

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरसिस्टम की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 24.01.2014

Date of Reporting : 25.01.2014

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
34547	2140	36687	50.04	25949	95	26044	50.09	744.0	41.80

* 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	46.46	7.72		54.18	30.18	31.24	1.06	85.42	0.00
Haryana	49.78	0.53		50.31	47.01	47.00	-0.01	97.31	0.14
Rajasthan	103.43	0.54	8.03	112.00	63.06	63.68	0.62	175.68	0.00
Delhi	22.45			22.45	45.31	45.19	-0.12	67.64	0.04
UP	109.39	2.65	15.60	127.64	90.40	88.82	-1.57	216.46	39.92
Uttarakhand		8.13		8.13	24.19	26.59	2.41	34.73	0.00
HP		4.85		4.85	19.25	19.45	0.19	24.30	0.00
J & K		5.66	0.00	5.66	32.53	32.96	0.43	38.63	1.70
Chandigarh				0.00	2.97	3.84	0.87	3.84	0.00
Total	331.51	30.08	23.63	385.22	354.91	358.78	3.87	744.00	41.80

* 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	4394	0	8	-724	2740	0	206	25	-6.66	
Haryana	5369	0	-65	-337	3026	0	102	-353	-10.52	
Rajasthan	7386	0	-166	627	6428	0	181	-412	-14.77	
Delhi	3405	0	-51	-611	1490	0	-37	-1281	-21.52	
UP	9056	2000	-158	1143	8818	95	-262	588	14.53	
Uttarakhand	1753	40	92	615	1152	0	15	583	14.24	
HP	1173	0	-14	385	724	0	8	412	9.57	
J&K	1811	100	38	656	1480	0	21	635	13.40	
Chandigarh	200	0	12	0	92	0	20	-10	-0.05	
Total	34547	2140	-306	1753	25949	95	254	187	27.77	

* 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	
										UI (OG:(+ve), UG: (-ve))
A. NTPC	Singrauli STPS	2000	1940	2089	2085	46.73	1947	46.56	0.17	
	Rihand I STPS	1000	945	1019	858	21.64	901	21.64	-0.01	
	Rihand II STPS	1000	883	1045	502	20.04	835	20.55	-0.51	
	Rihand III STPS	1000	-2	0	0	0.00	0	-0.03	0.03	
	Dadri I STPS	840	815	875	633	17.54	731	17.98	-0.44	
	Dadri II STPS	980	985	1010	752	21.19	883	21.89	-0.69	
	Unchahar I TPS	420	408	357	368	8.95	373	9.03	-0.07	
	Unchahar II TPS	420	405	376	307	8.37	349	8.51	-0.13	
	Unchahar III TPS	210	202	190	153	4.26	177	4.28	-0.02	
	ISTPP (Jhajjar)	1500	1500	606	627	15.97	665	16.30	-0.33	
	Dadri GPS	830	851	180	149	3.90	163	4.07	-0.17	
	Anta GPS	419	431	274	208	5.39	225	5.58	-0.19	
	Auraiya GPS	663	678	154	164	3.64	152	3.80	-0.17	
	Sub Total (A)	11282	10041	8174.9	6805.84	177.63	7401	180.15	-2.51	
	B. NPC	NAPS	440	302	332	339	7.14	298	7.25	-0.11
		RAPS- B	440	421	464	463	10.09	420	10.10	-0.01
RAPS- C		440	430	474	474	10.21	425	10.32	-0.12	
Sub Total (B)		1320	1153	1270	1276	27.44	1143	27.67	-0.24	
C. NHPC	Chamera I HPS	540	541	360	0	1.66	69	1.62	0.04	
	Chamera II HPS	300	200	201	0	1.28	54	1.34	-0.05	
	Chamera III HPS	231	0	0	0	0.00	0	0.00	0.00	
	Bairasuil HPS	180	122	122	0	0.71	30	0.68	0.03	
	Salal-HPS	690	105	200	112	2.80	117	2.51	0.29	
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00	
	Uri-HPS	480	118	244	21	2.93	122	3.05	-0.12	
	Uri-II HPS	180	68	121	40	1.83	76	1.63	0.21	
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
	Dulhasti-HPS	390	258	269	0	2.53	105	2.57	-0.04	
	Sewa-II HPS	120	119	123	0	1.03	43	1.04	-0.01	
	Sub Total (C)	3485	1531	1640	173	14.78	616	14.44	0.34	
	D. NJPC	Nathpa Jhakri	1500	1229	1090	0	7.22	301	7.30	-0.08
Sub Total (D)		1500	1229	1090	0	7.22	301	7.30	-0.08	
E. THDC	Tehri HPS	1000	980	984	0	6.97	290	6.90	0.07	
	Koteshwar HPS	400	106	200	88	2.58	108	2.50	0.08	
	Sub Total (E)	1400	1086	1184	88	9.55	398	9.40	0.15	
F. BBMB	Bhakra HPS	1497	482	1003	386	11.81	492	11.57	0.24	
	Dehar HPS	990	111	330	0	2.82	118	2.66	0.16	
	Pong HPS	396	195	312	60	4.93	205	4.68	0.25	
	Sub Total (F)	2883	788	1645	446	19.56	815	18.91	0.65	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.33	14	0.32	0.01	
	KWHEP HPS(IPP)	1000	0	360	0	3.62	151	3.60	0.02	
	Malana Stg-II HPS	100	0	0	0	0.08	3	0.11	-0.03	
	Shree Cement TPS	300	0	271	162	5.65	236	5.70	-0.05	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	631	162	9.69	404	9.74	-0.05	
H. Total Regional Entities (A-G)	23532	15828	15636	8951	265.86	11078	267.60	-1.74		

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	1020	850	19.60	817	
	Guru Nanak Dev TPS(Bhatinda)	440	100	80	1.79	75	
	Guru Hargobind Singh TPS(L.mbt)	920	973	716	18.85	785	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	120	0	6.22	259	
	Talwandi Saboo	660	0		0.00	0	
	Thermal (Total)	3980	2213	1646	46.46	1936	
	Total Hydro	1148	392	303	7.72	322	
	Total Punjab	5128	2605	1949	54.18	2258	
Haryana	Panipat TPS	1367	441	211	6.49	270	
	DCRTPP (Yamuna nagar)	600	557	254	10.17	424	
	Faridabad GPS (NTPC)	432	0	165	0.85	35	
	RGTPP (khedar) (IPP)	1200	589	483	12.17	507	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	1114	744	20.11	838	
	Thermal (Total)	4944	2701	1857	49.78	2074	
	Total Hydro	62	23	21	0.53	22	
	Total Haryana	5006	2724	1878	50.31	2096	
Rajasthan	kota TPS	1240	1146	1138	27.07	1128	
	suratgarh TPS	1500	1042	1067	25.22	1051	
	Chabra TPS	750	443	416	10.49	437	
	Dholpur GPS	330	104	104	2.48	103	
	Ramgarh GPS	221	2	101	2.77	116	
	RAPS A (NPC)	300	175	175	4.11	171	
	Barsingsar (NLC)	250	213	215	5.04	210	
	Giral LTPS	250	0	0	0.96	40	
	Rajwest LTPS (IPP)	1080	477	477	11.39	474	
	VSLP LTPS (IPP)	135	0	0	0.00	0	
	Kalisindh Thermal	600	0	0	0.00	0	
	Kawai(Adani)	1320	535	491	13.91	580	
	Thermal (Total)	7976	4137	4184	103.43	4310	
	Total Hydro	550	0	0	0.54	22	
	Wind power	2191	151	447	6.96	290	
	Biomass	91	25	25	0.60	25	
	Solar	201	5	0	0.47	20	
	Renewable/Others (Total)	2483	176	472	8.03	335	
	Total Rajasthan	11009	4313	4656	112.00	4667	
	UP	Anpara TPS	1630	1051	1045	21.80	908
Obra TPS		1288	561	563	12.20	508	
Paricha TPS		1140	913	950	20.30	846	
Panki TPS		210	70	75	1.40	58	
Harduaganj TPS		665	490	444	10.00	417	
Tanda TPS (NTPC)		440	334	382	9.29	387	
Roza TPS (IPP)		1200	563	720	16.51	688	
Anpara-C (IPP)		1200	391	536	12.14	506	
Bajaj Energy Pvt.Ltd(IPP) TPS		450	198	260	5.76	240	
Thermal (Total)		8223	4571	4975	109.39	4558	
Vishnuparyag HPS (IPP)		400	0	0	0.00	0	
Other Hydro		527	86	122	2.65	110	
Cogeneration		981	650	650	15.60	650	
Total UP		10131	5307	5747	127.64	5318	
Uttarakhand		Total Hydro	1303	458	222	8.13	339
		Total Uttarakhand	1303	458	222	8.13	339
Delhi	Rajghat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	119	118	2.87	120	
	Pragati Gas Turbine	330	321	261	7.22	301	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	505	510	12.36	515	
	Thermal (Total)	2232	945	889	22.45	935	
	Total Delhi	2232	945	889	22.45	935	
HP	Baspa HPS (IPP)	330	0	0	1.10	46	
	Malana HPS (IPP)	86	4	0	0.18	8	
	Other Hydro	589	183	96	3.57	149	
	Total HP	1005	187	96	4.85	202	
J & K	Baglihar HPS (IPP)	450	148	120	3.07	128	
	Other Hydro	323	92	128	2.59	108	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	240	248	5.66	236	
Total State Control Area Generation		36770	16779	15685	385.22	16051	
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			5177	2992	109.98	4583	
Total Regional Availability(Gross)		60303	37592	27628	761.07	31711	

IV. Total Hydro Generation:

Regional Entities Hydro	10560	5919	707	55.14	2298
State Control Area Hydro	5368	1386	1012	30.08	1253
Total Regional Hydro	15928	7305	1719	85.22	3551

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	250	-200	500	200	4.13	1.10	3.03
Gwalior-Agra (D/C)	1560	1250	1820	0	36.41	0.00	36.41
Zerda-Kankroli	-89	-407	0	407	0.00	4.54	-4.54
Zerda-Bhinmal	10	-306	100	329	0.00	1.72	-1.72
Malanpur-Auraiya	-58	-60	0	72	0.00	1.07	-1.07
Badod-Kota/Morak	-8	-132	50	137	0.00	1.13	-1.13
Mundra-Mohindergarh(HVDC)	2003	1999	2006	0	48.32	0.00	48.32
Sub Total WR	3668	2144			88.86	9.56	79.30
Pusaui Bypass	400	400	400	0	9.72	0.00	9.72
MZP- GKP (D/C)	154	120	223	0	2.55	0.00	2.55
Patna-Balia(D/C)	523	302	765	0	11.28	0.00	11.28
B'Sharif-Balia (D/C)	415	131	463	0	7.30	0.00	7.30
Pusaui-Balia	4	-91	19	92	0.00	0.75	-0.75
Gaya-Fatehpur (765 Kv)	-50	-78	38	113	0.00	1.12	-1.12
Pusaui-Sahupuri	107	125	158	0	2.80	0.00	2.80
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-35	-26	0	35	0.00	0.61	-0.61
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-9	-35	87	103	0.00	0.49	-0.49
Sub Total ER	1509	848			33.64	2.96	30.68
Total IR Exch	5177	2992			122.50	12.52	109.98

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
30.04	0.21	30.25	13.88	3.04	3.12	2.67	0.25	-0.25

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
47.51	60.86	108.37	30.68	79.30	109.98	-16.83	18.44	1.61

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	0.64	94.96	4.30	94.31	80.01	5.04

<----- Frequency (Hz) ----->				Average Frequency Hz	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz				
50.34	16.04	49.61	6.58	50.02	0.15	0.12	50.37	49.85

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	00:40	403	09:08	0.0	0.0	0.0	0.0
Gorakhpur	400	418	00:01	409	10:18	0.0	0.0	0.0	0.0
Bareilly	400	426	00:01	407	10:24	0.0	0.0	17.4	0.0
Kanpur	400	420	00:00	404	10:22	0.0	0.0	0.0	0.0
Dadri	400	425	02:45	404	10:22	0.0	0.0	21.9	0.0
Ballabgarh	400	433	00:00	411	10:22	0.0	0.0	64.5	10.2
Bawana	400	430	03:21	410	10:21	0.0	0.0	50.3	0.0
Bassi	400	432	03:38	402	10:21	0.0	0.0	36.0	1.1
Hissar	400	418	03:42	398	10:22	0.0	0.0	0.0	0.0
Moga	400	416	03:37	390	10:39	0.0	0.0	0.0	0.0
Abdullapur	400	428	23:02	408	18:38	0.0	0.0	38.5	0.0
Nalagarh	400	427	02:43	408	10:22	0.0	0.0	41.4	0.0
Kishenpur	400	424	13:16	391	10:39	0.0	0.0	0.1	0.0
Wagoora	400	412	12:13	365	10:40	18.2	65.9	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	776	13:10	733	05:40	0.0	2.2	0.0	0.0
Balia	765	762	16:03	735	10:22	0.0	4.3	0.0	0.0
Moga	765	799	21:53	739	10:34	0.0	3.3	0.0	0.0
Agra	765	816	23:05	777	10:23	0.0	0.0	46.9	0.0
Bhiwani	765	809	21:00	769	10:22	0.0	0.0	8.6	0.0
Unnao	765	764	00:00	739	10:24	0.0	1.0	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	497.31	994.96	489.93	729.00	171.51	335.84
Pong	426.72	384.05	409.08	464.36	407.74	425.80	191.93	318.25
Tehri	829.79	740.04	803.45	674.38	818.65	982.26	64.86	167.00
Koteshwar	612.50	598.50	610.14	4.69	610.70	4.95	167.00	171.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	51.65	44.61
Rihand	268.22	252.98	260.21	316.40	260.48	331.50	NA	NA
RPS	352.80	343.81	509.53	NA	512.19	NA	130.09	NA
Jawahar Sagar	298.70	295.78	297.94	NA	NA	NA	NA	NA
RSD	527.91	487.91	509.44	14.40	512.12	14.40	73.26	109.61

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 24.01.2014 :

1. Fog in Punjab / Haryana / Western UP / NCR

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 Mar, 2014 .