

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 21.12.2013
Date of Reporting : 22.12.2013

I. Regional Availability/Demand:

Evening Peak (19:00 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
35165	2005	37170	50.08	27519	770	28289	50.14	746.0	51.80

* 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	43.83	9.86		53.69	37.66	39.18	1.53	92.87	2.66
Haryana	69.23	0.42		69.65	35.34	34.51	-0.83	104.17	0.06
Rajasthan	99.75	5.13	5.01	109.88	79.59	75.29	-4.30	185.16	0.35
Delhi	20.91			20.91	36.76	37.38	0.62	58.28	0.00
UP	116.42	3.99	14.40	134.80	74.72	71.90	-2.82	206.70	44.51
Uttarakhand		10.40		10.40	19.54	20.78	1.24	31.18	2.17
HP		4.62		4.62	19.64	20.42	0.78	25.04	0.35
J & K		6.26	0.00	6.26	29.96	32.75	2.79	39.00	1.70
Chandigarh				0.00	3.17	3.55	0.38	3.55	0.00
Total	350.13	40.67	19.41	410.21	336.37	335.75	-0.62	745.96	51.80

* 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	4076	0	1	-434	3066	0	247	-342	-6.30	
Haryana	5317	0	-316	-935	3862	0	117	-1176	-26.64	
Rajasthan	8538	0	-234	927	6846	0	-147	1534	34.87	
Delhi	3079	0	-44	-715	1422	0	-107	-1470	-22.65	
UP	9356	1830	-501	215	8752	770	113	-125	-4.13	
Uttarakhand	1590	75	15	416	1064	0	-42	360	8.70	
HP	1242	0	45	259	780	0	11	379	7.99	
J&K	1782	100	-33	631	1646	0	85	540	9.99	
Chandigarh	186	0	-11	0	82	0	-2	-15	-0.12	
Total	35165	2005	-1078	365	27519	770	274	-316	1.72	

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

III. Regional Entities :

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	1858	1855	1792	43.25	1802	43.01	0.23
Rihand I STPS	1000	860	999	841	20.36	848	19.76	0.60
Rihand II STPS	1000	930	1044	873	21.99	916	21.39	0.60
Rihand III STPS	1000	460	520	487	11.19	466	11.03	0.15
Dadri I STPS	840	815	856	489	13.53	564	13.49	0.04
Dadri II STPS	980	480	507	368	10.85	452	11.14	-0.29
Unchahar I TPS	420	407	439	370	9.22	384	9.15	0.08
Unchahar II TPS	420	404	436	308	8.65	360	8.50	0.15
Unchahar III TPS	210	201	222	163	4.36	182	4.34	0.03
ISTPP (Jhajjar)	1500	1480	627	618	15.17	632	15.24	-0.06
Dadri GPS	830	835	297	339	7.74	322	7.81	-0.07
Anta GPS	419	411	234	223	5.53	230	5.56	-0.04
Auraiya GPS	663	665	160	164	3.84	160	3.71	0.13
Sub Total (A)	11282	9807	8196	7035	175.67	7319	174.12	1.54
B. NPC								
NAPS	440	321	361	361	7.73	322	7.70	0.02
RAPS- B	440	420	465	466	10.13	422	10.08	0.05
RAPS- C	440	430	473	476	10.24	427	10.32	-0.08
Sub Total (B)	1320	1171	1299	1303	28.09	1171	28.10	-0.01
C. NHPC								
Chamera I HPS	540	360	360	0	1.62	68	1.59	0.03
Chamera II HPS	300	300	163	0	1.07	45	0.94	0.13
Chamera III HPS	231	231	62	0	0.64	27	0.63	0.02
Bairasuil HPS	180	182	50	0	0.43	18	0.46	-0.02
Salal-HPS	690	116	203	150	2.84	118	2.79	0.05
Tanakpur-HPS	94	29	28	28	0.69	29	0.69	0.00
Uri-HPS	480	89	219	43	2.20	92	2.22	-0.02
Uri-II HPS	120	55	88	46	1.37	57	1.32	0.05
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	408	0	2.69	112	2.49	0.20
Sewa-II HPS	120	94	42	0	0.31	13	0.31	0.00
Sub Total (C)	3425	1843	1623	267	13.86	578	13.43	0.43
D. NJPC								
Nathpa Jhakri	1500	1350	1351	0	8.01	334	7.97	0.03
Sub Total (D)	1500	1350	1351	0	8.01	334	7.97	0.03
E. THDC								
Tehri HPS	1000	1060	1060	0	8.98	374	8.80	0.17
Koteshwar HPS	400	125	303	89	3.06	127	3.00	0.06
Sub Total (E)	1400	1185	1363	89	12.03	501	11.80	0.23
F. BBMB								
Bhakra HPS	1497	625	1037	371	15.81	659	14.99	0.82
Dehar HPS	990	120	330	0	3.08	128	2.87	0.21
Pong HPS	396	294	372	186	7.22	301	7.06	0.16
Sub Total (F)	2883	1038	1739	557	26.11	1088	24.92	1.19
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	0	0	0.51	21	0.46	0.05
KWHEP HPS(IPP)	1000	0	360	0	4.38	183	4.31	0.07
Malana Stg-II HPS	100	0	65	0	0.18	8	0.15	0.03
Shree Cement TPS	300	0	270	145	5.40	225	5.41	-0.02
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	695	145	10.47	436	10.34	0.13
H. Total Regional Entities (A-G)	23472	16394	16266	9396	274.24	11427	270.69	3.55

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	770	830	19.58	816
	Guru Nanak Dev TPS(Bhatinda)	440	250	250	6.06	253
	Guru Hargobind Singh TPS(L.mbt)	920	676	671	18.18	758
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	1696	1751	43.83	1826
	Total Hydro	1148	430	427	9.86	411
Total Punjab	3768	2126	2178	53.69	2237	
Haryana	Panipat TPS	1367	817	794	18.56	773
	DCRTPP (Yamuna nagar)	600	801	506	12.02	501
	Faridabad GPS (NTPC)	432	554	156	3.85	160
	RGTPP (khedar) (IPP)	1200	162	483	11.56	482
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	1226	744	23.25	969
	Thermal (Total)	4944	3560	2683	69.23	2885
	Total Hydro	62	18	13	0.42	18
	Total Haryana	5006	3578	2696	69.65	2902
	Rajasthan	kota TPS	1240	1153	1153	26.97
suratgarh TPS		1500	913	903	20.88	870
Chabra TPS		500	635	571	13.91	580
Dholpur GPS		330	110	110	2.74	114
Ramgarh GPS		111	92	85	1.83	76
RAPS A (NPC)		300	175	175	4.03	168
Barsingsar (NLC)		250	213	212	4.81	201
Giral LTPS		250	22	59	1.06	44
Rajwest LTPS (IPP)		1080	478	382	10.52	439
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	604	478	13.00	541
Thermal (Total)		6956	4395	4128	99.75	4156
Total Hydro		550	295	88	5.13	214
Wind power		2191	156	205	4.15	173
Biomass		91	20	20	0.49	20
Solar		201	0	0	0.37	15
Renewable/Others (Total)		2483	176	225	5.01	209
Total Rajasthan		9989	4866	4441	109.88	4578
UP		Anpara TPS	1630	1472	1418	32.20
	Obra TPS	1288	401	274	7.60	317
	Paricha TPS	1140	473	476	11.10	463
	Panki TPS	210	63	63	1.50	63
	Harduaganj TPS	665	448	459	10.90	454
	Tanda TPS (NTPC)	440	395	401	9.75	406
	Roza TPS (IPP)	1200	779	397	14.76	615
	Anpara-C (IPP)	1200	788	1067	20.03	834
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	402	283	8.58	358
	Thermal (Total)	8223	5221	4838	116.42	4851
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	182	174	3.99	166
	Cogeneration	981	600	600	14.40	600
	Total UP	10131	6003	5612	134.80	5617
	Uttarakhand	Total Hydro	1303	548	353	10.40
Total Uttarakhand		1303	548	353	10.40	433
Delhi	Raighat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	164	163	2.88	120
	Pragati Gas Turbine	330	318	267	7.32	305
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	23	0.06	2
	Badarpur TPS (NTPC)	705	500	430	10.65	444
	Thermal (Total)	2232	982	883	20.91	871
	Total Delhi	2232	982	883	20.91	871
HP	Baspa HPS (IPP)	330	30	0	0.91	38
	Malana HPS (IPP)	86	0	0	0.24	10
	Other Hydro	589	164	83	3.47	145
	Total HP	1005	194	83	4.62	193
J & K	Baglihar HPS (IPP)	450	294	118	3.72	155
	Other Hydro	323	102	120	2.54	106
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	396	238	6.26	261
Total State Control Area Generation		34390	18693	16484	410.21	17092
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			2840	3491	96.95	4040
Total Regional Availability(Gross)		57862	37799	29371	781.40	32558

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6501	913	65.09	2712
State Control Area Hydro	5368	2063	1376	40.67	1695
Total Regional Hydro	15868	8564	2289	105.76	4407

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	-100	0	300	0.00	2.91	-2.91
Gwalior-Agra (D/C)	710	1165	1633	0	29.43	0.00	29.43
Zerda-Kankroli	-155	-190	21	216	0.00	2.01	-2.01
Zerda-Bhinmal	-40	-66	201	116	0.87	0.00	0.87
Malanpur-Auraiya	-137	-102	0	137	0.00	2.10	-2.10
Badod-Kota/Morak	-95	-181	0	181	0.00	2.63	-2.63
Mundra-Mohindergarh(HVDC)	1356	1478	1478	0	37.96	0.00	37.96
Sub Total WR	1539	2004			68.26	9.65	58.61
Pusauli Bypass	100	-317	100	378	0.90	4.14	-3.24
MZP- GKP (D/C)	200	477	546	0	8.84	0.00	8.84
Patna-Balia(D/C)	573	594	870	0	15.82	0.00	15.82
B'Sharif-Balia (D/C)	251	254	448	0	6.96	0.00	6.96
Pusauli-Balia	-47	-2	51	100	0.00	0.34	-0.34
Gaya-Fatehpur (765 Kv)	13	88	239	0	2.56	0.00	2.56
Pusauli-Sahupuri	141	120	154	0	2.74	0.00	2.74
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-32	-30	0	37	0.00	0.84	-0.84
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	102	303	415	0	5.84	0.00	5.84
Sub Total ER	1301	1487			43.66	5.32	38.35
Total IR Exch	2840	3491			111.92	14.97	96.95

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ISGS/LT Schedule (MU)			Bilateral Schedule (MU)		Power Exchange Shdl (MU)		Wheeling (MU)	
ER	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
30.90	0.53	31.43	15.00	-15.94	-0.07	-3.66	4.15	-4.15

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
50.51	32.45	82.95	38.35	58.61	96.95	-12.16	26.16	14.00

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	3.90	97.90	9.00	94.00	31.90	2.10

<----- 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)
50.43	17.03	49.50	16.11	49.94	0.21	0.13	50.26	49.75

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	412	22:48	401	06:42	0.0	0.0	0.0	0.0
Gorakhpur	400	430	22:05	413	16:31	0.0	0.0	36.3	0.0
Barilly	400	425	20:53	405	06:51	0.0	0.0	16.5	0.0
Kanpur	400	423	20:52	402	15:54	0.0	0.0	8.1	0.0
Dadri	400	428	23:59	405	10:20	0.0	0.0	35.1	0.0
Ballabgarh	400	433	03:02	409	10:16	0.0	0.0	47.9	3.1
Bawana	400	428	03:05	407	10:16	0.0	0.0	38.3	0.0
Bassi	400	422	20:27	387	10:23	0.0	3.3	3.4	0.0
Hissar	400	416	23:10	392	10:19	0.0	0.0	0.0	0.0
Moga	400	426	23:12	396	10:04	0.0	0.0	7.3	0.0
Abdullapur	400	427	23:10	395	06:25	0.0	0.0	5.3	0.0
Nalagarh	400	428	22:58	400	12:36	0.0	0.0	19.9	0.0
Kishenpur	400	425	23:10	387	10:05	0.0	0.2	0.3	0.0
Wagoora	400	421	12:19	373	10:05	15.1	65.6	0.1	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	791	20:41	731	15:54	0.0	18.6	0.0	0.0
Balia	765	764	20:41	728	06:51	0.0	35.4	0.0	0.0
Moga	765	795	23:10	742	09:57	0.0	0.0	0.0	0.0
Agra	765	817	03:05	766	15:54	0.0	0.0	39.0	0.0
Bhiwani	765	799	03:06	758	09:56	0.0	0.0	0.0	0.0
Unnao	765	780	04:43	723	04:29	6.7	14.9	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	504.10	1272.20	497.00	983.40	135.84	429.34
Pong	426.72	384.05	413.64	622.40	412.28	577.87	67.68	455.67
Tehri	829.79	740.04	816.15	922.25	818.65	982.26	48.99	204.00
Koteshwar	612.50	598.50	610.30	4.95	NA	NA	204.00	181.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	44.62	43.74
Rihand	268.22	252.98	261.15	369.40	262.16	428.30	NA	NA
RPS	352.80	343.81	349.28	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	298.28	NA	NA	NA	NA	NA
RSD	527.91	487.91	512.54	144.00	518.15	144.00	54.85	137.22

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 21.12.2013 :

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 .