

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)

उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 30.08.2011

Date of Reporting : 31.08.2011

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
35624	3212	38836	49.76	34758	650	35408	50.01	821.6	37.05

* 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	47.90	13.77		61.67	111.06	108.54	-2.52	170.20	6.21
Haryana	60.62	0.87		61.48	59.13	63.81	4.68	125.30	3.11
Rajasthan	69.13	1.11	5.71	75.95	39.91	41.61	1.70	117.56	1.93
Delhi	27.07			27.07	74.52	70.04	-4.48	97.11	0.07
UP	54.49	17.01	0.00	71.50	147.41	155.10	7.69	226.59	25.66
Uttarakhand		20.42		20.42	11.90	7.70	-4.20	28.12	0.00
HP		23.87		23.87	-3.57	-2.10	-1.47	21.77	0.07
J & K		14.65	0.00	14.65	15.93	14.72	-1.21	29.38	0.00
Chandigarh				0.00	6.16	5.56	-0.61	5.56	0.00
Total	259.20	91.69	5.71	356.61	462.46	464.99	2.52	821.59	37.05

* 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	7324	1430	-26	1832	6912	0	-139	1927	44.19
Haryana	5276	712	303	533	5315	0	159	493	10.09
Rajasthan	4829	0	7	-283	4989	0	157	-272	-6.59
Delhi	4251	0	-171	554	3667	0	54	547	13.25
UP	9938	1025	690	1727	10772	650	948	1727	41.45
Uttarakhand	1356	0	-181	-100	1264	0	-202	-100	-2.40
HP	960	45	118	-1802	788	0	-28	-1806	-42.41
J&K	1437	0	27	-375	864	0	-361	-375	-9.24
Chandigarh	253	0	-27	54	187	0	-39	54	1.54
Total	35624	3212	740	2140	34758	650	549	2195	49.87

* 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)	Schedule Net MU	UI Net MU
A. NTPC	Singrauli STPS	2000	1782	2025	2017	43.34	1806	42.78	0.56
	Rihand I STPS	1000	930	1025	1018	22.51	938	22.32	0.19
	Rihand II STPS	1000	393	514	522	9.54	398	9.44	0.10
	Dadri I STPS	840	596	581	472	12.80	533	12.66	0.14
	Dadri II STPS	980	970	970	1025	22.52	938	22.58	-0.06
	Unchahar I TPS	440	332	394	328	8.04	335	7.89	0.15
	Unchahar II TPS	440	322	402	323	7.79	324	7.60	0.19
	Unchahar III TPS	210	163	204	170	3.96	165	3.87	0.09
	ISTPP (Jhajjar)	500	458	389	355	8.55	356	8.87	-0.32
	Dadri GPS	830	775	757	696	16.72	697	17.04	-0.32
	Anta GPS	419	392	397	256	7.66	319	7.71	-0.06
	Auraiya GPS	663	605	450	440	10.41	434	10.56	-0.16
	Sub Total (A)	9322	7718	8108	7622	173.81	7242	173.33	0.48
	B. NPC	NAPS	440	182	218	221	4.38	183	4.37
RAPS- B		440	193	217	218	4.55	190	4.63	-0.08
RAPS- C		440	420	472	470	10.14	423	10.08	0.06
Sub Total (B)		1320	795	907	909	19.08	795	19.08	-0.01
C. NHPC	Chamera I HPS	540	534	540	540	12.91	538	12.82	0.09
	Chamera II HPS	300	297	302	301	7.17	299	7.17	0.00
	Bairasuil HPS	180	82	120	70	1.56	65	1.46	0.10
	Salal-HPS	690	626	625	625	14.96	623	14.99	-0.03
	Tanakpur-HPS	94	94	94	95	2.26	94	2.24	0.01
	Uri-HPS	480	299	356	240	7.36	307	7.04	0.32
	Dhauliganga-HPS	280	277	280	277	6.77	282	6.68	0.08
	Dulhasti-HPS	390	387	409	406	9.13	381	8.44	0.69
	Sewa-II HPS	120	119	122	121	2.88	120	2.62	0.27
	Sub Total (C)	3074	2714	2848	2675	64.99	2708	63.46	1.53
D.NJPC	Nathpa Jhakri	1500	1600	1620	1622	38.56	1607	38.40	0.16
	Sub Total (D)	1500	1600	1620	1622	38.56	1607	38.40	0.16
E. THDC	Tehri HPS	1000	1060	1058	996	24.77	1032	24.75	0.02
	Koteshwar HPS	100	93	93	94	2.20	92	2.24	-0.04
Sub Total (E)	1100	1153	1151	1090	26.97	1124	26.99	-0.02	
F. BBMB	Bhakra HPS	1480	1218	1259	1259	29.98	1249	29.24	0.74
	Dehar HPS	990	602	660	610	14.83	618	14.45	0.38
	Pong HPS	396	354	366	366	8.84	368	8.50	0.34
	Sub Total (F)	2866	2174	2285	2235	53.65	2235	52.18	1.47
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	96	95	2.38	99	3.30	-0.92
	KWHEP HPS(IPP)	500	0	650	650	12.50	521	14.40	-1.90
	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	746	745	14.88	620	17.70	-2.82	
H. Total Regional Entities (A-G)	20075	16155	17665	16898	391.95	16331	391.14	0.80	

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	1245.00	1245.00	27.09	1129
	Guru Nanak Dev TPS(Bhatinda)	440	297.00	296.00	6.15	256
	Guru Hargobind Singh TPS(L.mbt)	920	691.00	689.00	14.66	611
	Thermal (Total)	2620	2233.00	2230.00	47.90	1996
	Total Hydro	1148	724.00	534.00	13.77	574
	Total Punjab	3768	2957	2764	61.67	2569
Haryana	Panipat TPS	1360	1168.00	1170.00	28.09	1170
	DCRTPP (Yamuna nagar)	600	571.00	559.00	12.81	534
	Faridabad GPS (NTPC)	432	395.00	321.00	8.69	362
	RGTPP (khedar) (IPP)	1200	282.00	504.00	11.03	460
	Magnum Diesel (IPP)	25	0.00	0.00	0.00	0
	Thermal (Total)	3617	2416.00	2554.00	60.62	2526
	Total Hydro	62	36.00	29.00	0.87	36
	Total Haryana	3679	2452	2583	61.48	2562
Rajasthan	kota TPS	1240	974.00	973.00	22.72	946
	suratgarh TPS	1500	1161.00	1155.00	27.10	1129
	Chabra TPS	500	236.00	224.00	5.39	224
	Dholpur GPS	330	272.00	275.00	6.25	260
	Ramgarh GPS	113	62.00	62.00	1.55	65
	RAPS A (NPC)	300	180.00	183.00	4.38	183
	Barsingsar (NLC)	250	60.00	51.00	1.23	51
	Giral LTPS (IPP)	250	39.00	39.00	0.53	22
	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	2984.00	2962.00	69.13	2881
	Total Hydro	550	85.00	27.00	1.11	46
	Wind power	1294	198.00	97.00	5.30	221
	Biomass	71	18.00	18.00	0.40	17
	Renewable/Others (Total)	1365	216	115	5.71	238
	Total Rajasthan	6668	3285	3104	75.95	3165
	UP	Anpara TPS	1630	801	888	17.70
Obra TPS		1442	422	425	9.30	388
Paricha TPS		640	396	392	8.40	350
Panki TPS		210	75	73	1.50	63
Harduaganj TPS		375	0	40	0.10	4
Tanda TPS (NTPC)		440	284	289	7.06	294
Roza TPS (IPP)		600	491	383	10.43	435
Anpara-C (IPP)		600	0	0	0.00	0
Thermal (Total)		5937	2469	2490	54.49	2270
Vishnuparyag HPS (IPP)		400	436	436	10.46	436
Other Hydro		527	310	0	6.55	273
Cogeneration		951	0	0	0.00	0
Total UP		7815	3215	2926	71.50	2543
Uttarakhand		Total Hydro	1303	979	694	20.42
	Total Uttarakhand	1303	979	694	20.42	851
Delhi	Rajghat TPS	135	46	48	1.30	54
	Delhi Gas Turbine	282	150	151	3.69	154
	Pragati Gas Turbine	330	295	299	7.31	305
	Rithala GPS	108	51	29	1.22	51
	Bawana GPS	440	0	0	0.00	0
	Badarpur TPS (NTPC)	705	645	560	13.55	565
	Thermal (Total)	2000	1187	1087	27.07	1128
	Total Delhi	2000	1187	1087	27.07	1128
HP	Baspa HPS (IPP)	330	330	330	7.92	330
	Malana HPS (IPP)	101	102	86	2.06	86
	Other Hydro	571	582	580	13.89	579
	Total HP	1002	1014	996	24	995
J & K	Baglihar HPS (IPP)	450	439	438	10.52	438
	Other Hydro	323	179	186	4.14	172
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	618	624	14.65	611
Total State Control Area Generation		27191	15707	14778	356.61	14423
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3423	3754	87.82	3659
Total Regional Availability(Gross)		47266	36795	35430	836.37	34413

IV. Total Hydro Generation:

Regional Entities Hydro	9433	8650	8367	199.06	8294
State Control Area Hydro	5365	3766	2904	81.24	3385
Total Regional Hydro	14797	12416	11271	280.29	11679

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	450	500	0	9.84	0.00	9.84
Gwalior-Agra (D/C)	915	1028	1443	0	26.41	0.00	26.41
Zerda-Kankroli	0	186	196	0	1.33	0.00	1.33
Zerda-Bhinmal	186	249	508	9	5.39	0.00	5.39
Malanpur-Auraiya	7	26	110	0	0.84	0.00	0.84
Badod-Kota/Morak	103	48	143	0	2.22	0.00	2.22
Sub Total WR	1711	1987			46.03	0.00	46.03
Pusauli Bypass	-3	250	250	3	2.47	0.00	2.47
MZP- GKP (D/C)	740	830	972	0	18.87	0.00	18.87
Patna-Balia(D/C)	269	157	239	0	4.96	0.00	4.96
B'Sharif-Balia (D/C)	321	191	392	0	5.92	0.00	5.92
Barh-Balia (D/C)	273	218	377	0	6.38	0.00	6.38
Pusauli-Sahupuri	147	151	170	0	3.79	0.00	3.79
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-30	0	35	0.00	0.60	-0.60
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1712	1767			42.38	0.60	41.79
Total IR Exch	3423	3754			88.41	0.60	87.82

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
19.03	3.73	22.76	18.44	31.89	1.26	11.43	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
42.45	42.66	85.12	41.79	46.03	87.82	-0.67	3.37	2.70

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
0.00	0.00	0.00	0.00	4.20	92.60	88.40	43.90

<----- 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				
50.42	17.02	49.54	11.11	49.97	0.24	0.15	50.29	49.66

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	412	06:02	398	22:13	0.0	0.0	0.0	0.0
Gorakhpur	400	431	06:03	403	22:17	0.0	0.0	29.7	0.7
Bareilly	400	418	08:00	388	14:23	0.0	0.3	0.0	0.0
Kanpur	400	417	09:00	391	14:22	0.0	0.0	0.0	0.0
Dadri	400	414	06:02	387	14:20	0.0	1.1	0.0	0.0
Ballabgarh	400	420	06:04	389	14:22	0.0	0.1	0.0	0.0
Bawana	400	416	06:04	389	14:23	0.0	0.0	0.0	0.0
Bassi	400	427	06:04	392	14:23	0.0	0.0	20.1	0.0
Hissar	400	412	06:02	389	14:22	0.0	0.5	0.0	0.0
Moga	400	418	06:02	399	14:23	0.0	0.0	0.0	0.0
Abdullapur	400	411	06:04	390	14:21	0.0	0.0	0.0	0.0
Nalagarh	400	409	06:00	394	14:00	0.0	0.0	0.0	0.0
Kishenpur	400	413	06:02	392	21:08	0.0	0.0	0.0	0.0
Wagora	400	407	00:43	380	21:08	0.0	32.5	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	510.32	1560.04	511.02	1605.30	1185.54	921.03
Pong	426.72	384.05	421.88	975.89	421.50	961.02	692.71	497.50
Tehri	829.79	740.04	818.10	962.25	NA	NA	771.41	554.00
Koteshwar	612.50	598.50	607.90	3.54	NA	NA	661.00	149.00
Chamera-I	760.00	748.75	757.51	12.91	757.00	NA	339.30	349.85
Rihand	268.22	252.98	263.68	524.00	256.79	149.00	NA	NA
RPS	352.80	343.81	348.45	NA	348.36	NA	NA	NA
Jawahar Sagar	298.70	295.78	297.48	NA	297.82	NA	36.27	0.00
RSD	527.91	487.91	522.16	NA	522.13	NA	391.68	163.56

IX. System Constraints:

X. Grid Disturbance / Any Other Significant Event:

XI. Weather Conditions For 30.08.2011 :

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 : 30.08.2011

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER