

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 27.09.2013

Date of Reporting : 28.09.2013

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
38530	2968	41498	50.10	36181	2400	38581	50.14	872.0	60.41

* 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	54.27	15.97		70.24	99.09	99.11	0.02	169.35	0.00
Haryana	64.83	0.58		65.41	66.58	68.14	1.56	133.54	0.52
Rajasthan	80.40	7.05	13.70	101.15	57.07	51.43	-5.64	152.58	0.00
Delhi	23.40			23.40	67.43	68.65	1.22	92.04	0.00
UP	116.41	4.85	1.70	122.96	110.54	109.56	-0.98	232.52	55.71
Uttarakhand		17.88		17.88	12.07	14.23	2.16	32.10	2.48
HP		17.24		17.24	5.82	7.46	1.64	24.70	0.00
J & K		13.52	0.00	13.52	17.64	16.48	-1.16	30.01	1.70
Chandigarh				0.00	4.97	5.19	0.22	5.19	0.00
Total	339.30	77.09	15.40	431.79	441.21	440.24	-0.97	872.03	60.41

* 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	7756	0	18	1409	7300	0	93	1687	37.75	
Haryana	5817	343	-60	336	5699	0	114	204	1.08	
Rajasthan	7055	0	-27	704	6060	0	-341	255	12.24	
Delhi	4216	0	46	-119	3241	0	-57	-566	-6.18	
UP	9361	2215	-515	851	10595	2400	302	1566	22.48	
Uttarakhand	1270	310	9	7	1326	0	147	45	1.80	
HP	1176	0	119	-906	869	0	61	-633	-13.00	
J&K	1634	100	87	-82	924	0	-107	-275	-2.38	
Chandigarh	246	0	-8	-10	167	0	4	-20	0.15	
Total	38530	2968	-330	2189	36181	2400	215	2263	53.93	

* 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	917	975	1001	21.89	912	21.99	-0.10
	Rihand II STPS	1000	477	517	520	11.34	473	11.34	0.00
	Rihand III STPS	500	482	493	512	11.54	481	11.57	-0.03
	Dadri I STPS	840	600	632	465	12.21	509	12.74	-0.52
	Dadri II STPS	980	975	1016	924	22.05	919	22.18	-0.14
	Unchahar I TPS	420	402	436	422	9.46	394	9.57	-0.11
	Unchahar II TPS	420	403	463	437	9.37	391	9.45	-0.08
	Unchahar III TPS	210	199	215	216	4.44	185	4.57	-0.13
	ISTPP (Jhajjar)	1500	1480	940	740	18.56	773	19.27	-0.71
	Dadri GPS	830	800	569	548	13.12	547	13.17	-0.05
	Anta GPS	419	399	258	261	6.06	252	6.19	-0.13
	Auraiya GPS	663	624	152	157	3.58	149	3.70	-0.12
	Sub Total (A)	10782	9697	8746	8144	189.60	7900	191.72	-2.12
B. NPC	NAPS	440	296	331	333	7.02	292	7.10	-0.09
	RAPS- B	440	400	433	444	9.43	393	8.25	1.18
	RAPS- C	440	412	464	466	9.87	411	9.89	-0.02
	Sub Total (B)	1320	1108	1228	1243	26.32	1097	25.24	1.08
C. NHPC	Chamera I HPS	540	536	540	180	5.31	221	5.30	0.01
	Chamera II HPS	300	300	301	100	3.28	137	3.78	-0.50
	Chamera III HPS	231	231	225	65	2.62	109	2.64	-0.02
	Bairasuil HPS	180	182	120	10	1.29	54	1.43	-0.15
	Salal-HPS	690	441	633	386	10.94	456	10.86	0.08
	Tanakpur-HPS	94	94	93	92	2.20	92	2.19	0.00
	Uri-HPS	480	250	303	243	5.75	239	5.70	0.05
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	354	400	254	8.55	356	8.49	0.05
	Sewa-II HPS	120	119	80	0	0.64	27	0.60	0.04
	Sub Total (C)	3305	2507	2695	1330	40.57	1690	41.00	-0.44
D. NJPC	Nathpa Jhakri	1500	1605	1616	718	22.08	920	21.35	0.73
	Sub Total (D)	1500	1605	1616	718	22.08	920	21.35	0.73
E. THDC	Tehri HPS	1000	1060	502	230	6.90	288	6.70	0.20
	Koteshwar HPS	400	100	101	100	2.42	101	2.40	0.02
	Sub Total (E)	1400	1160	603	330	9.32	388	9.10	0.22
F. BBMB	Bhakra HPS	1497	843	1355	776	20.59	858	20.24	0.35
	Dehar HPS	990	416	660	440	9.84	410	9.99	-0.15
	Pong HPS	396	203	312	60	4.96	207	4.88	0.08
	Sub Total (F)	2883	1463	2327	1276	35.39	1475	35.11	0.28
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	114	48	1.50	62	1.45	0.05
	KWHEP HPS(IPP)	1000	0	900	357	12.00	500	11.51	0.49
	Malana Stg-II HPS	100	0	107	35	1.14	48	1.08	0.07
	Shree Cement TPS	300	0	132	127	3.36	140	4.77	-1.40
	Budhil HPS(IPP)	70	0	35	10	0.54	23	0.55	-0.01
	Sub Total (G)	1662	0	1288	577	18.54	772	19.34	-0.81
H. Total Regional Entities (A-G)		22852	17540	18503	13618	341.81	14242	342.86	-1.05

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	1257	1255	26.78	1116
	Guru Nanak Dev TPS(Bhatinda)	440	340	355	7.15	298
	Guru Hargobind Singh TPS(L.mbt)	920	956	934	20.34	848
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	2553	2544	54.27	2261
	Total Hydro	1148	650	656	15.97	665
Total Punjab		3768	3203	3200	70.24	2927
Haryana	Panipat TPS	1367	438	435	10.55	440
	DCRTPP (Yamuna nagar)	600	281	290	6.58	274
	Faridabad GPS (NTPC)	432	313	275	7.29	304
	RGTPP (khedar) (IPP)	1200	589	559	13.69	570
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1114	1114	26.72	1113
	Thermal (Total)	4944	2735	2673	64.83	2701
	Total Hydro	62	13	13	0.58	24
	Total Haryana	5006	2748	2686	65.41	2725
	Rajasthan	kota TPS	1240	941	938	22.93
suratgarh TPS		1500	844	822	18.66	778
Chabra TPS		500	452	386	9.94	414
Dholpur GPS		330	105	93	2.48	103
Ramgarh GPS		111	57	55	1.48	62
RAPS A (NPC)		300	168	168	4.03	168
Barsingsar (NLC)		250	185	180	4.28	178
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	763	573	16.60	692
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	0	0	0.00	0
Thermal (Total)		6956	3515	3215	80.40	3350
Total Hydro		550	202	303	7.05	294
Wind power		2191	161	653	11.42	476
Biomass		91	34	34	0.81	34
Solar		201	0	0	1.47	61
Renewable/Others (Total)		2483	195	687	13.70	571
Total Rajasthan		9989	3912	4205	101.15	4214
UP		Anpara TPS	1630	1156	1206	28.40
	Obra TPS	1288	445	464	10.70	446
	Paricha TPS	1140	730	313	12.50	521
	Panki TPS	210	140	149	3.60	150
	Harduaganj TPS	665	211	388	7.00	292
	Tanda TPS (NTPC)	440	298	294	7.30	304
	Roza TPS (IPP)	1200	926	806	20.26	844
	Anpara-C (IPP)	1200	810	761	18.14	756
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	347	364	8.52	355
	Thermal (Total)	8223	5063	4745	116.41	4851
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	165	238	4.85	202
	Cogeneration	981	70	70	1.70	71
	Total UP	10131	5298	5053	122.96	5123
	Uttarakhand	Total Hydro	1303	781	724	17.88
Total Uttarakhand		1303	781	724	17.88	745
Delhi	Rajghat TPS	135	40	36	0.93	39
	Delhi Gas Turbine	282	159	160	3.70	154
	Pragati Gas Turbine	330	296	261	6.78	283
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	575	510	11.98	499
	Thermal (Total)	2232	1070	967	23.40	975
Total Delhi	2232	1070	967	23.40	975	
HP	Baspa HPS (IPP)	330	247	178	4.65	194
	Malana HPS (IPP)	86	67	36	1.03	43
	Other Hydro	589	500	483	11.56	482
	Total HP	1005	814	697	17.24	718
J & K	Baglihar HPS (IPP)	450	438	436	10.47	436
	Other Hydro	323	102	128	3.05	127
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	540	564	13.52	564
Total State Control Area Generation		34390	18366	18096	431.79	17991
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			3317	4233	100.47	4186
Total Regional Availability(Gross)		57242	40186	35947	874.07	36420

IV. Total Hydro Generation:

Regional Entities Hydro	10380	8362	4094	121.99	5083
State Control Area Hydro	5368	3165	3195	77.09	3212
Total Regional Hydro	15748	11527	7289	199.07	8295

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	350	400	400	200	6.50	0.12	6.38
Gwalior-Agra (D/C)	862	1186	1762	0	32.31	0.00	32.31
Zerda-Kankroli	-142	-88	0	252	0.00	2.87	-2.87
Zerda-Bhinmal	-126	-82	35	313	0.00	2.63	-2.63
Malanpur-Auraiya	-117	-47	0	133	0.00	1.17	-1.17
Badod-Kota/Morak	-32	-94	0	151	0.00	1.65	-1.65
Mundra-Mohindergarh(HVDC)	490	1059	1432	0	19.71	0.00	19.71
Sub Total WR	1285	2334			58.52	8.44	50.08
Pusauli Bypass	250	250	250	0	6.02	0.00	6.02
MZP- GKP (D/C)	569	500	798	0	15.06	0.00	15.06
Patna-Balia(D/C)	531	578	665	0	13.81	0.00	13.81
B'Sharif-Balia (D/C)	376	402	496	0	9.40	0.00	9.40
Pusauli-Balia	-19	-4	36	39	0.00	0.19	-0.19
Gaya-Fatehpur (765 Kv)	196	50	244	0	3.33	0.00	3.33
Pusauli-Sahupuri	166	159	175	0	3.83	0.00	3.83
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-37	-36	0	37	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	2032	1899			51.45	1.06	50.39
Total IR Exch	3317	4233			109.97	9.50	100.47

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
38.53	2.42	40.95	1.52	17.17	18.48	0.00	4.10	-4.10

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
65.05	48.39	113.44	50.39	50.08	100.47	-14.66	1.69	-12.97

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	0.30	1.40	96.60	3.10	95.50	49.90	3.10

<----- 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				
50.27	17.07	49.43	18.24	49.99	0.14	0.12	50.28	49.80

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	409	08:00	398	14:38	0.0	0.0	0.0	0.0
Gorakhpur	400	424	06:17	406	13:29	0.0	0.0	7.5	0.0
Barailly	400	420	08:02	398	11:21	0.0	0.0	0.0	0.0
Kanpur	400	419	08:02	401	12:17	0.0	0.0	0.0	0.0
Dadri	400	417	04:00	401	12:10	0.0	0.0	0.0	0.0
Ballabgarh	400	426	04:03	405	12:16	0.0	0.0	19.5	0.0
Bawana	400	422	04:01	402	12:16	0.0	0.0	2.2	0.0
Bassi	400	430	04:02	404	19:08	0.0	0.0	21.9	0.0
Hissar	400	412	04:00	390	12:16	0.0	0.0	0.0	0.0
Moga	400	412	03:57	394	12:14	0.0	0.0	0.0	0.0
Abdullapur	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Nalagarh	400	417	07:03	400	12:14	0.0	0.0	0.0	0.0
Kishenpur	400	421	02:59	400	19:06	0.0	0.0	1.1	0.0
Wagoora	400	424	23:53	384	19:05	0.0	2.0	7.6	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	757	23:52	728	19:09	0.0	23.7	0.0	0.0
Balia	765	765	08:04	729	11:25	0.0	13.2	0.0	0.0
Moga	765	784	04:03	749	14:33	0.0	0.0	0.0	0.0
Agra	765	811	04:02	768	12:16	0.0	0.0	7.0	0.0
Bhiwani	765	801	04:01	762	12:17	0.0	0.0	0.3	0.0
Unnao	765	761	07:41	754	01:18	0.0	0.0	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	511.18	1605.30	505.18	1312.37	492.09	585.76
Pong	426.72	384.05	422.98	1035.89	422.62	1020.81	174.43	275.52
Tehri	829.79	740.04	823.70	1080.00	818.65	982.26	158.70	138.00
Koteswar	612.50	598.50	608.20	4.96	NA	NA	138.00	158.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	148.26	150.02
Rihand	268.22	252.98	260.73	345.30	264.14	558.40	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	519.31	144.00	520.82	144.00	192.24	241.29

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 27.09.2013 :

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 : 27.09.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER