

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 28.11.2013
Date of Reporting : 29.11.2013

I. Regional Availability/Demand:

Demand Met	Evening Peak (19:00 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
33819	2701	36520	50.06	27404	986	28390	50.16	730.1	57.60

* 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	40.99	8.93		49.92	40.40	42.79	2.39	92.71	0.00
Haryana	59.54	0.61		60.14	38.38	41.44	3.06	101.58	0.65
Rajasthan	99.23	5.06	4.20	108.49	73.25	69.82	-3.44	178.31	0.00
Delhi	17.30			17.30	40.45	39.70	-0.75	56.99	0.03
UP	119.74	3.89	1.20	124.83	79.22	81.06	1.84	205.89	54.01
Uttarakhand		8.49		8.49	20.30	21.33	1.04	29.82	1.30
HP		6.07		6.07	17.09	17.30	0.21	23.37	0.02
J & K		6.09	0.00	6.09	28.97	31.97	3.00	38.06	1.60
Chandigarh				0.00	3.09	3.35	0.25	3.35	0.00
Total	336.80	39.13	5.40	381.33	341.15	348.74	7.59	730.07	57.60

* 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 (19:00 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	4417	0	-20	-401	3124	0	196	-571	-8.28
Haryana	5078	307	279	-982	3633	0	65	-980	-23.11
Rajasthan	7837	0	-502	833	6756	0	21	976	31.24
Delhi	3070	4	-56	-654	1454	6	83	-1133	-19.15
UP	8826	2225	-286	-35	9070	980	145	647	-0.48
Uttarakhand	1482	75	-185	541	1030	0	53	412	10.06
HP	1183	0	49	41	719	0	-6	237	5.54
J&K	1747	90	73	525	1529	0	186	376	8.62
Chandigarh	179	0	-4	0	88	0	5	0	-0.03
Total	33819	2701	-652	-131	27404	986	747	-36	4.42

* 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	1945	2091	2099	46.82	1951	46.63	0.19
	Rihand I STPS	1000	817	979	873	19.52	813	19.31	0.21
	Rihand II STPS	1000	828	1043	867	19.80	825	19.57	0.23
	Rihand III STPS	1000	414	514	429	9.98	416	9.89	0.10
	Dadri I STPS	840	814	664	482	12.90	537	13.17	-0.27
	Dadri II STPS	980	938	499	718	19.35	806	19.97	-0.62
	Unchahar I TPS	420	405	415	398	9.27	386	9.38	-0.11
	Unchahar II TPS	420	404	377	370	8.96	374	8.94	0.02
	Unchahar III TPS	210	201	181	181	4.39	183	4.41	-0.01
	ISTPP (Jhajjar)	1500	1480	1028	630	17.89	745	18.38	-0.49
	Dadri GPS	830	823	354	332	8.01	334	8.11	-0.10
	Anta GPS	419	415	248	253	6.16	257	6.30	-0.15
	Auraiya GPS	663	658	157	162	3.71	154	3.88	-0.18
	Sub Total (A)	11282	10140	8550	7794	186.75	7781	187.94	-1.19
B. NPC	NAPS	440	317	357	355	7.64	318	7.61	0.03
	RAPS- B	440	417	461	463	10.06	419	10.01	0.05
	RAPS- C	440	430	473	476	10.19	425	10.32	-0.13
	Sub Total (B)	1320	1164	1291	1294	27.89	1162	27.94	-0.05
C. NHPC	Chamera I HPS	540	541	540	0	2.02	84	2.00	0.02
	Chamera II HPS	300	300	177	0	1.60	67	1.71	-0.11
	Chamera III HPS	231	231	55	0	0.78	32	0.78	0.00
	Bairasuil HPS	180	182	60	0	0.57	24	0.56	0.01
	Salal-HPS	690	106	202	32	2.85	119	2.55	0.30
	Tanakpur-HPS	94	35	45	39	0.87	36	0.84	0.02
	Uri-HPS	480	101	236	44	2.75	115	2.85	-0.10
	Uri-II HPS	120	69	98	45	1.68	70	1.65	0.02
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	387	109	0	3.13	130	3.11	0.01
	Sewa-II HPS	120	119	121	0	0.32	14	0.34	-0.02
	Sub Total (C)	3425	2071	1643	160	16.56	690	16.39	0.17
	D. NJPC	Nathpa Jhakri	1500	1605	1594	0	9.79	408	9.59
Sub Total (D)		1500	1605	1594	0	9.79	408	9.59	0.20
E. THDC	Tehri HPS	1000	1060	926	0	6.54	273	6.40	0.14
	Koteshwar HPS	400	92	101	92	2.23	93	2.20	0.02
	Sub Total (E)	1400	1152	1027	92	8.77	365	8.60	0.17
F. BBMB	Bhakra HPS	1497	579	1053	320	14.17	590	13.90	0.27
	Dehar HPS	990	130	330	0	3.82	159	3.12	0.71
	Pong HPS	396	220	372	126	5.55	231	5.29	0.26
	Sub Total (F)	2883	929	1755	446	23.54	981	22.31	1.23
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.62	26	0.60	0.02
	KWHEP HPS(IPP)	1000	0	210	0	5.19	216	5.16	0.03
	Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00
	Shree Cement TPS	300	0	123	100	2.89	120	2.96	-0.07
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	333	100	8.70	363	8.73	-0.03
H. Total Regional Entities (A-G)	23472	17061	16193	9886	282.00	11750	281.49	0.51	

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	630	600	13.84	577
	Guru Nanak Dev TPS(Bhatinda)	440	345	280	6.89	287
	Guru Hargobind Singh TPS(L.mbt)	920	961	798	20.27	845
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	1936	1678	40.99	1708
	Total Hydro	1148	282	380	8.93	372
Total Punjab	3768	2218	2058	49.92	2080	
Haryana	Panipat TPS	1367	824	809	19.53	814
	DCRTPP (Yamuna nagar)	600	240	231	5.60	233
	Faridabad GPS (NTPC)	432	204	206	4.86	203
	RGTPP (khedar) (IPP)	1200	560	533	13.40	559
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	712	538	16.15	673
	Thermal (Total)	4944	2540	2317	59.54	2481
	Total Hydro	62	24	28	0.61	25
	Total Haryana	5006	2564	2345	60.14	2506
	Rajasthan	kota TPS	1240	1160	899	25.71
suratgarh TPS		1500	1096	1035	26.14	1089
Chabra TPS		500	436	382	10.25	427
Dholpur GPS		330	107	108	2.67	111
Ramgarh GPS		111	59	61	1.58	66
RAPS A (NPC)		300	175	175	3.99	166
Barsingsar (NLC)		250	213	218	5.13	214
Giral LTPS		250	0	0	0.00	0
Rajwest LTPS (IPP)		1080	490	398	9.87	411
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	567	600	13.89	579
Thermal (Total)		6956	4303	3876	99.23	4135
Total Hydro		550	174	176	5.06	211
Wind power		2191	157	63	3.13	130
Biomass		91	17	17	0.40	17
Solar		201	7	0	0.67	28
Renewable/Others (Total)		2483	174	80	4.20	175
Total Rajasthan		9989	4651	4132	108.49	4520
UP		Anpara TPS	1630	1406	1396	30.20
	Obra TPS	1288	340	337	7.30	304
	Paricha TPS	1140	743	682	15.60	650
	Panki TPS	210	80	80	1.70	71
	Harduaganj TPS	665	491	492	10.00	417
	Tanda TPS (NTPC)	440	400	397	9.74	406
	Roza TPS (IPP)	1200	1080	1080	26.05	1085
	Anpara-C (IPP)	1200	455	414	10.70	446
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	322	403	8.45	352
	Thermal (Total)	8223	5317	5281	119.74	4989
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	144	134	3.89	162
	Cogeneration	981	50	50	1.20	50
	Total UP	10131	5511	5465	124.83	5201
	Uttarakhand	Total Hydro	1303	510	215	8.49
Total Uttarakhand		1303	510	215	8.49	354
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	80	80	1.33	55
	Pragati Gas Turbine	330	313	263	7.02	293
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	570	335	8.95	373
	Thermal (Total)	2232	963	678	17.30	721
Total Delhi	2232	963	678	17.30	721	
HP	Baspa HPS (IPP)	330	30	39	1.56	65
	Malana HPS (IPP)	86	11	11	0.27	11
	Other Hydro	589	213	131	4.24	177
	Total HP	1005	254	181	6.07	253
J & K	Baglihar HPS (IPP)	450	152	146	3.54	147
	Other Hydro	323	91	115	2.56	106
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	243	261	6.09	254
Total State Control Area Generation		34390	16914	15335	381.33	15889
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2636	3683	85.24	3551
Total Regional Availability(Gross)		57862	35743	28904	748.57	31190

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6229	698	64.47	2686
State Control Area Hydro	5368	1631	1375	39.13	1630
Total Regional Hydro	15868	7860	2073	103.60	4317

V(A). Inter Regional Exchange [Import (+ve)/Export (-ve)] [Linkwise]

Element	Peak(19:00 Hrs)	Off Peak(03:00 Hrs)	Maximum Interchange (MW)		Energy (MU)		Net Energy MU
	MW	MW	Import	Export	Import	Export	
Vindhychal B/B	100	-400	100	500	0.38	5.38	-5.00
Gwalior-Agra (D/C)	686	1290	1436	0	23.46	0.00	23.46
Zerda-Kankroli	-178	-92	21	206	0.00	2.90	-2.90
Zerda-Bhinmal	-85	29	186	141	0.00	0.19	-0.19
Malanpur-Auraiya	-128	-69	0	132	0.00	2.38	-2.38
Badod-Kota/Morak	-87	-89	0	177	0.00	2.81	-2.81
Mundra-Mohindergarh(HVDC)	1000	1101	1303	0	26.87	0.00	26.87
Sub Total WR	1308	1770			50.71	13.65	37.06
Pusauli Bypass	-200	-200	0	200	0.00	4.83	-4.83
MZP- GKP (D/C)	367	611	853	0	15.16	0.00	15.16
Patna-Balia(D/C)	547	753	1065	0	19.13	0.00	19.13
B'Sharif-Balia (D/C)	300	358	878	0	13.02	0.00	13.02
Pusauli-Balia	39	72	196	0	2.26	0.00	2.26
Gaya-Fatehpur (765 Kv)	171	245	370	223	1.65	0.00	1.65
Pusauli-Sahupuri	136	104	159	0	2.62	0.00	2.62
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	0	37	0.00	0.86	-0.86
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	1328	1913			53.86	5.69	48.17
Total IR Exch	2636	3683			104.57	19.34	85.24

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
36.98	0.86	37.85	6.35	-28.86	18.12	3.09	2.95	-2.95

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
65.26	10.88	76.14	48.17	37.06	85.24	-17.09	26.18	9.09

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	0.60	95.10	3.10	94.50	53.50	4.90

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX	MIN
Freq	Time	Freq	Time	Hz			(Hz)	(Hz)
50.42	6.04	49.60	19.33	50.01	0.13	0.11	50.33	49.93

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	414	23:55	403	07:55	0.0	0.0	0.0	0.0
Gorakhpur	400	431	21:35	412	07:50	0.0	0.0	46.7	1.6
Barailly	400	424	21:42	398	07:13	0.0	0.0	2.5	0.0
Kanpur	400	425	21:41	401	07:12	0.0	0.0	7.8	0.0
Dadri	400	424	04:03	404	10:45	0.0	0.0	11.9	0.0
Ballabgarh	400	432	04:02	409	09:37	0.0	0.0	44.0	1.2
Bawana	400	425	21:37	407	09:19	0.0	0.0	12.2	0.0
Bassi	400	423	04:03	393	06:12	0.0	0.0	1.0	0.0
Hissar	400	416	04:04	394	09:06	0.0	0.0	0.0	0.0
Moga	400	421	04:02	397	09:27	0.0	0.0	0.6	0.0
Abdullapur	400	425	21:45	405	09:08	0.0	0.0	5.9	0.0
Nalagarh	400	425	04:02	404	09:09	0.0	0.0	19.7	0.0
Kishenpur	400	415	03:21	393	10:09	0.0	0.0	0.0	0.0
Wagoora	400	409	13:03	379	07:46	0.5	47.1	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	781	23:58	744	07:00	0.0	0.0	0.0	0.0
Balia	765	769	21:44	731	12:18	0.0	28.0	0.0	0.0
Moga	765	790	04:07	746	09:07	0.0	0.0	0.0	0.0
Agra	765	816	21:41	755	07:12	0.0	0.0	20.9	0.0
Bhiwani	765	798	21:40	767	14:33	0.0	0.0	0.0	0.0
Unnao	765	762	20:07	729	07:14	0.0	9.1	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	508.34	1470.42	500.82	1127.29	204.90	386.78
Pong	426.72	384.05	417.36	768.49	415.97	718.14	59.49	371.97
Tehri	829.79	740.04	820.65	1012.00	818.65	982.26	71.55	145.00
Koteshwar	612.50	598.50	609.00	4.50	NA	NA	145.00	152.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	54.60	61.64
Rihand	268.22	252.98	261.64	397.40	262.80	466.80	NA	NA
RPS	352.80	343.81	350.29	NA	NA	NA	253.12	NA
Jawahar Sagar	298.70	295.78	297.79	NA	NA	NA	241.12	NA
RSD	527.91	487.91	515.12	144.00	520.54	144.00	61.28	165.31

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 28.11.2013 :

1. Normal weather in Northern Region.

XIII. Synchronisation of new generating units :
0.00

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 Mar, 2014 .