



पश्चिम क्षेत्रीय भार प्रेषण केंद्र की  
दिसम्बर 2010 माह की प्रणाली प्रचालन  
रिपोर्ट

# System Operation Report Of Western Region For the month of Dec 2010

पावर सिस्टम ऑपरेशन कारपोरेशन लिमिटेड

(पावरग्रिड की एक पूर्ण स्वामित्व वाली कंपनी)

पश्चिम क्षेत्रीय भार प्रेषण केंद्र, मुंबई

Power System Operation Corporation Ltd.

(A wholly owned subsidiary company of POWERGRID)

Western Regional Load Despatch Centre, Mumbai

**TITLES**

**PAGES**

**A) SUMMARY REPORT**

**I IMPORTANT EVENTS**

1

- a) COMMISSIONING OF NEW GENERATING UNITS
- b) COMMISSIONING OF NEW TRANSMISSION LINES
- c) COMMISSIONING OF NEW SUB-STATIONS
- d) MAJOR PROBLEMS / CONSTRAINTS

**II SCHEDULE Vs DRAWAL**

2

**III FREQUENCY PROFILE**

3

**IV POWER SUPPLY POSITION**

3

**V PEAK DEMAND**

4

**VI INTERREGIONAL EXCHANGE**

5

**B) DETAILED REPORTS**

**I INSTALLED CAPACITY**

7

**C)**

**I SALIENT FEATURES OF GRID**

8

**II VOLTAGE PROFILE**

9

**III**

**a) INTRA REGIONAL EXCHANGE**

10

**b) PERFORMANCE OF EXCHANGES**

12

**D)**

**I AUFLS OPERATION**

13

**II UNIT WISE INSTALLED CAPACITY**

14-16

**II PROGRESS OF NEW TRANSMISSION LINE**

17-20

**APPENDIX**

**REGIONAL LOAD DURATION CURVE**

21

**REGIONAL GENERATION/LOAD CURVE FOR PEAK DEMAND DAY**

22

**REGIONAL GENERATION/LOAD CURVE FOR MINIMUM DEMAND DAY**

23

**FREQUENCY DURATION CURVE**

24

**FREQUENCY PROFILE**

25

**SYSTEM OPERATION REPORT OF WESTERN REGION  
FOR THE MONTH OF DEC 2010**

**A)SUMMARY REPORT**

**I)IMPORTANT EVENTS**

**a)COMMISSIONING OF NEW GENERATING UNITS**

SL.NO.	CONSTITUENT	UNIT NAME	UNIT NO	CAPACITY(MW)	DATE
1	APL	Mundra	V	660	22/12/10

**b)COMMISSIONING OF NEW TRANSMISSION LINES**

SL.NO.	CONSTITUENT	LINE NAME	CKT NO	KV	DATE
*1	PGCIL	Dehgam-Pirana	D/C	400	30/12/10

**c)COMMISSIONING OF NEW SUBSTATIONS**

**NIL**

**d)COMMISSIONING OF NEW LINE / BUS REACTORS**

**NIL**

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

**NIL**

**i) Grid Separations**                      **NIL**

**ii) Grid Disturbances**                      **NIL**

**\*Charged at Dehgam end .**

माह दिसम्बर 2010 में पश्चिम क्षेत्र का निष्पादन डाटा

**I** Performance of Western Regional Grid during Dec -2010  
**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	1122.66	914.95	-207.71	0.116	2.875
2	मध्य प्रदेश Madhya Pradesh	1879.65	1966.03	86.38	0.575	2.198
3	महाराष्ट्र Maharashtra	2121.84	2036.97	-84.87	0	6.512
4	छत्तिसगढ Chhattisgarh	-343.75	-507.32	-163.57	0.162	15.513
5	गोवा Goa	190.47	188.13	-2.34	0.05	1.241
6	दमन और दीव D&D	158.00	162.2	4.2	0.131	1.265
7	दादर नगर हवेली DNH	335.82	353.22	17.4	0.015	3.24
8	कुल TOTAL	5464.69	5055.02	-409.67	1.04	32.84

