

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 19.03.2013
Date of Reporting : 20.03.2013

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
31415	1895	33310	49.92	29351	1005	30356	50.21	750.4	49.92

* 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	38.98	12.03		51.01	49.49	51.38	1.89	102.39	2.73
Haryana	54.68	0.52		55.20	55.12	52.49	-2.63	107.69	0.00
Rajasthan	97.82	4.75	4.95	107.52	69.59	68.25	-1.34	175.76	0.19
Delhi	24.92			24.92	38.31	35.72	-2.59	60.63	0.00
UP	103.72	6.84	19.20	129.76	86.97	85.03	-1.94	214.79	44.76
Uttarakhand		12.71		12.71	17.18	17.64	0.45	30.35	0.51
HP		8.47		8.47	15.52	15.02	-0.50	23.50	0.00
J & K		8.35	0.00	8.35	23.89	23.49	-0.39	31.84	1.73
Chandigarh				0.00	3.73	3.45	-0.28	3.45	0.00
Total	320.11	53.68	24.15	397.94	359.79	352.46	-7.33	750.40	49.92

* 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	
Punjab	5031	45	132	-166	3736	0	94	159	-2.00
Haryana	5107	0	-213	56	3782	0	-131	-462	-6.19
Rajasthan	6023	0	-284	655	7568	0	146	876	21.17
Delhi	3091	0	12	-749	1647	0	-48	-1238	-20.75
UP	8009	1750	-271	14	9411	1005	171	79	1.61
Uttarakhand	1554	0	239	337	1070	0	-10	260	6.71
HP	916	0	-139	-234	775	0	13	101	1.02
J&K	1496	100	106	-5	1272	0	57	22	0.21
Chandigarh	189	0	-10	-4	90	0	-9	0	-0.12
Total	31415	1895	-427	-96	29351	1005	284	-203	1.67

* 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
A. NTPC	Singrauli STPS	2000	1963	2105	2079	47.07	1961	46.67	0.40	
	Rihand I STPS	1000	715	767	760	16.90	704	16.88	0.03	
	Rihand II STPS	1000	975	1023	1032	23.01	959	23.04	-0.03	
	Rihand III STPS	500	485	510	478	11.50	479	11.64	-0.14	
	Dadri I STPS	840	708	811	590	15.12	630	15.75	-0.63	
	Dadri II STPS	980	834	494	369	10.08	420	14.48	-4.40	
	Unchahar I TPS	420	408	412	428	9.25	386	8.66	0.60	
	Unchahar II TPS	420	406	416	426	9.18	383	8.21	0.97	
	Unchahar III TPS	210	202	178	220	4.57	190	4.13	0.44	
	IISTPP (Jhajjar)	1500	995	684	705	15.28	637	15.76	-0.48	
	Dadri GPS	830	808	332	361	8.66	361	8.87	-0.22	
	Anta GPS	419	406	255	228	3.57	149	5.88	-2.31	
	Auraiva GPS	663	638	148	158	3.57	149	3.83	-0.26	
	Sub Total (A)	10782	9542	8135	7834	177.78	7407	183.81	-6.03	
	B. NPC	NAPS	440	297	331	310	7.13	297	7.13	0.00
		RAPS- B	440	421	450	464	9.98	416	10.10	-0.12
RAPS- C		440	430	471	477	10.21	425	10.32	-0.11	
Sub Total (B)		1320	1148	1252	1251	27.32	1138	27.55	-0.23	
C. NHPC	Chamera I HPS	540	550	450	0	4.15	173	4.10	0.05	
	Chamera II HPS	300	310	152	0	1.78	74	1.92	-0.14	
	Chamera III HPS	231	231	236	0	0.95	39	0.94	0.00	
	Bairasuil HPS	180	182	182	10	1.55	65	1.37	0.18	
	Salal-HPS	690	200	224	35	4.50	188	4.43	0.08	
	Tanakpur-HPS	94	26	31	30	0.62	26	0.63	-0.01	
	Uri-HPS	480	480	478	480	11.56	481	11.42	0.14	
	Dhauliganga-HPS	280	288	214	0	1.09	45	1.06	0.03	
	Dulhasti-HPS	390	387	389	0	2.70	113	2.58	0.13	
	Sewa-II HPS	120	120	124	111	2.76	115	2.86	-0.10	
	Sub Total (C)	3305	2773	2480	666	31.67	1319	31.30	0.36	
	D.NJPC	Nathpa Jhakri	1500	1605	1326	0	7.86	328	8.00	-0.14
		Sub Total (D)	1500	1605	1326	0	7.86	328	8.00	-0.14
E. THDC	Tehri HPS	1000	610	618	0	8.27	345	8.25	0.02	
	Koteshwar HPS	400	300	300	0	2.19	91	3.30	-1.12	
	Sub Total (E)	1400	910	918	0	10.45	436	11.55	-1.10	
F. BBMB	Bhakra HPS	1480	674	994	415	16.41	684	16.17	0.24	
	Dehar HPS	990	226	660	165	5.50	229	5.42	0.09	
	Pong HPS	396	252	302	121	6.10	254	5.01	1.09	
	Sub Total (F)	2866	1151	1956	701	28.01	1167	26.59	1.42	
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	0	0	0.32	13	0.31	0.01	
	KWHEP HPS(IPP)	1000	0	141	0	4.01	167	4.09	-0.07	
	Malana Stg-II HPS	100	0	42	0	0.19	8	0.17	0.02	
	Shree Cement TPS	300	0	132	212	3.77	157	3.93	-0.16	
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00	
	Sub Total (G)	1662	0	315	212	8.30	346	8.50	-0.21	
H. Total Regional Entities (A-G)	22836	17130	16382	10664	291.39	12141	297.31	-5.92		

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	840	890	19.18	799
	Guru Nanak Dev TPS(Bhatinda)	440	232	200	4.83	201
	Guru Hargobind Singh TPS(L.mbt)	920	733	533	14.97	624
	Thermal (Total)	2620	1805	1623	38.98	1624
	Total Hydro	1148	657	437	12.03	501
	Total Punjab	3768	2462	2060	51.01	2125
Haryana	Panipat TPS	1367	1064	1078	25.78	1074
	DCRTPP (Yamuna nagar)	600	560	560	13.24	552
	Faridabad GPS (NTPC)	432	173	151	4.02	168
	RGTPP (khedar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	619	373	11.63	485
	Thermal (Total)	4944	2416	2162	54.68	2278
	Total Hydro	62	18	20	0.52	22
	Total Haryana	5006	2434	2182	55.20	2300
	Rajasthan	kota TPS	1240	1069	1155	27.02
suratgarh TPS		1500	1128	1365	29.12	1213
Chabra TPS		500	391	411	9.75	406
Dholpur GPS		330	138	111	3.06	128
Ramgarh GPS		111	70	70	1.79	75
RAPS A (NPC)		300	179	179	4.81	200
Barsingsar (NLC)		250	185	184	4.35	181
Giral LTPS		250	114	107	3.03	126
Rajwest LTPS (IPP)		1080	641	604	14.89	621
VSLP LTPS (IPP)		135	0		0.00	0
Thermal (Total)		5696	3915	4186	97.82	4076
Total Hydro		550	114	206	4.75	198
Wind power		2191	28	84	2.72	113
Biomass		91	26	26	0.63	26
Solar		201	40	0	1.61	67
Renewable/Others (Total)		2483	54	110	4.95	206
Total Rajasthan		8729	4083	4502	107.52	4480
UP	Anpara TPS	1630	956	990	23.20	967
	Obra TPS	1382	478	509	11.80	492
	Paricha TPS	890	621	745	15.50	646
	Panki TPS	210	77	81	1.90	79
	Harduaganj TPS	665	233	268	5.40	225
	Tanda TPS (NTPC)	440	407	405	9.87	411
	Roza TPS (IPP)	1200	639	801	17.94	748
	Anpara-C (IPP)	1200	391	392	9.41	392
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	316	403	8.70	362
	Thermal (Total)	8067	4118	4594	103.72	4322
	Vishnuparyag HPS (IPP)	400	75	74	1.78	74
	Other Hydro	527	143	261	5.07	211
	Cogeneration	981	800	800	19.20	800
	Total UP	9975	5136	5729	129.76	5333
Uttarakhand	Total Hydro	1303	559	485	12.71	530
	Total Uttarakhand	1303	559	485	12.71	530
Delhi	Rajghat TPS	135	54	54	1.40	58
	Delhi Gas Turbine	282	151	154	3.75	156
	Pragati Gas Turbine	330	296	265	6.70	279
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	580	575	13.07	544
	Thermal (Total)	2237	1081	1048	24.92	1038
	Total Delhi	2237	1081	1048	24.92	1038
HP	Baspa HPS (IPP)	330	0	0	0.99	41
	Malana HPS (IPP)	86	43	0	0.18	8
	Other Hydro	589	317	293	7.31	305
	Total HP	1005	360	293	8.47	353
J & K	Baglihar HPS (IPP)	450	246	146	3.80	158
	Other Hydro	323	95	130	4.55	189
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	341	276	8.35	348
Total State Control Area Generation		32979	16456	16575	397.94	16507
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			1763	2587	70.57	2940
Total Regional Availability(Gross)		55815	34601	29826	759.89	31588

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6863	1367	82.52	3438
State Control Area Hydro	5368	2192	1978	53.68	2163
Total Regional Hydro	15731	9055	3345	136.19	5601

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	150	150	350	0	4.01	0.00	4.01
Gwalior-Agra (D/C)	228	667	986	0	16.84	0.00	16.84
Zerda-Kankroli	-168	-82	55	168	0.00	1.66	-1.66
Zerda-Bhinmal	-107	-4	153	147	0.11	0.00	0.11
Malanpur-Auraiya	-165	-110	0	165	0.00	2.42	-2.42
Badod-Kota/Morak	-161	-153	0	161	0.00	2.30	-2.30
Mundra-Mohindergarh(HVDC)	1049	1052	1050	0	25.54	0.00	25.54
Sub Total WR	826	1520			46.50	6.38	40.12
Pusauli Bypass	400	400	400	0	9.26	0.00	9.26
MZP- GKP (D/C)	44	38	150	0	2.23	0.00	2.23
Patna-Balia(D/C)	389	457	588	0	12.23	0.00	12.23
B'Sharif-Balia (D/C)	95	178	307	0	5.10	0.00	5.10
Pusauli-Balia	-117	-113	0	130	0.00	2.14	-2.14
Gaya-Fatehpur (765 Kv)	27	9	127	6	1.70	0.00	1.70
Pusauli-Sahupuri	135	138	147	0	2.90	0.00	2.90
K'nasa-Sahupuri	0	0	0	0	0.00	0.00	0.00
Son Ngr-Rihand	-36	-40	0	44	0.00	0.83	-0.83
Garhwa-Rihand	0	0	0	0	0.00	0.00	0.00
Sub Total ER	937	1067			33.42	2.97	30.45
Total IR Exch	1763	2587			79.92	9.35	70.57

V(B). Inter Regional Schedule & Actual Exchanges [Import (+ve)/Export (-ve)] [Corridor wise]

ER	ISGS/LT Schedule (MU)		Bilateral Schedule (MU)		Power Exchange ShdI (MU)		Wheeling (MU)	
	Bhutan	Total	Through ER	Through WR	Through ER	Through WR	Through ER	Through WR
41.57	0.19	41.76	-10.79	2.28	1.60	0.34	-2.09	2.11

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
30.48	44.72	75.19	30.45	40.12	70.57	-0.03	-4.60	-4.62

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

<48.80	<49.0	<49.20	<49.50	<49.7	49.5 - 50.2	49.7 - 50.2	> 50.00	> 50.2
0.00	0.00	0.00	0.00	0.60	95.00	94.40	49.30	5.00

<----- 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				
50.46	17.05	49.57	19.14	50.00	0.15	0.12	50.41	49.91

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	408	4:24	401	10:30	0.0	0.0	0.0	0.0
Gorakhpur	400	428	17:27	408	11:23	0.0	0.0	32.1	0.0
Bareilly	400	0	0:00	9999	0:00	0.0	0.0	0.0	0.0
Kanpur	400	415	4:06	398	10:42	0.0	0.0	0.0	0.0
Dadri	400	421	4:06	399	11:12	0.0	0.0	0.1	0.0
Ballabgarh	400	427	4:06	404	10:46	0.0	0.0	10.3	0.0
Bawana	400	425	4:06	403	11:19	0.0	0.0	6.8	0.0
Bassi	400	424	4:06	394	22:33	0.0	0.0	3.3	0.0
Hissar	400	415	4:06	392	11:18	0.0	0.0	0.0	0.0
Moga	400	415	4:05	395	11:11	0.0	0.0	0.0	0.0
Abdullapur	400	428	4:06	403	11:06	0.0	0.0	14.4	0.0
Nalagarh	400	429	4:06	401	11:19	0.0	0.0	15.2	0.0
Kishenpur	400	414	4:04	391	18:57	0.0	0.0	0.0	0.0
Wagoora	400	408	13:03	381	18:57	0.0	17.2	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	766	4:06	732	11:19	0.0	12.1	0.0	0.0
Balia	765	767	5:16	731	10:42	0.0	12.7	0.0	0.0
Moga	765	786	4:05	748	11:18	0.0	0.0	0.0	0.0
Lucknow	765	777	17:07	741	10:46	0.0	0.1	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	483.24	536.06	482.07	511.55	252.39	460.91
Pong	426.72	384.05	401.59	259.17	405.69	361.16	84.50	363.64
Tehri	829.79	740.04	782.25	NA	818.65	982.26	67.88	219.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	90.19	106.02
Rihand	268.22	252.98	258.47	NA	260.54	NA	NA	NA
RPS	352.80	343.81	346.07	NA	NA	NA	NA	NA
Jawahar Sagar	298.70	295.78	296.24	NA	NA	NA	NA	NA
RSD	527.91	487.91	508.32	NA	495.85	NA	135.86	132.41

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 19.03.2013 :
Normal Weather in Northern Region.

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 :

Report for : 19.03.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER