

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 16.03.2014
Date of Reporting : 17.03.2014

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
32686	844	33530	49.94	28619	0	28619	50.13	752.9	17.04

* 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	47.21	10.19		57.40	48.87	49.20	0.32	106.60	0.00
Haryana	29.52	0.61		30.13	66.87	66.83	-0.03	96.96	0.00
Rajasthan	115.39	4.08	4.08	123.55	56.56	56.14	-0.42	179.70	0.18
Delhi	14.75			14.75	37.72	36.28	-1.44	51.03	0.10
UP	125.34	2.91	14.40	142.64	95.49	93.06	-2.44	235.70	15.07
Uttarakhand		9.53		9.53	19.23	18.67	-0.56	28.20	0.00
HP		6.45		6.45	13.93	13.73	-0.20	20.18	0.00
J & K		7.80	0.00	7.80	24.29	23.82	-0.47	31.62	1.70
Chandigarh				0.00	3.22	2.90	-0.32	2.90	0.00
Total	332.21	41.56	18.48	392.25	366.19	360.63	-5.56	752.88	17.04

* 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	STOA/PX transaction	
Punjab	5172	0	9	-322	3676	0	75	-146	-6.79	
Haryana	4298	0	-399	71	3658	0	174	33	1.18	
Rajasthan	6566	0	-515	775	7062	0	-14	615	22.54	
Delhi	2355	69	-31	-767	1405	0	-70	-1201	-21.93	
UP	10579	675	-6	786	9606	0	-94	620	13.79	
Uttarakhand	1357	0	106	402	1052	0	2	385	10.12	
HP	772	0	-71	18	720	0	65	88	2.85	
J&K	1435	100	-134	124	1357	0	31	241	4.25	
Chandigarh	153	0	-25	0	83	0	-11	0	0.00	
Total	32686	844	-1066	1088	28619	0	158	633	26.01	

* 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	Net MU
A. NTPC									
Singrauli STPS	2000	1432	1420	1541	33.11	1380	33.01	0.10	
Rihand I STPS	1000	945	996	735	19.96	832	19.92	0.04	
Rihand II STPS	1000	975	833	826	20.55	856	20.41	0.14	
Rihand III STPS	1000	485	479	380	10.24	427	10.04	0.20	
Dadri I STPS	840	815	532	595	13.96	581	14.36	-0.40	
Dadri II STPS	980	980	994	712	17.88	745	18.41	-0.53	
Unchahar I TPS	420	408	359	354	8.17	340	8.27	-0.10	
Unchahar II TPS	420	406	318	313	7.38	308	7.50	-0.12	
Unchahar III TPS	210	203	154	156	3.55	148	3.59	-0.04	
ISTPP (Jhajjhar)	1500	1500	347	395	7.79	325	7.94	-0.15	
Dadri GPS	830	830	190	199	4.48	187	4.74	-0.26	
Anta GPS	419	417	0	0	0.00	0	0.00	0.00	
Auraiya GPS	664	664	150	162	3.64	152	3.76	-0.12	
Sub Total (A)	11282	10060	6772	6368	150.72	6280	151.96	-1.24	
B. NPC									
NAPS	440	140	153	158	3.13	130	3.36	-0.23	
RAPS- B	440	414	451	458	9.89	412	9.94	-0.04	
RAPS- C	440	430	472	477	10.19	425	10.32	-0.13	
Sub Total (B)	1320	984	1076	1093	23.22	967	23.62	-0.40	
C. NHPC									
Chamera I HPS	540	540	540	0	4.99	208	5.00	-0.01	
Chamera II HPS	300	300	190	0	2.99	124	3.00	-0.01	
Chamera III HPS	231	231	223	0	0.50	21	1.60	-1.10	
Bairasuil HPS	180	182	182	100	3.02	126	3.02	0.00	
Salal-HPS	690	374	406	370	9.04	377	8.97	0.07	
Tanakpur-HPS	94	0	0	0	0.00	0	0.00	0.00	
Uri-HPS	480	448	480	474	10.66	444	10.71	-0.05	
Uri-II HPS	180	135	125	180	3.16	132	3.24	-0.08	
Dhauliganga-HPS	280	0	0	0	0.00	0	0.00	0.00	
Dulhasti-HPS	390	387	400	0	2.25	94	2.40	-0.15	
Sewa-II HPS	120	122	125	127	2.99	125	2.93	0.06	
Parbati 3	520	0	0	0	0.00	0	0.00	0.00	
Sub Total (C)	4005	2719	2671	1251	40	1650	41	-1	
D.NJPC									
Nathpa Jhakri	1500	1605	769	153	6.57	274	6.40	0.17	
Sub Total (D)	1500	1605	769	153	6.57	274	6.40	0.17	
E. THDC									
Tehri HPS	1000	618	623	0	7.32	305	7.30	0.02	
Koteshwar HPS	400	125	309	0	2.99	125	3.00	-0.01	
Sub Total (E)	1400	743	932	0	10.31	430	10.30	0.01	
F. BBMB									
Bhakra HPS	1497	636	1139	367	15.80	658	15.26	0.54	
Dehar HPS	990	165	495	0	4.33	180	3.96	0.38	
Pong HPS	396	186	308	120	4.50	188	4.46	0.04	
Sub Total (F)	2883	986	1942	487	24.63	1026	23.67	0.96	
G. IPP(s)/JV(s)									
ADHPL HPS(IPP)	192	0	0	0	0.36	15	0.34	0.02	
KWHEP HPS(IPP)	1000	0	300	0	3.43	143	3.44	-0.01	
Malana Stg-II HPS	100	0	0	0	0.00	0	0.00	0.00	
Shree Cement TPS	300	0	256	225	6.00	250	6.17	-0.18	
Budhil HPS(IPP)	70	0	0	0	0.02	1	0.34	-0.32	
Sub Total (G)	1662	0	556	225	9.80	409	10.29	-0.48	
H. Total Regional Entities (A-G)		24052	17097	14718	9577	264.84	11035	267.10	-2.26

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	870	915	21.06	878	
	Guru Nanak Dev TPS(Bhatinda)	440	90	0	1.22	51	
	Guru Hargobind Singh TPS(L.mbt)	920	598	510	13.80	575	
	Goindwal(GVK)		0	0	0.00	0	
	Rajpura	700	653	278	11.13	464	
	Talwandi Saboo	660	0	0	0.00	0	
	Thermal (Total)	3980	2211	1703	47.21	1967	
	Total Hydro	1148	426	414	10.19	425	
Total Punjab	5128	2637	2117	57.40	2392		
Haryana	Panipat TPS	1367	208	213	5.11	213	
	DCRTPP (Yamuna nagar)	600	253	252	6.06	253	
	Faridabad GPS (NTPC)	432	405	280	7.63	318	
	RGTPP (kheadar) (IPP)	1200	0	0	0.00	0	
	Magnum Diesel (IPP)	25	0	0	0.00	0	
	Jhajjar(CLP)	1320	543	378	10.73	447	
	Thermal (Total)	4944	1409	1123	29.52	1230	
	Total Hydro	62	25	24	0.61	25	
	Total Haryana	5006	1434	1147	30.13	1255	
	Rajasthan	kota TPS	1240	966	1073	25.36	1056
suratgarh TPS		1500	1202	1172	28.49	1187	
Chabra TPS		750	560	553	14.04	585	
Dholpur GPS		330	88	90	2.22	92	
Ramgarh GPS		221	117	90	2.97	124	
RAPS A (NPC)		300	175	175	4.15	173	
Barsingsar (NLC)		250	201	200	4.76	198	
Giral LTPS		250	83	80	1.63	68	
Rajwest LTPS (IPP)		1080	162	212	4.43	184	
VSLP LTPS (IPP)		135	0	0	0.00	0	
Kalisindh Thermal		600	0	0	0.00	0	
Kawai(Adani)		1320	1097	1183	27.36	1140	
Thermal (Total)		7976	4651	4828	115.39	4808	
Total Hydro		550	116	117	4.08	170	
Wind power		2191	25	133	4.00	167	
Biomass		91	19	19	0.46	19	
Solar		201	1	0	0.13	6	
Renewable/Others (Total)		2483	44	152	4.08	170	
Total Rajasthan	11009	4811	5097	123.55	5148		
UP	Anpara TPS	1630	1404	1405	30.50	1271	
	Obra TPS	1288	536	507	11.30	471	
	Paricha TPS	1140	562	539	11.90	496	
	Panki TPS	210	95	75	1.70	71	
	Harduaganj TPS	665	442	419	9.40	392	
	Tanda TPS (NTPC)	440	397	403	9.54	397	
	Roza TPS (IPP)	1200	1080	1098	23.68	987	
	Anpara-C (IPP)	1200	1080	1064	25.26	1053	
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	85	85	2.06	86	
	Thermal (Total)	8223	5681	5595	125.34	5222	
	Vishnuparyag HPS (IPP)	400	0	0	0.00	0	
	Other Hydro	527	178	118	2.91	121	
	Cogeneration	981	600	600	14.40	600	
	Total UP	10131	6459	6313	142.64	5944	
	Uttarakhand	Total Hydro	1303	413	312	9.53	397
		Total Uttarakhand	1303	413	312	9.53	397
Delhi	Rajghat TPS	135	0	0	0.00	0	
	Delhi Gas Turbine	282	80	83	1.82	76	
	Pragati Gas Turbine	330	137	262	5.54	231	
	Rithala GPS	95	0	0	0.00	0	
	Bawana GPS	686	0	0	0.00	0	
	Badarpur TPS (NTPC)	705	294	298	7.39	308	
	Thermal (Total)	2232	511	643	14.75	614	
	Total Delhi	2232	511	643	14.75	614	
HP	Baspa HPS (IPP)	330	0	0	0.93	39	
	Malana HPS (IPP)	86	39	0	0.26	11	
	Other Hydro	589	187	181	5.26	219	
	Total HP	1005	226	181	6.45	269	
J & K	Baglihar HPS (IPP)	450	294	296	5.50	229	
	Other Hydro	323	73	132	2.30	96	
	Gas/Diesel/Others	183	0	0	0.00	0	
	Total J & K	956	367	428	7.80	325	
Total State Control Area Generation		36770	16858	16238	392.25	16344	
J. Net Inter Regional Exchange (Import (+ve)/Export (-ve))			4707	3858	109.75	4573	
Total Regional Availability(Gross)		60823	36283	29673	766.84	31952	

IV. Total Hydro Generation:

Regional Entities Hydro	11080	6614	1891	84.89	3537
State Control Area Hydro	5368	1751	1594	41.56	1731
Total Regional Hydro	16448	8365	3485	126.44	5268

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	500	500	0	10.98	0.00	10.98
Gwalior-Agra (D/C)	1547	1586	1786	0	36.95	0.00	36.95
Zerda-Kankroli	-192	-297	0	383	0.00	5.96	-5.96
Zerda-Bhinmal	-97	-192	0	292	0.00	3.30	-3.30
Malanpur-Auraiya	-68	-58	0	107	0.00	1.87	-1.87
Badod-Kota/Morak	-93	-111	0	143	0.00	1.50	-1.50
Mundra-Mohindergarh(HVDC)	1911	1731	1916	0	44.97	0.00	44.97
Sub Total WR	3508	3159			92.90	12.62	80.28
Pusauli Bypass	300	300	300	0	7.29	0.00	7.29
MZP- GKP (D/C)	196	100	333	0	4.51	0.00	4.51
Patna-Balia(D/C)	507	309	676	0	11.38	0.00	11.38
B'Sharni-Balia (D/C)	296	88	475	0	6.34	0.00	6.34
Pusauli-Balia	-53	-127	16	133	0.00	1.18	-1.18
Gaya-Fatehpur (765 Kv)	-111	-57	32	119	0.00	1.19	-1.19
Pusauli-Sahupuri	171	115	171	0	3.16	0.00	3.16
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-28	-25	0	32	0.00	0.62	-0.62
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sasaram - Fatehpur(765 KV)	-79	-4	88	94	0.00	0.22	-0.22
Sub Total ER	1199	699			32.67	3.20	29.47
Total IR Exch	4707	3858			125.57	15.82	109.75

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
30.87	0.05	30.93	6.60	7.62	4.51	-0.27	0.00	0.00
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
42.04	71.92	113.96	29.47	80.28	109.75	-12.57	8.36	-4.21

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	0.00	0.10	1.15	15.91	30.84	22.13	45.88	11.67	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				
50.40	6.49	49.80	18.52	50.09	0.16	0.09	50.26	49.89

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	01:38	402	00:00	0.0	0.0	0.0	0.0
Gorakhpur	400	426	05:07	402	18:52	0.0	0.0	17.4	0.0
Bareilly	400	0	00:00	9999	00:00	0.0	0.0	0.0	0.0
Kanpur	400	418	18:01	404	18:49	0.0	0.0	0.0	0.0
Dadri	400	424	01:43	409	06:22	0.0	0.0	20.7	0.0
Ballabgarh	400	430	00:58	415	06:24	0.0	0.0	74.9	0.0
Bawana	400	430	01:53	412	06:26	0.0	0.0	56.5	0.0
Bassi	400	431	18:04	400	08:05	0.0	0.0	45.6	0.0
Hissar	400	418	01:53	397	06:27	0.0	0.0	0.0	0.0
Moga	400	418	01:47	397	06:30	0.0	0.0	0.0	0.0
Abdullapur	400	426	04:02	405	06:25	0.0	0.0	46.3	0.0
Nalagarh	400	424	01:55	405	06:38	0.0	0.0	15.5	0.0
Kishenpur	400	416	23:53	395	19:05	0.0	0.0	0.0	0.0
Wagoora	400	389	01:53	371	07:29	25.4	100.0	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	774	18:02	743	18:54	0.0	0.0	0.0	0.0
Balia	765	777	05:46	736	18:52	0.0	2.5	0.0	0.0
Moga	765	797	01:55	758	06:36	0.0	0.0	0.0	0.0
Agra	765	807	18:03	777	06:26	0.0	0.0	13.6	0.0
Bhiwani	765	807	23:57	774	06:28	0.0	0.0	3.5	0.0
Unnao	765	758	00:00	747	10:39	0.0	0.0	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	484.97	585.65	483.24	536.06	120.35	533.86
Pong	426.72	384.05	403.65	304.55	401.59	259.17	94.95	305.60
Tehri	829.79	740.04	788.45	425.58	818.65	982.26	48.18	195.00
Koteswar	612.50	598.50	610.35	4.69	609.60	4.21	195.00	198.00
Chamera-I	760.00	748.75	NA	NA	NA	NA	81.53	107.03
Rihand	268.22	252.98	259.45	274.80	258.99	250.70	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	508.60	144.00	508.99	144.00	105.85	120.77

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 16.03.2014 :

1. Normal Weather.

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 .

Report for : 16.03.2014

पारी प्रभारी अभियंता / SHIFT CHARGE ENGINEER