



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

**System Operation Report
Of Western Region
For the month of
APRIL 2011**

पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(पावरग्रिड की एक पूर्ण स्वामित्व वाली कंपनी)

पश्चिम क्षेत्रीय भार प्रेषण केन्द्र, मुंबई

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 APRIL 2011

A)SUMMARY REPORT

I)IMPORTANT EVENTS

a)COMMISSIONING OF NEW GENERATING UNITS

SL.NO.	CONSTITUENT	UNIT NAME	UNIT NO	C`ty(MW)	DATE
1	JSW	JAIGARH	3	300	29/04/11

b)COMMISSIONING OF NEW TRANSMISSION LINES

SL.NO.	CONSTITUENT	LINE NAME	CKT NO	KV	DATE
1	MSETCL	Chakan-Padghe	Lilo at Pune	400	15/04/11
2	GETCO	Hadala-Vadinar	D/C	400	25/04/11
3	RELIANCE	Limbdi -Ranchorpura(Vadavi)	II	400	29/04/11

c)COMMISSIONING OF NEW SUBSTATIONS

NIL

d)COMMISSIONING OF NEW ICT / BUS /LINE REACTORS

SL.NO.	CONSTITUENT	STATION NAME	KV RATIO	CAPACITY	DATE
1	POWERGRID	Pune ICT-I	400/220	315	29/04/11

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

NIL

i) Grid Separations **NIL**

ii) Grid Disturbances **NIL**

माह अपेेल 2011 में पश्चिम क्षेत्र का निष्पादन डाटा

I **Performance of Western Regional Grid during April -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	642.68	585.01	-57.67	4.3	0.592
2	मध्य प्रदेश Madhya Pradesh	1606.3	1610.74	4.44	1.698	0.354
3	महाराष्ट्र Maharashtra	2315.1	2489.72	174.62	0.646	0.48
4	छत्तिसगढ Chhattisgarh	-142.97	-198.35	-55.38	2.693	0.288
5	गोवा Goa	209.01	208.47	-0.54	0.688	0.093
6	दमन और दीव D&D	176.14	150.16	-25.98	0.114	0.089
7	दादर नगर हवेली	351.48	348.1	-3.38	0.174	0.029
8	कुल TOTAL	5157.44	5193.85	36.42	10.31	0.029

आवृत्ति रूपरेखा

III a. Frequency Profile

MAXIMUM FREQUENCY(Inst.):	50.65 HZ
आधिकतम आवृत्ती एकिकृत :	
Minimum frequency(Inst)	48.80 HZ
न्यूनतम आवृत्ती एकिकृत :	
Average frequency	49.79 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	0.64	6.85	91.09	1.42	0.00

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

a. विद्युत पूर्ति की स्थिति Power Supply Position

	April-11			April -11 TO April-11		
	Requirement (MUs)	Availability (MUs)	Shortage (%)	Requirement (MUs)	Availability (MUs)	Shortage (%)
Gujarat	6812	6737	1.10	6812	6737	1.10
MPSEB	4061	3312	18.44	4061	3312	18.44
CSEB	1825	1803	1.21	1825	1803	1.21
Maharashtra	12463	10696	14.18	12463	10696	14.18
Goa	238	235	1.26	238	235	1.26
D&D	177	157	11.30	177	157	11.30
DNH	348	344	1.15	348	344	1.15
Western Region	25949	23310	10.17	25949	23310	10.17

b. Peak Demand / Demand Met(MW)

	April-11			April -11 TO April-11		
	Requirement (MW)	Availability (MW)	Shortage (%)	Requirement (MW)	Availability (MW)	Shortage (%)
Gujarat	10546	10334	2.01	10546	10334	2.01
MPSEB	7664	7511	2.00	7664	7511	2.00
CSEB	3408	2908	14.67	3408	2908	14.67
Maharashtra	20176	16923	16.12	20176	16923	16.12
Goa	411	388	5.60	411	388	5.60
D&D	264	248	6.06	264	248	6.06
DNH	514	511	0.58	514	511	0.58
Western **Region	41249	35388	14.21	41249	35388	14.21

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

PEAK DEMAND FOR APRIL,2011

State	Catered	UNSCHLS +SCHLS	FC	PC	Total	Date	Time	Freq.
दिव दमण DD								
पंजीकृत Registered	248	-	-	-	248	20.04.11	15:00	49.71
दादरा नगर हवेली DNH								
पंजीकृत Registered	511	-	-	-	511	20.04.11	17:00	49.87
गुजरात GUJARAT								
पंजीकृत Registered	10334	-	-	-	10334	14.04.11	16:00	49.82
असीमित Unrestricted	9769	620	157	0.00	10546	29.04.11	24:00	49.54
छत्तीसगढ़ रा .वि.बोर्ड Chhattisgarh								
पंजीकृत Registered	2908	-	-	-	2908	03.04.11	19:00	50.03
असीमित Unrestricted	2838	549	16	0	3403	01.04.11	19:00	49.84
मध्य प्रदेश रा .वि.बोर्ड Madhy Pradesh								
पंजीकृत Registered	7511	-	-	-	7511	02.04.11	20:00	49.42
असीमित Unrestricted	7511	0	152	0	7664	02.04.11	20:00	49.42
महाराष्ट्र रा .वि.बोर्ड-MAHA-RASHTRA								
पंजीकृत Registered	16923	-	-	-	16923	20.04.11	16:00	49.82
असीमित Unrestricted	15896	4057	223	0	20176	06.04.11	20:00	49.60
पश्चिम क्षेत्र WESTERN REGION								
पंजीकृत Registered	35388	-	-	-	35388	06.04.11	21:00	49.64
असीमित Unrestricted	35004	5755	490	0	41249	06.04.11	20:00	49.60

Note:

UNSCHL = Unscheduled Load shedding
 SCHLS = Scheduled Load shedding
 FC = Frequency correction
 Registerc = Actual catered
 Unrestricted = Actual catered+Unschls+FC+PC+SCHLS+Holiday staggering+Recess stagg
 Power number = 3.5% of Registered demand

VI	
माह अप्रेल 2011 में अंतर क्षेत्र से पश्चिम क्षेत्र को विद्युत विनिमय	
Inter-Regional Exchange of Power in Western Region during April -11	
DESCRIPTION	Import (Mus)
Indian Energy Exchange (ER to WR)	87.95
Power Exchange of India (ER to WR)	35.36
ER (NTPC) to GUVNL	66.96
ER (NTPC) to MP PTCL	37.29
ER (NTPC) to CSEB	15.13
ER (NTPC) to MSEDCL	74.65
ER (NTPC) to GOA	0.00
ER (NTPC) to D D	0.98
ER (NTPC) to D N H	1.51
DVC to MPPTCL (Long Term Open Access)	72.08
Hirakud to CSEB	1.28
APL GUVNL to ASEB (TPTCL)	6.64
WARDHA MSEB to CESC (NETS)	30.92
TRIPURA to MSEB (NVVNL)	6.32
SIKKIM to RINFRA MSEB (SIKKIM)	21.06
WBSEB to RINFRA MSEB (NVVNL)	0.66
REALISPAT CSEB to WBSEB (NVVNL)	4.00
Indian Energy Exchange (NR to WR)	391.14
Rihand (Hydro) to MPPTCL (Long Term Open Access)	2.52
JK to CSEB (NVVNL)	70.02
RPPC to CSEB (NVVNL)	28.01
NDPL(DTL) to KSEB (GMRETL)	2.83
BSES_RAJ to MPSEB (IEXL)	0.17
DESCRIPTION	Export(Mus)
GUVNL to TNEB (TNEB)	90.97
APL GUVNL to WBSEB (TPTCL)	67.48
MPSEB to WBSEB (NVVNL)	11.74
REALISPAT CSEB to WBSEB (NVVNL)	4.00
SEML CSEB to WBSEB (NVVNL)	7.38
SSPL CSEB to WBSEB (NVVNL)	4.55
GUVNL to NPCL (NPCL)	34.61
PCBL GUVNL to NPCL (NPCL)	4.31
APL GUVNL to NDPL(DTL) (TPTCL)	7.94
JPL to NDPL(DTL) (JPL)	34.61
SKSIP CSEB to NDPL(DTL) (TPTCL)	6.59
WELSPUN GUVNL to NDPL(DTL) (TPTCL)	5.32
WARDHA MSEB to NDPL(DTL) (TPTCL)	7.45
BPIL CSEB to NDMC(DTL) (PTC LTD)	5.21
SBMPL CSEB to NDMC(DTL) (PTC LTD)	2.42
VGL CSEB to NDMC(DTL) (PTC LTD)	6.29
MIEL CSEB to PSEB (NVVNL)	17.91

DESCRIPTION	Export(Mus)
MIELMH CSEB to PSEB (LANCO)	7.84
GUVNL to UPPCL (NVVNL)	36.90
MPSEB to UPPCL (UPPCL)	16.01
MIEL CSEB to UPPCL (KISPL)	6.57
MIELMH CSEB to UPPCL (KISPL)	5.57
WARDHA MSEB to UPPCL (KISPL)	7.68
JPL to APPCC (NVVNL)	99.21
JPL to APPCC (PTC LTD)	24.97
RPPC to APPCC (NVVNL)	47.92
VIL GUVNL to APPCC (NETS)	6.31
CSEB to BESCO (PTC LTD)	197.76
LAMKPL to BESCO (PTC LTD)	49.28
TORRENT_GUVNL to BESCO (NVVNL)	49.28
BSES_RAJ to TNEB (RETL)	0.28
BALCO CSEB to TNEB (NVVNL)	12.52
BALCO CSEB to TNEB (PTC LTD)	6.26
CSPL CSEB to TNEB (KISPL)	9.41
GUVNL to TNEB (TNEB)	44.65
LAMKPL to TNEB (PTC LTD)	49.28
NET EXPORT TO ER	242.04
NET EXPORT TO NR	401.88
NET EXPORT TO SR	657.68

दिनांक 30 | 04 | 2011 को राज्यानुसार संस्थापित क्षमता
INSTALLED GENERATION CAPACITY OF THE STATES INCLUDING SHARES AS ON 30.04.2011

(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	1558.00	424.00	559.00	2541.00	0.00	0.00	2541.00
	Total	772.00	8408.00	3894.22	559.00	13633.22	17.48	2000.47	15651.17
Madhya Pradesh	State	1703.67	2932.50	0.00	0.00	4636.17	0.00	26.76	4662.93
	Private	0.00	0.00	0.00	0.00	0.00	0.00	240.40	240.40
	Central(firm allo)	1520.00	1512.82	257.00	273.00	3562.82	0.00	0.00	3562.82
	Total	3223.67	4445.32	257.00	273.00	8198.99	0.00	267.16	8466.15
Chhattisgarh	State	120.00	2280.00	0.00	0.00	2400.00	0.00	19.05	2419.05
	Private	0.00	1600.00	0.00	0.00	1600.00	0.00	231.90	1831.90
	Central(firm allo)	0.00	643.00	0.00	48.00	691.00	0.00	0.00	691.00
	Total	120.00	4523.00	0.00	48.00	4691.00	0.00	250.95	4941.95
Maharashtra	State	2884.83	7295.00	672.00	0.00	10851.83	0.00	269.23	11121.06
	Private	447.00	3040.00	180.00	0.00	3667.00	0.00	2540.10	6207.10
	Central(firm allo)	0.00	2061.86	2624.00	690.00	5375.86	0.00	0.00	5375.86
	Total	3331.83	12396.86	3476.00	690.00	19894.69	0.00	2809.33	22704.02
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	281.50	0.00	26.00	307.50	0.00	0.00	307.50
	Total	0.00	281.50	48.00	26.00	355.50	0.00	30.05	385.55
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	19.92	4.00	7.00	30.92	0.00	0.00	30.92
	Total	0.00	19.92	4.00	7.00	30.92	0.00	0.00	30.92
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	23.20	27.00	9.00	59.20	0.00	0.00	59.20
	Total	0.00	23.20	27.00	9.00	59.20	0.00	0.00	59.20
WR	State	5480.50	16727.50	1564.72	0.00	23772.72	17.28	344.99	24134.99
	Private	447.00	7270.00	2805.50	0.00	10522.50	0.20	5012.97	15535.67
	Central(firm allo)*	1520.00	6100.30	3336.00	1612.00	12568.30	0.00	0.00	12568.30
	Unallocated	0.00	1032.70	197.59	228.00	1458.29	0.00	0.00	1458.29
	Total	7447.50	31130.50	7903.81	1840.00	48321.81	17.48	5357.96	53697.25

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

i) Includes allocation to WR beneficiaries from kahalgaon STPP II (1000MW) of NTPC station ER commissioned (i.e. achieved full load) on 31.07.09. Firm allocation of WR beneficiaries viz Guj-94, MP-49.32, Chh-20, Mah-98.66, DD-1.32 and DNH-2.00 MW totalling to 265.30 has been included in the installed capacity of WR.

ii) Unit Nos 1,2,3,4 of 60 MW each of Uran Gas power Station of MAHAGENCO have been retired w.e.f. 16.11.10

iii) RES capacity revised to 5357.96 MW from 4918.28 MW (Feb. 2011)

c) SILENT FEATURE OF WESTERN REGION GRID FOR THE MONTH OF APRIL -2011

1. स्थापित क्षमता Installed Capacity (MW)	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ़ CSEB	महाराष्ट्र Mah.	गोवा Goa	सेंट्रल सेक्टर Central Sector	सेंट्रल सेक्टर Central unlocated	पश्चिम क्षेत्र Western Region
अप्रैल April'10	14138	8324	4769	21378	381	13872	1375	47744
अप्रैल April'11	15722	8381	4882	22780	387	14372	1450	53697
वृद्धि प्रतिशतमें % increase	11.20	0.68	2.37	6.56	2	3.60	5.5	12.47
2. ऊर्जा Energy (Gross)	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ़ CSEB	महाराष्ट्र Mah.	गोवा Goa	दिव दमण DD	दादरा नगर हवेली DNH	प क्षेत्र Western Region
असिमित आवश्यकता Unrestricted requirement (MUs)								
अप्रैल April'10	6979	3986	1078	12724	284	159	357	25570
अप्रैल April'11	6812	4061	1825	12463	238	177	348	25949
असिमित आवश्यकता Unrestricted Requirement MUs/day								
अप्रैल April'10	233	133	36	424	9	5	12	852
अप्रैल April'11	227	135	61	415	8	6	12	865
ऊर्जा उपलब्धता Energy availability (MUs)								
अप्रैल April'10	6303	3078	1016	9876	277	159	357	21068
अप्रैल April'11	6737	3312	1803	10696	235	157	344	23310
ऊर्जा उपलब्धता Energy availability MUs/day								
अप्रैल April'10	210	103	34	329	9	5	12	702
अप्रैल April'11	225	110	60	357	8	5	11	777
3. मांग Demand	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ़ CSEB	महाराष्ट्र Mah.	गोवा Goa	दिव दमण DD	दादरा नगर हवेली DNH	प क्षेत्र Western Region
असिमित मांग Unrestricted demand (MW)								
अप्रैल April'10	10620	7113	3075	20059	492	239	475	41081
अप्रैल April'11	10546	7664	3408	20176	411	264	514	41249
प्रतिशत in%	-0.70	7.75	10.83	0.58	-16.46	10.46	8.21	0.41
चरम मांग Peak Demand met (MW)								
अप्रैल April'10	9632	5747	2922	15887	423	239	475	33663
अप्रैल April'11	10334	7511	2908	16923	388	248	511	35388
प्रतिशत in%	7.29	30.69	-0.48	6.52	-8.27	3.77	7.58	5.12
4. मांग और ऊर्जा में कमतरता प्रतिशतमें Shortage in demand and energy (%)								
क्षमतामें कमी Capacity shortage	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ़ CSEB	महाराष्ट्र Mah.	गोवा Goa	दिव दमण DD	दादरा नगर हवेली DNH	पश्चिम क्षेत्र Western Region
अधिशेष (-)/ surplus (+) (MW)								
अप्रैल April'10	-988	-1366	-153	-4172	-69.00	0.00	0.00	-7418
प्रतिशत in%	-9.30	-19.20	-4.98	-20.80	-14.02	0.00	0.00	-18.06
अप्रैल April'11	-212	-153	-500	-3253	-23	-16	-3	-5861
प्रतिशत in%	-2.01	-2.00	-14.67	-16.12	-5.60	-6.06	-0.58	-14.21
ऊर्जा में कमी Energy अधिशेष Surplus (+) (MUs)	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ़ CSEB	महाराष्ट्र Mah.	गोवा Goa	दिव दमण DD	दादरा नगर हवेली DNH	प क्षेत्र Western
अप्रैल April'10	-676.06	-907.82	-61.72	-2847.78	-7.01	0.00	0.00	-4501.72
प्रतिशत in%	-9.69	-22.78	-5.73	-22.38	-2.47	0.00	0.00	-17.61
अप्रैल April'11	-75.00	-749.00	-22.00	-1767.00	-3.00	-20.00	-4.00	-2639.00
प्रतिशत in%	-1.10	-18.44	-1.21	-14.18	-1.26	-11.30	-1.15	-10.17

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

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

क्षेत्र Region	सब स्टेशनका नाम Sub station name	अधिकतम विद्युतदाब Nominal Voltage(KV)	विद्युतदाब स्थिति (प्रतिशत समय)			अधिकतम विद्युतदाब Max. Voltage(KV)	न्यूनतम विद्युतदाब Min. Voltage(KV)	संक्षिप्त स्पष्टीकरण Brief Explanation
			Percentage of time when voltage was					
			Below 0.97 p.u.	0.97-1.03 p.u	Above 1.03 p.u.			
Western	धुले Dhule	400	0.00	13.88	86.12	432	398	
	असोज Asoj	400	0.00	0.00	100.00	424	404	
	कराड Karad	400	0.00	46.06	53.94	426	371	
	कासेर Kasor	400	0.01	11.81	88.18	432	412	
	इन्दौर Indore	400	0.00	25.76	74.24	426	388	
	इटारसी Itarsi	400	0.00	34.33	65.67	424	400	
	जेटपुर Jetpur	400	0.00	17.41	82.59	434	401	
	भिलाई Bhilai	400	0.00	60.05	39.95	420	399	
	बिना Bina	400	0.00	41.04	58.96	430	395	
	ग्वालियर Gwalior	400	0.00	25.31	74.69	433	376	

Annexure-IV(1)

माह अप्रैल 2011 का अंतर राज्य में ऊर्जा परीक्षण

A) Inter-Regional Transfer Of Energy For The Month Of April- 2011	
EXPORT	Mus
NET EXPORT TO ER	242.04
NET EXPORT TO NR	401.88
NET EXPORT TO SR	657.68

Annexure-IV(2)

B) INTRA- REGIONAL ENERGY EXCHANGES(In Mus)	
DESCRIPTION	Mus
NSPCL CSEB to DD (BILATERAL)	47.66
NSPCL CSEB to DD (DD)	20.43
KSTPS-III to DNH (DNH)	14.20
NSPCL CSEB to DNH (BILATERAL)	68.12
NSPCL CSEB to DNH (DNH)	37.90
KSTPS-III to GUVNL (GUVNL)	46.16
JPL to GOA (NVVNL)	26.64
KSTPS-III to GOA (GOA)	2.35
APL GUVNL to MPSEB (NVVNL)	11.53
KSTPS-III to MPSEB (MPSEB)	37.18
RINFRA MSEB to MPSEB (MPSEB)	17.84
TPC MSEB to MPSEB (TPTCL)	3.15
TORRENT GUVNL to MPSEB	72.00
WARDHA MSEB to MPSEB (KISPL)	16.51
BALCO CSEB to MSEB (NVVNL)	30.86
JPL to MSEB (NVVNL)	72.00
KSTPS-III to MSEB (MSEB)	68.28
BALCO CSEB to RINFRA MSEB	27.87
JPL to RINFRA MSEB (JPL)	237.60
MPSEB to RINFRA MSEB	43.20
JBIL CSEB to TPC MSEB	1.63

(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
(411,668,470)	(212,776,650)	8,690,430	(60,457,730)	(53,193,850)	(15,874,990)	0.000	0.000	(3,585,120)	(74,470,560)

(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
(115,335,250)	(113,053,600)	756,210	(3,085,960)	48,100	0	0	0	0

(E) Scope for further increase in Inter-state energy transfer and constraints if any: Nil**(F) Regulatory measures (If any) : Nil**

AUFLS OPERATION DURING April, 2011

**In the month of April, 2011 , frequency remained below 49.5 Hz for 7.49% 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	11th,23rd	80-149	550	Nil
Gujarat	11th,23rd	4-6	220	Nil
Madhya Pradesh	Nil	Nil	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 , Gujarat and Madhya Pradesh are inadequate.

Generating Station Details

SUMMARY OF WESTERN REGION

SL. NO.	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
TOTAL REGION	HYDRO		7474.86		7445.86
	THERMAL		30572.5		29740.5
	GAS		8143.81		7897
	DIESEL		17.48		17.48
	WIND+RES+SHP		5357.96		5357.96
	NUCLEAR		1840		1840
GRAND TOTAL (WESTERN REGION)			53406.61		52298.61

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	1000	2X500	1000
	Bhilai TPP	1x250	250	1x250	250
	TOTAL THERMAL		7110		7110
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			8423.59		8423.59

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	THERMAL		7110		7110
SECTOR	GAS		1313.59		1313.59
	NUCLEAR		1840		1840
GRAND TOTAL (CENTRAL SECTOR)			10263.59		10263.59

IPP(private Generation)

	JINDAL TPP	4x250	1000	4x250	1000
	LANCO-Amarkantak	2x300	600	2x300	600
	Mundra APL	4*330 + 1*660	1980	4*330 + 1*660	1980
			3580		3580

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		779
THERMAL	A.E.Co.	1x60+3x110	390	1x70+3x110	400
	DHUVARAN	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
	TOTAL THERMAL		5080		5090
GAS	DHUVARAN	1x218.62	218.62	1x218.62	218.62

SUMMARY OF WESTERN REGION

SL. NO.	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
	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	160	1x106+1x54	160
	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			3470.22		3463.22
TOTAL GUJARAT			779		779
	HYDRO				
	THERMAL		5080		5090
	GAS		3470.22		3463.22
GRAND TOTAL (GUJARAT)			9329.22		9332.22

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%)	106.7	2x80 (66.67%)	106.7	
	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			3267.20		3267.2
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			3267.2		3267.2	
	HYDRO					
	THERMAL		2807.5		2807.5	
GRAND TOTAL (MADHYA PRADESH)			6074.7		6074.7	

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
TOTAL THERMAL			1780		1780
TOTAL CHHATISGARH			125		125
	HYDRO				
	THERMAL		1780		1780
GRAND TOTAL (CHHATISGARH)			1905		1905

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

SUMMARY OF WESTERN REGION

SL. NO.	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
	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%)	53.33	2x80 (33.33%)	53.33
	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			3578.66		3574.66
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	3x210	630
	BHUSAWAL	2x210	440	2x210	440
	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	2x135	270	2x135	270
TOTAL THERMAL			10215		10175
GAS	TROMBAY-7A & 7B	120+60	180	120+60	180
*	URAN (G)	4x60+4x108	672	4x108	432
	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			3312		3072
WIND+RES			79.48		79.48
TOTAL WIND+RES			79.48		79.48
TOTAL	HYDRO		3578.66		3574.66
MAHARASHTRA	THERMAL		10215		10175
	GAS		3312		3072
	WIND+RES		79.48		79.48
GRAND TOTAL (MAHARASHTRA)			17185.14		16901.14
GOA					
TYPE	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
GAS	RELIANCE, SALGAONKAR	1x39.82+1x8.2	48	1x39.82+1x8.2	48
GRAND TOTAL (GOA)			48		48

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 block 2	350 350	2011-12 2011-12
3	Mundra ultra mega TPP (TATA)	1 2	800 800	Sep-11 Sep-12
4	Hazira CCPP Expansion GSEG	GT+ST	350	May-11
	OTHER PROJECTS			
1	Gujarat lignite NLC&GPCL joint venture	Stage 1 Stage 2	1500 500	2011-12 2012-13
2	Pipavav TPP - Torrent power		1000	2011-12
3	Mundra STPP (Adani power ltd)	2	660	Jun-11
B	<u>MADHYA PRADESH</u>			
1	Amarkantak TPS	2	500	May-11
2	Satpura TPS ext.	10 11	250 250	May-11 May-11
	OTHER PROJECTS			
1	Maheshwar HEP		400	2011-12
2	Malwa TPP	1	500	2011-12
C	<u>CHATTISGARH</u>			
1	Marwa TPP	1 2	500 500	Sep-12 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	May-11
2	JSW Ratnagiri TPP (JSW Ltd.)	3 4	300 300	29/04/11 Sep-11
	OTHER PROJECTS	1	800	Oct-12
1	Koradi TPS extn	1	800	Nov-11
2	Dhopawe TPS	2 block 2	800 340	May-12 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 3	660 660	July'11 Feb'12
3	Mauda TPP	2	500	2012-13

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	March`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	June'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	May'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	June'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	LILLO of 400 KV Korba(W)Bhilai(Khedmara) line to Marwa TPP	65	Mar'12	Order placed
II) 220kV Lines				
1	Korba- Bishrampur DCSS	153	2010-11	Payment for forest compensation ha 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	Apr'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	May'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	June'11	Work in progress
2	Beed - Patoda D/C	45	March'11	Work in progress
3	Parli TPS-Nanded M/C line (Waghala)	90.3	May'11	Work in progress
4	Jaina- Chikhali D/C	150	May'11	Work in progress
5	220kv D/C on D/C tower from 400kv Bhusawal-II to 220kv Amalner	182	May'11	Work still in progress
6	220 KV D/C on D/C Tower from Jeur-Paranda	30	Sep`11	Alt line LILLO 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	May'11	Work in progress
Sl.No	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	Mar'12	Stringing commenced from April'10
2	400 KV Wardha(PG)-Parli(PG) D/C(quad.)	674	Jun'11	ROW problem
3	400 KV Raipur(PG) - Wardha(PG) D/C	741	Jan`12	Work affected due to ROW problem
5	400 KV Parli (MSEB)-Parli (PG) D/C	14	Jun'11	Engg & survey under progress

PROGRESS OF TRANSMISSION LINE CONSTRUCTION IN WR

	Name of transmission line	<u>Length in ckt km.</u>	Commissioning Schedule	Remarks
For Regional strengthening in southern Maharashtra to be implemented through IPTC Route by WR transmission				
6	400 KV Parli (PG)-Pune D/C	646	Aug'11	Objection from KEIPL SEZ on the line routing near Pune end.
7	400 KV Pune (PG)-A'bad(MSEB) D/C	450	Aug'11	Objection from KEIPL SEZ on the line routing near Pune end.
8	400 KV Parli(PG)-Pandharpur/Solapur D/C	272	Aug'11	WRTPL taken up the matter with MSETCL for clearance of crossing this line over existing line of MSETCL
9	400 KV Solapur(PG)-Kolhapur(MSEB)	438	Aug'11	All cases submitted for forest clearance
10	LILO of L'khand(MSEB)-Kalwa(MSEB) at Pune(PG) D/C	2.4	Aug'11	WRTPL taken up the matter with MSETCL for clearance of LILOing of this line
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	June'11	Under Progress
14	400 KV Ranchodpura(GEB)-Zerda(GEB) D/C	280	June'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	May'11	Line completed & ready fpor commisioning
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	June'11	Effort is being made to complete the line earlier
Transmission system associated with Mundra UMPP				
27	400 KV D/C Mundra-Limbdi	626	Dec'11	
28	400 KV D/C Mundra-Bachchau-ranchodpur	764	June'11	Attempts are made to bring line in June`11
29	400 KV D/C Mundra-Bachchau-Jetpur	666	Mar'12	Wild life sanctury 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-Auranagabad(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

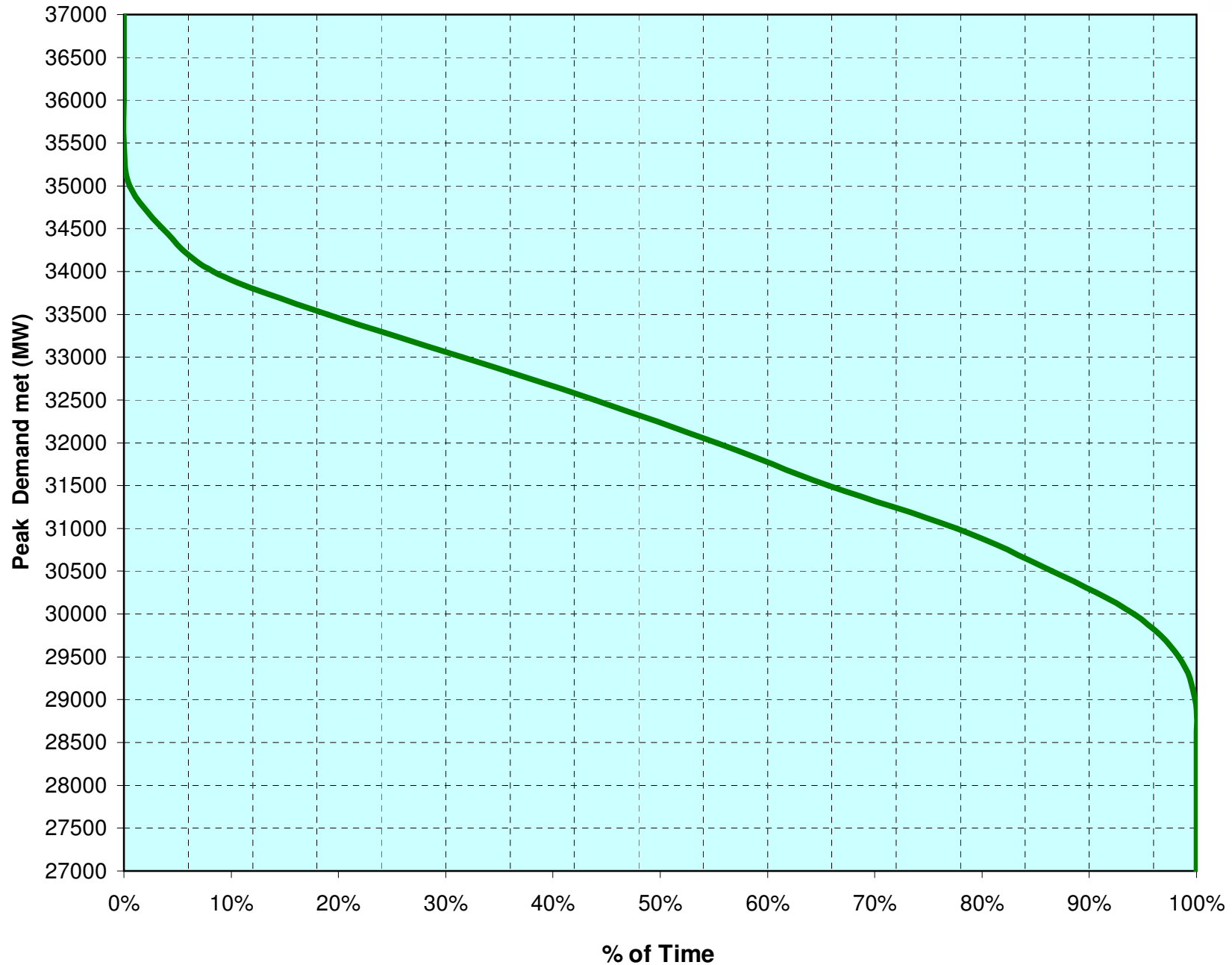
	Name of transmission line	<u>Length in ckt km.</u>	Commissioning Schedule	Remarks
Transmission system associated with Sasan UMPP				
35	765 KV Sasan-Satna Line-I	257	Dec'12	
36	765 KV Sasan-Satna Line-II	260	Dec'12	Tower package awarded
37	765 KV Satna-Bina Line I	279	Dec'12	
38	765 KV Satna-Bina Line 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	
INTER-REGIONAL LINES				
East-West transmission corridor strengthening scheme				
1	400 KV Raigarh-Rourkela D/C	420	May'11	Under Progress

Power system Operation Corporation Ltd.

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Western Regional Despatch Centre

LOAD DURATION CURVE (APRIL-2011) Max.demand met=35388 MW Min.demand = 28792 MW

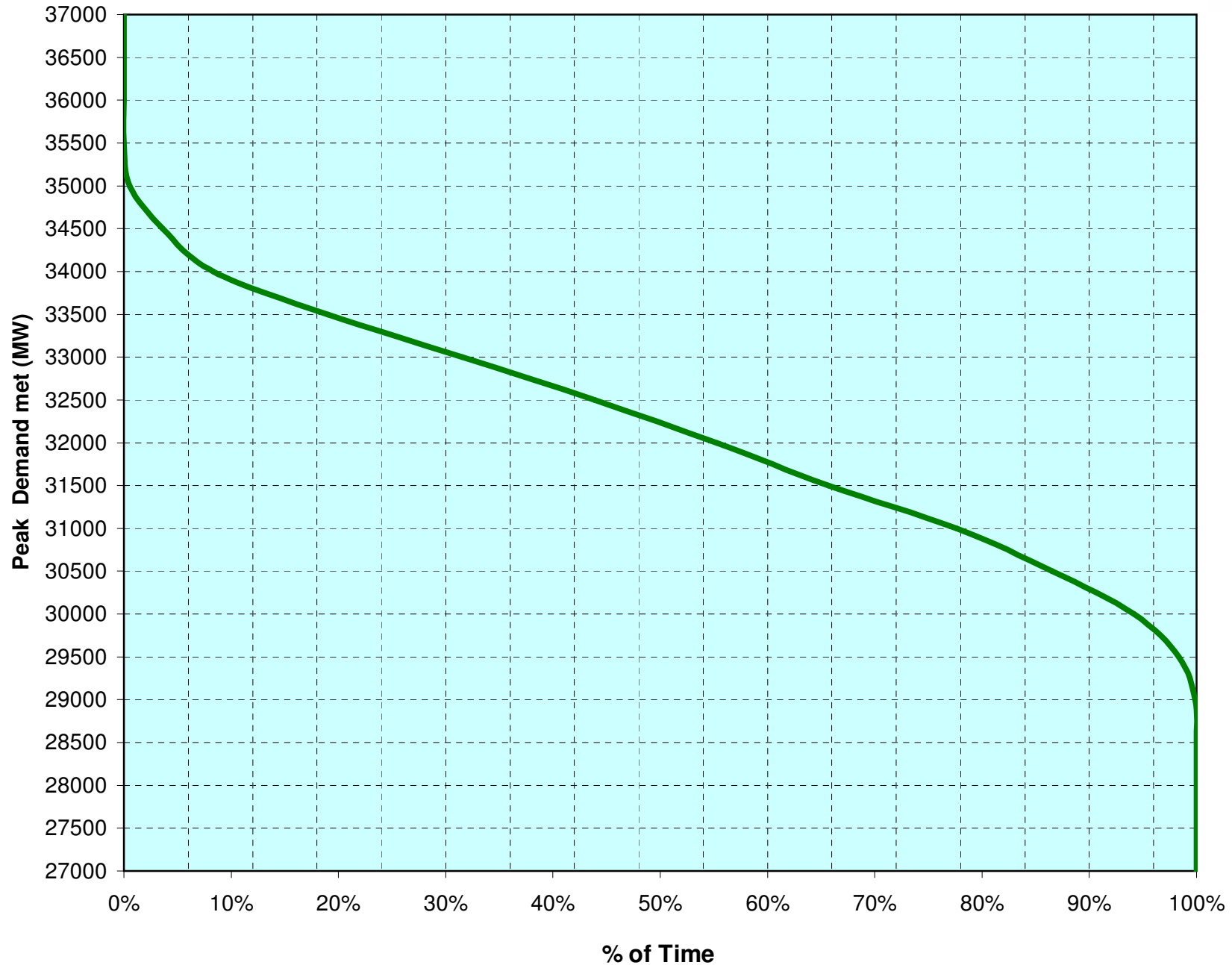


Power system Operation Corporation Ltd.

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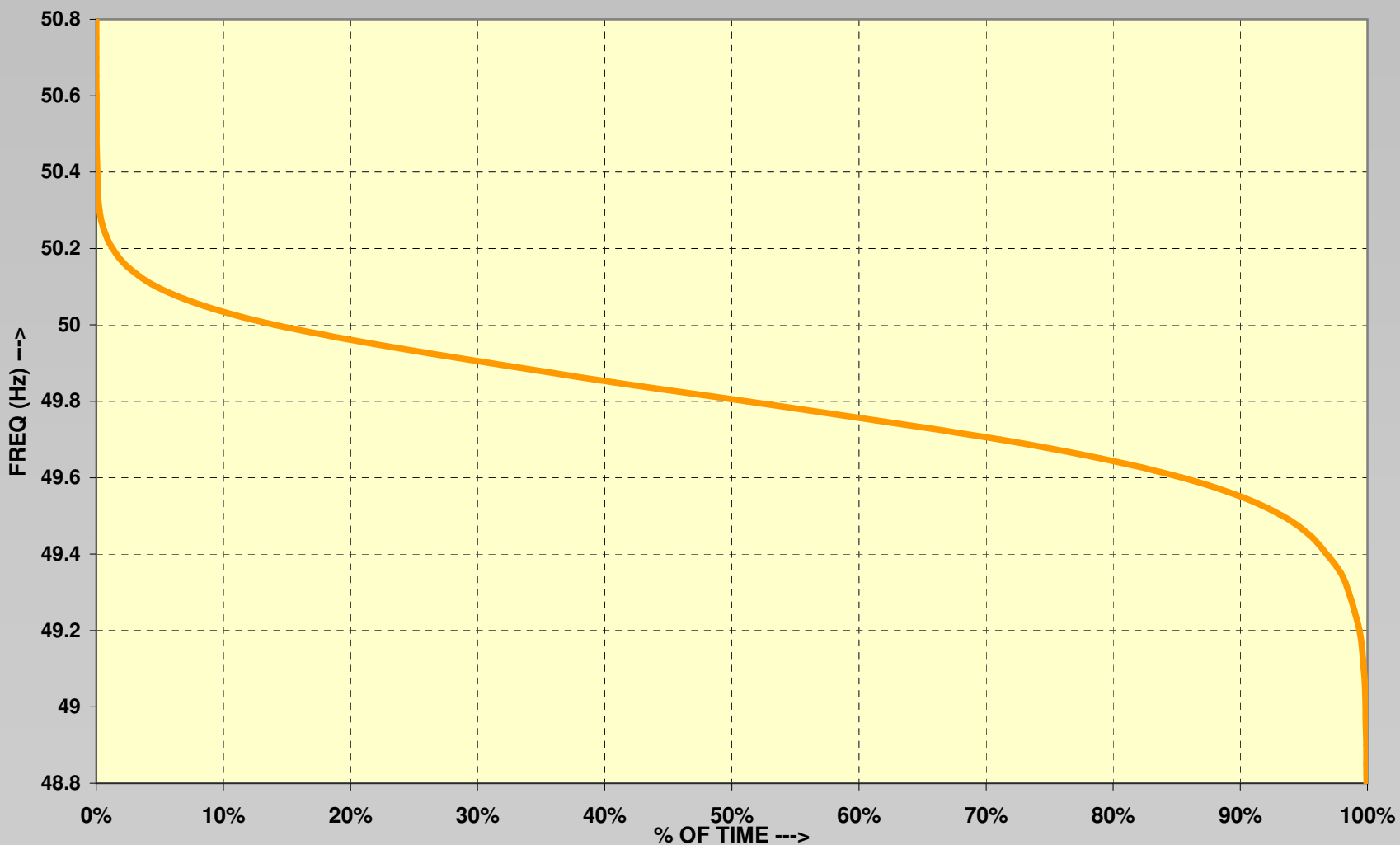
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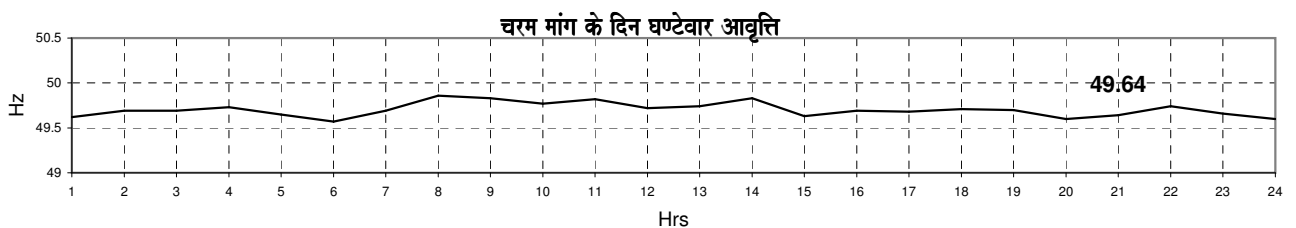
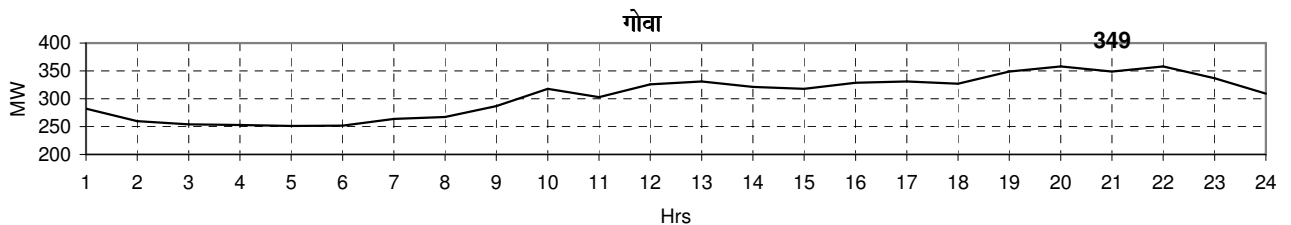
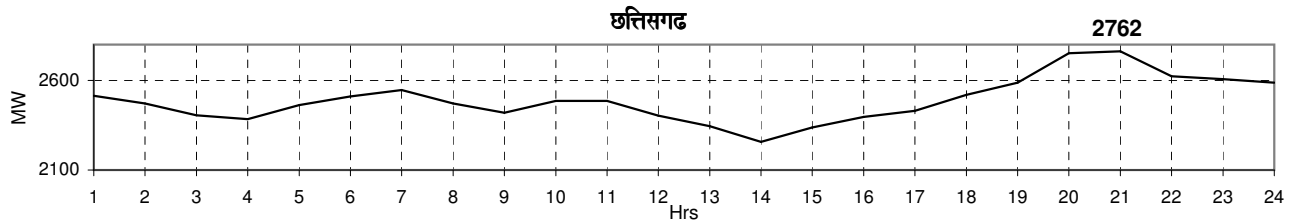
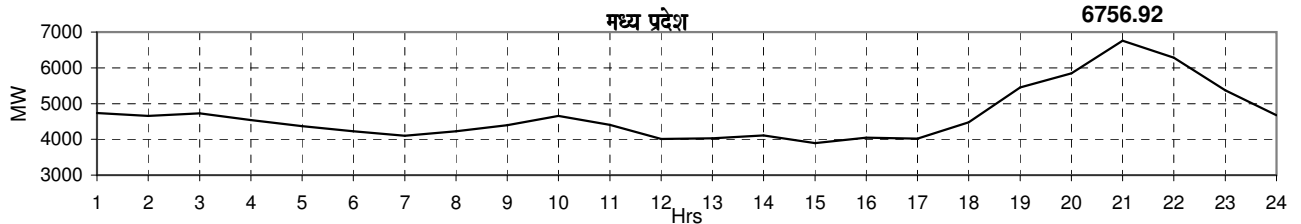
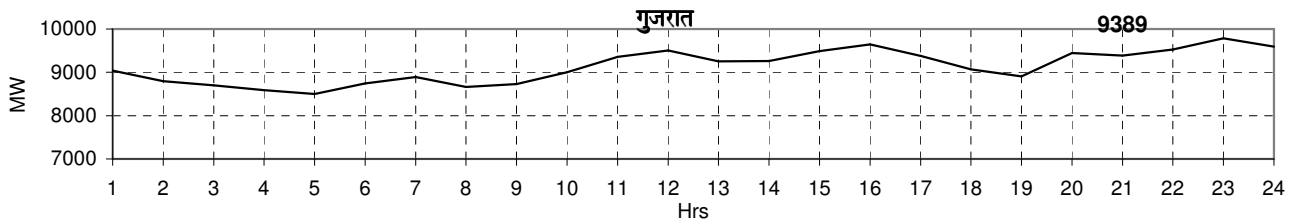
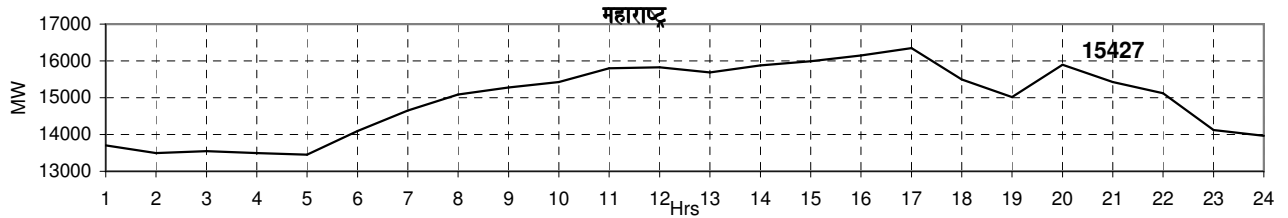
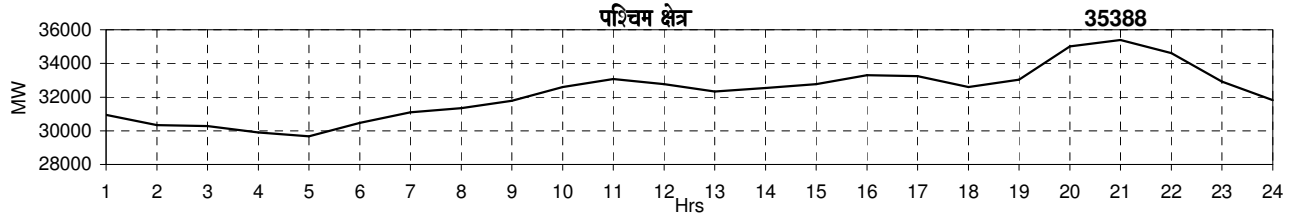


NEW GRID FREQUENCY DURATION CURVE FOR APRIL `11

Max =50.650 Hz, Min=48.80 Hz Average = 49.79 Hz



पश्चिम क्षेत्र का चरम भार दिन के प्रतिघंटा भार वक
HOURLY DEMAND CURVES ON REGIONAL PEAK DAY 06.04.2011



पश्चिम क्षेत्र का न्यूनतम भार दिन के प्रतिघंटा भार वक्र
 HOURLY MIN.DEMAND CURVES ON REGIONAL MIN DAY 03.04.2011

