492	601	721	0	12.07	0.00	12.07
B'Sharif-Balia (D/C)	321	526	535	0	8.36	0.00	8.36
Pusaui-Sahupuri	159	178	218	0	4.29	0.00	4.29
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-32	0	38	0.00	0.75	-0.75
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	2546	2273			49.84	0.88	48.96
Total IR Exch	4331	4340			93.48	1.27	92.21

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
27.33	3.70	31.03	25.47	35.16	-0.06	2.67	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
56.44	37.52	93.96	48.96	43.25	92.21	-7.48	5.73	-1.75

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	10.00	97.40	88.00	17.70	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				
50.44	17.16	49.38	21.12	49.88	0.36	0.15	50.26	49.64

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	406	09:03	397	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	436	18:16	398	11:06	0.2	0.2	46.0	12.2
Bareilly	400	424	08:00	393	00:03	0.0	0.0	1.8	0.0
Kanpur	400	418	09:00	396	00:01	0.0	0.0	0.0	0.0
Dadri	400	409	07:45	393	00:13	0.0	0.0	0.0	0.0
Ballabgarh	400	416	08:03	396	12:21	0.0	0.0	0.0	0.0
Bawana	400	410	08:02	391	12:21	0.0	0.0	0.0	0.0
Bassi	400	428	18:15	401	12:20	0.0	0.0	8.5	0.0
Hissar	400	407	18:00	387	12:19	0.0	6.6	0.0	0.0
Moga	400	408	03:42	390	21:16	0.0	0.0	0.0	0.0
Abdullapur	400	410	18:01	394	00:19	0.2	0.2	0.0	0.0
Nalagarh	400	408	02:28	401	00:05	0.0	0.0	0.0	0.0
Kishenpur	400	414	03:45	398	21:10	0.0	0.0	0.0	0.0
Wagoora	400	408	04:05	391	15:27	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 (m ³ /s)	Usage (m ³ /s)
Bhakra	513.59	445.62	498.35	1029.80	491.15	768.41	1329.05	758.52
Pong	426.72	384.05	414.81	668.52	401.02	244.95	825.38	453.38
Tehri	829.79	740.04	784.25	371.99	NA	NA	779.94	533.00
Koteswar	612.50	598.50	605.30	2.46	NA	NA	533.00	0.00
Chamera-I	760.00	748.75	755.60	12.10	754.97	NA	312.21	348.27
Rihand	268.22	252.98	258.74	237.90	255.79	107.70	NA	NA
RPS	352.80	343.81	345.99	NA	NA	NA	246.70	0.00
Jawahar Sagar	298.70	295.78	297.33	NA	NA	NA	78.66	362.06
RSD	527.91	487.91	508.75	NA	510.68	NA	336.86	443.89

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 31.07.2011 :

1 : Hot weather in N R.

XII. Synchronisation of new generating units :

XIII. Synchronisation of new 400 / 765 KV lines and energising of bus / /substation :

1: 400/220 kV 500MVA ICT-3 (new) first time test charged at 17.09 hrs of dt 31.07.2011 at Patiala s/s.

2: 400kV Badmer - Rajwest (RRVFN) line first time charged at 17.57 hrs of dt 31.07.2011

XIV. Tripping of lines in pooling stations :

XV. Complete generation loss in a generating station :

Report for : 31.07.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER