

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 14.09.2013
Date of Reporting : 15.09.2013

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
42255	2639	44894	50.15	40968	2080	43048	50.07	966.8	67.83

* 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:

UI [OD:(+ve), UD: (-ve)]

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	46.99	21.51		68.51	111.38	111.29	-0.09	179.79	1.35
Haryana	88.08	0.67		88.75	69.45	70.58	1.13	159.33	0.01
Rajasthan	106.44	0.69	7.81	114.94	87.13	79.61	-7.52	194.55	0.49
Delhi	26.05			26.05	73.68	72.43	-1.25	98.48	0.14
UP	124.67	4.60	1.00	130.27	112.17	112.91	0.74	243.19	59.42
Uttarakhand		19.15		19.15	9.17	10.96	1.80	30.11	4.00
HP		20.70		20.70	1.85	4.76	2.91	25.46	0.72
J & K		13.69	0.00	13.69	15.69	17.02	1.34	30.72	1.70
Chandigarh				0.00	5.23	5.20	-0.03	5.20	0.00
Total	392.23	81.01	8.81	482.06	485.75	484.77	-0.98	966.83	67.83

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

II. B. State's Demand Met in MWs:

UI/OA/PX [OD/Import: (+ve), UD/Export: (-ve)]

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	8112	200	147	1670	7527	0	-56	1817	42.07	
Haryana	7269	14	61	-2	6654	0	-51	-10	-3.89	
Rajasthan	8023	0	-548	635	8478	0	-640	1175	22.71	
Delhi	4545	0	65	-156	3888	0	-72	-215	-3.19	
UP	9900	2100	-98	712	11043	2080	54	1904	27.00	
Uttarakhand	1318	225	6	-81	1289	0	142	-44	-1.69	
HP	1225	0	149	-906	934	0	185	-1020	-21.63	
J&K	1615	100	111	-142	970	0	-11	-426	-6.15	
Chandigarh	249	0	-18	0	187	0	-3	-10	-0.11	
Total	42255	2639	-126	1731	40968	2080	-452	3170	55.12	

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

III. Regional Entities :

UI [OG:(+ve), UG: (-ve)]

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
	Rihand I STPS	1000	940	1028	1024	22.63	943	22.56	0.07
	Rihand II STPS	1000	478	517	515	11.49	479	11.47	0.02
	Rihand III STPS	500	483	496	510	11.64	485	11.58	0.06
	Dadri I STPS	840	795	858	878	18.96	790	19.02	-0.06
	Dadri II STPS	980	975	1015	1007	23.08	962	23.24	-0.16
	Unchahar I TPS	420	392	422	436	9.29	387	9.38	-0.09
	Unchahar II TPS	420	403	436	442	9.54	398	9.59	-0.04
	Unchahar III TPS	210	199	216	216	4.73	197	4.73	0.00
	ISTPP (Jhajjar)	1500	1480	1040	957	22.80	950	23.31	-0.51
	Dadri GPs	830	795	380	383	8.86	369	9.11	-0.25
	Anta GPs	419	393	0	0	0.00	0	0.00	0.00
	Auraiya GPs	663	621	155	152	3.54	148	3.58	-0.03
	Sub Total (A)	10782	9693	8434	8385	188.46	7853	189.33	-0.87
B. NPC	NAPS	440	290	327	328	6.97	291	6.96	0.01
	RAPS- B	440	194	218	220	4.63	193	4.66	-0.02
	RAPS- C	440	410	460	460	9.78	408	9.84	-0.06
	Sub Total (B)	1320	894	1005	1008	21.39	891	21.46	-0.07
C. NHPC	Chamera I HPS	540	519	540	360	7.37	307	7.39	-0.03
	Chamera II HPS	300	300	247	226	4.84	202	4.81	0.03
	Chamera III HPS	231	231	217	152	3.16	132	3.30	-0.14
	Bairasuil HPS	180	182	30	60	1.66	69	1.81	-0.15
	Salal-HPS	690	650	666	668	15.72	655	15.60	0.12
	Tanakpur-HPS	94	92	93	93	2.24	93	2.18	0.06
	Uri-HPS	480	284	359	352	8.32	347	8.40	-0.08
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	380	407	9.41	392	9.35	0.06
	Sewa-II HPS	120	117	71	0	0.83	35	1.00	-0.17
	Sub Total (C)	3305	2762	2603	2318	53.54	2231	53.85	-0.31
D. NJPC	Nathpa Jhakri	1500	1605	1614	1074	31.67	1319	31.89	-0.23
	Sub Total (D)	1500	1605	1614	1074	31.67	1319	31.89	-0.23
E. THDC	Tehri HPS	1000	1060	1062	232	10.86	453	10.50	0.36
	Koteshwar HPS	400	391	403	91	3.66	152	3.60	0.06
	Sub Total (E)	1400	1451	1465	323	14.52	605	14.10	0.42
F. BBMB	Bhakra HPS	1497	971	1251	827	24.00	1000	23.30	0.70
	Dehar HPS	990	573	825	570	14.00	583	13.76	0.24
	Pong HPS	396	233	372	126	5.98	249	5.58	0.40
	Sub Total (F)	2883	1777	2448	1523	43.98	1833	42.64	1.34
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	183	93	2.05	86	2.21	-0.16
	KWHEP HPS(IPP)	1000	0	809	600	17.59	733	18.50	-0.92
	Malana Stg-II HPS	100	0	56	54	1.25	52	1.14	0.10
	Shree Cement TPS	300	0	125	120	2.96	123	2.99	-0.03
	Budhil HPS(IPP)	70	0	69	22	0.79	33	0.87	-0.08
	Sub Total (G)	1662	0	1242	889	24.64	1027	25.72	-1.08
H. Total Regional Entities (A-G)		22852	18182	18811	15520	378.20	15758	378.99	-0.79

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	1050	1050	23.42	976	
	Guru Nanak Dev TPS(Bhatinda)	440	338	338	7.24	301	
	Guru Hargobind Singh TPS(L.mbt)	920	716	736	16.34	681	
	Goindwal(GVK)		0	0 0 0	0.00	0	
	Thermal (Total)	2620	2104	2124	46.99	1958	
	Total Hydro	1148	916	900	21.51	896	
	Total Punjab	3768	3020	3024	68.51	2855	
Haryana	Panipat TPS	1367	1085	1008	24.84	1035	
	DCRTPP (Yamuna nagar)	600	574	574	13.04	543	
	Faridabad GPS (NTPC)	432	196	197	4.54	189	
	RGTPP (khedar) (IPP)	1200	1036	849	22.56	940	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	1018	1058	23.99	1000	
	Thermal (Total)	4944	3	3686	88.08	3670	
	Total Hydro	62	18	18	0.67	28	
		Total Haryana	5006	21	3704	88.75	3698
	Rajasthan	kota TPS	1240	1150	1100	27.26	1136
suratgarh TPS		1500	1070	972	25.20	1050	
Chabra TPS		500	434	449	10.64	443	
Dholpur GPS		330	111	112	2.66	111	
Ramgarh GPS		111	60	63	1.61	67	
RAPS A (NPC)		300	180	180	4.01	167	
Barsingsar (NLC)		250	83	69	1.86	78	
Giral LTPS		250	0	0	0.00	0	
Rajwest LTPS (IPP)		1080	772	840	19.27	803	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		660	559	583	13.94	581	
Thermal (Total)		6956	4419	4368	106.44	4435	
Total Hydro		550	114	0	0.69	29	
Wind power		2191	0	502	5.06	211	
Biomass		91	33	33	0.79	33	
Solar		201	0	0	1.97	82	
Renewable/Others (Total)		2483	33	535	7.81	325	
		Total Rajasthan	9989	4566	4903	114.94	4789
UP		Anpara TPS	1630	1208	1239	28.90	1204
	Obra TPS	1288	450	437	10.70	446	
	Paricha TPS	1140	797	809	19.20	800	
	Panki TPS	210	68	131	2.70	113	
	Harduaganj TPS	665	387	390	8.90	371	
	Tanda TPS (NTPC)	440	294	297	7.33	305	
	Roza TPS (IPP)	1200	819	810	19.48	812	
	Anpara-C (IPP)	1200	850	828	19.98	833	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	323	324	7.48	312	
	Thermal (Total)	8223	5196	5265	124.67	5195	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	197	218	4.60	192	
	Cogeneration	981	40	40	1.00	42	
		Total UP	10131	5433	5523	130.27	5428
Uttarakhand	Total Hydro	1303	798	802	19.15	798	
	Total Uttarakhand	1303	798	802	19.15	798	
Delhi	Rajghat TPS	135	93	87	2.11	88	
	Delhi Gas Turbine	282	157	157	3.61	151	
	Pragati Gas Turbine	330	293	260	6.78	282	
	Riithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	287	278	6.71	280	
	Badarpur TPS (NTPC)	705	290	425	6.84	285	
	Thermal (Total)	2232	1120	1207	26.05	1085	
		Total Delhi	2232	1120	1207	26.05	1085
HP	Baspa HPS (IPP)	330	179	299	5.75	239	
	Malana HPS (IPP)	86	67	52	1.40	58	
	Other Hydro	589	567	564	13.55	565	
		Total HP	1005	813	915	20.70	862
J & K	Baglihar HPS (IPP)	450	438	436	10.49	437	
	Other Hydro	323	132	128	3.20	133	
	Gas/Diesel/Others	183	0	0	0.00	0	
		Total J & K	956	570	564	13.69	571
Total State Control Area Generation		34390	16341	20642	482.06	20086	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3818	5278	123.33	5139	
Total Regional Availability(Gross)		57242	38970	41440	983.59	40983	

IV. Total Hydro Generation:

Regional Entities Hydro	10380	9178	5985	164.60	6858
State Control Area Hydro	5368	3426	3417	81.01	3376
Total Regional Hydro	15748	12604	9402	245.61	10234

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	50	500	500	0	5.51	0.00	5.51
Gwalior-Agra (D/C)	852	1603	1650	0	24.88	0.00	24.88
Zerda-Kankroli	81	92	133	60	0.57	0.00	0.57
Zerda-Bhinmal	137	132	226	72	2.21	0.00	2.21
Malanpur-Auraiya	-55	-109	0	130	0.00	1.50	-1.50
Badod-Kota/Morak	33	45	93	54	0.00	0.01	-0.01
Mundra-Mohindergarh(HVDC)	1449	1432	1450	0	34.78	0.00	34.78
Sub Total WR	2547	3695			67.94	1.52	66.42
Pusauli Bypass	50	-250	50	250	0.73	2.52	-1.79
MZP- GKP (D/C)	524	861	897	0	17.19	0.00	17.19
Patna-Balia(D/C)	178	200	998	0	18.71	0.00	18.71
B'Sharif-Balia (D/C)	223	327	674	0	13.46	0.00	13.46
Pusauli-Balia	22	178	178	0	1.98	0.00	1.98
Gaya-Fatehpur (765 Kv)	160	243	299	0	5.14	0.00	5.14
Pusauli-Sahupuri	151	60	172	0	3.10	0.00	3.10
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	1271	1583			60.30	3.39	56.91
Total IR Exch	3818	5278			128.24	4.91	123.33

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
34.81	2.34	37.16	1.96	20.28	14.53	-4.02	4.09	-4.09

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
57.74	63.78	121.52	56.91	66.42	123.33	-0.83	2.64	1.81

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	97.10	2.80	97.10	40.70	2.90

<----- 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				
50.36	6.04	49.70	8.10	49.98	0.11	0.11	50.27	49.88

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	407	11:18	400	00:49	0.0	0.0	0.0	0.0
Gorakhpur	400	422	18:32	402	00:05	0.0	0.0	1.9	0.0
Bareilly	400	418	06:07	394	00:18	0.0	0.0	0.0	0.0
Kanpur	400	415	05:05	398	00:15	0.0	0.0	0.0	0.0
Dadri	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Ballabgarh	400	419	04:02	405	00:04	0.0	0.0	0.0	0.0
Bawana	400	412	17:59	400	15:26	0.0	0.0	0.0	0.0
Bassi	400	416	04:01	393	23:12	0.0	0.0	0.0	0.0
Hissar	400	407	04:01	390	14:33	0.0	0.0	0.0	0.0
Moga	400	413	04:00	394	19:09	0.0	0.0	0.0	0.0
Abdullapur	400	412	06:07	397	14:16	0.0	0.0	0.0	0.0
Nalagarh	400	412	03:45	397	14:31	0.0	0.0	0.0	0.0
Kishenpur	400	418	04:05	399	19:07	0.0	0.0	0.0	0.0
Wagoora	400	419	04:00	390	19:10	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	770	18:02	739	13:54	0.0	1.1	0.0	0.0
Balia	765	768	18:31	724	00:14	1.2	15.7	0.0	0.0
Moga	765	791	04:03	753	19:12	0.0	0.0	0.0	0.0
Agra	765	799	05:05	764	13:52	0.0	0.0	0.0	0.0
Bhiwani	765	798	06:07	764	14:30	0.0	0.0	0.0	0.0
Unnao	765	766	22:03	733	00:16	0.0	5.8	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	511.54	1620.46	502.46	1192.70	690.14	673.63
Pong	426.72	384.05	423.81	1066.19	419.63	875.55	362.99	327.26
Tehri	829.79	740.04	821.50	1033.00	818.65	982.26	238.22	239.00
Koteshwar	612.50	598.50	610.90	4.96	NA	NA	239.00	241.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	203.54	199.14
Rihand	268.22	252.98	NA	NA	262.92	474.40	NA	NA
RPS	352.80	343.81	352.72	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.61	NA	NA	NA	NA	NA
RSD	527.91	487.91	521.08	144.00	516.06	144.00	182.36	429.06

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 14.09.2013 :

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 .

Report for : 14.09.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER