

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 30.08.2013
Date of Reporting : 31.08.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (20:00 Hrs) MW			Off Peak (03:00 Hrs) MW				Day Energy (Net MU)	
	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage	Requirement	Freq* (Hz)	Demand Met	Shortage
39436	2689	42125	50.08	37974	1460	39434	50.10	908.1	41.39

* Half hourly (two 15 minutes block-one block each before and after the designated time) average frequency

II. A. State's Load 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	46.22	21.10		67.33	119.61	119.71	0.10	187.03	0.00
Haryana	72.43	0.64		73.07	84.58	86.64	2.05	159.70	2.33
Rajasthan	85.04	7.88	15.33	108.24	53.41	50.29	-3.12	158.53	0.09
Delhi	24.89			24.89	74.60	72.13	-2.47	97.01	0.07
UP	97.76	4.69	1.00	103.45	113.89	111.76	-2.13	215.21	36.16
Uttarakhand		20.57		20.57	11.64	11.97	0.34	32.55	1.04
HP		24.03		24.03	0.57	0.72	0.15	24.75	0.00
J & K		13.61	0.00	13.61	16.63	14.47	-2.16	28.08	1.70
Chandigarh				0.00	5.76	5.27	-0.50	5.27	0.00
Total	326.34	92.52	16.33	435.19	480.68	472.95	-7.73	908.13	41.39

* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

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	STOA/PX transaction	
Punjab	8105	0	30	1867	7748	0	-193	2114	48.80	
Haryana	6953	493	76	585	6666	0	113	606	13.34	
Rajasthan	6858	86	-66	-80	6648	0	155	-4	0.06	
Delhi	4378	0	-21	315	3991	0	-71	154	6.23	
UP	8923	1860	-235	646	9694	1460	269	956	17.17	
Uttarakhand	1400	150	9	14	1290	0	0	-131	-2.16	
HP	1124	0	8	-1100	869	0	-7	-1265	-27.47	
J&K	1453	100	25	-257	886	0	-33	-537	-7.75	
Chandigarh	241	0	-30	0	182	0	-15	-20	0.01	
Total	39436	2689	-204	1990	37974	1460	218	1874	48.23	

* 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	UI Net MU
A. NTPC	Singrauli STPS	2000	1832	2018	1902	44.63	1860	43.96	0.68
	Rihand I STPS	1000	900	955	892	20.27	845	20.54	-0.27
	Rihand II STPS	1000	464	512	513	10.58	441	10.63	-0.05
	Rihand III STPS	500	388	515	0	9.27	386	9.14	0.13
	Dadri I STPS	840	600	646	621	11.27	470	11.31	-0.04
	Dadri II STPS	980	975	985	978	19.57	815	19.73	-0.16
	Unchahar I TPS	420	391	429	397	7.71	321	7.77	-0.06
	Unchahar II TPS	420	404	431	343	7.66	319	7.80	-0.13
	Unchahar III TPS	210	201	216	177	3.88	161	3.88	-0.01
	ISTPP (Jhajjar)	1500	1480	518	512	9.70	404	9.92	-0.22
	Dadri GPS	830	655	334	314	7.66	319	7.74	-0.08
	Anta GPS	419	393	238	203	5.46	227	5.54	-0.08
	Auraiya GPS	663	624	158	156	3.64	152	3.66	-0.02
	Sub Total (A)	10782	9306	7955	7008	161.29	6720	161.62	-0.33
B. NPC	NAPS	440	145	179	179	3.62	151	3.48	0.14
	RAPS- B	440	399	438	446	9.57	399	9.58	-0.01
	RAPS- C	440	400	460	467	9.79	408	9.60	0.19
	Sub Total (B)	1320	944	1077	1092	22.97	957	22.66	0.32
C. NHPC	Chamera I HPS	540	534	540	540	12.72	530	12.82	-0.09
	Chamera II HPS	300	300	303	201	6.57	274	6.78	-0.22
	Chamera III HPS	231	231	230	233	4.90	204	5.04	-0.14
	Bairasuil HPS	180	179	70	120	2.44	102	2.71	-0.27
	Salal-HPS	690	665	668	666	15.99	666	15.96	0.03
	Tanakpur-HPS	94	91	92	94	2.21	92	2.19	0.02
	Uri-HPS	480	319	358	331	7.96	332	7.80	0.17
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	405	403	9.16	382	9.06	0.10
	Sewa-II HPS	120	119	126	125	2.99	124	2.95	0.03
	Sub Total (C)	3305	2825	2792	2713	64.93	2706	65.30	-0.37
D. NJPC	Nathpa Jhakri	1500	1605	1621	1625	38.71	1613	38.50	0.20
	Sub Total (D)	1500	1605	1621	1625	38.71	1613	38.50	0.20
E. THDC	Tehri HPS	1000	1060	1064	1063	25.43	1059	25.25	0.18
	Koteshwar HPS	400	381	386	380	8.24	343	8.20	0.04
Sub Total (E)	1400	1441	1450	1443	33.67	1403	33.45	0.22	
F. BBMB	Bhakra HPS	1497	1212	1321	1094	30.04	1252	29.10	0.94
	Dehar HPS	990	601	825	560	14.31	596	14.44	-0.13
	Pong HPS	396	260	372	312	6.98	291	6.23	0.75
	Sub Total (F)	2883	2074	2518	1966	51.33	2139	49.77	1.56
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	228	196	3.92	163	2.90	1.02
	KWHEP HPS(IPP)	1000	0	1194	1195	28.46	1186	28.51	-0.05
	Malana Stg-II HPS	100	0	109	101	2.51	104	2.10	0.41
	Shree Cement TPS	300	0	129	121	2.95	123	2.99	-0.04
	Budhil HPS(IPP)	70	0	65	60	1.47	61	1.41	0.06
	Sub Total (G)	1662	0	1725	1673	39.31	1638	37.91	1.40
H. Total Regional Entities (A-G)	22852	18195	19138	17520	412.21	17175	409.21	3.00	

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	1160	1020	23.87	995
	Guru Nanak Dev TPS(Bhatinda)	440	190	190	4.02	167
	Guru Hargobind Singh TPS(L.mbt)	920	942	690	18.33	764
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2292	1900	46.22	1926
	Total Hydro	1148	902	903	21.10	879
Total Punjab	3768	3194	2803	67.33	2805	
Haryana	Panipat TPS	1367	817	625	16.83	701
	DCRTPP (Yamuna nagar)	600	278	278	6.46	269
	Faridabad GPS (NTPC)	432	281	260	6.71	280
	RGTPP (kheadar) (IPP)	1200	946	1036	23.22	967
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	810	783	19.21	800
	Thermal (Total)	4944	3132	2982	72.43	3018
	Total Hydro	62	26	21	0.64	27
	Total Haryana	5006	3158	3003	73.07	3044
	Rajasthan	kota TPS	1240	857	857	20.05
suratgarh TPS		1500	1114	880	22.59	941
Chabra TPS		500	228	222	5.11	213
Dholpur GPS		330	119	119	2.67	111
Ramgarh GPS		111	63	65	1.57	65
RAPS A (NPC)		300	180	180	3.99	166
Barsingsar (NLC)		250	91	90	2.11	88
Giral LTPS		250	48	48	0.83	35
Rajwest LTPS (IPP)		1080	463	465	13.02	543
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	537	612	13.10	546
Thermal (Total)		6956	3700	3538	85.04	3543
Total Hydro		550	390	345	7.88	328
Wind power		2191	531	297	13.95	581
Biomass		91	33	33	0.79	33
Solar		201	0	0	0.59	25
Renewable/Others (Total)		2483	564	330	15.33	639
Total Rajasthan		9989	4654	4213	108.24	4510
UP		Anpara TPS	1630	1269	1142	26.80
	Obra TPS	1288	163	173	4.10	171
	Paricha TPS	1140	447	637	11.90	496
	Panki TPS	210	140	140	3.10	129
	Harduaganj TPS	665	348	349	8.30	346
	Tanda TPS (NTPC)	440	383	380	9.62	401
	Roza TPS (IPP)	1200	554	576	13.58	566
	Anpara-C (IPP)	1200	730	758	16.37	682
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	169	170	3.99	166
	Thermal (Total)	8223	4203	4325	97.76	4073
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	213	24	4.69	196
	Cogeneration	981	40	40	1.00	42
	Total UP	10131	4456	4389	103.45	4311
	Uttarakhand	Total Hydro	1303	788	924	20.57
Total Uttarakhand		1303	788	924	20.57	857
Delhi	Rajghat TPS	135	34	46	0.84	35
	Delhi Gas Turbine	282	112	114	2.59	108
	Pragati Gas Turbine	330	263	288	6.46	269
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	206	241	5.31	221
	Badarpur TPS (NTPC)	705	450	445	9.70	404
	Thermal (Total)	2232	1065	1134	24.89	1037
	Total Delhi	2232	1065	1134	24.89	1037
HP	Baspa HPS (IPP)	330	331	331	7.90	329
	Malana HPS (IPP)	86	70	56	1.44	60
	Other Hydro	589	611	617	14.69	612
	Total HP	1005	1012	1004	24.03	1001
J & K	Baglihar HPS (IPP)	450	436	438	10.47	436
	Other Hydro	323	132	128	3.14	131
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	568	566	13.61	567
Total State Control Area Generation		34390	18895	18036	435.19	18133
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3287	2691	67.71	2821
Total Regional Availability(Gross)		57242	41320	38247	915.10	38129

IV. Total Hydro Generation:

Regional Entities Hydro	10380	9912	9239	223.52	9313
State Control Area Hydro	5368	3899	3787	92.52	3855
Total Regional Hydro	15748	13811	13026	316.05	13169

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	100	-250	250	350	1.38	3.63	-2.25
Gwalior-Agra (D/C)	1236	1000	1716	0	28.24	0.00	28.24
Zerda-Kankroli	-106	-127	0	298	0.00	4.99	-4.99
Zerda-Bhinmal	-55	-63	0	293	0.00	4.14	-4.14
Malanpur-Auraiya	-37	-35	0	71	0.00	0.54	-0.54
Badod-Kota/Morak	-30	-20	0	110	0.00	1.20	-1.20
Mundra-Mohindergarh(HVDC)	998	984	1001	0	23.82	0.00	23.82
Sub Total WR	2106	1489			53.44	14.49	38.95
Pusauli Bypass	-158	-140	11	205	0.01	3.02	-3.00
MZP- GKP (D/C)	540	551	666	0	13.60	0.00	13.60
Patna-Balia(D/C)	328	371	433	0	7.69	0.00	7.69
B'Sharif-Balia (D/C)	234	259	337	0	5.93	0.00	5.93
Pusauli-Balia	10	23	34	0	0.56	0.00	0.56
Gaya-Fatehpur (765 Kv)	141	37	142	0	1.99	0.00	1.99
Pusauli-Sahupuri	121	139	140	0	2.79	0.00	2.79
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-38	0	45	0.00	0.80	-0.80
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	0	0	0	0	0.00	0.00	0.00
Sub Total ER	1181	1202			32.58	3.82	28.76
Total IR Exch	3287	2691			86.02	18.31	67.71

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
26.56	3.73	30.29	-8.97	38.69	-0.81	-14.26	2.88	-2.88

Total IR Schedule (MU)			Total IR Actual (MU)			Net IR UI (MU)		
Through ER	Through WR Inclds Mndra	Total	Through ER	Through WR	Total	Through ER	Through WR	Total
23.38	63.63	87.01	28.76	38.95	67.71	5.38	-24.68	-19.29

VI. Frequency Profile <----- % of Time Frequency ----->

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7-49.8	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.00	90.80	1.70	90.80	66.10	9.20

<----- 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				
50.48	12.01	49.71	18.56	50.05	0.17	0.12	50.41	49.92

VII. Voltage profile 400 kV

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	415	03:54	403	11:37	0.0	0.0	0.0	0.0
Gorakhpur	400	429	07:02	414	19:02	0.0	0.0	68.5	0.0
Barilly	400	423	08:01	406	22:10	0.0	0.0	1.5	0.0
Kanpur	400	424	04:03	407	19:39	0.0	0.0	15.2	0.0
Dadri	400	419	08:00	402	14:22	0.0	0.0	0.0	0.0
Ballabgarh	400	427	08:00	410	14:24	0.0	0.0	29.4	0.0
Bawana	400	420	08:00	405	14:59	0.0	0.0	0.0	0.0
Bassi	400	429	04:02	407	19:29	0.0	0.0	18.3	0.0
Hissar	400	409	08:01	395	14:24	0.0	0.0	0.0	0.0
Moga	400	410	08:02	398	14:21	0.0	0.0	0.0	0.0
Abdullapur	400	412	07:08	400	14:22	0.0	0.0	0.0	0.0
Nalagarh	400	409	03:58	398	14:20	0.0	0.0	0.0	0.0
Kishenpur	400	415	01:57	405	19:37	0.0	0.0	0.0	0.0
Wagoora	400	416	23:15	397	06:52	0.0	0.0	0.0	0.0

VIII. Voltage profile 765 kV

Station	Voltage Level (kV)	Maximum		Minimum		Voltage (in % of Time)			
		Voltage(KV)	Time	Voltage (KV)	Time	<728 kV	<742 kV	>800 kV	>820 kV
Fatehpur	765	773	04:03	742	19:41	0.0	0.0	0.0	0.0
Balia	765	772	07:05	743	22:10	0.0	0.0	0.0	0.0
Moga	765	777	08:01	751	14:22	0.0	0.0	0.0	0.0
Agra	765	807	04:01	770	19:39	0.0	0.0	13.2	0.0
Bhiwani	765	785	10:01	762	12:44	0.0	0.0	0.0	0.0
Unnao	765	769	02:28	738	19:37	0.0	3.8	0.0	0.0

IX. 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	510.50	1575.10	497.41	994.96	1103.36	882.95
Pong	426.72	384.05	422.61	1020.81	417.21	768.49	843.13	388.22
Tehri	829.79	740.04	820.20	1003.00	818.65	982.26	458.97	563.00
Koteshwar	612.50	598.50	609.45	4.30	NA	NA	563.00	540.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	285.67	344.61
Rihand	268.22	252.98	259.96	302.90	262.13	426.50	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	524.00	144.00	511.20	144.00	389.36	408.61

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 30.08.2013 :

1. Cloudy weather in NR.

XIII. Synchronisation of new generating units :

XIV. Synchronisation of new 220 / 400 / 765 KV lines and energising of bus //substation :

XV. Tripping of lines in pooling stations :

XVI. Complete generation loss in a generating station :

Vishnuprayag (400MW) and Dhauliganga (280MW) are out of operation since 16.06.2013.
Civil construction is in progress for rectification of the major damages in Plants/Dam caused due to flood
Vishnuprayag expected by Dec, 2013 and Dhauliganaga expected by March, 2014.