

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.02.2014
Date of Reporting : 20.02.2014

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
35835	3766	39601	50.02	27830	50	27880	50.10	783.9	27.32

* 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	46.23	10.29		56.51	40.21	40.81	0.60	97.32	0.00
Haryana	33.67	0.49		34.16	68.70	69.31	0.61	103.47	0.05
Rajasthan	100.34	5.40	4.02	109.77	88.09	86.57	-1.52	196.33	0.72
Delhi	23.20			23.20	42.30	39.41	-2.89	62.60	0.04
UP	115.43	3.49	16.80	135.72	90.08	87.99	-2.09	223.71	24.39
Uttarakhand		9.07		9.07	22.83	24.84	2.01	33.91	0.42
HP		5.09		5.09	18.58	19.10	0.52	24.20	0.00
J & K		6.04	0.00	6.04	33.95	32.74	-1.21	38.78	1.70
Chandigarh				0.00	3.37	3.60	0.24	3.60	0.00
Total	318.86	39.87	20.82	379.56	408.11	404.37	-3.74	783.93	27.32

* 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	5039	0	-52	-462	3157	0	42	125	-6.22
Haryana	5382	135	-37	-31	3487	0	265	-42	-4.27
Rajasthan	7878	92	-42	949	7295	0	-13	1049	37.20
Delhi	3238	29	-72	-914	1451	0	-62	-1612	-25.49
UP	9553	3335	-153	433	8900	50	-58	460	7.23
Uttarakhand	1677	75	174	472	1115	0	56	450	11.63
HP	1118	0	-60	147	701	0	-9	445	7.68
J&K	1759	100	-67	521	1636	0	-78	608	11.25
Chandigarh	191	0	3	0	88	0	-2	0	0.00
Total	35835	3766	-306	1114	27830	50	141	1483	39.00

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

III. Regional Entities :

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

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	2090	1988	45.92	1913	45.99	-0.06
Rihand I STPS	1000	945	1020	883	21.59	900	21.58	0.02
Rihand II STPS	1000	975	1041	873	22.24	927	22.34	-0.10
Rihand III STPS	1000	415	506	236	9.87	411	9.94	-0.08
Dadri I STPS	840	683	687	590	15.04	627	15.48	-0.44
Dadri II STPS	980	873	1004	654	19.34	806	19.43	-0.09
Unchahar I TPS	420	407	444	324	8.93	372	9.02	-0.09
Unchahar II TPS	420	406	444	310	8.55	356	8.59	-0.05
Unchahar III TPS	210	203	220	154	4.30	179	4.36	-0.06
ISTPP (Jhajjar)	1500	1500	1105	627	17.36	723	17.64	-0.28
Dadri GPS	830	841	608	578	13.15	548	13.31	-0.15
Anta GPS	419	428	275	250	6.29	262	6.33	-0.04
Auraiya GPS	663	674	159	164	3.72	155	3.80	-0.08
Sub Total (A)	11282	10295	9603	7631	196.30	8179	197.81	-1.51
B. NPC								
NAPS	440	299	329	335	7.10	296	7.18	-0.07
RAPS- B	440	417	458	463	10.03	418	10.01	0.02
RAPS- C	440	430	474	473	10.19	425	10.32	-0.13
Sub Total (B)	1320	1146	1261	1271	27.32	1138	27.50	-0.19
C. NHPC								
Chamera I HPS	540	540	450	0	2.85	119	2.80	0.05
Chamera II HPS	300	200	205	0	1.20	50	1.23	-0.02
Chamera III HPS	231	154	0	0	0.00	0	0.65	-0.65
Bairasuil HPS	180	137	182	50	1.30	54	1.28	0.02
Salal-HPS	690	149	230	120	3.54	147	3.52	0.02
Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00
Uri-HPS	480	204	308	148	4.90	204	4.89	0.01
Uri-II HPS	180	112	121	111	2.74	114	2.72	0.02
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00
Dulhasti-HPS	390	258	274	0	2.41	100	2.40	0.01
Sewa-II HPS	120	119	125	0	1.42	59	1.40	0.02
Sub Total (C)	3485	1873	1895	429	20.36	848	20.88	-0.51
D. NJPC								
Nathpa Jhakri	1500	1605	774	0	6.85	285	6.80	0.05
Sub Total (D)	1500	1605	774	0	6.85	285	6.80	0.05
E. THDC								
Tehri HPS	1000	900	905	0	7.02	293	7.00	0.02
Koteshwar HPS	400	116	302	0	2.84	118	2.80	0.04
Sub Total (E)	1400	1016	1207	0	9.86	411	9.80	0.06
F. BBMB								
Bhakra HPS	1497	694	1004	390	16.80	700	16.66	0.14
Dehar HPS	990	134	330	0	3.44	143	3.22	0.22
Pong HPS	396	200	312	126	5.14	214	4.80	0.34
Sub Total (F)	2883	1028	1646	516	25.38	1058	24.67	0.71
G. IPP(s)/JV(s)								
ADHPL HPS(IPP)	192	0	0	0	0.36	15	0.35	0.01
KWHEP HPS(IPP)	1000	0	0	0	3.47	145	3.48	-0.01
Malana Stg-II HPS	100	0	0	0	0.11	4	0.09	0.02
Shree Cement TPS	300	0	253	140	5.11	213	5.22	-0.11
Budhil HPS(IPP)	70	0	0	0	0.02	1	0.21	-0.18
Sub Total (G)	1662	0	253	140	9.07	378	9.34	-0.27
H. Total Regional Entities (A-G)	23532	16963	16639	9987	295.14	12298	296.81	-1.67

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	700	600	15.60	650
	Guru Nanak Dev TPS(Bhatinda)	440	90	90	2.05	85
	Guru Hargobind Singh TPS(L.mbt)	920	772	693	18.21	759
	Goindwal(GVK)		0	0	0.00	0
	Rajpura	700	611	280	10.37	432
	Talwandi Saboo	660	0	0	0.00	0
	Thermal (Total)	3980	2173	1663	46.23	1926
	Total Hydro	1148	479	442	10.29	429
Total Punjab	5128	2652	2105	56.51	2355	
Haryana	Panipat TPS	1367	214	215	5.26	219
	DCRTPP (Yamuna nagar)	600	534	257	10.22	426
	Faridabad GPS (NTPC)	432	414	309	9.29	387
	RGTPP (kheadar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	376	371	8.90	371
	Thermal (Total)	4944	1538	1152	33.67	1403
	Total Hydro	62	20	22	0.49	20
Total Haryana	5006	1558	1174	34.16	1423	
Rajasthan	kota TPS	1240	1136	1154	26.80	1117
	suratgarh TPS	1500	1371	1361	32.08	1337
	Chabra TPS	750	652	650	16.03	668
	Dholpur GPS	330	139	138	3.44	143
	Ramgarh GPS	221	129	130	2.93	122
	RAPS A (NPC)	300	175	176	4.14	173
	Barsingsar (NLC)	250	101	208	3.35	140
	Giral LTPS	250	69	69	1.19	49
	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	436	430	10.38	433
	Thermal (Total)	7976	4208	4316	100.34	4181
	Total Hydro	550	222	159	5.40	225
	Wind power	2191	159	145	2.93	122
	Biomass	91	31	31	0.74	31
	Solar	201	3	0	0.35	15
Renewable/Others (Total)	2483	190	176	4.02	168	
Total Rajasthan	11009	4620	4651	109.77	4574	
UP	Anpara TPS	1630	1017	1012	24.30	1013
	Obra TPS	1288	422	497	11.00	458
	Paricha TPS	1140	640	574	14.90	621
	Panki TPS	210	77	68	1.70	71
	Harduaganj TPS	665	401	423	11.00	458
	Tanda TPS (NTPC)	440	395	404	9.81	409
	Roza TPS (IPP)	1200	1062	747	21.39	891
	Anpara-C (IPP)	1200	545	805	16.50	687
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	209	139	4.84	202
	Thermal (Total)	8223	4768	4669	115.43	4810
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0
	Other Hydro	527	102	147	3.49	146
	Cogeneration	981	700	700	16.80	700
	Total UP	10131	5570	5516	135.72	5655
Uttarakhand	Total Hydro	1303	427	177	9.07	378
	Total Uttarakhand	1303	427	177	9.07	378
Delhi	Rajghat TPS	135	0	0	0.00	0
	Delhi Gas Turbine	282	160	163	3.82	159
	Pragati Gas Turbine	330	312	265	7.18	299
	Rithala GPS	95	0	0	0.00	0
	Bawana GPS	686	234	0	2.44	102
	Badarpur TPS (NTPC)	705	430	415	9.75	406
	Thermal (Total)	2232	1136	843	23.20	967
	Total Delhi	2232	1136	843	23.20	967
HP	Baspa HPS (IPP)	330	30	0	0.90	38
	Malana HPS (IPP)	86	0	0	0.20	8
	Other Hydro	589	211	91	3.99	166
	Total HP	1005	241	91	5.09	212
J & K	Baglihar HPS (IPP)	450	152	150	3.68	153
	Other Hydro	323	94	132	2.36	98
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	246	282	6.04	252
Total State Control Area Generation		36770	16450	14839	379.56	15815
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			4500	4307	128.33	5347
Total Regional Availability(Gross)		60303	37589	29133	803.02	33459

IV. Total Hydro Generation:

Regional Entities Hydro	10560	5522	945	66.39	2766
State Control Area Hydro	5368	1737	1320	39.87	1661
Total Regional Hydro	15928	7259	2265	106.26	4428

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	200	500	0	10.19	0.00	10.19
Gwalior-Agra (D/C)	1201	1252	1891	0	34.09	0.00	34.09
Zerda-Kankroli	-23	-217	177	253	0.00	0.44	-0.44
Zerda-Bhinmal	98	-64	349	123	3.07	0.00	3.07
Malanpur-Auraiya	-105	-77	0	109	0.00	1.56	-1.56
Badod-Kota/Morak	-58	-102	81	118	0.00	0.92	-0.92
Mundra-Mohindergarh(HVDC)	2003	2002	2006	0	48.34	0.00	48.34
Sub Total WR	3616	2994			95.68	2.93	92.76
Pusauli Bypass	300	300	300	0	7.26	0.00	7.26
MZP- GKP (D/C)	21	207	363	0	4.89	0.00	4.89
Patna-Balia(D/C)	239	484	678	0	10.31	0.00	10.31
B'Sharni-Balia (D/C)	266	194	513	0	7.53	0.00	7.53
Pusauli-Balia	-54	-56	0	118	0.00	1.51	-1.51
Gaya-Fatehpur (765 Kv)	1	57	230	7	2.26	0.00	2.26
Pusauli-Sahupuri	82	0	128	0	0.58	0.00	0.58
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-31	-28	0	34	0.00	0.68	-0.68
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	60	155	398	0	4.93	0.00	4.93
Sub Total ER	884	1313			37.76	2.19	35.57
Total IR Exch	4500	4307			133.44	5.11	128.33

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
35.70	0.23	35.93	13.98	2.02	4.94	12.69	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
54.92	75.81	130.74	35.57	92.76	128.33	-19.35	16.95	-2.41

VI. Frequency Profile <----- % of Time Frequency ----->

<49.2	<49.7	<49.8	<49.9	<50.0	49.9-50.05	50.05-50.10	>50.10	>50.20	>50.50
0.00	0.50	2.70	13.00	40.80	47.00	20.10	40.00	3.50	0.00

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				
50.48	18.02	49.65	9.21	50.02	0.12	0.11	50.29	0.00

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	406	21:57	400	18:35	0.0	0.0	0.0	0.0
Gorakhpur	400	421	12:12	400	19:00	0.0	0.0	7.9	0.0
Bareilly	400	423	23:28	401	09:25	0.0	0.0	2.7	0.0
Kanpur	400	417	23:26	399	09:25	0.0	0.0	0.0	0.0
Dadri	400	422	23:27	403	09:25	0.0	0.0	4.5	0.0
Ballabgarh	400	430	23:28	409	09:25	0.0	0.0	47.6	0.0
Bawana	400	428	23:29	407	09:25	0.0	0.0	29.7	0.0
Bassi	400	425	18:02	395	09:27	0.0	0.0	5.9	0.0
Hissar	400	416	23:29	394	09:25	0.0	0.0	0.0	0.0
Moga	400	417	23:26	396	09:25	0.0	0.0	0.0	0.0
Abdullapur	400	418	23:28	398	18:34	0.0	0.0	0.0	0.0
Nalagarh	400	428	23:23	406	10:13	0.0	0.0	7.3	0.0
Kishenpur	400	410	13:04	390	18:47	0.0	0.0	0.0	0.0
Wagoora	400	401	13:04	366	18:50	41.9	95.5	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	773	23:28	735	09:25	0.0	4.3	0.0	0.0
Balia	765	774	21:51	736	18:50	0.0	6.1	0.0	0.0
Moga	765	794	23:28	753	09:25	0.0	0.0	0.0	0.0
Agra	765	817	18:02	765	09:25	0.0	0.0	32.6	0.0
Bhiwani	765	774	10:26	710	11:04	61.1	90.9	0.0	0.0
Unnao	765	765	23:30	734	09:25	0.0	13.2	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	499.46
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
Koteshwar	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 19.02.2014 :

Normal weather in NR.

XIII. Synchronisation of new generating units :

1. Prabati Hydro Stage -3 (NHPC) unit #1 first time synchronised at 20.10 hrs to 22.00 hrs/ 19.02.2014 , unit run at 130 MW.

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 : 19.02.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER