

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 22.12.2013

Date of Reporting : 23.12.2013

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
33511	980	34491	49.97	25594	787	26381	50.14	708.5	39.05

* 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	39.21	8.73		47.94	31.69	32.55	0.86	80.49	0.00
Haryana	63.96	0.41		64.36	31.52	27.74	-3.78	92.10	0.00
Rajasthan	97.19	4.50	6.03	107.72	77.78	71.82	-5.96	179.53	0.00
Delhi	21.55			21.55	39.15	36.27	-2.88	57.82	0.01
UP	120.13	3.95	14.40	138.48	71.02	70.62	-0.40	209.10	36.92
Uttarakhand		10.63		10.63	18.94	18.76	-0.18	29.39	0.38
HP		5.17		5.17	17.75	16.92	-0.83	22.09	0.04
J & K		6.29	0.00	6.29	30.77	28.59	-2.18	34.88	1.70
Chandigarh				0.00	3.08	3.11	0.03	3.11	0.00
Total	342.04	39.67	20.43	402.13	321.69	306.38	-15.31	708.51	39.05

* 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	4373	0	5	-481	2458	0	140	-333	-4.31	
Haryana	4929	0	81	-1212	3394	0	-177	-1310	-26.11	
Rajasthan	8102	0	-288	1514	6472	0	-324	1630	38.01	
Delhi	2877	0	-150	-604	1395	7	-47	-1551	-22.14	
UP	8670	805	-791	215	8896	780	439	-164	-4.54	
Uttarakhand	1477	75	-85	406	1057	0	-36	359	8.62	
HP	1188	0	10	280	695	0	3	379	7.43	
J&K	1722	100	-124	631	1162	0	-340	540	10.38	
Chandigarh	173	0	1	0	65	0	-20	-15	-0.16	
Total	33511	980	-1340	750	25594	787	-361	-466	7.19	

* 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	1433	1575	1405	33.44	1393	32.51	0.93
Rihand I STPS	1000	877	998	802	19.95	831	19.36	0.59
Rihand II STPS	1000	930	1048	826	21.42	892	20.56	0.85
Rihand III STPS	1000	460	525	383	10.55	440	10.42	0.14
Dadri I STPS	840	815	476	477	11.39	475	11.48	-0.09
Dadri II STPS	980	905	927	436	18.13	756	19.22	-1.08
Unchahar I TPS	420	407	335	350	8.57	357	8.56	0.01
Unchahar II TPS	420	404	369	315	8.09	337	8.02	0.07
Unchahar III TPS	210	201	188	153	4.05	169	4.04	0.00
ISTPP (Jhajjar)	1500	1480	627	618	14.13	589	14.21	-0.08
Dadri GPS	830	773	392	335	6.50	271	6.88	-0.38
Anta GPS	419	426	252	226	6.01	250	5.86	0.15
Auraiya GPS	663	667	166	154	3.75	156	3.67	0.08
Sub Total (A)	11282	9779	7878	6480	165.97	6916	164.79	1.19
B. NPC								
NAPS	440	321	362	356	7.72	322	7.70	0.02
RAPS- B	440	420	465	465	10.17	424	10.08	0.09
RAPS- C	440	430	476	474	10.22	426	10.32	-0.10
Sub Total (B)	1320	1171	1303	1295	28.11	1171	28.10	0.01
C. NHPC								
Chamera I HPS	540	360	270	0	1.60	67	1.57	0.03
Chamera II HPS	300	300	203	0	1.18	49	1.24	-0.06
Chamera III HPS	231	231	53	0	0.59	24	0.54	0.05
Bairasuil HPS	180	182	60	0	0.53	22	0.53	0.00
Salal-HPS	690	120	230	150	2.88	120	2.88	0.00
Tanakpur-HPS	94	28	32	28	0.66	27	0.68	-0.02
Uri-HPS	480	88	220	33	2.05	85	2.13	-0.08
Uri-II HPS	120	59	100	35	1.34	56	1.41	-0.07
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	387	270	0	2.42	101	2.58	-0.15
Sewa-II HPS	120	119	125	0	0.42	17	0.43	-0.01
Sub Total (C)	3425	1873	1563	246	13.66	569	13.97	-0.31
D. NJPC								
Nathpa Jhakri	1500	1605	1350	0	7.07	295	6.87	0.20
Sub Total (D)	1500	1605	1350	0	7.07	295	6.87	0.20
E. THDC								
Tehri HPS	1000	1060	707	0	8.74	364	8.70	0.04
Koteshwar HPS	400	125	301	88	3.05	127	3.00	0.05
Sub Total (E)	1400	1185	1008	88	11.80	492	11.70	0.10
F. BBMB								
Bhakra HPS	1497	600	1192	372	15.05	627	14.40	0.65
Dehar HPS	990	118	330	0	3.16	132	2.84	0.33
Pong HPS	396	277	372	186	6.86	286	6.65	0.21
Sub Total (F)	2883	995	1894	558	25.07	1045	23.89	1.18
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	0	0	0.44	18	0.42	0.02
KWHEP HPS(IPP)	1000	0	360	0	3.75	156	4.33	-0.57
Malana Stg-II HPS	100	0	55	0	0.16	7	0.15	0.01
Shree Cement TPS	300	0	278	146	5.40	225	5.43	-0.03
Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
Sub Total (G)	1662	0	693	146	9.75	406	10.33	-0.58
H. Total Regional Entities (A-G)	23472	16608	15689	8813	261.43	10893	259.65	1.78

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	770	17.28	720
	Guru Nanak Dev TPS(Bhatinda)	440	250	250	5.52	230
	Guru Hargobind Singh TPS(L.mbt)	920	768	671	16.41	684
	Goindwal(GVK)		0	0	0.00	0
	Thermal (Total)	2620	1788	1691	39.21	1634
	Total Hydro	1148	383	407	8.73	364
Total Punjab	3768	2171	2098	47.94	1998	
Haryana	Panipat TPS	1367	782	776	18.40	766
	DCRTPP (Yamuna nagar)	600	503	506	11.92	497
	Faridabad GPS (NTPC)	432	168	149	3.84	160
	RGTPP (khedar) (IPP)	1200	429	459	10.66	444
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	744	744	19.14	797
	Thermal (Total)	4944	2626	2634	63.96	2665
	Total Hydro	62	14	14	0.41	17
	Total Haryana	5006	2640	2648	64.36	2682
	Rajasthan	kota TPS	1240	1093	1000	25.60
suratgarh TPS		1500	755	827	19.36	807
Chabra TPS		500	380	577	11.85	494
Dholpur GPS		330	109	111	2.70	112
Ramgarh GPS		111	142	89	2.35	98
RAPS A (NPC)		300	175	175	4.06	169
Barsingsar (NLC)		250	206	185	4.87	203
Giral LTPS		250	22	59	1.48	62
Rajwest LTPS (IPP)		1080	524	479	12.26	511
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		660	583	475	12.67	528
Thermal (Total)		6956	3989	3977	97.19	4050
Total Hydro		550	280	89	4.50	187
Wind power		2191	157	232	5.07	211
Biomass		91	20	20	0.47	20
Solar		201	5	0	0.48	20
Renewable/Others (Total)		2483	177	252	6.03	251
Total Rajasthan		9989	4446	4318	107.72	4488
UP		Anpara TPS	1630	1618	1618	35.00
	Obra TPS	1288	506	347	9.90	413
	Paricha TPS	1140	672	324	10.60	442
	Panki TPS	210	75	70	1.50	63
	Harduaganj TPS	665	504	500	10.90	454
	Tanda TPS (NTPC)	440	347	400	9.56	398
	Roza TPS (IPP)	1200	675	810	17.18	716
	Anpara-C (IPP)	1200	699	747	18.05	752
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	284	406	7.44	310
	Thermal (Total)	8223	5380	5222	120.13	5005
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	167	169	3.95	164
	Cogeneration	981	600	600	14.40	600
	Total UP	10131	6147	5991	138.48	5770
	Uttarakhand	Total Hydro	1303	566	371	10.63
Total Uttarakhand		1303	566	371	10.63	443
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	163	162	3.87	161
	Pragati Gas Turbine	330	313	317	7.58	316
	Riithala GPS	95	0	0	0.00	0
	Bawana GPS	686	18	18	0.47	20
	Badarpur TPS (NTPC)	705	430	425	9.63	401
	Thermal (Total)	2232	924	922	21.55	898
	Total Delhi	2232	924	922	21.55	898
HP	Baspa HPS (IPP)	330	29	0	1.45	60
	Malana HPS (IPP)	86	0	0	0.20	8
	Other Hydro	589	162	79	3.52	147
	Total HP	1005	191	79	5.17	215
J & K	Baglihar HPS (IPP)	450	296	112	3.71	155
	Other Hydro	323	90	124	2.58	108
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	386	236	6.29	262
Total State Control Area Generation		34390	17471	16663	402.13	16756
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			4846	2095	82.48	3437
Total Regional Availability(Gross)		57862	38006	27571	746.04	31085

IV. Total Hydro Generation:

Regional Entities Hydro	10500	6230	892	61.95	2581
State Control Area Hydro	5368	1987	1365	39.67	1653
Total Regional Hydro	15868	8217	2257	101.62	4234

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	-50	-300	100	400	0.48	4.02	-3.54
Gwalior-Agra (D/C)	1650	834	1650	0	26.51	0.00	26.51
Zerda-Kankroli	22	-278	22	349	0.00	2.91	-2.91
Zerda-Bhinmal	130	-187	178	289	0.87	0.51	0.36
Malanpur-Auraiya	-97	-108	0	133	0.00	2.18	-2.18
Badod-Kota/Morak	-63	-212	0	263	0.00	2.63	-2.63
Mundra-Mohindergarh(HVDC)	1200	801	1206	0	25.52	0.00	25.52
Sub Total WR	2792	550			53.38	12.25	41.13
Pusauli Bypass	100	100	100	378	2.44	0.00	2.44
MZP- GKP (D/C)	463	321	578	0	8.35	0.00	8.35
Patna-Balia(D/C)	718	579	928	0	15.14	0.00	15.14
B'Sharif-Balia (D/C)	332	202	447	0	5.62	0.00	5.62
Pusauli-Balia	-58	-66	51	106	0.00	1.69	-1.69
Gaya-Fatehpur (765 Kv)	113	98	305	0	2.78	0.00	2.78
Pusauli-Sahupuri	157	125	167	0	3.16	0.00	3.16
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)	261	216	511	0	6.39	0.00	6.39
Sub Total ER	2054	1545			43.88	2.53	41.35
Total IR Exch	4846	2095			97.25	14.77	82.48

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
28.43	0.43	28.86	15.03	-16.76	3.56	-1.11	4.17	-4.17

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
51.61	26.97	78.58	41.35	41.13	82.48	-10.26	14.16	3.90

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	3.30	94.60	8.10	91.30	45.70	5.40

<----- 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				
50.42	16.04	49.53	12.20	49.98	0.21	0.14	50.28	49.71

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	413	03:08	404	10:09	0.0	0.0	0.0	0.0
Gorakhpur	400	430	16:56	410	13:01	1.0	1.0	55.0	0.0
Barailly	400	428	04:03	407	10:15	0.0	0.0	42.6	0.0
Kanpur	400	425	03:11	402	10:45	0.0	0.0	22.2	0.0
Dadri	400	432	03:01	408	10:23	0.0	0.0	38.6	2.5
Ballabgarh	400	436	03:03	414	09:34	0.0	0.0	59.0	18.4
Bawana	400	433	04:03	409	10:25	0.0	0.0	46.8	4.2
Bassi	400	428	04:02	389	10:24	0.0	0.3	10.1	0.0
Hissar	400	421	04:03	397	10:13	0.0	0.0	0.3	0.0
Moga	400	429	04:04	405	12:04	0.0	0.0	22.1	0.0
Abdullapur	400	426	02:59	407	06:39	0.0	0.0	24.5	0.0
Nalagarh	400	428	04:02	410	10:14	0.0	0.0	37.6	0.0
Kishenpur	400	427	04:04	393	16:22	0.0	0.0	8.7	0.0
Wagoora	400	416	04:04	379	12:44	0.2	13.3	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	791	04:03	745	10:47	0.0	0.0	0.0	0.0
Balia	765	777	16:04	725	12:19	0.9	11.3	0.0	0.0
Moga	765	800	04:03	757	12:20	0.0	0.0	0.0	0.0
Agra	765	822	04:03	754	07:17	0.0	0.0	38.8	0.1
Bhiwani	765	807	04:03	769	09:40	0.0	0.0	8.5	0.0
Unnao	765	770	04:04	736	11:13	0.0	10.7	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 22.12.2013 :

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 .