

पश्चिम क्षेत्रीय भार प्रेषण केंद्र की
मई 2011 माह की प्रणाली प्रचालन रिपोर्ट

System Operation Report Of Western Region

For the month of **June-2011**



पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(पावरग्रिड की एक पूर्ण स्वामित्व वाली कंपनी)

पश्चिम क्षेत्रीय भार प्रेषण केन्द्र, मुम्बई

Power System Operation Corporation Ltd.

(A wholly owned subsidiary company of POWERGRID)

Western Regional Load Despatch Centre, Mumbai

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SYSTEM OPERATION REPORT OF WESTERN REGION
FOR THE MONTH OF MAY 2011

A)SUMMARY REPORT

I)IMPORTANT EVENTS

a)COMMISSIONING OF NEW GENERATING UNITS

S.No.	CONSTITUENT	UNIT NAME	UNIT NO	Capacity(MW)	DATE
1	GUJARAT	APL	6	660	3/6/2011
2	NTPC	SIPAT	I	660	22/06/11

b)COMMISSIONING OF NEW TRANSMISSION LINES

S.No.	CONSTITUENT	LINE NAME	CKT NO	KV	DATE
1	POWERGRID	Korba-Raipur	III & IV	400	21/06/11

c)COMMISSIONING OF NEW ICTS

S.No.	CONSTITUENT	STATION NAME	KV RATIO	Capacity(MVA)	DATE
1	POWERGRID	RAIPUR	400/220	315	30/06/11

d)COMMISSIONING OF LINE / BUS REACTORS

S.No.	CONSTITUENT	STATION NAME	KV RATIO	Capacity(MVAR)	DATE
-	NIL	NIL	NIL	-	-

e) Major problem/constraints affecting Grid operation including major Grid disturbances

NIL

i) Grid Separations

NIL

ii) Grid Disturbances

NIL

माह जुन 2011 में पश्चिम क्षेत्र का निष्पादन डाटा
Performance of Western Regional Grid during June - 2011
Schedule and Drawal Of Constituents from Central sector

Sl. No.	State/U.T./ System	Schedule (Mus)	Actual Drawal (MUs)	Total Over (+)/Under (-)drawal (MUs)	Overdrawal at Freq. <49.5Hz (MUs)	Underdrawal at Freq. >50.2Hz (MUs)
1	गुजरात Gujarat	1018.27	1066.17	47.9	4.038	0.1532
2	मध्य प्रदेश Madhya Pradesh	1284.04	1116.02	-168.02	1.431	4.522
3	महाराष्ट्र Maharashtra	2216.4	2254.05	37.65	0.578	2.354
4	छत्तिसगढ Chhattisgarh	-92.12	-104.69	-12.57	0.911	0.648
5	गोवा Goa	188.42	173.65	-14.77	0.311	0.362
6	दमन और दीव D&D	148.83	162.39	13.56	0.592	0.088
7	दादर नगर हवेली	311.17	338.11	26.94	0.934	0.11
8	कुल TOTAL	5075.01	5005.70	-69.31	8.795	8.2372

आवृत्ति रूपरेखा

III a. Frequency Profile

MAXIMUM FREQUENCY(Inst.):	50.60 HZ
आधिकतम आवृत्ती एकिकृत	:
Minimum frequency(Inst)	48.82 HZ
न्यूनतम आवृत्ती एकिकृत	:
Average frequency	49.89 HZ
औसत आवृत्ती	

b. आवृत्ती वितरण प्रतिशत में Frequency distribution in %

HZ	<48.8	48.8 - 49.2	49.2 -49.5	49.5-50.2	50.2-51.0	>51.0
%	0	0.54	4.02	90.93	4.51	0.00

IV Power Supply Position and Peak Demand / Met In Western Region

a. विद्युत पूर्ति की स्थिति Power Supply Position

	JUNE-11			April -11 TO JUNE -11		
	Requirement (MUs)	Availability (MUs)	Shortage (%)	Requirement (MUs)	Availability (MUs)	Shortage (%)
Gujarat	6878	6844	0.50	20467	20331	0.67
MPSEB	3163	2834	10.41	11077	9380	15.32
CSEB	1584	1566	1.16	5240	5185	1.06
Maharashtra	10861	9643	11.22	35670	30881	13.43
Goa	198	196	1.05	667	659	1.21
D&D	180	161	10.81	553	473	14.38
DNH	363	360	0.96	1040	1029	1.01
Western Region	23228	21603	7.00	74750	67966	9.08

b. Peak Demand / Demand Met(MW)

	JUNE-11			April -11 TO JUNE -11		
	Requirement (MW)	Availability (MW)	Shortage (%)	Requirement (MW)	Availability (MW)	Shortage (%)
Gujarat	10632	10473	1.50	10632	10473	1.50
MPSEB	6419	5568	13.26	7664	7511	2.00
CSEB	2961	2706	8.61	3408	2908	14.67
Maharashtra	19084	15203	20.34	20574	16923	17.75
Goa	401	360	10.22	421	405	3.80
D&D	268	237	11.57	268	248	7.46
DNH	530	526	0.75	530	511	3.58
Western **Region	39106	34436	11.94	41249	35388	14.21

**Regional demand met is the simultaneous demand met and not the sum of demand met by constituent .

PEAK DEMAND FOR JUN.2011

State	Catered	UNSCHLS +SCHLS	FC	PC	Total	Date	Time	Freq.
दिव दमण DD								
पंजीकृत Registered	253	-	-	-	253	30.06.11	15:00	50.02
दादरा नगर हवेली DNH								
पंजीकृत Registered	541	-	-	-	541	30.06.11	16:00	50.06
गुजरात GUJARAT								
पंजीकृत Registered	10776	-	-	-	10776	30.06.11	22:00	49.97
असीमित Unrestricted	10704	0	142	0.00	10846	10.06.11	15:00	49.62
छत्तीसगढ रा .वि.बोर्ड Chhattisgarh								
पंजीकृत Registered	2706	-	-	-	2706	01.06.11	20:00	49.85
असीमित Unrestricted	2452	484	25	0	2961	02.06.11	20:00	49.71
मध्य प्रदेश रा .वि.बोर्ड Madhy Pradesh								
पंजीकृत Registered	5961	-	-	-	5961	04.06.11	21:00	49.71
असीमित Unrestricted	5878	824	140	0	6841	06.06.11	22:00	49.32
महाराष्ट्र रा .वि.बोर्ड -MAHA-RASHTRA								
पंजीकृत Registered	16566	-	-	-	16566	01.06.11	15:00	49.81
असीमित Unrestricted	15432	3763	97	0	19292	01.06.11	21:00	49.82
पश्चिम क्षेत्र WESTERN REGION								
पंजीकृत Registered	34436	-	-	-	34436	01.06.11	21:00	49.82
असीमित Unrestricted	34436	4453	217	0	39106	01.06.11	21:00	49.82

माह जून 2011 में अंतर क्षेत्र से पश्चिम क्षेत्र को विद्युत विनिमय	
Inter-Regional Exchange of Power in Western Region during JUNE -11	
DESCRIPTION	Import (Mus)
ER (NTPC) to GUVNL	36.34
ER (NTPC) to MP PTCL	22.61
ER (NTPC) to CSEB	9.77
ER (NTPC) to MSEDCL	48.06
ER (NTPC) to GOA	0.00
ER (NTPC) to D D	0.64
ER (NTPC) to D N H	0.98
DVC to MPPTCL (Long Term Open Access)	23.42
Hirakud to CSEB	1.27
STERLITE to VARDHMAN MPSEB (TPTCL)	0.47
GOA (SR) to GOA (WHEELING)	1.17
JSL KPTCL to BEST MSEB (JSL KPTCL)	0.69
RVPNL to CSEB (NVVNL)	12.19
Rihand (Hydro) to MPPTCL (Long Term Open Access)	1.09
Matathilla (Hydro) to MPPTCL (Long Term Open Access)	0.57
RPPC to CSEB (NVVNL)	18.70
JK to CSEB (NVVNL)	16.46
KWHEPS to CSEB (PTC LTD)	5.84
KWHEPS to JAYPEE WANAK GUVNL (JAYPEE KARCHAM)	3.49
KWHEPS to MSEB (PTC LTD)	62.85
TNEB to CSEB (PTC LTD)	29.43
DESCRIPTION	Export(Mus)
Indian Energy Exchange (WR to ER)	67.71
Power Exchange of India (WR to ER)	12.66
Indian Energy Exchange (WR to NR)	169.45
PCBL GUVNL to NPCL (NPCL)	11.98
BALCO CSEB to PSEB (NVVNL)	14.27
MPSEB to APPCC (MPPL)	1.54
NSPCL CSEB to SAIL-VISL (SAIL-VISL)	6.33
RINFRA MSEB to APPCC (PTC LTD)	43.14
RINFRA MSEB to UPPCL (UPPCL)	61.63
CSEB to HARIYANA (NVVNL)	2.17
MPSEB to PSEB (PSEB)	0.27
TORRENT_GUVNL to UT-CHANDIGARH (NVVNL)	28.21
CSEB to NDMC(DTL) (PTC LTD)	5.84
MIEL CSEB to PSEB (NVVNL)	19.19
JPL to PSEB (TPTCL)	27.60
CSEB to HARIYANA (NVVNL)	15.81
BALCO CSEB to PSEB (PTC LTD)	15.90
JPL to PSEB (PTC LTD)	22.46
CSEB to BSES_RAJ (NVVNL)	4.62
MIELMH CSEB to PSEB (LANCO)	9.67

DESCRIPTION	Export(Mus)
CSEB to UPPCL (PTC LTD)	241.79
GUVNL to NPCL (NPCL)	32.24
GUVNL to TNEB (TNEB)	111.41
BALCO CSEB to BESCO (PTC LTD)	4.10
GUVNL to BESCO (PTC LTD)	21.24
MPSEB to BSES_RAJ (RETL)	41.42
JPL to APPCC (NVVNL)	6.75
JPL to NDPL(DTL) (TPTCL)	38.00
LAMKPL to PSEB (PTC LTD)	18.37
MPSEB to PSEB (PSEB)	45.96
BALCO CSEB to APPCC (NVVNL)	3.47
MPSEB to BSES_RAJ (MPPL)	2.16
JPL to BSES_RAJ (TPTCL)	5.53
GOA to BSES YM (DTL) (NVVNL)	23.47
RINFRA MSEB to BSES_RAJ (PTC LTD)	28.49
BSES_RAJ to RINFRA MSEB (RINFRA MSEB)	0.82
NET EXPORT TO ER	191.33
NET EXPORT TO NR	876.43
NET EXPORT TO SR	355.83

दिनांक 31 | 06 | 2011 को राज्यानुसार संस्थापित क्षमता

INSTALLED GENERATION CAPACITY OF THE STATES INCLUDING SHARES AS ON 31.06.2011

(All fig. in MW)

State	Ownership	Hydro	Coal	Gas	Nuclear	Total	Diesel	RES	Total
Gujarat	State	772.00	4220.00	892.72	0.00	5884.72	17.28	29.90	5931.90
	Private	0.00	2630.00	2577.50	0.00	5207.50	0.20	1970.57	7178.27
	Central(firm allo)	0.00	1808.90	424.27	559.32	2792.49	0.00	0.00	2792.49
	Total	772.00	8658.90	3894.49	559.32	13884.71	17.48	2000.47	15902.66
Madhya Pradesh	State	1703.66	2807.50	0.00	0.00	4511.16	0.00	26.76	4537.92
	Private	0.00	0.00	0.00	0.00	0.00	0.00	240.40	240.40
	Central(firm allo)	1520.00	1646.93	257.18	273.24	3697.35	0.00	0.00	3697.35
	Total	3223.66	4454.43	257.18	273.24	8208.51	0.00	267.16	8475.67
Chhattisgarh	State	120.00	2060.00	0.00	0.00	2180.00	0.00	19.05	2199.05
	Private	0.00	1600.00	0.00	0.00	1600.00	0.00	231.90	1831.90
	Central(firm allo)	0.00	908.00	0.00	47.52	955.52	0.00	0.00	955.52
	Total	120.00	4568.00	0.00	47.52	4735.52	0.00	250.95	4986.47
Maharashtra	State	2884.84	7150.00	672.00	0.00	10706.84	0.00	269.23	10976.07
	Private	447.00	3340.00	180.00	0.00	3967.00	0.00	2540.10	6507.10
	Central(firm allo)	0.00	2308.05	2623.93	690.14	5622.12	0.00	0.00	5622.12
	Total	3331.84	12798.05	3475.93	690.14	20295.96	0.00	2809.33	23105.29
Goa	State	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05
	Private	0.00	0.00	48.00	0.00	48.00	0.00	30.00	78.00
	Central(firm allo)	0.00	289.70	0.00	25.80	315.50	0.00	0.00	315.50
	Total	0.00	289.70	48.00	25.80	363.50	0.00	30.05	393.55
DD	State	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Central(firm allo)	0.00	23.71	4.20	7.38	35.29	0.00	0.00	35.29
	Total	0.00	23.71	4.20	7.38	35.29	0.00	0.00	35.29
DNH	State	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Private	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Central(firm allo)	0.00	28.04	27.10	8.46	63.60	0.00	0.00	63.60
	Total	0.00	28.04	27.10	8.46	63.60	0.00	0.00	63.60
WR	State	5480.50	16237.50	1564.72	0.00	23282.72	17.28	344.99	23644.99
	Private	447.00	7570.00	2805.50	0.00	10822.50	0.20	5012.97	15835.67
	Central(firm allo)*	1520.00	7013.33	3336.68	1611.86	13481.87	0.00	0.00	13481.87
	Unallocated	0.00	1124.35	196.91	228.14	1549.40	0.00	0.00	1549.40
	Total	7447.50	31945.18	7903.81	1840.00	49136.49	17.48	5357.96	54511.93

Note - Renewable Energy Sources (RES) includes Small Hydro Project, Biomass Gasifier, Biomass Power, Urban & Industrial Waste Power

SAILENT FEATURE OF WESTERN REGION GRID FOR THE MONTH OF JUNE -2011

1. स्थापित क्षमता Installed Capacity (MW)	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ CSEB	महाराष्ट्र Mah.	गोवा Goa	सेंट्रल सेक्टर Central Sector	सेंट्रल सेक्टर Central unlocated	पश्चिम क्षेत्र Western Region
June'10	14325	8281	4769	21604	381	12128	1375	50824
June'11	15903	8476	4987	23105	394	15032	1549	54512
वृद्धि प्रतिशतमें % increase	11.01	2.36	4.56	6.95	3	23.94	12.7	7.26
2. उर्जा Energy (Gross)	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ CSEB	महाराष्ट्र Mah.	गोवा Goa	दिव दमण DD	दादरा नगर हवेली DNH	प क्षेत्र Western Region
असिमित आवश्यकता Unrestricted requirement (MUs)								
जून June'10	6167	3472	1622	10711	264	158	318	21692
जून June'11	6878	3163	1584	10861	198	180	363	23228
असिमित आवश्यकता Unrestricted Requirement MUs/day								
जून June'10	206	116	54	357	9	5	11	723
जून June'11	229	105	53	362	7	6	12	774
ऊर्जा उपलब्धता Energy availability (MUs)								
जून June'10	5778	2702	1550	8596	202	137	302	19270
जून June'11	6844	2834	1566	9643	196	161	360	21603
ऊर्जा उपलब्धता Energy availability MUs/day								
जून June'10	193	90	52	287	7	5	10	642
जून June'11	228	94	52	321	7	5	12	720
3. मांग Demand	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ CSEB	महाराष्ट्र Mah.	गोवा Goa	दिव दमण DD	दादरा नगर हवेली DNH	प क्षेत्र Western Region
असिमित मांग Unrestricted demand (MW)								
जून June'10	10133	6524	2578	19395	544	218	472	37618
जून June'11	10632	6419	2961	19084	401	268	530	39106
प्रतिशत in%	4.92	-1.61	14.86	-1.60	-26.29	22.94	12.29	3.96
चरम मांग Peak Demand met (MW)								
जून June'10	9395	5276	2517	14707	453	213	468	30584
जून June'11	10473	5568	2706	15203	360	237	526	34436
प्रतिशत in%	11.47	5.53	7.51	3.37	-20.53	11.27	12.39	12.59
4. मांग और ऊर्जा में कमतरता प्रतिशतमें Shortage in demand and energy (%)								
क्षमतामें कमी Capacity shortage	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ CSEB	महाराष्ट्र Mah.	गोवा Goa	दिव दमण DD	दादरा नगर हवेली DNH	पश्चिम क्षेत्र Western Region
अधिशेष (-)/ surplus (+) (MW)								
जून June'10	-738	-1248	-61	-4688	-91.00	-5.00	-4.00	-7034
प्रतिशत in%	-7.28	-19.13	-2.37	-24.17	-16.73	-2.29	-0.85	-18.70
जून June'11	-159	-851	-255	-3881	-41	-31	-4	-4670
प्रतिशत in%	-1.50	-13.26	-8.61	-20.34	-10.22	-11.57	-0.75	-11.94
ऊर्जा में कमी Energy अधिशेष Surplus (+) (MUs)	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ CSEB	महाराष्ट्र Mah.	गोवा Goa	दिव दमण DD	दादरा नगर हवेली DNH	प क्षेत्र Western Region
जून June'10	-389.00	-770.00	-72.00	-2115.00	-62.00	-21.00	-16.00	-2422.00
प्रतिशत in%	-6.31	-22.18	-4.44	-19.75	-23.48	-13.29	-5.03	-11.17
जून June'11	-34.00	-329.00	-18.00	-1218.00	-2.00	-19.00	-3.00	-1625.00
प्रतिशत in%	-0.49	-10.40	-1.14	-11.21	-1.01	-10.56	-0.83	-7.00

माह जुन 11 में ग्रिड के प्रमुख उप केन्द्र का विद्युतदाब रूपरेखा

Voltage Profile of major Sub-Stations for the month of June -2011

क्षेत्र Region	सब स्टेशनका नाम	अधिकतम विद्युतदाब Nominal	विद्युतदाब स्थिती (प्रतिशत समय)			अधिकतम विद्युतदाब Max.	न्यूनतम विद्युतदाब Min.	संक्षिप्त स्पष्टीकरण Brief Explanation
	Sub station name	Voltage(KV)	Percentage of time when voltage was			Voltage(KV)	Voltage(KV)	
			Below 0.97 p.u.	0.97-1.03 p.u.	Above 1.03 p.u.			
WESTERN REGION	धुले Dhule	400	0	0.23	0.77	432	396	
	असोज Asoj	400	0.00	0.27	0.73	420	402	
	कराड Karad	400	0.00	0.14	0.86	430	397	
	कासोर Kasor	400	0.00	0.29	0.71	424	405	
	इन्दौर Indore	400	0.00	0.32	0.68	426	393	
	इटारसी Itarsi	400	0.00	0.37	0.63	427	394	
	जेतपुर Jetpur	400	0.00	0.28	0.72	431	374	
	भिलाई Bhilai	400	0.00	0.17	0.83	424	402	
	बिना Bina	400	0.01	0.57	0.42	435	384	
	ग्वालियर Gwalior	400	0.00	0.75	0.25	435	372	

A) Inter-Regional Transfer Of Energy For The Month Of June- 2011	
EXPORT	Mus
NET EXPORT TO ER	191.33
NET EXPORT TO NR	876.43
NET EXPORT TO SR	355.83

B) INTRA- REGIONAL ENERGY EXCHANGES(In Mus)	
DESCRIPTION	Mus
KSTPS-III to CSEB (CSEB)	50.43
KSTPS-III to MSEB (MSEB)	47.54
LAMKPL to CSPTRDCL CSEB (CSPTRDCL CSEB)	7.68
LAMKPL to CSEB (LANCO)	1.92
IPGPL CSEB to BEST MSEB (TPTCL)	1.94
KSTPS-III to GOA (GOA)	0.87
CSEB to MSEB (NVVNL)	15.55
RREL CSEB to BEST MSEB (KISPL)	2.59
NSPCL CSEB to DD (BILATERAL)	38.20
MPSEB to RINFRA MSEB (RINFRA MSEB)	64.35
JPL to RINFRA MSEB (JPL)	259.20
NSPCL CSEB to DNH (MTOA)	8.45
TORRENT_GUVNL to MPSEB	23.33
JPL to MSEB (NVVNL)	72.00
JPL to GOA (NVVNL)	26.64
TORRENT_GUVNL to MSEB (NVVNL)	22.46
KSTPS-III to DD (DD)	2.06
KSTPS-III to MPSEB (MPSEB)	25.98
KSTPS-III to DNH (DNH)	7.24
NSPCL CSEB to DNH (BILATERAL)	54.56
TPC MESB to MPSEB(TPTCL)	7.88
NSPCL CSEB to DD (MTOA)	4.69

(C) Exchanges through Indian Energy Exchange (All figures are in KWH)

(Figures in bracket are export)

TOTAL	GUVNL	MPPTCL	CSEB	MSEDCL	GOA	DD	DNH	JINDAL POWER	LANCO
(306,532,490)	(65,418,650)	(28,093,170)	(49,104,970)	(65,037,880)	(11,362,500)	0	2244600	(41,360,070)	(48,399,850)

(D) Exchanges through Power exchange India ltd. (All figures are in KWH)

(Figures in bracket are export)

TOTAL	GUVNL	MPPTCL	CSEB	MSEDCL	GOA	DD	DNH	JINDAL POWER
(55,360,460)	(55,314,890)	(337,250)	(205,200)	0	0	0	0	(1,503,120)

(E) Scope for further increase in Inter-state energy transfer and constraints if any: Nil

(F) Regulatory measures (If any) : Nil

AUFLS OPERATION DURING June, 2011

In the month of June, 2011 , frequency remained below 49.5 Hz for 4.56% of the time .
During the month frequency did not touch 48.8 Hz .

The details of operation of AUFLS are given below.

State	Dates on which frequency relays at 48.8 Hz operated	Actual load relief obtained (MW) (Range)	Load relief required as per the scheme (MW)	Dates on which U/F relays did not operate
Maharashtra (1)	24-Jun-11	17	550	Nil
Gujarat	Nil	Nil	220	Nil
Madhya Pradesh (2)	21-Jun-11	18	152	Nil
CSEB	Nil	Nil	38	Nil

REMARKS :

The AUFLS operation is not consistent. During certain times of the day, load relief is very meager and not adequate to act as a defence mechanism against major disturbances. The load relief obtained from Maharashtra and Madhya Pradesh are inadequate.

* () are no.of ocassions

Generating Station Details

CENTRAL SECTOR GENERATING STATIONS

NTPC					
TYPE	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
THERMAL	KSTPS	3x200+4x500	2600	3x200+4x500	2600
	VSTPS	6x210+4x500	3260	6x210+4x500	3260
	Sipat STPS-II	2X500+1X660	1660	2X500+1X660	1660
	Bhilai TPP	1x250	250	1x250	250
TOTAL THERMAL			7770		7770
GAS	KAWAS	4x106+2x116.1	656.20	4x106+2x116.1	656.20
	GANDHAR	3x144.3+1x224.49	657.39	3x144.3+1x224.49	657.39
TOTAL GAS			1313.59		1313.59
GRAND TOTAL			9083.59		9083.59

NPCIL

TYPE	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
NUCLEAR	TAPS	2x160+2x540	1400	2x160+2x540	1400
	KAPS	2x220	440	2x220	440
TOTAL NUCLEAR			1840		1840

CENTRAL SECTOR SUMMARY

TOTAL CENTRAL SECTOR	THERMAL		7770		7770
	GAS		1313.59		1313.59
	NUCLEAR		1840		1840
GRAND TOTAL (CENTRAL SECTOR)			10923.59		10923.59

STATE SECTOR GENERATING STATIONS

GUJARAT

TYPE	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
HYDRO	UKAI	4x75	300	4x75	300
	UKAI (LBCH)	2x2.5	5	2x2.5	5
	KADANA	4x60	240	4x60	240
	PANAM CANAL	2x1	2	2x1	2
	SARDAR SAROVAR	16% of 1450	232	16% of 1450	232
	TOTAL HYDRO			779	
THERMAL	A.E.Co.	1x60+2x110+120	400	1x60+2x110+120	400
	DHUVRAN	2x110	220	2x110	220
	UKAI	2x120+2x200+1x210	850	2x120+2x200+1x210	850
	GANDHI NAGAR	2x120+3x210	870	2x120+3x210	870
	WANAKBORI	7x210	1470	7x210	1470
	SIKKA	2x120	240	2x120	240
	KUTCH LIGNITE	2x70+2x75	290	2x70+2x75	290
	SURAT LIGNITE	4x125	500	4x125	500
	AKRIMOTA	2x125	250	2x125	250
	Mundra(APL)	4*330 + 2*660	2640	4*330 + 2*660	2640
	TOTAL THERMAL			7730	
GAS	DHUVRAN	1x218.62	218.62	1x218.62	218.62
	TORRENT POWER	2X32.5+35.0(ST)	100	2X32.5+35(ST)	100
	UTRAN-I	3x33+1x45	144	2x30+1x32+1x45	137
	UTRAN-II	1X228+1X146(ST)	374	1X228+1X146(ST)	374
	GIPCL	1x106+1x54+2x125	410	1x106+1x54+2x125	410
	ESSAR	3x110+1x185 (ST)	515	3x110+1x185	515
GAS	GPEC	3x135+1x250	655	3x135+1x250	655
	GSEG HAZIRA	2x52+1x52.1 (ST)	156.1	2x52+1x52.1 (ST)	156.1
	SUGEN	3X382.5	1147.5	3X382.5	1147.5
TOTAL GAS			3720.22		3713.22
Diesel			17.48		17.48
RES			2000.47		2000.47
TOTAL GUJARAT	HYDRO		779		779
	THERMAL		7730		7730
GRAND TOTAL			3720.22		3713.22

GRAND TOTAL (GUJARAT)		14247.17		14240.17		
MADHYA PRADESH						
TYPE	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY		
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)	
HYDRO	GANDHI NAGAR	5x23 (50%)	57.5	5x23 (50%)	57.5	
	R P SAGAR	4x43 (50%)	86	4x43 (50%)	86	
	J SAGAR	3x33 (50%)	49.5	3x33 (50%)	49.5	
	PENCH SHARE	2x80 (66.67%)	106.672	2x80 (66.67%)	106.672	
	BANASAGAR TONS	1x315	315	1x315	315	
	BARGI	2x50	100	2x50	100	
	BANASAGAR	1x30+1x60+1x20	110	1x30+1x60+1x20	110	
	BIRSINGHPUR	1x20	20	1x20	20	
	RAJGHAT	3x15(50%)	22.5	3X15(50%)	22.5	
	INDIRA SAGAR	8x125	1000	8x125	1000	
	MADHIKHEDA HEP	2X20	40	2X20	40	
	MINI & MICRO HYDRO	13.5	13.5	3.25	13.5	
	* Omkareswar Hydro	8x65	520	8x65	520	
	SARDAR SAROVAR	57% of 1450	826.5	57% of 1450	826.5	
	TOTAL HYDRO			3267.17		3267.17
	THERMAL	AMARKANTAK	2X120+1X210	450	2X120+1X210	450
		SATPURA-I	5x62.5 (60%)	187.5	5x62.5 (60%)	187.5
SATPURA-II		1x200+1x210	410	1x200+1x210	410	
SATPURA-III		2x210	420	2x210	420	
S GANDHI TPS		4x210	840	4x210	840	
S GANDHI TPS		1x500	500	1x500	500	
TOTAL THERMAL			2807.5		2807.5	
TOTAL MADHYA PRADESH	HYDRO		3267.17		3267.17	
	THERMAL		2807.5		2807.5	
Diesel			0		0	
RES			267		267	
GRAND TOTAL (MADHYA PRADESH)			6341.67		6341.67	

CHHATISGARH					
TYPE	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
HYDRO	HASDEO BANGO	3x40	120	3x40	120
	Gangrel	1x5	5	1x5	5
TOTAL HYDRO			125		125
THERMAL	KORBA (E)	4x50+2x120	440	4X50+2X120	440
	KORBA (W)	4x210	840	4x210	840
	KORBA (E) ext-I	2x250	500	2x250	500
	JINDAL TPP	4x250	1000	4x250	1000
	LANCO-Amarkantak	2x300	600	2x300	600
TOTAL THERMAL			2780		2780
TOTAL CHHATISGARH	HYDRO		125		125
	THERMAL		2780		2780
Diesel			0		0
RES			250.95		250.95
GRAND TOTAL (CHHATISGARH)			3155.95		3155.95

MAHARASHTRA					
TYPE	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
HYDRO	KOYNA I & II	4x(65+5)+4x(75+5)	600	4x(65+5)+4x(75+5)	600
	KOYNA III	4x80	320	4x80	320
	KOYNA DPH	2x20	40	2X18	36
	KOYNA IV	4x250	1000	4x250	1000
TATA HYDRO	KHOPOLI	1 TO 8	96	1 TO 8	96
	BHIVPURI	1 TO 7	99	1 TO 7	99
	BHIRA	6x25	150	6x25	150
	BHIRA PSS	1x150	150	1x150	150
	VAITHARNA	1x60+1x1.5	61.5	1x60+1x1.5	61.5
	ELDARI	3x7.5	22.5	3x7.5	22.5
	VEER & BHATGAR	2x4.5+1x16	25	2x4.5+1x16	25
	PAITHAN	1x12	12	1x12	12
	TILLARI	1x60	60	1x60	60
RADHANAGRI	4x1.2	4.8	4x1.2	4.8	
BHIRA T/R	2x40	80	2x40	80	
BHANDARDHARA	1 & 2	46	1 & 2	46	

	DUDHGANGA	2x12	24	2x12	24
	PENCH DRAWAL	2x80 (33.33%)	53.328	2x80 (33.33%)	53.328
	PAWANA	1x10	10	1x10	10
	BHATSA	1x15	15	1x15	15
	DHOM	2x1	2	2x1	2
	KANHAR	1x4	4	1x4	4
	MANIKDOH	1x6	6	1x6	6
	UJJANI	1x12	12	1x12	12
	DIMBHE	1x5	5	1x5	5
	SURYA	1X6+1X0.75	6.75	1x0.75+1x6	6.75
	PANSHET	1x8	8	1x8	8
	VARASGAON	1x8	8	1x8	8
	WARNA	2x8	16	2x8	16
	YEOTESHWAR	1x0.08	0.08	1x0.08	0.08
	TERWANMEDHE	1x0.2	0.2	1x0.2	0.2
	GHATGHAR	2x125	250	2x125	250
	SARDAR SAROVAR	27% of 1450	391.5	27% of 1450	391.5
	TOTAL HYDRO		3578.658		3574.658
THERMAL	CHANDRAPUR	4x210+3x500	2340	4x210+3x500	2340
	TROMBAY	1x150+2x500+1X250	1400	1x150+2x500+1X250	1400
*	KORADI	1x200+2x210	620	1x200+2x210	620
	NASIK	2x125+3x210	880	2x125+3x210	880
	KHAPERKHEDA	4x210	840	4x210	840
*	PARLI	2x20+3x210	670	2x20+3x210	670
	BHUSAWAL	2x210	420	2x210	420
	REL DAHANU	2x250	500	2x250	500
*	PARAS	1x55	55	1x55	55
	PARAS	2x250	500	2x250	500
	NEW PARLI	2x250	500	2x250	500
	JSW Ratnagiri	4x300	1200	4x300	1200
	Wardha Warora	3x135	405	3x135	405
	TOTAL THERMAL		10330		10330
GAS	TROMBAY-7A & 7B	120+60	180	120+60	180
	URAN (G)	4x60+4x108	960	3x60+4x108	900
	URAN-DPH	2x120	240	2x120	240
	RATNAGIRI PH - I	PHASE-I	740	PHASE-I	740
	RATNAGIRI PH -II	PHASE-II	740	PHASE-II	740
	RATNAGIRI PH- III	PHASE-III	740	PHASE-III	740
	TOTAL GAS		3600		3540
Diesel			0		0
RES			2809.33		2809.33
MAHARASHTRA	HYDRO		3578.658		3574.658
	THERMAL		10330		10330
	GAS		3600		3540
	WIND+RES		2809.33		2809.33
	GRAND TOTAL (MAHARASHTRA)		23127.318		23063.318
GOA					
TYPE	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
Diesel			0		0
RES			30		30
GAS	RELIANCE, SALGAONKAR	1x39.82+1x8.2	48.02	1x39.82+1x8.2	48.02
	GRAND TOTAL (GOA)		78.02		78.02

*PARAS-2, PARLI-1&2,BHUSAWAL-1 ,& KORADI 1TO 4 DERATED BY 565 MW TOTAL

PROGRESS OF TRANSMISSION LINE CONSTRUCTION IN WR

	Name of transmission line	<u>Length in ckt km.</u>	Commissioning Schedule	Remarks
A	Gujarat			
	I)400kV Lines			
1	Essar - Hadala	226	July'11	work under progress,ROW Problems
2	400 kV Adani-Zerda Line no.2	661.12	May`12	Work under progress
3	400 kV Adani-Zerda Line no.1	661.12	Oct'11	Package awarded
	II)220kV Lines			
1	220 KV D/C Utran- Kosamba s/s from Vav-Zagadia line-II	86	July'11	work under progress, ROW Problem
2	220 KV D/C GSEG(Hazira)-Kosamba line	124	July'11	Work under progress
3	220 KV D/C GPPC-Dhokadva line	100	July'11	Work under progress
4	LILO of one circuit of 220 KV D/C Savarkundla-Otha line at GPPC	93	July'11	Work under progress
5	LILO of 220 KV Morbi-Halvad line 1 at 400 KV Bhimasar (PG) S/S	215	July'11	Check survey work under progress
6	LILO of 220 KV Morbi-Halvad line 2 at 400 KV Bhimasar (PG) S/S	210	July'11	Check survey work under progress
7	220 KV GSEG(Hazira)-Mota line	111.06	July'11	Check survey work under progress
8	220 KV D/C Nakhatrana-Varsana line	190	July'11	Check survey work under progress
B)	Madhya Pradesh			
	I) 400kV Lines			
	II) 220kV Lines			
1	LILO of 1st ckt DCDS200KV Gwalior-Malanpur at 400kv Gwalior PGCIL S/S	16.4	2011-12	Work restarted and is nearing completion
2	Satna - Chhatapur line	156.32	2011-12	Work under progress
3	Jabalpur-Narsingpur part line for 400kv PGCIL Sukha	153.14	2011-12	Work almost completed, charging being arranged
4	Chegoan - Nimrani	205	2011-12	Work almost completed, charging being arranged
5	Maheshwar - Rajgarh	230	2011-12	Forest approval not yet received.work not commenced
6	Dewas - Astha line	144	2011-12	Work in progress
C)	Chhatisgarh			
	I) 400kV Lines			
1	LILO of 400 kV Korba(west)-Bhilai to Raipur DCDS	25	Dec'11	Profile of 19.937 km has been approved.Work under progress
2	400 kV Korba(West) – Khedamara DCDS	224	June'12	Work under progress
3	400 KV DCDS Marwa TPP-Proposed 400 KV s/s Raipur	150	Mar'12	Work under progress

PROGRESS OF TRANSMISSION LINE CONSTRUCTION IN WR

	Name of transmission line	<u>Length in ckt km.</u>	Commissioning Schedule	Remarks
4	LILO of 400 KV Korba(W)Bhilai(Khedmara) line to Marwa TPP	65	Mar'12	Order placed
	II) 220kV Lines			
1	Korba- Bishrampur DCSS	153	2011-12	Payment for forest compensation has been made, work will start after second phase approval of forest.
2	220 KV DCSS Kheedmara - 220KV s/s Bemtara + 1 no. bay at Khedmara & 1 no. at Betemara	50.9	July'11	Work under progress
3	Chhuri - Mopka DC DS line	180	Mar'12	Profile of 34.84 km has been approved
D)	Maharashtra			
	I) 400kV Lines			
1	Bhusawal-II -A'rangabad (location 1-270&1-271)	190	July'11	work in progress
2	400 KV D/C line from Chandrapur-Wardha via Warora	123	Dec'11	Work in progress
3	400 KV line from Koradi TPS-Wardha s/s	120	Dec'11	Work in progress
	II) 220kV Lines			
1	Chitegaon-Shendra D/C	86.2	July'11	Work in progress
2	Beed - Patoda D/C	45	July'11	Work in progress
3	Parli TPS-Nanded M/C line (Waghala)	90.3	July'11	Work in progress
4	Jaina- Chikhali D/C	150	July'11	Work in progress
5	220kv D/C on D/C tower from 400kv Bhusawal-II to 220kv Amalner	182	July'11	Work still in progress
6	220 KV D/C on D/C Tower from Jeur-Paranda	30	Sep`11	Alt line LILO on 220KV usmanabad -barshi for panda is given to M/S Kalpatru
7	220 KV Koradi-Butibori II D/C line on M/C tower at 400 KV Koradi s/s	53	Sep`11	Work in progress
8	220 KV Paras-Balapur D/C on M/C	5.61	July'11	Work in progress
SLNo	POWERGRID			
	765 kV & 400kv			
E)	W R Strengthening scheme-II			
	For Absorbing import in Eastern and Central part of WR			
1	765 kv 2nd s/c Seoni(PG)-Wardha(PG)	261	Aug`11	Work in progress
2	400 KVWardha(PG)-Parli(PG) D/C(quad.)	674	Jun'11	ROW problem
3	400 KVRaipur(PG) - Wardha(PG) D/C	741	Jan`12	Work affected due to ROW problem
5	400 KVParli (MSEP)-Parli (PG) D/C	14	Jun'11	Engg & survey under progress

PROGRESS OF TRANSMISSION LINE CONSTRUCTION IN WR

	Name of transmission line	Length in ckt km.	Commissioning Schedule	Remarks
For Regional strengthening in southern Maharashtra to be implemented through IPTC Route by WR				
6	400 KV Parli (PG)-Pune D/C	646	March'12	Objection from KEIPL SEZ on the line routing near Pune end.
7	400 KV Pune (PG)-A'bad(MSEB) D/C	450	March'12	Objection from KEIPL SEZ on the line routing near Pune end.
8	400 KV Parli(PG)-Pandharpur/Solapur D/C	272	Dec'11	Forest clearance received.Power line Xing proposal submitted for all cases
9	400 KV Solapur(PG)-Kolhapur(MSEB)	438	Aug'11	Forest clearance received submitted for PTCC clearance
10	LILO of L'khand(MSEB)-Kalwa(MSEB) at Pune(PG) D/C	2.4	Aug'11	PTCC clearance received
For Regional strengthening in Gujarat to be implemented through IPTC Route by WR transmission (Guj) Pvt.				
12	400 KV Rajgarh(PG)-Karamsad(GEB) D/C	468	Aug'11	Under Progress
14	400 KV Ranchodpura(GEB)-Zerda(GEB) D/C	280	Aug'11	
For Regional strengthening in Northern Madhya Pradesh				
Transmission system associated with Gandhar-II(GBPP)				
18	400 KV Gandhar-Kawas D/C	190	*	* 33 month from investment approval or from tying up date of FSA by NTPC whichever is later
19	400 KV Gandhar-Rajkot D/C	600	*	
WR strengthening system-V				
22	400 KV Vapi- Navi Mumbai D/C	258	March` 13	Severe ROW problem
WR strengthening system-IX				
23	LILO of 400 KV Bina-Nagda Line at Sujalpur	60	30.05.2011	Charged
WR strengthening system-X				
24	LILO of 765 KV Sipat-Seoni line near Sipat at Bilaspur	14	Feb'12	Award placed in Dec` 10 Engg in progress
WR strengthening system-XI				
25	LILO of 765 KV 2nd Sipat-Seoni line near Sipat at Bilaspur	24	Feb'12	Award placed in Dec` 10 Engg in progress
Transmission system associated with Korba-III				
26	400 KV D/C Korba STPS-Raipur line	430	Aug'11	Work near completion
Transmission system associated with Mundra UMPP				
27	400 KV D/C Mundra-Limbdi	626	Dec'11	
28	400 KV D/C Mundra-Bachchauranchodpur	764	Aug'11	Attempts are made to bring line in June` 11
29	400 KV D/C Mundra-Bachchaur-Jetpur	666	Mar'12	Wild life sanctuary portion clearance awaited
30	400 KV D/C Gandhar-Navsari line	212	Mar'12	River crossing
31	400 KV D/C Navsari-Mumbai	408	Mar'12	01 out of 02 package awarded.
32	400 KV D/C Wardha-Aurangabad	800	Oct'12	Tendering under progress
33	400 KV D/C Aurangabad-Aurangabad(MSETCL)line	60	Oct'12	Tendering under progress
34	LILO of both ckt of Kawas-Navsari 220 kV D/C at Navsari	100	Oct'12	Tendering under progress

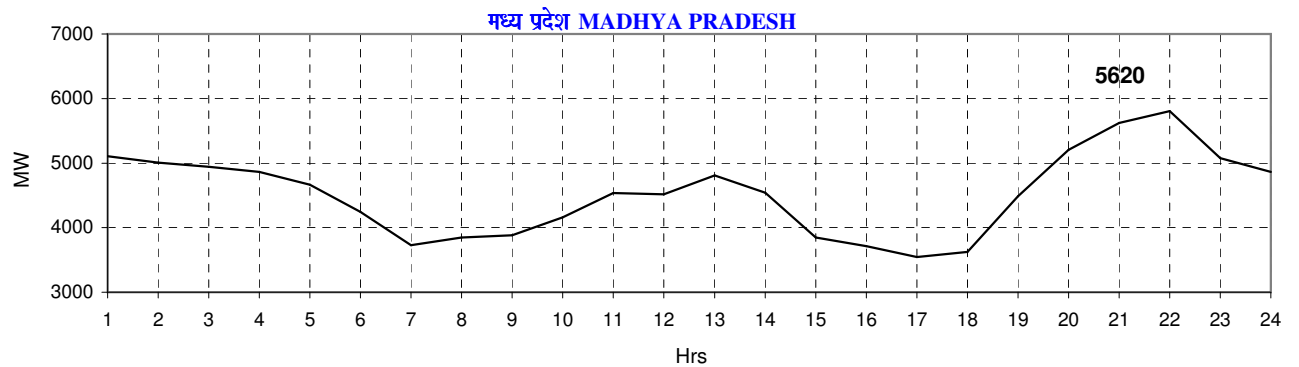
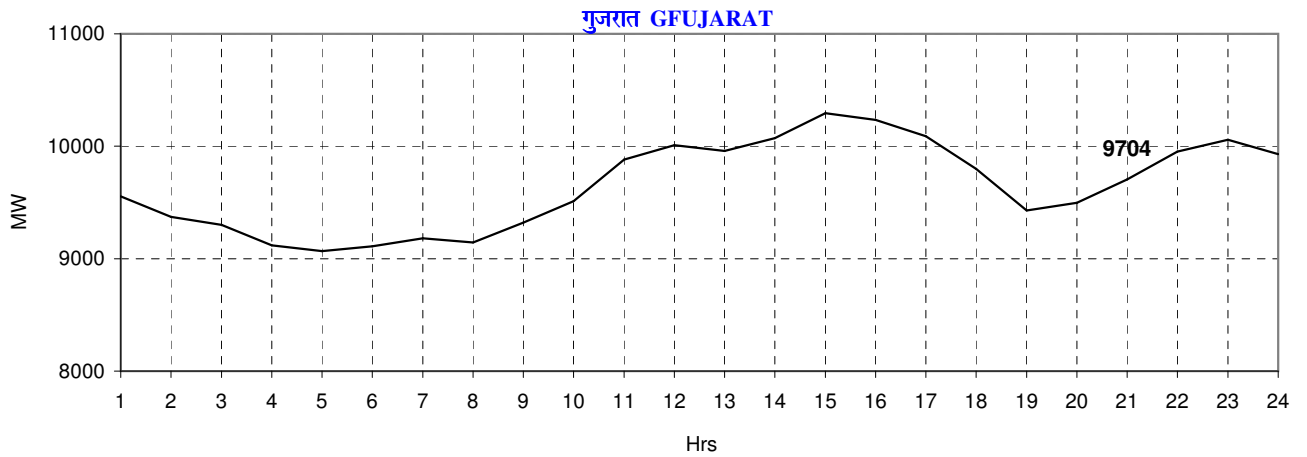
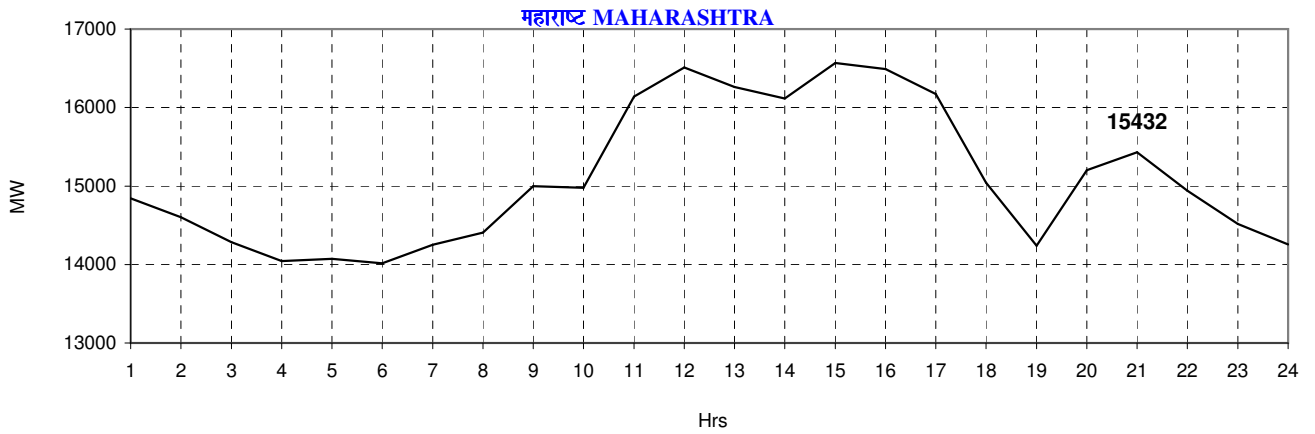
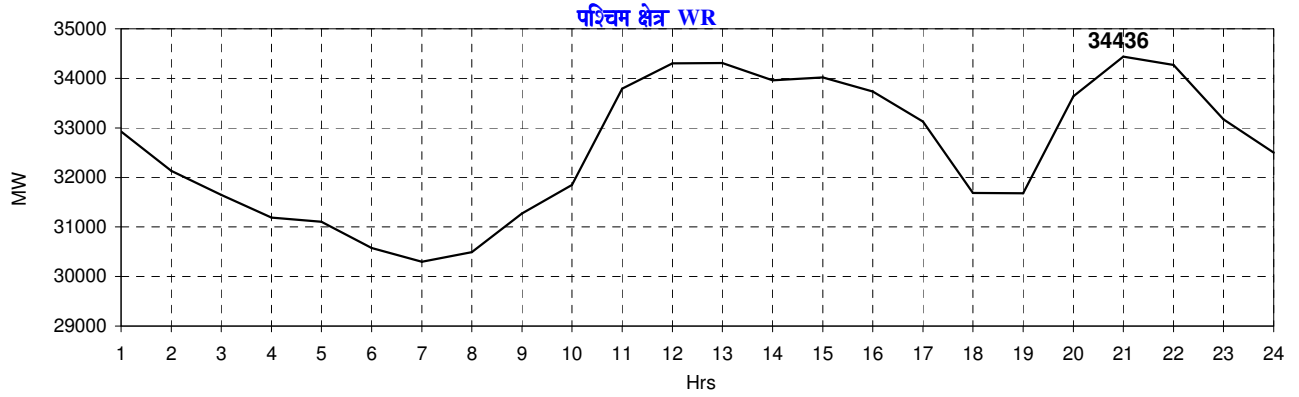
PROGRESS OF TRANSMISSION LINE CONSTRUCTION IN WR

	Name of transmission line	<u>Length in ckt km.</u>	Commissioning Schedule	Remarks
Transmission system associated with Sasan UMPP				
35	765 KV Sasan-Satna Line-I	257	Dec'12	
36	765 KV Sasan-Satna Line-II	260	Dec'12	Tower package awarded
37	765 KV Satna-Bina Line I	279	Dec'12	
38	765 KV Satna-Bina Line II	274	Dec'12	
39	765 KV Sasaram-Fatehpur line II	352	Dec'12	Tendering under progress
40	765 KV Agra-Fatehpur line	340	Dec'12	Tendering under progress
41	400 KV Bina-Bina(MPPTCL)line	10	Dec'12	Award placed in Mar'09,Engg. Under progress
42	LILO of both ckt of Vindhyanchal Jabalpur 400 KV D/C at Sasan	10	Dec'12	Award placed in Feb'09,Engg. Under progress
43	765 KV Bina-Indore line	320	Dec'12	
44	400 KV Indore-Indore(MPPTCL) line	120	Dec'12	

PROGRESS OF ONGOING GENERATION PROJECT IN WESTERN REGION

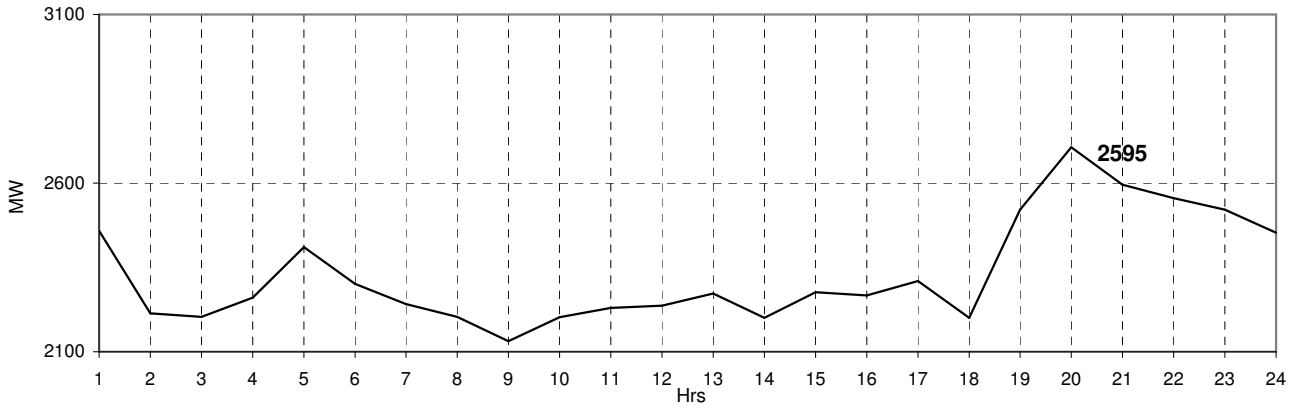
Sr.No.	Name of the power project	Unit No.	Capacity(MW)	commissionig schedule
A	<u>GUJARAT</u>			
1	Ukai TPS extn	6	490	Jul-11
2	Pipavav CCPP-GPCL & GSPC joint venture	block 1	350	2011-12
		block 2	350	2011-12
3	Mundra ultra mega TPP (TATA)	1	800	Sep-11
		2	800	Mar-12
4	Hazira CCPP Expansion GSEG	GT+ST	350	May-11
	OTHER PROJECTS			
1	Gujarat lignite NLC&GPCL joint venture	Stage 1	1500	2011-12
		Stage 2	500	2012-13
2	Pipavav TPP - Torrent power		1000	2011-12
3	Mundra STPP (Adani power ltd)	1	660	Sep-11
B	<u>MADHYA PRADESH</u>			
1	Amarkantak TPS	2	500	Jul-11
2	Satpura TPS ext.	10	250	Jul-11
		11	250	Jul-11
	OTHER PROJECTS			
1	Maheshwar HEP		400	12-Mar
2	Malwa TPP	1	500	2011-12
C	<u>CHATTISGARH</u>			
1	Marwa TPP	1	500	Sep-12
		2	500	Nov'12
2	Korba west -III TPP	1	500	Jul-12
	OTHER PROJECTS			
1	Bhaiyathan TPP Phase 1	1	500	Dec-12
		2	500	Aug-13
2	IFFCO	1	660	Aug-12
		2	660	Dec-12
D	<u>MAHARASHTRA</u>			
1	Khaperkheda TPS Extn.	1	500	Jul-11
2	JSW Ratnagiri TPP (JSW Ltd.)			
		4	300	Sep-11
	OTHER PROJECTS	1	800	Oct-12
1	Koradi TPS extn	1	800	Nov-11
2	Dhopawe TPS	2	800	May-12
		block 2	340	Nov-11
3	Utran CCPP	1	800	Apr-12
4	Koradi TPS extn.(replacement)	1	500	Dec-11
5	Chandrapur TPS Extn	2	500	May-12
E	<u>CENTRAL SECTOR</u>			
1	Sipat TPP	2	660	July'11
		3	660	Feb'12
3	Mauda TPP	2	500	2012-13

पश्चिम क्षेत्र का चरम भार दिन के प्रतिघंटा भार वक्र
HOURLY DEMAND CURVES ON REGIONAL PEAK DAY 01.06.2011

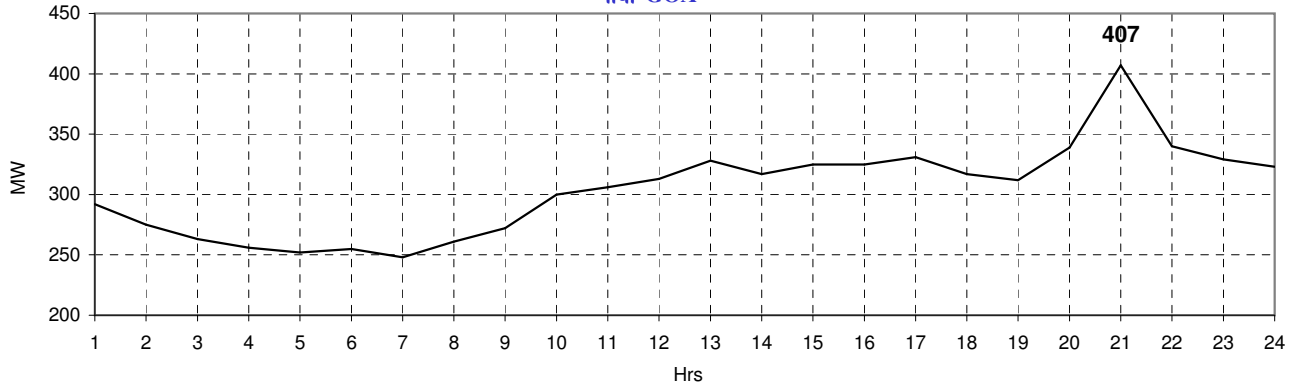


पश्चिम क्षेत्र का चरम भार दिन के प्रतिघंटा भार वक
HOURLY DEMAND CURVES ON REGIONAL PEAK DAY 01.06.2011

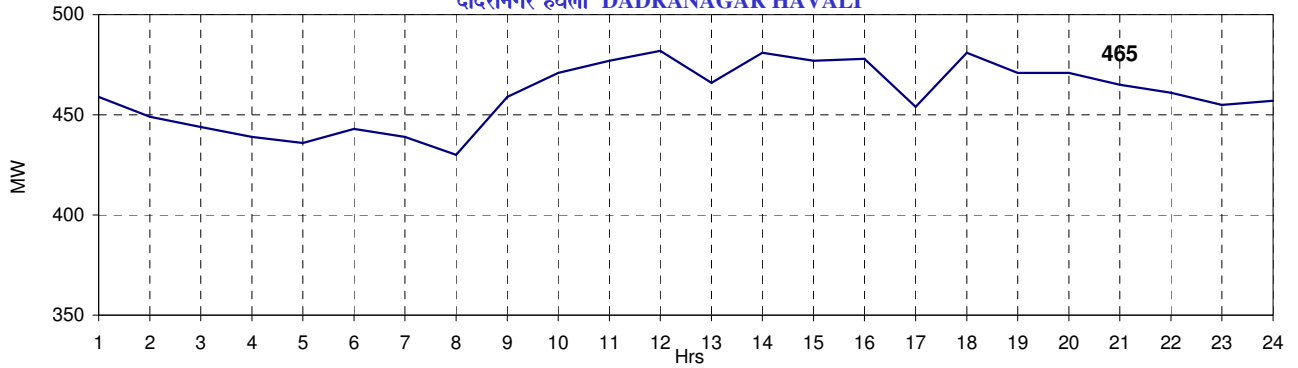
छत्तिसगढ़ CHHATISGARH



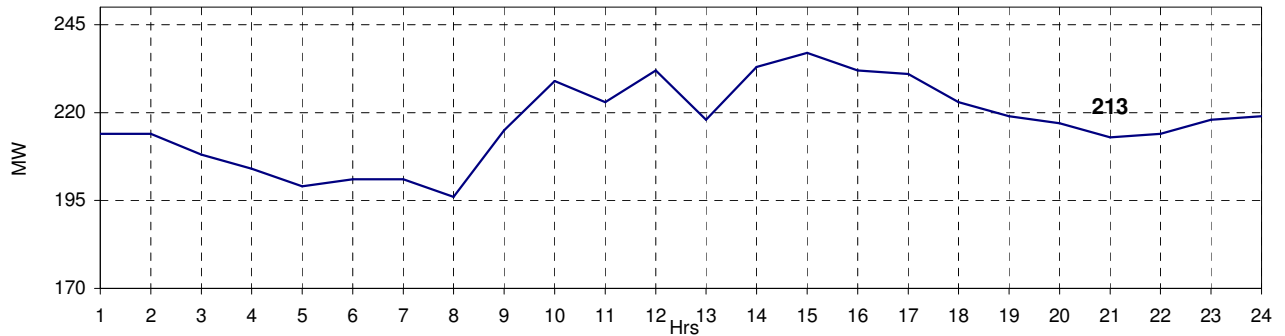
गोवा GOA



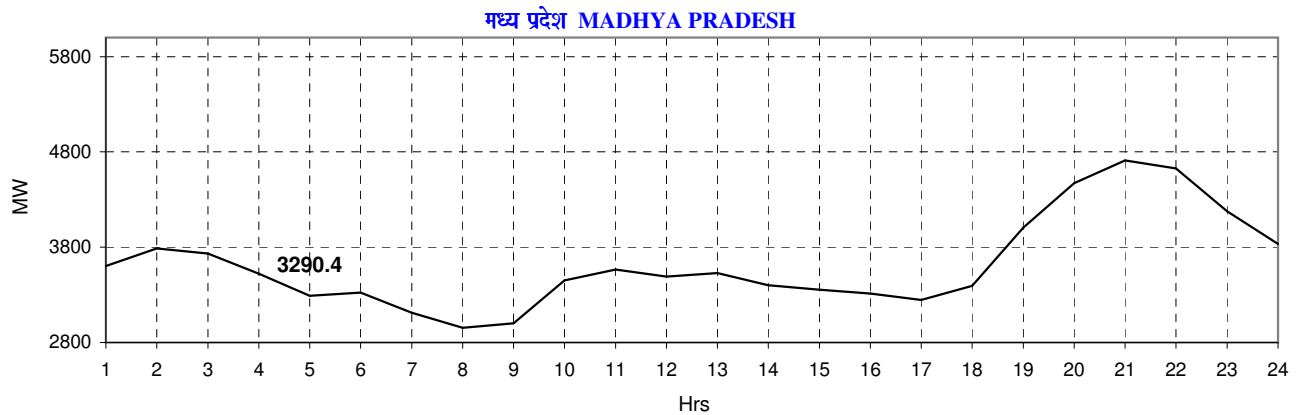
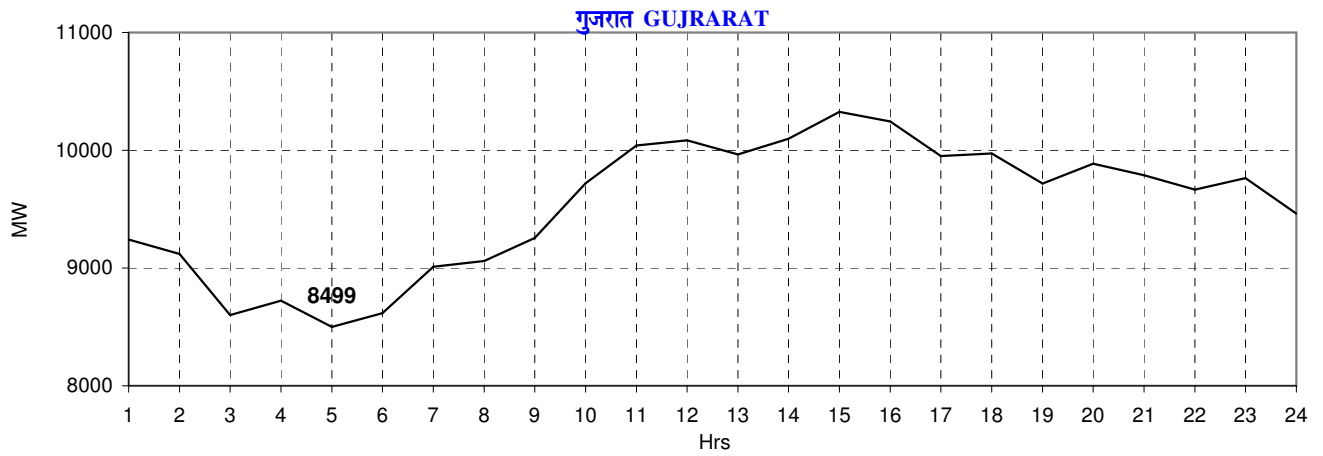
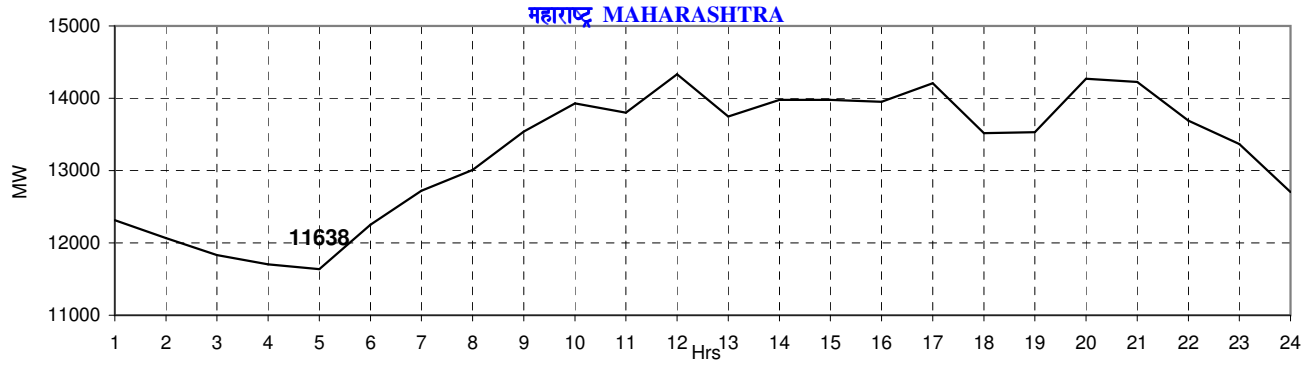
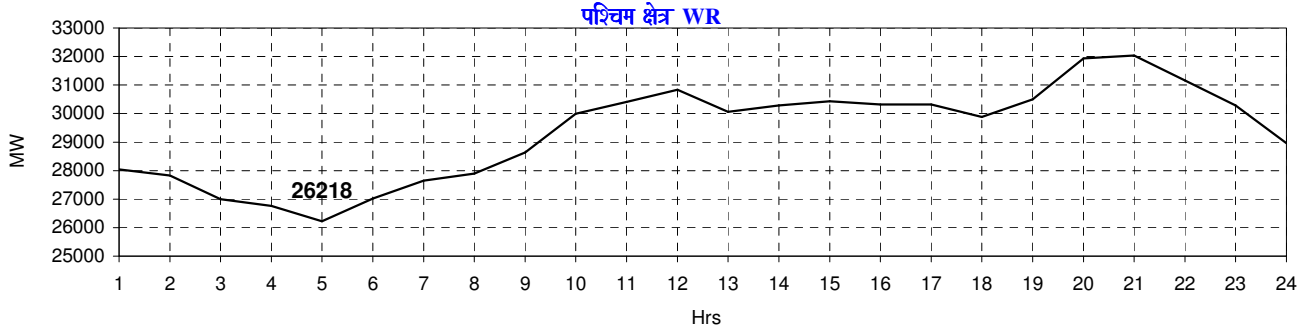
दादरानगर हवेली DADRANAGAR HAVALI



दिव और दमण DIV DAMAN

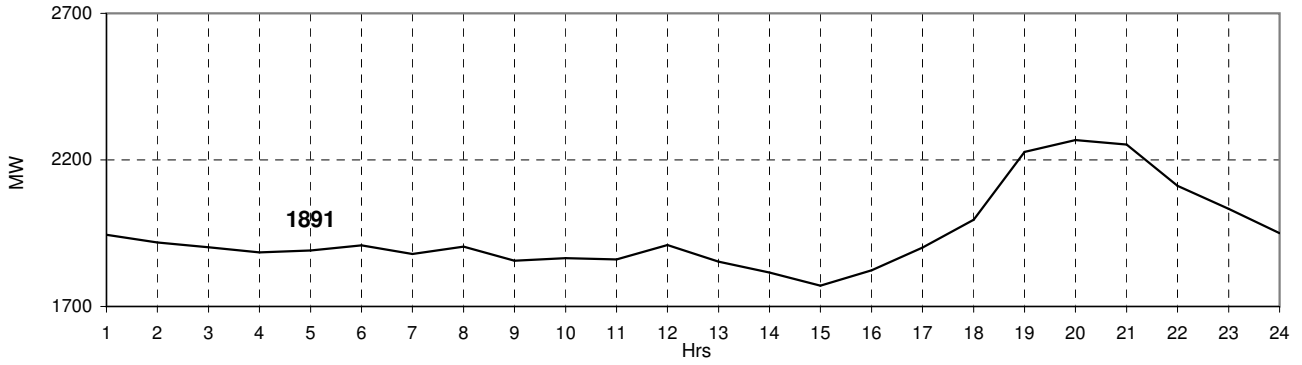


पश्चिम क्षेत्र का न्यूनतम भार दिन के प्रतिघंटा भार वक
 HOURLY MIN.DEMAND CURVES ON REGIONAL PEAK DAY 27.06.2011

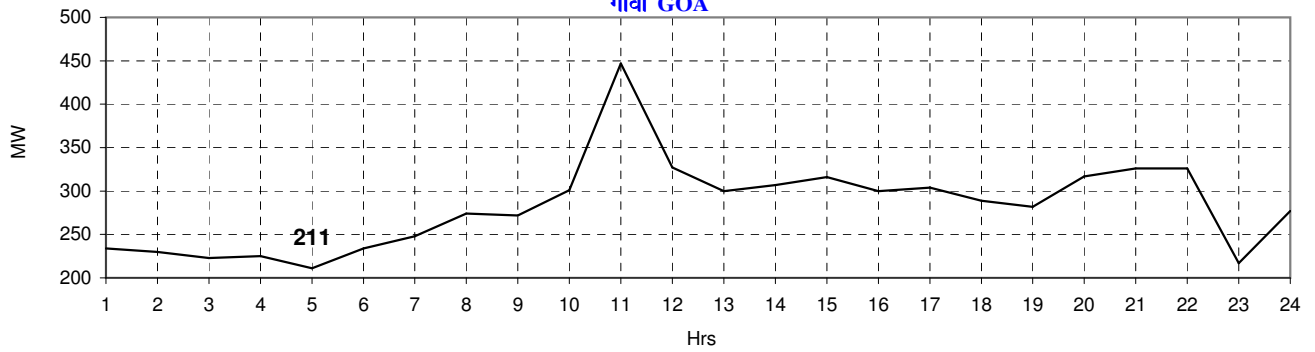


पश्चिम क्षेत्र का न्यूनतम भार दिन के प्रतिघंटा भार वक्र
 HOURLY MIN.DEMAND CURVES ON REGIONAL PEAK DAY 27.06.2011

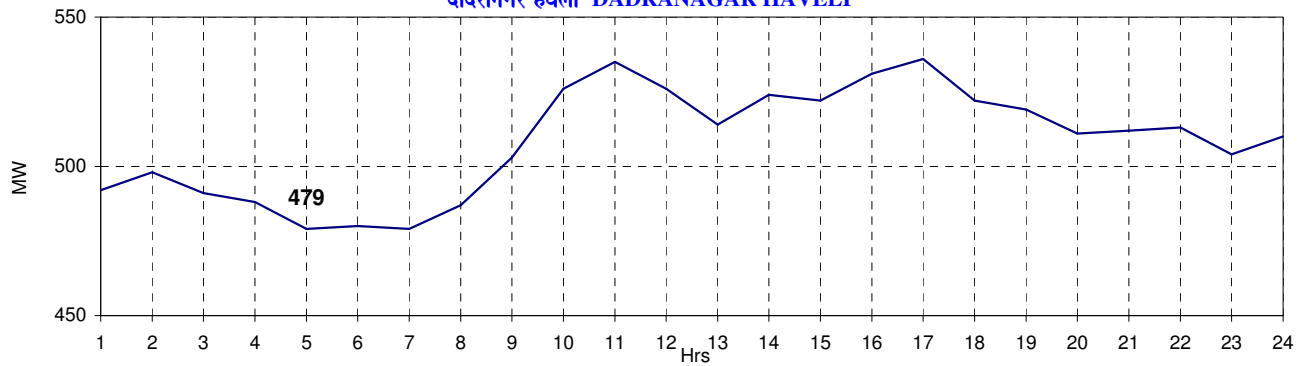
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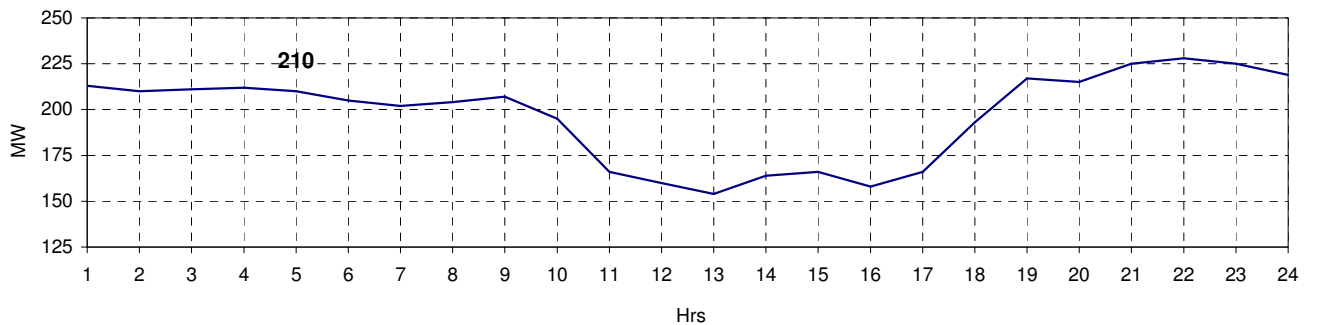
गोवा GOA



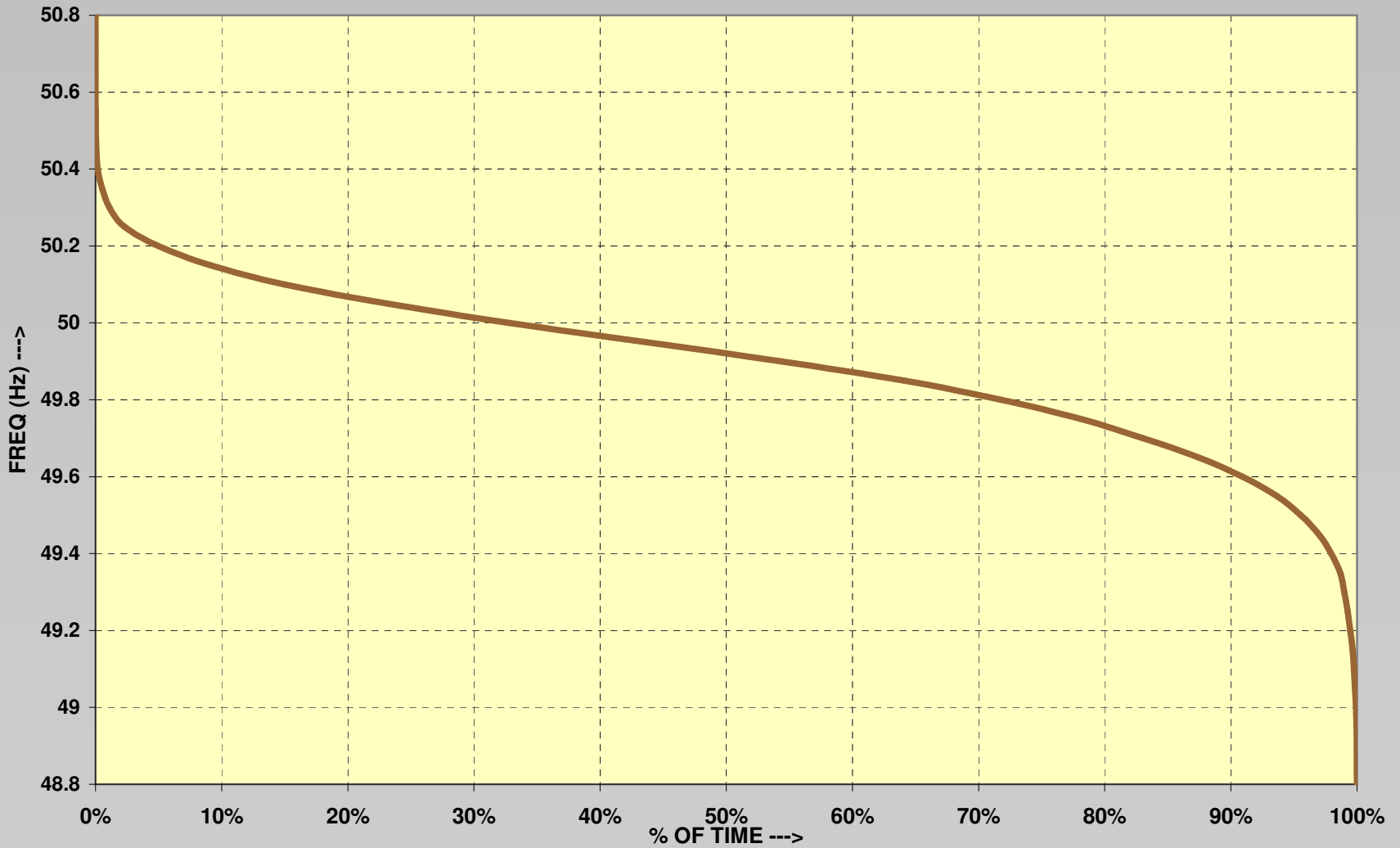
दादरानगर हवेली DADRANAGAR HAVELI



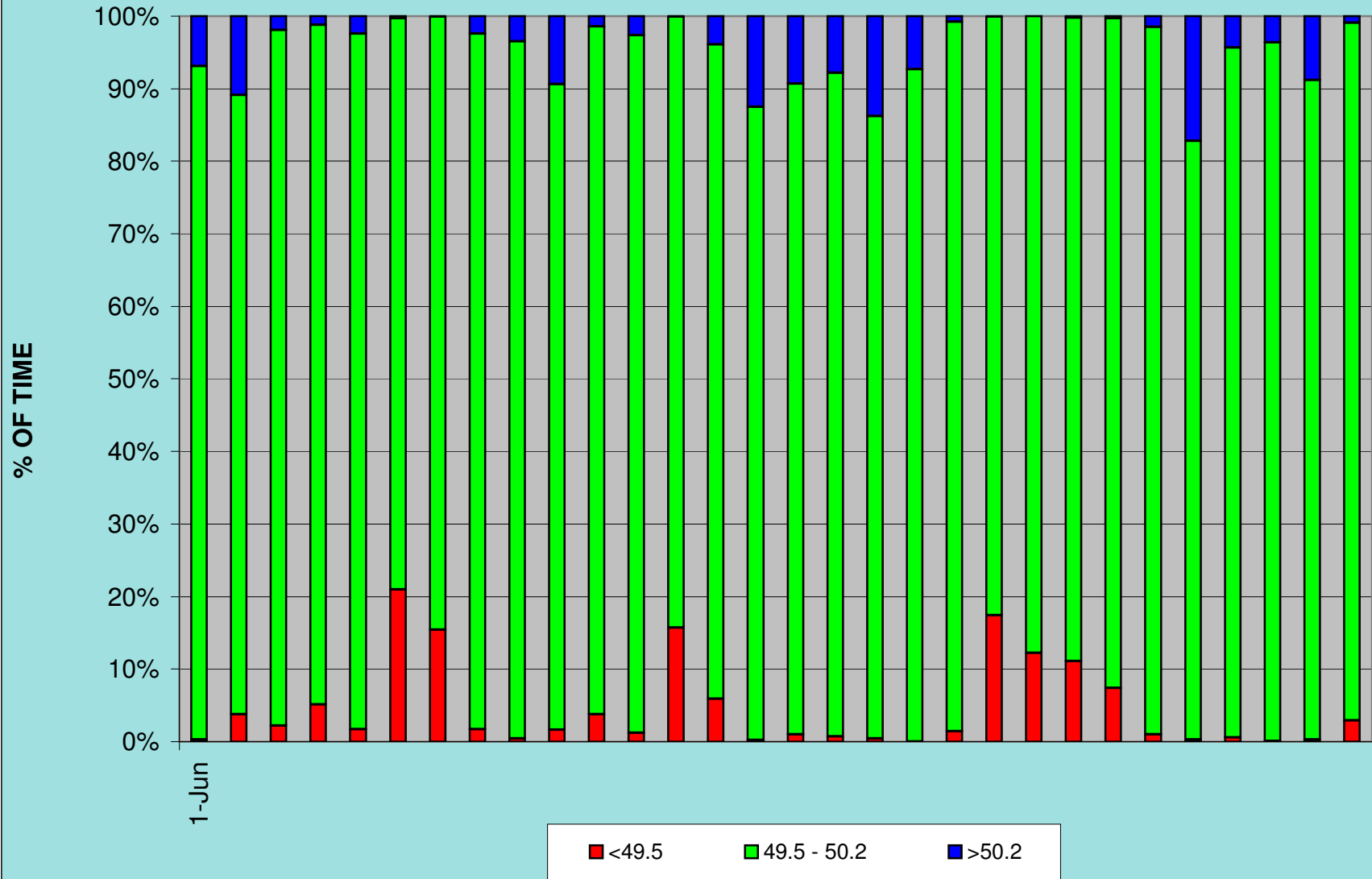
दिव और दमण DIU & DAMAN



NEW GRID FREQUENCY DURATION CURVE FOR JUNE`11
Max =50.60 Hz, Min=48.82 Hz Average = 49.89 Hz



Frequency Profile - June-2011



WIND GENERATION June-11

GUJARAT MAHARASHTRA

