

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 16.09.2013

Date of Reporting : 17.09.2013

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
38767	2355	41122	50.18	31502	1209	32711	50.22	848.9	50.56

* 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	17.16	11.06		28.22	89.35	83.91	-5.44	112.13	0.00
Haryana	88.08	0.60		88.68	58.09	61.39	3.30	150.07	0.15
Rajasthan	94.54	0.84	10.77	106.15	74.86	64.68	-10.18	170.83	0.00
Delhi	30.38			30.38	69.81	66.40	-3.41	96.78	0.10
UP	118.82	4.39	1.00	124.21	115.10	113.18	-1.92	237.40	46.50
Uttarakhand		17.69		17.69	11.40	13.15	1.75	30.84	1.96
HP		18.05		18.05	1.13	-0.66	-1.79	17.39	0.15
J & K		13.69	0.00	13.69	15.72	15.54	-0.18	29.23	1.70
Chandigarh				0.00	5.24	4.22	-1.02	4.22	0.00
Total	348.98	66.33	11.77	427.08	440.70	421.81	-18.89	848.88	50.56

* 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	6281	0	-30	1635	3487	0	-711	1808	40.94	
Haryana	6688	30	191	328	4587	0	138	-111	1.54	
Rajasthan	7438	0	-453	1203	6741	0	-860	1509	27.76	
Delhi	4320	0	-408	62	3644	44	-181	-148	-0.73	
UP	9967	2000	-226	626	10494	1165	61	2092	30.78	
Uttarakhand	1355	225	-4	-32	1073	0	17	71	0.45	
HP	1028	0	26	-1032	471	0	-134	-936	-19.95	
J&K	1468	100	-99	-82	899	0	-59	-426	-5.20	
Chandigarh	222	0	-36	0	106	0	-66	-12	0.24	
Total	38767	2355	-1038	2709	31502	1209	-1795	3846	75.84	

* 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	1740	1863	1382	38.41	1600	38.21	0.20
	Rihand I STPS	1000	934	1105	710	19.85	827	19.82	0.03
	Rihand II STPS	1000	478	517	351	10.24	427	10.14	0.10
	Rihand III STPS	500	485	495	349	10.13	422	10.23	-0.10
	Dadri I STPS	840	440	465	309	8.52	355	8.85	-0.33
	Dadri II STPS	980	975	902	794	20.48	853	20.52	-0.04
	Unchahar I TPS	420	392	432	331	8.13	339	8.17	-0.05
	Unchahar II TPS	420	403	435	311	7.86	327	7.85	0.01
	Unchahar III TPS	210	199	211	153	3.90	163	3.93	-0.03
	ISTPP (Jhajjar)	1500	1480	988	620	15.03	626	15.22	-0.19
	Dadri GPS	830	795	563	194	8.31	346	8.69	-0.38
	Anta GPS	419	393	0	0	0.00	0	0.00	0.00
	Auraiya GPS	663	621	153	154	3.59	150	3.69	-0.10
	Sub Total (A)	10782	9335	8129	5658	154.44	6435	155.32	-0.88
	B. NPC	NAPS	440	291	329	337	7.20	300	6.98
RAPS- B		440	194	218	222	4.67	195	4.66	0.02
RAPS- C		440	410	461	464	9.81	409	9.84	-0.03
Sub Total (B)		1320	895	1008	1023	21.68	903	21.48	0.20
C. NHPC	Chamera I HPS	540	534	540	360	7.40	308	7.43	-0.03
	Chamera II HPS	300	300	302	72	4.42	184	4.83	-0.42
	Chamera III HPS	231	231	186	77	3.10	129	3.25	-0.15
	Bairasuil HPS	180	182	70	120	1.71	71	1.70	0.01
	Salal-HPS	690	556	507	523	13.20	550	12.60	0.60
	Tanakpur-HPS	94	94	94	94	2.26	94	2.22	0.04
	Uri-HPS	480	321	356	333	8.12	339	8.19	-0.06
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	408	398	9.30	387	9.44	-0.14
	Sewa-II HPS	120	119	95	0	0.87	36	1.06	-0.19
	Sub Total (C)	3305	2725	2558	1977	50.38	2099	50.73	-0.35
	D. NJPC	Nathpa Jhakri	1500	1605	1577	11117	28.90	1204	29.10
Sub Total (D)		1500	1605	1577	11117	28.90	1204	29.10	-0.19
E. THDC	Tehri HPS	1000	1060	1065	0	10.22	426	10.00	0.22
	Koteshwar HPS	400	400	396	90	3.46	144	3.45	0.01
	Sub Total (E)	1400	1460	1461	90	13.68	570	13.45	0.23
F. BBMB	Bhakra HPS	1497	880	1194	824	21.32	888	21.12	0.20
	Dehar HPS	990	575	700	580	14.27	595	13.79	0.48
	Pong HPS	396	287	372	246	7.03	293	6.90	0.13
	Sub Total (F)	2883	1742	2266	1650	42.62	1776	41.80	0.82
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	116	64	1.77	74	1.76	0.01
	KWHEP HPS(IPP)	1000	0	744	584	14.96	623	16.56	-1.60
	Malana Stg-II HPS	100	0	81	36	0.92	38	0.87	0.05
	Shree Cement TPS	300	0	125	123	2.93	122	3.05	-0.13
	Budhil HPS(IPP)	70	0	32	35	0.80	33	0.81	-0.01
	Sub Total (G)	1662	0	1098	842	21.38	891	23.06	-1.68
H. Total Regional Entities (A-G)	22852	17761	18097	22357	333.08	13879	334.94	-1.86	

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	415	340	8.56	356
	Guru Nanak Dev TPS(Bhatinda)	440	0	104	0.49	20
	Guru Hargobind Singh TPS(L.mbt)	920	429	325	8.12	338
	Goindwal(GVK)		0	0 0 0	0.00	0
	Thermal (Total)	2620	844	769	17.16	715
	Total Hydro	1148	709	29	11.06	461
	Total Punjab	3768	1553	798	28.22	1176
Haryana	Panipat TPS	1367	998	935	23.14	964
	DCRTPP (Yamuna nagar)	600	575	514	12.48	520
	Faridabad GPS (NTPC)	432	195	165	4.13	172
	RGTPP (khedar) (IPP)	1200	486	353	9.57	399
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1065	694	20.37	849
	Thermal (Total)	4944	3	2661	88.08	3670
	Total Hydro	62	16	17	0.60	25
	Total Haryana	5006	19	2678	88.68	3695
	Rajasthan	kota TPS	1240	882	1064	22.66
suratgarh TPS		1500	947	935	23.94	997
Chabra TPS		500	393	385	10.62	443
Dholpur GPS		330	78	0	1.29	54
Ramgarh GPS		111	41	42	1.32	55
RAPS A (NPC)		300	180	180	4.09	170
Barsingsar (NLC)		250	81	83	1.77	74
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	762	576	16.78	699
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	473	442	12.07	503
Thermal (Total)		6956	3837	3707	94.54	3939
Total Hydro		550	24	23	0.84	35
Wind power		2191	172	841	8.55	356
Biomass		91	33	33	0.78	33
Solar		201	0	0	1.43	60
Renewable/Others (Total)		2483	205	874	10.77	449
Total Rajasthan		9989	4066	4604	106.15	4423
UP		Anpara TPS	1630	1199	1186	28.90
	Obra TPS	1288	467	419	11.00	458
	Paricha TPS	1140	741	700	17.00	708
	Panki TPS	210	77	72	1.80	75
	Harduaganj TPS	665	404	390	9.40	392
	Tanda TPS (NTPC)	440	296	300	7.32	305
	Roza TPS (IPP)	1200	806	793	17.20	717
	Anpara-C (IPP)	1200	821	779	19.49	812
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	323	230	6.72	280
	Thermal (Total)	8223	5134	4869	118.82	4951
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	223	174	4.39	183
	Cogeneration	981	40	40	1.00	42
	Total UP	10131	5397	5083	124.21	5176
	Uttarakhand	Total Hydro	1303	809	657	17.69
Total Uttarakhand		1303	809	657	17.69	737
Delhi	Raighat TPS	135	86	92	1.69	70
	Delhi Gas Turbine	282	159	158	3.69	154
	Pragati Gas Turbine	330	262	260	6.54	273
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	205	213	5.73	239
	Badarpur TPS (NTPC)	705	605	565	12.73	530
	Thermal (Total)	2232	1317	1288	30.38	1266
	Total Delhi	2232	1317	1288	30.38	1266
HP	Baspa HPS (IPP)	330	233	244	5.00	208
	Malana HPS (IPP)	86	68	30	0.95	39
	Other Hydro	589	530	455	12.11	505
	Total HP	1005	831	729	18.05	752
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	14562	16401	427.08	17795
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4608	3800	103.22	4301
Total Regional Availability(Gross)		57242	37267	42558	863.38	35974

IV. Total Hydro Generation:

Regional Entities Hydro	10380	8803	15518	153.24	6385
State Control Area Hydro	5368	3182	2193	66.33	2764
Total Regional Hydro	15748	11985	17711	219.56	9148

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	-300	400	450	3.33	3.28	0.06
Gwalior-Agra (D/C)	1176	1494	1726	0	32.64	0.00	32.64
Zerda-Kankroli	50	-139	50	139	0.00	1.21	-1.21
Zerda-Bhinmal	92	-99	104	114	0.34	0.00	0.34
Malanpur-Auraiya	-87	-22	0	147	0.00	1.10	-1.10
Badod-Kota/Morak	64	-7	114	30	0.73	0.00	0.73
Mundra-Mohindergarh(HVDC)	967	661	970	0	19.35	0.00	19.35
Sub Total WR	2662	1588			56.39	5.59	50.81
Pusaui Bypass	50	50	50	0	1.31	0.00	1.31
MZP- GKP (D/C)	601	921	1007	0	18.61	0.00	18.61
Patna-Balia(D/C)	594	586	692	0	14.56	0.00	14.56
B'Sharif-Balia (D/C)	405	374	642	0	10.02	0.00	10.02
Pusaui-Balia	17	13	94	90	0.63	0.00	0.63
Gaya-Fatehpur (765 Kv)	172	156	296	0	4.95	0.00	4.95
Pusaui-Sahupuri	144	148	168	0	3.20	0.00	3.20
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	1946	2212			53.28	0.87	52.41
Total IR Exch	4608	3800			109.67	6.46	103.22

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
31.84	2.84	34.68	4.31	27.95	12.27	11.47	4.16	-4.16

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
55.42	64.28	119.70	52.41	50.81	103.22	-3.01	-13.47	-16.49

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	87.80	1.10	87.80	66.50	12.20

<----- 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				
50.36	8.06	49.69	16.43	50.06	0.16	0.11	50.37	49.91

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	01:06	405	21:03	0.0	0.0	0.0	0.0
Gorakhpur	400	422	18:18	407	00:21	0.0	0.0	0.5	0.0
Barilly	400	422	05:05	399	23:20	9.1	9.1	0.2	0.0
Kanpur	400	424	03:15	404	11:19	0.0	0.0	14.7	0.0
Dadri	400	420	07:26	400	11:19	0.0	0.0	0.0	0.0
Ballabgarh	400	429	03:52	406	11:17	0.0	0.0	31.8	0.0
Bawana	400	425	03:50	405	11:19	0.0	0.0	37.1	0.0
Bassi	400	430	04:05	398	09:25	0.0	0.0	13.0	0.0
Hissar	400	416	03:49	394	13:51	0.0	0.0	0.0	0.0
Moga	400	419	03:49	397	19:02	0.0	0.0	0.0	0.0
Abdullapur	400	423	03:49	403	19:38	0.0	0.0	13.0	0.0
Nalagarh	400	423	03:49	398	19:09	0.0	0.0	7.4	0.0
Kishenpur	400	420	03:51	401	19:10	0.0	0.0	0.0	0.0
Wagoora	400	419	03:49	390	19:12	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	786	04:04	750	11:10	0.0	0.0	0.0	0.0
Balia	765	763	13:05	725	11:46	1.7	26.3	0.0	0.0
Moga	765	793	03:49	751	19:10	0.0	0.0	0.0	0.0
Agra	765	813	04:05	774	11:47	0.0	0.0	20.8	0.0
Bhiwani	765	807	04:05	768	19:23	0.0	0.0	11.7	0.0
Unnao	765	776	05:06	744	23:20	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	511.62	1635.65	502.94	1219.07	679.41	618.81
Pong	426.72	384.05	423.78	1066.19	420.00	889.22	325.73	388.22
Tehri	829.79	740.04	822.05	1045.00	818.65	982.26	220.85	224.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	168.15	200.46
Rihand	268.22	252.98	NA	NA	263.50	512.00	NA	NA
RPS	352.80	343.81	352.74	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.70	NA	NA	NA	NA	NA
RSD	527.91	487.91	520.90	144.00	516.82	144.00	165.60	185.62

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 16.09.2013 :

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 : 16.09.2013

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER