

पॉवर सिस्टम ऑपरेशन कार्पोरेशन लिमिटेड

(पावरग्रिड की पूर्ण स्वामित्व प्राप्त सहायक कंपनी)



उत्तरी क्षेत्रीय भार प्रेषण केंद्र

Power Supply Position in Northern Region for 28.03.2013
Date of Reporting : 29.03.2013

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
26279	1566	27845	50.07	24452	650	25102	50.39	637.9	32.41

* 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	25.95	11.93		37.88	37.17	38.50	1.34	76.38	0.00
Haryana	33.95	0.61		34.55	53.32	53.28	-0.04	87.83	0.00
Rajasthan	74.77	0.96	9.41	85.14	62.44	56.66	-5.78	141.79	0.39
Delhi	21.59			21.59	34.02	32.54	-1.48	54.13	0.05
UP	92.89	5.37	19.20	117.47	82.74	80.78	-1.96	198.24	30.26
Uttarakhand		13.12		13.12	14.63	11.69	-2.94	24.81	0.00
HP		9.53		9.53	10.42	9.62	-0.80	19.15	0.00
J & K		11.75	0.00	11.75	22.63	20.51	-2.13	32.25	1.70
Chandigarh				0.00	3.73	3.32	-0.41	3.32	0.00
Total	249.15	53.26	28.61	331.01	321.09	306.90	-14.20	637.91	32.41

* 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	3739	0	203	17	2373	0	-154	-215	-0.92
Haryana	3929	0	-130	-342	3524	0	86	-204	-6.68
Rajasthan	4992	0	-473	599	5733	0	-349	416	12.10
Delhi	2551	6	-97	-1010	1531	0	-78	-985	-24.27
UP	7128	1460	-158	-13	8879	650	181	28	0.54
Uttarakhand	1360	0	155	319	743	0	-264	238	6.45
HP	896	0	69	-361	415	0	-160	-26	-2.92
J&K	1512	100	56	-45	1164	0	-117	-45	-1.07
Chandigarh	172	0	-18	-56	90	0	-36	0	-0.26
Total	26279	1566	-392	-891	24452	650	-891	-792	-17.03

* 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
A. NTPC	Singrauli STPS	2000	1970	1895	1595	41.72	1738	41.28	0.44
	Rihand I STPS	1000	715	623	592	14.64	610	14.73	-0.09
	Rihand II STPS	1000	975	817	796	19.26	803	19.61	-0.34
	Rihand III STPS	500	485	399	353	10.17	424	10.36	-0.19
	Dadri I STPS	840	807	791	610	15.51	646	17.33	-1.83
	Dadri II STPS	980	969	495	350	8.37	349	14.56	-6.19
	Unchahar I TPS	420	408	343	315	7.86	327	7.50	0.36
	Unchahar II TPS	420	406	316	311	7.21	300	6.94	0.27
	Unchahar III TPS	210	0	0	0	0.00	0	0.00	0.00
	ISTPP (Jhajjar)	1500	995	383	322	8.19	341	8.71	-0.52
	Dadri GPS	830	799	335	333	8.42	351	8.83	-0.41
	Anta GPS	419	402	238	246	5.74	239	5.87	-0.14
	Auraiya GPS	663	640	156	156	3.59	150	3.81	-0.22
	Sub Total (A)	10782	9571	6791	5979	150.66	6278	159.52	-8.86
B. NPC	NAPS	440	300	331	340	7.18	299	7.20	-0.02
	RAPS- B	440	423	460	465	10.07	420	10.15	-0.08
	RAPS- C	440	430	471	477	10.17	424	10.32	-0.15
	Sub Total (B)	1320	1153	1262	1282	27.41	1142	27.67	-0.26
C. NHPC	Chamera I HPS	540	550	540	0	1.87	78	2.02	-0.15
	Chamera II HPS	300	310	207	29	3.05	127	3.21	-0.17
	Chamera III HPS	231	231	231	0	1.88	78	2.00	-0.12
	Bairasuil HPS	180	182	182	20	1.96	81	1.81	0.14
	Salal-HPS	690	278	456	279	6.73	280	6.76	-0.03
	Tanakpur-HPS	94	31	27	25	0.69	29	0.72	-0.03
	Uri-HPS	480	480	480	478	11.60	484	11.48	0.12
	Dhauliganga-HPS	280	289	283	0	1.21	50	1.23	-0.02
	Dulhasti-HPS	390	387	398	0	3.42	143	3.48	-0.06
	Sewa-II HPS	120	120	121	110	2.81	117	2.82	-0.01
	Sub Total (C)	3305	2858	2925	941	35.21	1467	35.54	-0.33
	D. NJPC	Natpaha Jhakri	1500	1605	1165	0	9.81	409	9.81
Sub Total (D)		1500	1605	1165	0	9.81	409	9.81	0.00
E. THDC	Tehri HPS	1000	780	170	0	6.15	256	6.00	0.15
	Koteshwar HPS	400	300	200	0	2.48	103	3.10	-0.62
	Sub Total (E)	1400	1080	370	0	8.63	359	9.10	-0.48
F. BBMB	Bhakra HPS	1480	777	993	679	18.71	780	18.64	0.07
	Dehar HPS	990	307	495	280	7.56	315	7.36	0.20
	Pong HPS	396	118	180	120	2.79	116	5.01	-2.22
	Sub Total (F)	2866	1201	1668	1079	29.06	1211	31.00	-1.94
G. IPP(s)/JV(s)	ADHPL HPS(IPP)	192	0	44	102	0.79	33	0.73	0.06
	KWHEP HPS(IPP)	1000	0	150	0	5.03	210	5.05	-0.02
	Malana Stg-II HPS	100	0	51	0	0.26	11	0.23	0.03
	Shree Cement TPS	300	0	267	171	5.59	233	5.72	-0.14
	Budhil HPS(IPP)	70	0	0	0	0.00	0	0.00	0.00
	Sub Total (G)	1662	0	512	273	11.66	486	11.73	-0.06
H. Total Regional Entities (A-G)	22836	17468	14693	9554	272.44	11352	284.37	-11.92	

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	480	640	12.46	519
	Guru Nanak Dev TPS(Bhatinda)	440	95	95	2.04	85
	Guru Hargobind Singh TPS(L.mbt)	920	485	479	11.46	477
	Thermal (Total)	2620	1060	1214	25.95	1081
	Total Hydro	1148	441	533	11.93	497
Total Punjab	3768	1501	1747	37.88	1578	
Haryana	Panipat TPS	1367	621	621	15.05	627
	DCRTPP (Yamuna nagar)	600	261	254	6.17	257
	Faridabad GPS (NTPC)	432	196	150	3.89	162
	RGTPP (kheadar) (IPP)	1200	0	0	0.00	0
	Magnum Diesel (IPP)	25	0	0	0.00	0
	Jhajjar(CLP)	1320	369	369	8.84	368
	Thermal (Total)	4944	1447	1394	33.95	1414
	Total Hydro	62	21	26	0.61	25
	Total Haryana	5006	1468	1420	34.55	1440
	Rajasthan	kota TPS	1240	731	903	19.19
suratgarh TPS		1500	853	751	21.17	882
Chabra TPS		500	195	453	6.88	287
Dholpur GPS		330	125	50	3.25	135
Ramgarh GPS		111	48	72	1.81	75
RAPS A (NPC)		300	172	172	4.80	200
Barsingsar (NLC)		250	174	167	3.87	161
Giral LTPS		250	61	59	1.30	54
Rajwest LTPS (IPP)		1080	495	608	12.51	521
VSLP LTPS (IPP)		135	0		0.00	0
Thermal (Total)		5696	2854	3235	74.77	3116
Total Hydro		550	11	10	0.96	40
Wind power		2191	173	555	7.03	293
Biomass		91	40	40	0.97	40
Solar		201	35	0	1.41	59
Renewable/Others (Total)		2483	213	595	9.41	392
Total Rajasthan		8729	3078	3840	85.14	3547
UP		Anpara TPS	1630	805	967	22.50
	Obra TPS	1382	487	479	11.70	488
	Paricha TPS	890	695	785	18.30	763
	Panki TPS	210	0	63	0.30	13
	Harduaganj TPS	665	45	268	5.50	229
	Tanda TPS (NTPC)	440	402	407	9.92	413
	Roza TPS (IPP)	1200	599	806	16.34	681
	Anpara-C (IPP)	1200	0	0	0.00	0
	Bajaj Energy Pvt.Ltd(IPP) TPS	450	315	400	8.33	347
	Thermal (Total)	8067	3348	4175	92.89	3871
	Vishnuparyag HPS (IPP)	400	80	80	1.90	79
	Other Hydro	527	129	145	3.48	145
	Cogeneration	981	800	800	19.20	800
	Total UP	9975	4357	5200	117.47	4815
Uttarakhand	Total Hydro	1303	578	534	13.12	546
	Total Uttarakhand	1303	578	534	13.12	546
Delhi	Rajghat TPS	135	104	104	2.45	102
	Delhi Gas Turbine	282	85	77	1.96	82
	Pragati Gas Turbine	330	301	265	6.78	282
	Rithala GPS	108	0	0	0.00	0
	Bawana GPS	677	0	0	0.00	0
	Badarpur TPS (NTPC)	705	525	395	10.40	434
	Thermal (Total)	2237	1015	841	21.59	900
	Total Delhi	2237	1015	841	21.59	900
	HP	Baspa HPS (IPP)	330	31	31	1.05
Malana HPS (IPP)		86	45	0	0.25	10
Other Hydro		589	322	342	8.23	343
Total HP		1005	398	373	9.53	397
J & K	Baglihar HPS (IPP)	450	296	290	7.20	300
	Other Hydro	323	95	130	4.55	189
	Gas/Diesel/Others	183	0	0	0.00	0
	Total J & K	956	391	420	11.75	489
Total State Control Area Generation		32979	12786	14375	331.01	13713
J. Net Inter Regional Exchange [Import (+ve)/Export (-ve)]			644	995	39.91	1663
Total Regional Availability(Gross)		55815	28123	24924	643.36	26728

IV. Total Hydro Generation:

Regional Entities Hydro	10364	6373	2122	88.78	3699
State Control Area Hydro	5368	1969	2041	53.26	2140
Total Regional Hydro	15731	8342	4163	142.04	5839

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	-100	-250	50	400	0.06	5.96	-5.90
Gwalior-Agra (D/C)	-6	288	871	71	10.44	0.00	10.44
Zerda-Kankroli	-273	-274	0	329	0.00	5.33	-5.33
Zerda-Bhinmal	-232	-251	20	314	0.00	4.07	-4.07
Malanpur-Auraiya	-109	-88	0	109	0.00	1.58	-1.58
Badod-Kota/Morak	-145	-197	0	214	0.00	1.52	-1.52
Mundra-Mohindergarh(HVDC)	1263	1262	1267	0	30.46	0.00	30.46
Sub Total WR	398	490			40.96	18.46	22.50
Pusauli Bypass	200	100	200	177	2.73	0.00	2.73
MZP- GKP (D/C)	-126	28	164	126	1.67	0.00	1.67
Patna-Balia(D/C)	224	290	400	0	7.87	0.00	7.87
B'Sharif-Balia (D/C)	19	116	251	0	3.93	0.00	3.93
Pusauli-Balia	-108	-64	24	108	0.00	1.07	-1.07
Gaya-Fatehpur (765 Kv)	-34	-51	108	55	0.54	0.00	0.54
Pusauli-Sahupuri	107	126	129	0	2.58	0.00	2.58
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	246	505			19.31	1.90	17.41
Total IR Exch	644	995			60.27	20.37	39.91

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
31.86	0.29	32.15	-12.51	-4.63	2.26	-13.77	-1.94	1.94

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
19.95	31.85	51.80	17.41	22.50	39.91	-2.54	-9.35	-11.89

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	0.00	76.53	76.53	94.53	23.47

<----- Frequency (Hz) ----->				Average Frequency	Frequency Variation	Std. Dev.	Frequency in 15 Min Block	
Maximum		Minimum					MAX (Hz)	MIN (Hz)
Freq	Time	Freq	Time	Hz	Index			
50.63	4.10	49.83	9.09	50.21	0.63	0.11	50.56	50.01

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	416	4:05	408	9:06	0.0	0.0	0.0	0.0
Gorakhpur	400	428	18:01	413	22:44	0.0	0.0	46.5	0.0
Bareilly	400	431	18:18	415	10:29	0.0	0.0	58.2	0.2
Kanpur	400	427	4:09	409	22:34	0.0	0.0	31.5	0.0
Dadri	400	430	4:10	413	9:36	0.0	0.0	54.9	0.0
Ballabgarh	400	436	4:07	417	22:16	0.0	0.0	89.6	15.1
Bawana	400	433	4:06	413	19:11	0.0	0.0	72.4	7.1
Bassi	400	433	17:01	407	22:12	0.0	0.0	40.2	1.2
Hissar	400	423	4:10	402	19:10	0.0	0.0	4.6	0.0
Moga	400	425	4:07	404	19:11	0.0	0.0	13.1	0.0
Abdullapur	400	428	16:05	402	19:12	0.0	0.0	23.8	0.0
Nalagarh	400	430	0:46	411	19:10	0.0	0.0	69.2	0.0
Kishenpur	400	422	4:02	398	19:10	0.0	0.0	4.4	0.0
Wagoora	400	413	16:56	382	19:40	0.0	9.8	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	800	16:59	752	19:39	0.0	0.0	0.0	0.0
Balia	765	770	7:03	743	22:32	0.0	0.0	0.0	0.0
Moga	765	802	4:06	758	19:12	0.0	0.0	1.0	0.0
Lucknow	765	0	0:00	9999	0:00	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	480.55	468.02	478.31	420.92	351.33	604.03
Pong	426.72	384.05	399.20	216.87	403.79	312.39	97.66	254.37
Tehri	829.79	740.04	776.70	282.00	818.65	982.26	86.74	178.00
Koteshwar	612.50	598.50	NA	NA	NA	NA	NA	NA
Chamera-I	760.00	748.75	NA	NA	NA	NA	NA	NA
Rihand	268.22	252.98	258.07	NA	260.18	NA	NA	NA
RPS	352.80	343.81	345.69	NA	NA	NA	NA	119.64
Jawahar Sagar	298.70	295.78	296.27	NA	NA	NA	NA	258.05
RSD	527.91	487.91	507.67	NA	496.20	NA	103.30	102.05

* NA: Not Available

X. System Constraints:

XI. Grid Disturbance / Any Other Significant Event:

XII. Weather Conditions For 28.03.2013 :

1. Rains & hail storm in NCR 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 : 28.03.2013

पारी प्रभाती अश्विनी / SHIFT CHARGE ENGINEER