

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 13.02.2014
Date of Reporting : 14.02.2014

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
36780	1115	37895	50.10	29125	35	29160	50.28	802.4	34.31

* 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:

UI (OD:(+ve), UD: (-ve))

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	43.68	9.38		53.06	40.03	42.55	2.53	95.61	0.00
Haryana	43.94	0.39		44.33	62.38	62.47	0.09	106.80	0.05
Rajasthan	96.35	4.97	15.53	116.86	91.52	84.50	-7.02	201.36	0.66
Delhi	19.72			19.72	44.29	42.56	-1.73	62.28	0.06
UP	123.09	2.89	16.80	142.78	92.82	91.10	-1.73	233.88	31.43
Uttarakhand		7.95		7.95	25.22	26.28	1.06	34.23	0.42
HP		4.44		4.44	19.44	19.41	-0.03	23.85	0.01
J & K		6.18	0.00	6.18	33.25	34.58	1.34	40.77	1.70
Chandigarh				0.00	3.32	3.63	0.31	3.63	0.00
Total	326.79	36.19	32.33	395.31	412.26	407.08	-5.18	802.39	34.31

* Shortage furnished by the respective constituent.\$ Others include UP Co-generation and JK Diesel

II. B. State's Demand Met in MWs:

UI/OA/PX (OD/Import: (+ve), UD/Export: (-ve))

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	
Punjab	5007	0	64	-521	3110	0	-6	-41	-8.94
Haryana	5486	0	-236	-62	3756	0	280	-523	-7.57
Rajasthan	8456	25	-37	1171	7313	0	-902	1398	35.02
Delhi	3276	0	83	-905	1429	0	-62	-1461	-25.60
UP	9948	990	-240	461	9868	35	34	484	7.34
Uttarakhand	1710	0	17	525	1149	0	11	531	13.38
HP	1097	0	-113	327	701	0	29	369	8.43
J&K	1609	100	-257	523	1704	0	36	616	11.26
Chandigarh	191	0	1	0	96	0	6	-10	-0.07
Total	36780	1115	-717	1519	29125	35	-574	1363	33.25

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

III. Regional Entities :

UI (OG:(+ve), UG: (-ve))

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
	Rihand I STPS	1000	945	1017	866	21.84	910	21.86	-0.02
	Rihand II STPS	1000	975	1034	937	22.72	947	22.81	-0.08
	Rihand III STPS	1000	485	515	420	11.28	470	11.26	0.01
	Dadri I STPS	840	799	830	605	15.90	663	16.87	-0.97
	Dadri II STPS	980	980	995	715	20.76	865	21.37	-0.61
	Unchahar I TPS	420	408	439	322	8.89	370	8.97	-0.08
	Unchahar II TPS	420	405	437	309	8.47	353	8.54	-0.07
	Unchahar III TPS	210	202	213	154	4.25	177	4.28	-0.03
	ISTPP (Jhajjhar)	1500	1500	959	956	24.48	1020	24.79	-0.31
	Dadri GPS	830	842	584	521	13.08	545	13.23	-0.15
	Anta GPS	419	425	234	253	6.87	286	7.03	-0.16
	Auraiya GPS	663	669	159	160	3.72	155	3.77	-0.05
	Sub Total (A)	11282	10548	9494	8209	207.32	8639	210.20	-2.87
B. NPC	NAPS	440	299	339	340	7.18	299	7.18	0.00
	RAPS- B	440	410	460	463	10.07	420	9.84	0.23
	RAPS- C	440	430	474	476	10.08	420	10.32	-0.24
	Sub Total (B)	1320	1139	1273	1279	27.32	1138	27.34	-0.01
C. NHPC	Chamera I HPS	540	540	540	0	2.55	106	2.53	0.02
	Chamera II HPS	300	200	204	0	1.15	48	0.95	0.21
	Chamera III HPS	231	154	151	0	0.71	29	0.70	0.01
	Bairasuil HPS	180	182	120	0	0.79	33	0.88	-0.09
	Salal-HPS	690	142	227	132	3.25	136	3.56	-0.31
	Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00
	Uri-HPS	480	237	321	82	5.36	223	5.60	-0.24
	Uri-II HPS	180	120	110	80	3.04	127	2.88	0.16
	Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
	Dulhasti-HPS	390	258	267	0	2.79	116	3.01	-0.22
	Sewa-II HPS	120	119	0	0	1.12	47	1.36	-0.24
	Sub Total (C)	3485	1951	1940	294	20.76	865	21.47	-0.71
D. NJPC	Nathpa Jhakri	1500	1605	962	0	6.11	255	6.35	-0.24
	Sub Total (D)	1500	1605	962	0	6.11	255	6.35	-0.24
E. THDC	Tehri HPS	1000	920	922	0	7.42	309	7.39	0.03
	Koteshwar HPS	400	116	302	0	2.84	118	2.80	0.04
	Sub Total (E)	1400	1036	1224	0	10.26	428	10.19	0.07
F. BBMB	Bhakra HPS	1497	659	1156	391	16.15	673	15.81	0.34
	Dehar HPS	990	111	330	0	3.02	126	2.66	0.36
	Pong HPS	396	169	306	120	4.12	172	4.06	0.06
	Sub Total (F)	2883	939	1792	511	23.29	970	22.53	0.76
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.36	15	0.35	0.02
	KWHEP HPS(IPP)	1000	0	0	0	3.50	146	3.13	0.37
	Malana Stg-II HPS	100	0	0	0	0.14	6	0.13	0.01
	Shree Cement TPS	300	0	254	140	5.27	220	5.34	-0.07
	Budhil HPS(IPP)	70	0	8	0	0.12	5	0.14	-0.02
	Sub Total (G)	1662	0	262	140	9.38	391	9.07	0.31
H. Total Regional Entities (A-G)		23532	17219	16947	10433	304.45	12686	307.14	-2.69

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	1050	790	21.37	890
	Guru Nanak Dev TPS(Bhatinda)	440	80	80	2.00	83
	Guru Hargobind Singh TPS(L.mbt)	920	968	736	20.31	846
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	0	0	0.00	0
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	2098	1606	43.68	1820
	Total Hydro	1148	374	371	9.38	391
Total Punjab	5128	2472	1977	53.06	2211	
Haryana	Panipat TPS	1367	221	218	5.27	220
	DCRTPP (Yamuna nagar)	600	534	263	9.75	406
	Faridabad GPS (NTPC)	432	184	203	4.64	193
	RGTPP (khedar) (IPP)	1200	620	506	12.71	529
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	495	377	11.57	482
	Thermal (Total)	4944	2054	1567	43.94	1831
	Total Hydro	62	13	11	0.39	16
	Total Haryana	5006	2067	1578	44.33	1847
	Rajasthan	kota TPS	1240	1136	1090	26.83
suratgarh TPS		1500	1338	1271	31.54	1314
Chabra TPS		750	401	370	9.81	409
Dholpur GPS		330	115	115	2.81	117
Ramgarh GPS		221	139	134	2.99	124
RAPS A (NPC)		300	175	175	4.14	173
Barsingsar (NLC)		250	212	164	4.57	191
Giral LTPS		250	28	0	0.21	9
Rajwest LTPS (IPP)		1080	0	0	0.00	0
VSLP LTPS (IPP)		135	0	0	0.00	0
Kalisindh Thermal		600	0	0	0.00	0
Kawai(Adani)		1320	256	132	13.45	560
Thermal (Total)		7976	3800	3451	96.35	4015
Total Hydro		550	206	237	4.97	207
Wind power		2191	393	1007	14.86	619
Biomass		91	21	21	0.52	21
Solar		201	2	0	0.16	7
Renewable/Others (Total)		2483	414	1028	15.53	647
Total Rajasthan	11009	4420	4716	116.86	4869	
UP	Anpara TPS	1630	1121	1135	24.10	1004
	Obra TPS	1288	545	545	11.90	496
	Paricha TPS	1140	673	718	14.80	617
	Panki TPS	210	70	75	1.60	67
	Harduaganj TPS	665	242	247	5.20	217
	Tanda TPS (NTPC)	440	395	401	9.56	398
	Roza TPS (IPP)	1200	1080	1071	24.60	1025
	Anpara-C (IPP)	1200	1049	927	24.45	1019
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	250	253	6.87	286
	Thermal (Total)	8223	5425	5372	123.09	5129
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	89	132	2.89	120
	Cogeneration	981	700	700	16.80	700
	Total UP	10131	6214	6204	142.78	5949
Uttarakhand	Total Hydro	1303	509	171	7.95	331
	Total Uttarakhand	1303	509	171	7.95	331
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	115	115	2.78	116
	Pragati Gas Turbine	330	316	262	6.90	288
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	0	0	0.00	0
	Badarpur TPS (NTPC)	705	431	383	10.04	418
	Thermal (Total)	2232	862	760	19.72	822
	Total Delhi	2232	862	760	19.72	822
HP	Baspa HPS (IPP)	330	0	0	0.90	38
	Malana HPS (IPP)	86	0	0	0.20	8
	Other Hydro	589	157	84	3.33	139
	Total HP	1005	157	84	4.44	185
J & K	Baglihar HPS (IPP)	450	150	120	3.54	147
	Other Hydro	323	89	129	2.65	110
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	239	249	6.18	258
Total State Control Area Generation		36770	16940	15739	395.31	16471
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			4861	3674	113.86	4744
Total Regional Availability(Gross)		60303	38748	29846	813.63	33901

IV. Total Hydro Generation:

Regional Entities Hydro	10560	5918	805	64.42	2684
State Control Area Hydro	5368	1587	1255	36.19	1508
Total Regional Hydro	15928	7505	2060	100.61	4192

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	500	300	500	200	10.10	0.12	9.98
Gwalior-Agra (D/C)	1440	1486	1926	0	35.22	0.00	35.22
Zerda-Kankroli	-35	-268	44	268	0.00	2.22	-2.22
Zerda-Bhinmal	70	-208	208	219	0.70	0.00	0.70
Malanpur-Auraiya	-70	-96	0	132	0.00	2.00	-2.00
Badod-Kota/Morak	-49	-175	0	206	0.00	2.09	-2.09
Mundra-Mohinderghar(HVDC)	1998	1999	2004	0	48.33	0.00	48.33
Sub Total WR	3854	3038			94.35	6.43	87.92
Pusauli Bypass	200	200	200	0	4.81	0.00	4.81
MZP- GKP (D/C)	126	108	299	0	3.52	0.00	3.52
Patna-Balia(D/C)	405	280	607	0	9.35	0.00	9.35
B'Sharif-Balia (D/C)	287	123	433	0	5.71	0.00	5.71
Pusauli-Balia	-99	-86	0	122	0.00	1.86	-1.86
Gaya-Fatehpur (765 Kv)	-56	-96	130	139	0.00	0.30	-0.30
Pusauli-Sahupuri	201	189	207	0	4.28	0.00	4.28
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-31	-28	0	34	0.00	0.64	-0.64
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-26	-54	227	101	1.07	0.00	1.07
Sub Total ER	1007	636			28.74	2.80	25.94
Total IR Exch	4861	3674			123.09	9.22	113.86

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
28.20	0.12	28.32	17.88	2.61	3.39	4.36	0.07	-0.07

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
49.66	75.79	125.45	25.94	87.92	113.86	-23.72	12.13	-11.59

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	87.49	0.66	87.49	87.24	12.51

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation Index	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN
Freq	Time	Freq	Time	Hz				
50.56	23.57	49.78	9.27	50.14	0.39	0.12	50.48	49.87

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	410	03:37	400	18:23	0.0	0.0	0.0	0.0
Gorakhpur	400	427	23:51	407	19:44	0.0	0.0	58.2	0.0
Bareilly	400	430	23:58	407	11:44	0.0	0.0	15.0	0.0
Kanpur	400	423	23:56	402	09:15	0.0	0.0	2.4	0.0
Dadri	400	425	03:48	406	09:16	0.0	0.0	27.3	0.0
Ballabgarh	400	434	23:44	411	10:11	0.0	0.0	62.6	15.5
Bawana	400	430	04:32	410	10:07	0.0	0.0	44.0	0.0
Bassi	400	427	03:46	393	10:11	0.0	0.0	30.5	0.0
Hissar	400	419	03:52	396	10:07	0.0	0.0	0.0	0.0
Moga	400	421	04:31	399	10:05	0.0	0.0	0.2	0.0
Abdullapur	400	429	23:48	409	06:15	0.0	0.0	46.5	0.0
Nalagarh	400	429	00:02	408	18:42	0.0	0.0	36.3	0.0
Kishenpur	400	415	04:27	393	18:56	0.0	0.0	0.0	0.0
Wagoora	400	404	20:33	373	18:56	10.1	49.6	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	00:33	741	09:15	0.0	0.1	0.0	0.0
Balia	765	781	23:58	739	18:38	0.0	0.6	0.0	0.0
Moga	765	799	04:32	758	10:06	0.0	0.0	0.0	0.0
Agra	765	819	21:51	777	09:16	0.0	0.0	47.0	0.0
Bhiwani	765	810	04:32	770	10:12	0.0	0.0	31.6	0.0
Unnao	765	776	23:42	740	09:19	0.0	1.5	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 (m³/s)	Usage (m³/s)
Bhakra	513.59	445.62	492.03	848.04	486.93	644.48	162.77	489.46
Pong	426.72	384.05	407.10	407.15	405.49	352.07	94.83	269.80
Tehri	829.79	740.04	796.30	544.69	818.65	982.26	66.94	185.00
Koteswar	612.50	598.50	610.40	4.69	610.00	4.69	185.00	188.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	59.52	69.18
Rihand	268.22	252.98	259.84	296.30	259.78	292.90	NA	NA
RPS	352.80	343.81	NA	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	NA	NA	NA	NA	NA	NA
RSD	527.91	487.91	508.74	148.00	510.66	150.00	99.99	116.98

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 13.02.2014 :
Widespread rain in UP, Haryana, Punjab and Delhi area.

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 .

Report for : 13.02.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER