

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 20.08.2011
Date of Reporting : 21.08.2011

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
32685	2420	35105	49.57	31341	650	31991	50.10	735.4	26.91

* 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	50.50	11.17		61.67	110.03	105.95	-4.08	167.61	1.80
Haryana	56.34	0.08		56.41	57.06	53.32	-3.74	109.74	0.90
Rajasthan	69.26	0.10	4.03	73.39	35.13	35.61	0.48	109.00	1.73
Delhi	23.66			23.66	63.88	59.65	-4.24	83.31	0.14
UP	46.84	15.26	0.00	62.10	132.15	131.03	-1.12	193.13	22.20
Uttarakhand		11.91		11.91	10.65	8.23	-2.42	20.14	0.00
HP		23.32		23.32	-3.89	-1.88	2.01	21.44	0.14
J & K		14.26	0.00	14.26	15.24	11.93	-3.31	26.18	0.00
Chandigarh				0.00	5.74	4.83	-0.91	4.83	0.00
Total	246.59	76.09	4.03	326.72	425.99	408.66	-17.33	735.38	26.91

* 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	7027	450	-78	1654	7408	0	-356	2483	52.82
Haryana	4998	189	-44	780	4543	0	-166	756	18.72
Rajasthan	4344	106	-185	-412	4754	0	58	-273	-8.53
Delhi	3911	0	-74	453	3033	0	-294	288	10.02
UP	8622	1675	621	1770	8681	650	137	2327	45.73
Uttarakhand	1200	0	111	-100	1030	0	-314	-100	-2.40
HP	951	0	141	-1800	798	0	68	-1812	-42.58
J&K	1385	0	10	-387	931	0	-291	-380	-9.47
Chandigarh	247	0	-6	19	163	0	-44	9	0.72
Total	32685	2420	496	1978	31341	650	-1202	3298	65.03

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

III. Regional Entities :

A. NTPC	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
Rihand I STPS	1000	918	1030	970	22.02	918	21.72	0.30	
Rihand II STPS	1000	473	523	511	11.45	477	11.22	0.24	
Dadri I STPS	840	587	563	47	11.57	482	11.68	-0.11	
Dadri II STPS	980	815	811	620	17.74	739	17.86	-0.13	
Unchahar I TPS	440	338	340	380	7.35	306	7.40	-0.05	
Unchahar II TPS	440	320	353	325	7.49	312	7.40	0.09	
Unchahar III TPS	210	159	177	164	3.71	155	3.56	0.15	
ISTPP (Jhajjar)	500	0	0	0	0.00	0	0.00	0.00	
Dadri GPS	830	789	572	651	15.36	640	13.20	2.16	
Anta GPS	419	391	382	271	7.33	305	7.18	0.15	
Auraiya GPS	663	611	578	508	11.48	478	11.63	-0.15	
Sub Total (A)	9322	6444	6670	5624	141.45	5894	137.64	3.81	
B. NPC	NAPS	440	188	227	228	4.49	187	4.51	-0.03
RAPS- B	440	381	425	427	9.28	387	9.14	0.14	
RAPS- C	440	420	467	476	10.11	421	10.08	0.03	
Sub Total (B)	1320	989	1119	1131	23.88	995	23.74	0.14	
C. NHPC	Chamera I HPS	540	534	540	540	12.87	536	12.81	0.06
Chamera II HPS	300	297	304	300	7.21	300	7.41	-0.20	
Bairasuil HPS	180	179	170	120	2.01	84	2.08	-0.07	
Salal-HPS	690	548	621	626	13.24	552	13.14	0.10	
Tanakpur-HPS	94	92	94	94	2.27	94	2.24	0.02	
Uri-HPS	480	300	360	229	7.23	301	7.18	0.05	
Dhauliganga-HPS	280	277	281	281	6.75	281	6.75	0.00	
Dulhasti-HPS	390	387	464	382	9.09	379	9.08	0.01	
Sewa-II HPS	120	119	128	120	2.88	120	2.79	0.08	
Sub Total (C)	3074	2732	2962	2692	63.54	2648	63.49	0.05	
D.NJPC	Nathpa Jhakri	1500	1600	1616	1615	38.11	1588	38.38	-0.27
Sub Total (D)	1500	1600	1616	1615	38.11	1588	38.38	-0.27	
E. THDC	Tehri HPS	1000	1023	1030	1000	24.12	1005	24.00	0.12
Koteshwar HPS	100	92	95	93	2.23	93	2.21	0.02	
Sub Total (E)	1100	1115	1125	1093	26.35	1098	26.21	0.14	
F. BBMB	Bhakra HPS	1480	1227	1256	1256	30.17	1257	29.45	0.72
Dehar HPS	990	608	660	630	14.91	621	14.60	0.32	
Pong HPS	396	354	366	366	8.85	369	8.50	0.35	
Sub Total (F)	2866	2189	2282	2252	53.93	2247	52.54	1.39	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	181	171	3.80	158	3.57	0.23
KWHEP HPS(IPP)	500	0	600	600	14.28	595	14.28	0.00	
Malana Stg-II HPS	50	0	0	0	0.00	0	0.00	0.00	
Shree Cement TPS	150	0	0	0	0.00	0	0.00	0.00	
Sub Total (G)	892	0	781	771	18.08	753	17.85	0.22	
H. Total Regional Entities (A-G)	20075	15069	16555	15178	365.33	15222	359.85	5.49	

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	1045.00	1255.00	24.11	1005
	Guru Nanak Dev TPS(Bhatinda)	440	290.00	283.00	6.08	253
	Guru Hargobind Singh TPS(L.mbt)	920	942.00	941.00	20.30	846
	Thermal (Total)	2620	2277.00	2479.00	50.50	2104
	Total Hydro	1148	648.00	340.00	11.17	465
	Total Punjab	3768	2925	2819	61.67	2569
Haryana	Panipat TPS	1360	1141.00	890.00	22.72	947
	DCRTPP (Yamuna nagar)	600	559.00	559.00	12.37	515
	Faridabad GPS (NTPC)	432	398.00	408.00	9.26	386
	RGTPP (khedar) (IPP)	1200	493.00	360.00	11.99	500
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0
	Thermal (Total)	3617	2591.00	2217.00	56.34	2347
	Total Hydro	62	0.00	13.00	0.08	3
	Total Haryana	3679	2591	2230	56.41	2351
Rajasthan	kota TPS	1240	968.00	953.00	22.04	918
	suratgarh TPS	1500	1167.00	1148.00	26.86	1119
	Chabra TPS	500	224.00	229.00	4.90	204
	Dholpur GPS	330	279.00	277.00	6.38	266
	Ramgarh GPS	113	62.00	62.00	1.61	67
	RAPS A (NPC)	300	173.00	174.00	4.29	179
	Barsingsar (NLC)	250	80.00	82.00	2.07	86
	Giral LTPS (IPP)	250	41.00	33.00	1.11	46
	Rajwst LTPS (IPP)	135	0.00	0.00	0.00	0
	VSLP LTPS (IPP)	135	0.00	0.00	0.00	0
	Thermal (Total)	4753	2994.00	2958.00	69.26	2886
	Total Hydro	550	0.00	8.00	0.10	4
	Wind power	1294	125.00	223.00	3.71	154
	Biomass	71	14.00	14.00	0.33	14
	Renewable/Others (Total)	1365	139	237	4.03	168
	Total Rajasthan	6668	3133	3203	73.39	3058
	UP	Anpara TPS	1630	654	660	15.70
Obra TPS		1442	325	315	7.80	325
Paricha TPS		640	350	350	8.40	350
Panki TPS		210	70	45	1.40	58
Harduaganj TPS		375	0	0	0.00	0
Tanda TPS (NTPC)		440	283	280	6.97	290
Roza TPS (IPP)		600	284	244	6.57	274
Anpara-C (IPP)		600	0	0	0.00	0
Thermal (Total)		5937	1966	1894	46.84	1952
Vishnuparyag HPS (IPP)		400	436	436	10.46	436
Other Hydro		527	246	0	4.80	200
Cogeneration		951	0	0	0.00	0
Total UP		7815	2648	2330	62.10	2152
Uttarakhand		Total Hydro	1303	585	955	11.91
	Total Uttarakhand	1303	585	955	11.91	496
Delhi	Rajghat TPS	135	103	76	2.07	86
	Delhi Gas Turbine	282	112	145	3.14	131
	Pragati Gas Turbine	330	296	302	7.22	301
	Rithala GPS	108	38	29	0.90	37
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	500	455	10.34	431
	Thermal (Total)	2000	1049	1007	23.66	986
	Total Delhi	2000	1049	1007	23.66	986
HP	Baspa HPS (IPP)	330	330	330	7.93	330
	Malana HPS (IPP)	101	103	105	2.50	104
	Other Hydro	571	561	497	12.89	537
	Total HP	1002	994	932	23	972
J & K	Baglihar HPS (IPP)	450	442	440	10.57	441
	Other Hydro	323	130	156	3.69	154
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	572	596	14.26	594
Total State Control Area Generation		27191	14497	14072	326.72	13177
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3446	3025	71.64	2985
Total Regional Availability(Gross)		47266	34498	32275	763.69	31385

IV. Total Hydro Generation:

Regional Entities Hydro	9433	8766	8423	200.01	8334
State Control Area Hydro	5365	3045	2844	65.64	2735
Total Regional Hydro	14797	11811	11267	265.64	11068

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	350	500	0	9.40	0.00	9.40
Gwalior-Agra (D/C)	910	965	1146	0	22.06	0.00	22.06
Zerda-Kankroli	192	105	299	93	1.79	0.00	1.79
Zerda-Bhinmal	227	187	371	13	3.86	0.00	3.86
Malanpur-Auraiya	-4	1	1	68	0.11	0.00	0.11
Badod-Kota/Morak	0	0	0	0	0.00	0.00	0.00
Sub Total WR	1825	1608			37.22	0.00	37.22
Pusauli Bypass	92	-38	165	77	1.74	0.55	1.19
MZP- GKP (D/C)	607	602	900	0	15.06	0.00	15.06
Patna-Balia(D/C)	467	242	472	0	8.29	0.00	8.29
B'Sharif-Balia (D/C)	339	225	367	0	6.01	0.00	6.01
Barh-Balia (D/C)	0	268	332	0	1.62	0.00	1.62
Pusauli-Sahupuri	141	131	155	0	2.72	0.00	2.72
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-25	-13	0	30	0.00	0.47	-0.47
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1621	1417			35.44	1.02	34.42
Total IR Exch	3446	3025			72.66	1.02	71.64

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
15.25	3.53	18.78	23.54	28.32	0.03	10.24	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
42.35	38.20	80.55	34.42	37.22	71.64	-7.92	-0.99	-8.91

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	0.63	3.10	19.14	95.90	79.87	45.25	1.00

<----- 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				
50.47	6.05	49.11	20.36	49.94	0.41	0.20	50.34	49.34

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	422	08:14	406	19:20	0.0	0.0	7.8	0.0
Gorakhpur	400	434	08:18	404	19:23	0.0	0.0	60.4	9.6
Bareilly	400	425	08:00	395	19:21	0.0	0.0	6.3	0.0
Kanpur	400	423	09:00	397	19:22	0.0	0.0	5.4	0.0
Dadri	400	416	06:02	396	19:20	0.0	0.0	0.0	0.0
Ballabgarh	400	422	06:03	396	19:22	0.0	0.0	5.3	0.0
Bawana	400	418	04:14	395	19:22	0.0	0.0	0.0	0.0
Bassi	400	428	06:06	401	19:20	0.0	0.0	29.6	0.0
Hissar	400	413	06:03	392	19:22	0.0	0.0	0.0	0.0
Moga	400	418	06:03	403	15:03	0.0	0.0	0.0	0.0
Abdullapur	400	414	03:47	392	05:34	0.0	0.0	0.0	0.0
Nalagarh	400	414	04:08	399	15:25	0.0	0.0	0.0	0.0
Kishenpur	400	410	06:09	393	19:22	0.0	0.0	0.0	0.0
Wagoora	400	0	00:00	9999	00:00	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	508.16	1455.60	509.07	1500.16	1511.16	927.04
Pong	426.72	384.05	422.92	1035.89	417.42	768.49	2052.94	493.53
Tehri	829.79	740.04	810.70	822.28	NA	NA	694.54	559.00
Koteshwar	612.50	598.50	607.70	3.54	NA	NA	553.00	148.00
Chamera-I	760.00	748.75	757.83	11.14	756.00	NA	413.00	349.00
Rihand	268.22	252.98	NA	NA	256.37	131.20	NA	NA
RPS	352.80	343.81	347.95	NA	349.18	NA	347.76	0.00
Jawahar Sagar	298.70	295.78	297.15	NA	298.03	NA	0.00	44.29
RSD	527.91	487.91	518.59	NA	520.92	NA	581.71	96.75

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 20.08.2011 :
Partial rains in Northern region

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 : 20.08.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER