

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 15.08.2011
Date of Reporting : 16.08.2011

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Demand Met	Off Peak (03:00 Hrs) MW			Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)		Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
27071	2083	29154	49.85	26613	0	26613	50.31	594.5	8.81

* 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	22.92	8.69		31.62	92.23	88.10	-4.13	119.72	1.80
Haryana	53.82	0.93		54.75	52.94	42.62	-10.32	97.37	0.14
Rajasthan	56.09	0.45	0.72	57.26	34.99	37.16	2.16	94.42	0.30
Delhi	16.33			16.33	58.24	45.58	-12.67	61.91	0.07
UP	34.43	12.33	1.20	47.96	123.34	109.00	-14.34	156.96	6.50
Uttarakhand		18.25		18.25	7.25	-0.01	-7.26	18.24	0.00
HP		24.02		24.02	-4.27	-7.55	-3.27	16.47	0.00
J & K		14.15	0.00	14.15	16.37	11.51	-4.86	25.66	0.00
Chandigarh				0.00	5.26	3.73	-1.54	3.73	0.00
Total	183.60	78.82	1.92	264.34	386.36	330.13	-56.22	594.47	8.81

* 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	4783	450	-482	1870	5462	0	-108	2231	48.82
Haryana	3904	58	162	874	4491	0	-291	761	19.87
Rajasthan	3718	275	42	-388	3990	0	-319	-307	-8.06
Delhi	2946	0	124	643	2737	0	-558	616	14.19
UP	8549	1300	1753	2130	7357	0	-720	2330	46.52
Uttarakhand	881	0	32	-167	989	0	-145	-144	-3.58
HP	749	0	-105	-1806	651	0	-107	-1820	-42.75
J&K	1361	0	-28	-380	784	0	-447	-380	-9.36
Chandigarh	180	0	-37	24	152	0	-62	14	0.61
Total	27071	2083	1461	2800	26613	0	-2757	3300	66.26

* 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
	Singrauli STPS	2000	1323	1028	1149	23.49	979	23.26	0.23
	Rihand I STPS	1000	920	805	710	15.94	664	16.24	-0.30
	Rihand II STPS	1000	918	787	685	15.67	653	16.13	-0.46
	Dadri I STPS	840	598	325	403	8.15	340	8.61	-0.46
	Dadri II STPS	980	960	468	313	6.19	258	10.04	-3.85
	Unchahar I TPS	440	371	350	302	6.39	266	6.07	0.33
	Unchahar II TPS	440	371	331	295	5.24	218	4.84	0.40
	Unchahar III TPS	210	181	140	150	3.16	132	2.77	0.39
	ISTPP (Jhajjar)	500	400	306	284	6.71	280	6.72	-0.01
	Dadri GPS	830	801	189	464	6.20	258	6.52	-0.32
	Anta GPS	419	390	120	222	3.60	150	3.58	0.02
	Auraiya GPS	663	616	154	312	4.40	183	4.38	0.02
	Sub Total (A)	9322	7849	5003	5289	105.14	4381	109.14	-3.99
B. NPC	NAPS	440	187	228	232	4.52	188	4.49	0.03
	RAPS- B	440	382	422	427	9.18	383	9.17	0.01
	RAPS- C	440	420	462	476	10.18	424	10.08	0.10
	Sub Total (B)	1320	989	1112	1135	23.88	995	23.74	0.15
C. NHPC	Chamera I HPS	540	534	540	540	12.46	519	12.82	-0.36
	Chamera II HPS	300	297	301	298	7.07	295	7.20	-0.13
	Bairasuil HPS	180	179	170	110	3.17	132	3.89	-0.72
	Salal-HPS	690	542	541	516	12.70	529	13.01	-0.31
	Tanakpur-HPS	94	90	95	93	2.12	88	2.24	-0.13
	Uri-HPS	480	266	357	237	5.93	247	6.52	-0.59
	Dhauliganga-HPS	280	277	278	280	6.62	276	6.70	-0.09
	Dulhasti-HPS	390	387	413	174	7.12	297	9.01	-1.90
	Sewa-II HPS	120	119	126	94	2.49	104	2.86	-0.37
	Sub Total (C)	3074	2690	2821	2342	59.66	2486	64.26	-4.59
D. NJPC	Nathpa Jhakri	1500	1600	1594	1602	38.07	1586	38.39	-0.32
	Sub Total (D)	1500	1600	1594	1602	38.07	1586	38.39	-0.32
E. THDC	Tehri HPS	1000	960	986	762	20.51	855	22.50	-1.99
	Koteshwar HPS	100	92	93	91	2.05	85	2.20	-0.15
	Sub Total (E)	1100	1052	1079	853	22.56	940	24.70	-2.14
F. BBMB	Bhakra HPS	1480	813	1075	804	20.17	840	19.51	0.66
	Dehar HPS	990	608	660	620	15.17	632	14.60	0.57
	Pong HPS	396	354	366	366	8.80	367	8.50	0.30
	Sub Total (F)	2866	1775	2101	1790	44.14	1839	42.60	1.54
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	229	142	4.32	180	3.30	1.02
	KWHEP HPS(IPP)	500	0	600	600	9.75	406	14.40	-4.65
	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	829	742	14.07	586	17.70	-3.63
H. Total Regional Entities (A-G)		20075	15955	14539	13753	307.52	12814	320.51	-12.99

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	630.00	600.00	11.26	469	
	Guru Nanak Dev TPS(Bhatinda)	440	105.00	105.00	2.21	92	
	Guru Hargobind Singh TPS(L.mbt)	920	467.00	553.00	9.46	394	
	Thermal (Total)	2620	1202.00	1258.00	22.92	955	
	Total Hydro	1148	314.00	362.00	8.69	362	
	Total Punjab	3768	1516	1620	31.62	1317	
Haryana	Panipat TPS	1360	608.00	1020.00	17.53	730	
	DCRTPP (Yamuna nagar)	600	249.00	504.00	8.95	373	
	Faridabad GPS (NTPC)	432	0.00	282.00	7.68	320	
	RGTPP (khedar) (IPP)	1200	628.00	896.00	19.66	819	
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0	
	Thermal (Total)	3617	1485.00	2702.00	53.82	2243	
	Total Hydro	62	36.00	37.00	0.93	39	
	Total Haryana	3679	1521	2739	54.75	2281	
Rajasthan	kota TPS	1240	856.00	786.00	18.48	770	
	suratgarh TPS	1500	635.00	1154.00	19.05	794	
	Chabra TPS	500	221.00	200.00	4.68	195	
	Dholpur GPS	330	214.00	238.00	5.68	237	
	Ramgarh GPS	113	62.00	62.00	1.60	67	
	RAPS A (NPC)	300	174.00	176.00	4.32	180	
	Barsingsar (NLC)	250	88.00	93.00	2.28	95	
	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	2250.00	2709.00	56.09	2337	
	Total Hydro	550	27.00	9.00	0.45	19	
	Wind power	1294	40.00	1.00	0.39	16	
	Biomass	71	14.00	14.00	0.33	14	
	Renewable/Others (Total)	1365	54	15	0.72	30	
	Total Rajasthan	6668	2331	2733	57.26	2386	
	UP	Anpara TPS	1630	427	416	10.00	417
		Obra TPS	1442	135	372	3.90	163
Paricha TPS		640	381	384	8.20	342	
Panki TPS		210	60	70	1.30	54	
Harduaganj TPS		375	0	28	0.20	8	
Tanda TPS (NTPC)		440	276	237	6.22	259	
Roza TPS (IPP)		600	203	189	4.61	192	
Anpara-C (IPP)		600	0	0	0.00	0	
Thermal (Total)		5937	1482	1696	34.43	1435	
Vishnuparyag HPS (IPP)		400	0	436	8.51	355	
Other Hydro		527	206	0	3.82	159	
Cogeneration		951	50	50	1.20	50	
Total UP		7815	1738	2182	47.96	1644	
Uttarakhand		Total Hydro	1303	523	843	18.25	761
	Total Uttarakhand	1303	523	843	18.25	761	
Delhi	Rajghat TPS	135	0	107	1.49	62	
	Delhi Gas Turbine	282	37	76	1.22	51	
	Pragati Gas Turbine	330	147	270	4.62	193	
	Rithala GPS	108	0	29	0.51	21	
	Bawana GPS	440	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	455	400	8.50	354	
	Thermal (Total)	2000	639	882	16.33	681	
	Total Delhi	2000	639	882	16.33	681	
HP	Baspa HPS (IPP)	330	330	330	7.92	330	
	Malana HPS (IPP)	101	106	105	2.51	104	
	Other Hydro	571	572	571	13.59	566	
	Total HP	1002	1008	1006	24	1001	
J & K	Baglihar HPS (IPP)	450	442	441	10.57	441	
	Other Hydro	323	140	169	3.58	149	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	582	610	14.15	590	
Total State Control Area Generation		27191	9858	12615	264.34	10659	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4043	1248	37.90	1579	
Total Regional Availability(Gross)		47266	28440	27616	609.76	25052	

IV. Total Hydro Generation:

Regional Entities Hydro	9433	8424	7329	178.50	7437
State Control Area Hydro	5365	2696	2867	70.31	2930
Total Regional Hydro	14797	11120	10196	248.81	10367

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	-200	400	450	1.70	6.28	-4.58
Gwalior-Agra (D/C)	1039	565	1172	0	13.93	0.00	13.93
Zerda-Kankroli	302	0	302	0	0.70	0.00	0.70
Zerda-Bhinmal	212	68	486	145	1.41	0.00	1.41
Malanpur-Auraiya	41	-1	63	51	0.40	0.00	0.40
Badod-Kota/Morak	48	25	55	0	0.74	0.00	0.74
Sub Total WR	2042	457			18.88	6.28	12.60
Pusauli Bypass	246	-117	246	167	1.18	1.11	0.07
MZP- GKP (D/C)	1016	490	1016	0	14.66	0.00	14.66
Patna-Balia(D/C)	268	114	268	0	3.58	0.00	3.58
B'Sharif-Balia (D/C)	366	180	366	0	4.51	0.00	4.51
Barh-Balia (D/C)	0	0	0	0	0.00	0.00	0.00
Pusauli-Sahupuri	130	137	142	0	2.94	0.00	2.94
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	2001	791			26.87	1.57	25.30
Total IR Exch	4043	1248			45.75	7.85	37.90

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
12.51	3.76	16.27	24.18	26.22	0.31	12.08	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
40.76	37.95	78.72	25.30	12.60	37.90	-15.47	-25.35	-40.82

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	0.30	1.70	4.30	48.50	45.90	81.30	49.80

<----- 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				
50.69	7.22	49.09	19.13	50.18	0.90	0.24	50.72	49.63

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	421	13:31	409	00:09	0.0	0.0	0.1	0.0
Gorakhpur	400	436	08:05	402	19:07	0.0	0.0	84.1	33.7
Bareilly	400	437	08:00	400	19:09	0.0	0.0	48.8	3.9
Kanpur	400	428	09:00	402	19:14	0.0	0.0	56.9	0.0
Dadri	400	424	09:49	405	19:14	0.0	0.0	24.6	0.0
Ballabgarh	400	428	07:20	406	19:12	0.0	0.0	54.9	0.0
Bawana	400	424	07:19	407	19:09	0.0	0.0	22.7	0.0
Bassi	400	428	01:02	402	19:08	0.0	0.0	72.5	0.0
Hissar	400	415	07:22	402	19:09	0.0	0.0	0.0	0.0
Moga	400	419	02:51	407	19:07	0.0	0.0	0.0	0.0
Abdullapur	400	418	13:31	287	19:07	0.1	0.1	0.0	0.0
Nalagarh	400	421	07:20	413	00:00	0.0	0.0	0.5	0.0
Kishenpur	400	412	02:51	395	19:08	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	505.36	1325.82	505.61	1339.30	1414.82	584.83
Pong	426.72	384.05	421.69	961.02	412.97	600.05	1674.23	1017.17
Tehri	829.79	740.04	800.45	608.45	NA	NA	599.20	502.00
Koteshwar	612.50	598.50	607.90	3.54	NA	NA	417.00	145.00
Chamera-I	760.00	748.75	756.00	11.09	756.00	NA	684.71	344.85
Rihand	268.22	252.98	261.95	415.40	256.21	125.00	NA	NA
RPS	352.80	343.81	347.92	NA	347.49	NA	347.76	0.00
Jawahar Sagar	298.70	295.78	297.58	NA	297.61	NA	0.00	44.29
RSD	527.91	487.91	515.04	NA	518.98	NA	631.27	143.42

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 15.08.2011 :

1 : Rain 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 : 15.08.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER