

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 07.09.2013
Date of Reporting : 08.09.2013

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
39426	3203	42629	49.79	39010	1831	40841	50.10	932.6	58.66

* 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	50.15	20.18		70.32	114.42	113.80	-0.62	184.13	0.00
Haryana	88.08	0.72		88.80	67.51	68.01	0.50	156.81	2.05
Rajasthan	91.55	2.39	11.19	105.13	51.49	58.97	7.48	164.10	5.59
Delhi	23.94			23.94	72.55	70.63	-1.92	94.57	0.00
UP	125.30	4.21	1.00	130.51	115.91	113.31	-2.60	243.81	44.81
Uttarakhand		19.67		19.67	9.84	10.70	0.87	30.37	3.60
HP		21.46		21.46	1.01	3.49	2.48	24.94	0.91
J & K		13.68	0.00	13.68	16.21	15.03	-1.17	28.72	1.70
Chandigarh				0.00	5.51	5.12	-0.39	5.12	0.00
Total	379.02	82.29	12.19	473.50	454.42	459.05	4.63	932.55	58.66

* 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	8381	0	-82	1855	7285	0	-49	1999	50.25	
Haryana	6194	713	-66	156	6432	0	-13	277	2.97	
Rajasthan	7142	265	122	234	6884	96	366	-45	1.64	
Delhi	4311	0	-11	199	3755	0	-208	44	-0.16	
UP	9426	1830	-625	955	11295	1735	329	2045	29.16	
Uttarakhand	1250	295	14	-85	1272	0	30	-72	-1.95	
HP	1138	0	-97	-1022	934	0	49	-986	-23.81	
J&K	1331	100	-75	-244	978	0	-85	-376	-6.44	
Chandigarh	253	0	2	-20	176	0	-18	-10	0.27	
Total	39426	3203	-817	2028	39010	1831	401	2876	51.93	

* 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	1238	1358	1359	29.77	1240	29.58	0.19
	Rihand I STPS	1000	880	965	830	21.13	880	21.07	0.07
	Rihand II STPS	1000	450	496	500	10.90	454	10.80	0.10
	Rihand III STPS	500	485	509	498	11.51	480	11.45	0.06
	Dadri I STPS	840	600	655	650	14.29	595	14.25	0.04
	Dadri II STPS	980	975	995	975	22.63	943	22.55	0.08
	Unchahar I TPS	420	391	429	411	9.08	378	8.98	0.09
	Unchahar II TPS	420	404	440	387	9.26	386	8.92	0.34
	Unchahar III TPS	210	200	219	208	4.59	191	4.51	0.08
	ISTPP (Jhajjhar)	1500	1440	928	637	15.21	634	15.48	-0.27
	Dadri GPS	830	653	183	183	4.33	180	5.11	-0.78
	Anta GPS	419	393	256	250	5.84	243	6.00	-0.16
	Auraiya GPS	663	624	150	156	3.55	148	4.05	-0.49
	Sub Total (A)	10782	8732	7583	7044	162.09	6754	162.75	-0.66
B. NPC	NAPS	440	291	324	331	7.03	293	6.98	0.04
	RAPS- B	440	192	217	218	4.63	193	4.61	0.02
	RAPS- C	440	360	454	459	9.74	406	8.64	1.10
	Sub Total (B)	1320	843	995	1008	21.39	891	20.23	1.16
C. NHPC	Chamera I HPS	540	534	540	0	6.56	273	6.49	0.06
	Chamera II HPS	300	300	304	101	4.92	205	4.71	0.20
	Chamera III HPS	231	231	230	77	3.52	146	3.38	0.14
	Bairasuil HPS	180	179	100	100	1.84	77	1.81	0.03
	Salal-HPS	690	637	665	650	15.43	643	15.28	0.15
	Tanakpur-HPS	94	63	63	63	1.53	64	1.51	0.02
	Uri-HPS	480	338	349	342	8.24	343	8.16	0.08
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	403	398	9.43	393	9.40	0.03
	Sewa-II HPS	120	119	125	0	1.55	65	1.48	0.08
	Sub Total (C)	3305	2787	2779	1731	53.00	2208	52.22	0.78
D. NJPC	Natpura Jhakri	1500	1605	1608	1380	34.99	1458	34.30	0.69
	Sub Total (D)	1500	1605	1608	1380	34.99	1458	34.30	0.69
E. THDC	Tehri HPS	1000	1060	1066	770	20.58	857	20.00	0.58
	Koteshwar HPS	400	391	401	286	6.76	282	6.70	0.06
Sub Total (E)	1400	1451	1467	1056	27.34	1139	26.70	0.64	
F. BBMB	Bhakra HPS	1497	957	1301	732	23.15	965	22.97	0.18
	Dehar HPS	990	581	825	570	14.24	593	13.94	0.30
	Pong HPS	396	169	312	60	4.22	176	4.05	0.17
	Sub Total (F)	2883	1707	2438	1362	41.61	1734	40.96	0.65
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	205	100	2.42	101	2.26	0.16
	KWHEP HPS(IPP)	1000	0	1178	798	20.20	842	20.17	0.03
	Malana Stg-II HPS	100	0	101	51	1.46	61	1.19	0.27
	Shree Cement TPS	300	0	126	125	3.01	125	2.98	0.03
	Budhil HPS(IPP)	70	0	50	20	0.93	39	1.07	-0.14
	Sub Total (G)	1662	0	1660	1094	28.02	1168	27.67	0.35
H. Total Regional Entities (A-G)	22852	17125	18530	14675	368.44	15352	364.83	3.62	

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	1250	1060	24.58	1024
	Guru Nanak Dev TPS(Bhatinda)	440	333	295	6.83	285
	Guru Hargobind Singh TPS(L.mbt)	920	940	776	18.74	781
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2523	2131	50.15	2090
	Total Hydro	1148	848	826	20.18	841
Total Punjab	3768	3371	2957	70.32	2930	
Haryana	Panipat TPS	1367	1041	1057	25.77	1074
	DCRTPP (Yamuna nagar)	600	282	280	6.50	271
	Faridabad GPS (NTPC)	432	195	180	4.44	185
	RGTPP (khedar) (IPP)	1200	833	984	21.92	913
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1023	1001	25.70	1071
	Thermal (Total)	4944	3374	3502	88.08	3670
	Total Hydro	62	29	29	0.72	30
	Total Haryana	5006	3403	3531	88.80	3700
	Rajasthan	kota TPS	1240	850	844	20.69
suratgarh TPS		1500	1030	1062	25.57	1066
Chabra TPS		500	225	222	5.35	223
Dholpur GPS		330	114	114	2.71	113
Ramgarh GPS		111	64	64	1.66	69
RAPS A (NPC)		300	180	180	4.00	167
Barsingsar (NLC)		250	88	91	2.04	85
Giral LTPS		250	60	35	1.03	43
Rajwest LTPS (IPP)		1080	632	626	14.25	594
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	624	618	14.25	594
Thermal (Total)		6956	3867	3856	91.55	3815
Total Hydro		550	333	42	2.39	100
Wind power		2191	59	758	10.18	424
Biomass		91	23	28	0.55	23
Solar		201	0	0	0.46	19
Renewable/Others (Total)		2483	82	786	11.19	466
Total Rajasthan		9989	4282	4684	105.13	4380
UP		Anpara TPS	1630	1222	1151	28.40
	Obra TPS	1288	444	340	10.40	433
	Paricha TPS	1140	812	772	18.60	775
	Panki TPS	210	72	68	1.60	67
	Harduaganj TPS	665	338	346	8.50	354
	Tanda TPS (NTPC)	440	286	296	7.34	306
	Roza TPS (IPP)	1200	847	837	20.02	834
	Anpara-C (IPP)	1200	986	990	23.67	986
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	284	283	6.77	282
	Thermal (Total)	8223	5291	5083	125.30	5221
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	135	177	4.21	175
	Cogeneration	981	40	40	1.00	42
	Total UP	10131	5466	5300	130.51	5438
	Uttarakhand	Total Hydro	1303	778	849	19.67
Total Uttarakhand		1303	778	849	19.67	819
Delhi	Rajghat TPS	135	48	48	1.10	46
	Delhi Gas Turbine	282	154	156	3.63	151
	Pragati Gas Turbine	330	293	265	6.76	282
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	294	278	6.13	255
	Badarpur TPS (NTPC)	705	290	285	6.32	263
	Thermal (Total)	2232	1079	1032	23.94	998
Total Delhi	2232	1079	1032	23.94	998	
HP	Baspa HPS (IPP)	330	393	298	6.43	268
	Malana HPS (IPP)	86	70	54	1.36	57
	Other Hydro	589	592	558	13.67	570
	Total HP	1005	1055	910	21.46	894
J & K	Baglihar HPS (IPP)	450	438	436	10.48	437
	Other Hydro	323	132	128	3.20	133
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	570	564	13.68	570
Total State Control Area Generation		34390	20004	19827	473.50	19729
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3144	6140	116.17	4841
Total Regional Availability(Gross)		57242	41678	40642	958.12	39922

IV. Total Hydro Generation:

Regional Entities Hydro	10380	9776	6478	181.02	7543
State Control Area Hydro	5368	3748	3397	82.29	3429
Total Regional Hydro	15748	13524	9875	263.32	10971

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	500	500	0	11.14	0.00	11.14
Gwalior-Agra (D/C)	486	1734	1734	0	27.67	0.00	27.67
Zerda-Kankroli	-22	-34	34	202	0.00	1.53	-1.53
Zerda-Bhinmal	97	4	156	201	0.00	0.52	-0.52
Malanpur-Auraiya	-70	-23	0	81	0.00	1.57	-1.57
Badod-Kota/Morak	-16	47	50	48	0.30	0.00	0.30
Mundra-Mohindergarh(HVDC)	483	985	987	0	23.06	0.00	23.06
Sub Total WR	1358	3213			62.17	3.62	58.55
Pusauli Bypass	-152	100	120	162	1.64	0.52	1.12
MZP- GKP (D/C)	628	980	1087	0	20.66	0.00	20.66
Patna-Balia(D/C)	525	781	786	0	11.92	0.00	11.92
B'Sharif-Balia (D/C)	362	644	921	0	13.69	0.00	13.69
Pusauli-Balia	45	109	208	0	1.93	0.00	1.93
Gaya-Fatehpur (765 Kv)	240	273	316	0	5.57	0.00	5.57
Pusauli-Sahupuri	175	76	175	0	3.60	0.00	3.60
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-37	-36	33	0	0.00	0.87	-0.87
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	1786	2927			59.01	1.39	57.62
Total IR Exch	3144	6140			121.18	5.01	116.17

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
31.39	3.73	35.11	-3.39	23.20	8.14	-0.37	4.19	-4.19

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
44.05	59.52	103.57	57.62	58.55	116.17	13.57	-0.96	12.60

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	0.59	3.58	97.51	4.24	94.52	35.59	1.90

<----- 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				
50.60	17.02	49.45	19.45	49.96	0.18	0.13	50.15	49.58

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	406	09:05	401	01:05	0.0	0.0	0.0	0.0
Gorakhpur	400	419	08:03	398	01:03	0.0	0.0	0.0	0.0
Barilly	400	419	18:07	396	00:27	0.0	0.0	0.0	0.0
Kanpur	400	416	08:01	398	14:25	0.0	0.0	0.0	0.0
Dadri	400	414	18:04	401	14:17	0.0	0.0	0.0	0.0
Ballabgarh	400	421	18:04	404	14:21	0.0	0.0	0.4	0.0
Bawana	400	417	18:04	402	14:23	0.0	0.0	0.0	0.0
Bassi	400	420	03:52	396	12:13	0.0	0.0	0.0	0.0
Hissar	400	408	18:04	394	14:20	0.0	0.0	0.0	0.0
Moga	400	411	03:34	399	16:34	0.0	0.0	0.0	0.0
Abdullapur	400	412	18:05	398	14:20	0.0	0.0	0.0	0.0
Nalagarh	400	411	03:33	400	11:19	0.0	0.0	0.0	0.0
Kishenpur	400	417	03:35	402	18:57	0.0	0.0	0.0	0.0
Wagoora	400	417	03:36	394	18:56	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	771	07:47	729	13:43	0.0	25.6	0.0	0.0
Balia	765	763	18:00	720	01:05	7.4	61.0	0.0	0.0
Moga	765	788	03:38	762	18:57	0.0	0.0	0.0	0.0
Agra	765	803	18:04	766	18:58	0.0	0.0	0.9	0.0
Bhiwani	765	794	17:47	770	18:58	0.0	0.0	0.0	0.0
Unnao	765	760	18:15	727	01:07	0.1	54.4	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	511.06	1605.30	499.61	1076.64	830.53	764.41
Pong	426.72	384.05	423.02	1051.02	418.08	807.91	423.34	162.20
Tehri	829.79	740.04	820.20	1005.00	818.65	982.26	328.57	561.00
Koteshwar	612.50	598.50	609.65	4.40	NA	NA	560.00	547.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	201.03	270.52
Rihand	268.22	252.98	260.45	329.80	262.28	435.50	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	523.95	144.00	511.52	144.00	353.96	403.15

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 07.09.2013 :

1. Normal 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 and Dhauliganga expected by Dec, 2013 .