### आवृत्ति रूपरेखा

#### III a. Frequency Profile

MAXIMUM FREQUENCY( Inst.):	50.68 HZ
आधिकतम आवृत्ती एकिकृत :	
Minimum frequency(Inst)	48.94 HZ
न्यूनतम आवृत्ती एकिकृत :	
Average frequency	49.92 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	0.08	1.94	88.94	9.04	0.00

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

##### a. विद्युत पूर्ति की स्थिति Power Supply Position

	DEC-10			APR -10 TO DEC-10		
	Requirement (MUs)	Availability (MUs)	Shortage (%)	Requirement (MUs)	Availability (MUs)	Shortage (%)
Gujarat	6648	6095	8.32	55609.82	52240.69	6.06
MPSEB	5229	4052	22.51	34036.10	27569.39	19.00
CSEB	1563	1559	0.26	15066.02	14936.54	0.86
Maharashtra	10943	9497	13.21	95849.30	82326.31	14.11
Goa	206	204	0.97	1947.21	1854.87	4.74
D&D	180	160	11.11	1475.90	1328.35	10.00
DNH	354	353	0.28	1945.95	1864.69	4.18
Western Region	25129	21925	12.75	206191.59	182356.45	11.56

##### b. Peak Demand / Demand Met(MW)

	DEC-10			APR -10 to DEC -10		
	Requirement (MW)	Availability (MW)	Shortage (%)	Requirement (MW)	Availability (MW)	Shortage (%)
Gujarat	10371	9518	8.22	11296	10344	8.43
MPSEB	8928	7414	16.96	8928	7864	11.92
CSEB	2673	2651	0.82	3075	2922	4.98
Maharashtra	19488	15753	19.17	20308	15945	21.48
Goa	401	373	6.98	544	453	16.73
D&D	269	240	10.78	291	252	13.40
DNH	514	512	0.39	526	514	2.28
Western **Region	41252	34342	16.75	41252	34342	16.75

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

**PEAK DEMAND FOR DEC.2010**

State	Catered	UNSCHLS +SCHLS	FC	PC	Total	Date	Time	Freq.
<b>दिव दमण DD</b>								
पंजीकृत Registered	240	-	-	-	240	02.12.10	19:00	49.82
<b>दादरा नगर हवेली DNH</b>								
पंजीकृत Registered	520	-	-	-	512	27.12.10	19:00	49.86
<b>गुजरात GUJARAT</b>								
पंजीकृत Registered	9518	-	-	-	9518	25.12.10	12:00	49.65
आंकलित Computed	9516	0	137	-	9653	27.12.10	12:00	49.59
असीमित Unrestricted	9516	718	137	0.00	10371	27.12.10	12:00	49.59
<b>छत्तीसगढ रा .वि.बोर्ड Chhattisgarh</b>								
पंजीकृत Registered	2651	-	-	-	2651	30.12.10	19:00	49.92
आंकलित Computed	2651	0	7		2658	30.12.10	19:00	49.92
असीमित Unrestricted	2651	14	7	0	2673	30.12.10	19:00	49.92
<b>मध्य प्रदेश रा .वि.बोर्ड Madhy Pradesh</b>								
पंजीकृत Registered	7414	-	-	-	7414	20.12.10	21:00	49.86
आंकलित Computed	7414	0	36	-	7451	20.12.10	21:00	49.86
असीमित Unrestricted	7414	1478	36	0	8928	20.12.10	21:00	49.86
<b>महाराष्ट्र रा .वि.बोर्ड -MAHA-RASHTRA</b>								
पंजीकृत Registered	15753	-	-	-	15753	28.12.10	21:00	49.78
आंकलित Computed	15753	3214	121	-	19088	28.12.10	21:00	49.78
असीमित Unrestricted	15753	3214	121	400	19488	28.12.10	21:00	49.78
<b>पश्चिम क्षेत्र WESTERN REGION</b>								
पंजीकृत Registered	34342	-	-	-	34342	28.12.10	21:00	49.78
आंकलित Computed	33715	5213	118	-	39046	29.12.10	19:00	49.90
असीमित Unrestricted	33715	7019	118	400	41252	29.12.10	19:00	49.90

<b>VI</b>	
<b>माह दिसम्बर 2010 में अंतर क्षेत्र से पश्चिम क्षेत्र को विद्युत विनिमय</b>	
<b>Inter-Regional Exchange of Power in Western Region during DEC -10</b>	
<b>DESCRIPTION</b>	<b>Import ( Mus )</b>
Indian Energy Exchange (ER to WR)	16.66
Power Exchange of India (ER to WR)	15.28
ER (NTPC) to GUVNL	63.55
ER (NTPC) to MP PTCL	39.58
ER (NTPC) to CSEB	16.36
ER (NTPC) to MSEDCL	63.57
ER (NTPC) to D D	1.06
ER (NTPC) to D N H	1.64
DVC to MPPTCL (Long Term Open Access)	42.78
Hirakud to CSEB	1.32
TATA HALDIA(WB) to TPC MSEB ( TPTCL)	2.12
TPCH WBSEB to TPC MSEB ( TPTCL)	11.82
Indian Energy Exchange (NR to WR)	555.36
Rihand (Hydro) to MPPTCL (Long Term Open Access)	1.65
Matathilla (Hydro) to MPPTCL (Long Term Open Access)	3.39
BSES_RAJ to MPSEB ( RETL)	40.06
BSES YM (DTL) to MPSEB ( RETL)	47.19
PSEB to MPSEB ( MPSEB)	69.73
PSEB to MPSEB ( SCL)	3.51
RPPC to MPSEB ( MPPL)	10.03
UPPCL to MPSEB ( MPPL)	70.98
HSSKN KPTCL to BEST MSEB ( TPTCL)	10.06
USWL to BEST MSEB ( TPTCL)	6.93
VSL to BEST MSEB ( TPTCL)	7.04
BSES_RAJ to KSEB ( RETL)	25.06
BALCO CSEB to KSEB ( RPGPTCL)	25.33
TNEB to MPSEB ( MPPL)	7.83
JSWEL to MSEB ( JSW PTL)	35.72
<b>DESCRIPTION</b>	<b>Export(Mus)</b>
BALCO CSEB to NPCL ( RPGPTCL)	0.61
GUVNL to NPCL ( NPCL)	28.67
JPL to NPCL ( JPL)	12.84
BALCO CSEB to RPPC ( KISPL)	3.54
CSEB to RPPC ( NVVNL)	11.51
JPL to RPPC ( NVVNL)	47.15
HARIYANA to TNEB ( NVVNL)	0.30
PSEB to TNEB ( PTC LTD)	109.57
NSPCL CSEB to SAIL-SLM ( SAIL-SLM)	6.15
BALCO CSEB to STERLITE ( LANCO)	2.80
CSEB to TNEB ( PTC LTD)	56.41
CSEB to TNEB ( PXIL)	30.27

<b>DESCRIPTION</b>	<b>Export(Mus)</b>
HARIYANA to TNEB ( NVVNL)	0.29
JPL to TNEB ( PTC LTD)	8.77
LAMKPL to TNEB ( IEXL)	19.14
MSEB to TNEB ( IEXL)	20.91
PSEB to TNEB ( PTC LTD)	104.74
WBSEB to TNEB ( PTC LTD)	73.99
APL GUVNL to BESCOM ( NVVNL)	67.29
JPL to BESCOM ( NVVNL)	70.02
JPL to BESCOM ( PTC LTD)	69.96
<b>NET EXPORT TO ER</b>	<b>133.58</b>
<b>NET EXPORT TO NR</b>	<b>608.47</b>
<b>NET EXPORT TO SR</b>	<b>634.55</b>



**दिनांक 31 | 12 | 2010 को राज्यानुसार संस्थापित क्षमता**  
**INSTALLED GENERATION CAPACITY OF THE STATES INCLUDING SHARES AS ON 31.12.2010**

(All fig. in MW)

State	Ownership	Hydro	Coal	Gas	Nuclear	Total	Diesel	RES	Total
Gujarat	State	772.00	4440.00	892.72	0.00	6104.72	17.28	29.90	6151.90
	Private	0.00	2630.00	2577.50	0.00	5207.50	0.20	1821.14	7028.84
	Central(firm allo)	0.00	1628.89	424.27	559.32	2612.48	0.00	0.00	2612.48
	Total	772.00	8698.89	3894.49	559.32	13924.70	17.48	1851.04	15793.22
Madhya Pradesh	State	1703.66	2807.50	0.00	0.00	4511.16	0.00	11.76	4522.92
	Private	0.00	0.00	0.00	0.00	0.00	0.00	232.60	232.60
	Central(firm allo)	1520.00	1552.60	257.18	273.24	3603.02	0.00	0.00	3603.02
	Total	3223.66	4360.10	257.18	273.24	8114.18	0.00	244.36	8358.54
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	199.90	1799.90
	Central(firm allo)	0.00	804.00	0.00	47.52	851.52	0.00	0.00	851.52
	Total	120.00	4464.00	0.00	47.52	4631.52	0.00	218.95	4850.47
Maharashtra	State	2884.84	7295.00	672.00	0.00	10851.84	0.00	257.73	11109.57
	Private	447.00	2770.00	180.00	0.00	3397.00	0.00	2316.15	5713.15
	Central(firm allo)	0.00	2138.05	2623.93	690.14	5452.12	0.00	0.00	5452.12
	Total	3331.84	12203.05	3475.93	690.14	19700.96	0.00	2573.88	22274.84
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	283.03	0.00	25.80	308.83	0.00	0.00	308.83
	Total	0.00	283.03	48.00	25.80	356.83	0.00	30.05	386.88
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	21.04	4.20	7.38	32.62	0.00	0.00	32.62
	Total	0.00	21.04	4.20	7.38	32.62	0.00	0.00	32.62
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	25.04	27.10	8.46	60.60	0.00	0.00	60.60
	Total	0.00	25.04	27.10	8.46	60.60	0.00	0.00	60.60
WR	State	5480.50	16602.50	1564.72	0.00	23647.72	17.28	318.49	23983.49
	Private	447.00	7000.00	2805.50	0.00	10252.50	0.20	4599.79	14852.49
	Central(firm allo)*	1520.00	5675.30	3336.68	1611.86	12143.84	0.00	0.00	12143.84
	Unallocated	0.00	1025.35	196.91	228.14	1450.40	0.00	0.00	1450.40
	Total	7447.50	30303.15	7903.81	1840.00	47494.46	17.48	4918.28	53207.57

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

c) SILENT FEATURE OF WESTERN REGION GRID FOR THE MONTH OF DEC -2010

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
दिसम्बर Dec'09	13564	8323	4435	20858	381	13871	1375	49027
दिसम्बर Dec'10	15793	8358	4850	22275	387	14371	1450	53208
वृद्धि प्रतिशतमें % increase	16.43	0.42	9.36	6.79	2	3.60	5.5	8.53
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)								
दिसम्बर Dec'09	6555	4445	693	11371	281	169	343	23859
दिसम्बर Dec'10	6648	5229	1563	10943	206	180	354	25129
असिमित आवश्यकता Unrestricted Requirement MUs/day								
दिसम्बर Dec'09	211	143	22	367	9	5	11	770
दिसम्बर Dec'10	214	169	50	353	7	6	11	811
ऊर्जा उपलब्धता Energy availability (MUs)								
दिसम्बर Dec'09	6008	3666	685	9071	278	159	343	20213
दिसम्बर Dec'10	6095	4052	1559	9497	204	160	353	21925
ऊर्जा उपलब्धता Energy availability MUs/day								
दिसम्बर Dec'09	194	118	22	293	9	5	11	652
दिसम्बर Dec'10	197	131	50	306	7	5	11	707
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)								
दिसम्बर Dec'09	10032	7217	2610	18499	467	249	464	38755
दिसम्बर Dec'10	10371	8928	2673	19488	401	269	514	41252
प्रतिशत in%	3.38	23.71	2.41	5.35	-14.13	8.03	10.78	6.44
चरम मांग Peak Demand met (MW)								
दिसम्बर Dec'09	9025	6198	2559	14212	444	237	464	32277
दिसम्बर Dec'10	9518	7414	2651	15753	373	240	512	34342
प्रतिशत in%	5.46	19.62	3.60	10.84	-15.99	1.27	10.34	6.40
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)								
दिसम्बर Dec'09	-1007	-1019	-51	-4287	-23.00	-12.00	0.00	-6478
प्रतिशत in%	-10.04	-14.12	-1.95	-23.17	-4.93	-4.82	0.00	-16.72
दिसम्बर Dec'10	-853	-1514	-22	-3735	-28	-29	-2	-6910
प्रतिशत in%	-8.22	-16.96	-0.82	-19.17	-6.98	-10.78	-0.39	-16.75
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
दिसम्बर Dec'09	-547.00	-779.00	-8.51	-2300.00	-2.53	-9.60	-0.17	-3645.55
प्रतिशत in%	-8.34	-17.53	-1.23	-20.23	-0.90	-5.69	-0.05	-15.28
दिसम्बर Dec'10	-553.00	-1177.00	-4.00	-1446.00	-2.00	-20.00	-1.00	-3204.00
प्रतिशत in%	-8.32	-22.51	-0.26	-13.21	-0.97	-11.11	-0.28	-12.75

माह दिसम्बर 10 में ग्रिड के प्रमुख उप केन्द्र का विद्युतदाब रूपरेखा

Voltage Profile of major Sub-Stations for the month of DEC -2010

क्षेत्र Region	सब स्टेशनका नाम Sub station name	अधिकतम विद्युतदाब Nominal Voltage(KV)	विद्युतदाब स्थिती (प्रतिशत समय) Percentage of time when voltage was			अधिकतम विद्युतदाब Max. Voltage(KV)	न्यूनतम विद्युतदाब Min. Voltage(KV)	संक्षिप्त स्पष्टीकरण Brief Explanation
			Below 0.97 p.u.	0.97-1.03 p.u	Above 1.03 p.u.			
Western	धुले Dhule	400	0.00	22.80	77.20	434	396	
	असोज Asoj	400	0.00	0.00	100.00	427	406	
	कराड Karad	400	0.00	31.31	68.69	430	398	
	कासोर Kasor	400	0.00	9.84	90.16	429	406	
	इन्दौर Indore	400	0.10	75.77	24.13	421	384	
	इटारसी Itarsi	400	0.00	43.74	56.26	428	386	
	जेतपुर Jetpur	400	0.84	50.32	48.84	424	376	
	भिलाई Bhilai	400	0.00	23.21	76.79	427	399	
	बिना Bina	400	0.72	72.38	26.90	427	372	
	ग्वालियर Gwalior	400	1.05	52.72	46.23	431	380	

<b>A) Inter-Regional Transfer Of Energy For The Month Of Dec- 2010</b>	
<b>EXPORT</b>	<b>Mus</b>
<b>NET EXPORT TO ER</b>	<b>133.58</b>
<b>NET EXPORT TO NR</b>	<b>608.47</b>
<b>NET EXPORT TO SR</b>	<b>634.55</b>

**Annexure-IV(2)**

<b>B) INTRA- REGIONAL ENERGY EXCHANGES( In Mus)</b>	
<b>DESCRIPTION</b>	<b>Mus</b>
NSPCL CSEB to DD ( BILATERAL)	38.12
NSPCL CSEB to DD ( DD)	13.71
NSPCL CSEB to DNH ( BILATERAL)	54.48
NSPCL CSEB to DNH ( DNH)	15.19
RINFRA MSEB to MPSEB ( MPSEB)	109.31
JPL to MSEB ( NVVNL)	59.52
JPL to RINFRA MSEB ( JPL)	181.04

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

**(Figures in bracket are export )**

<b>TOTAL</b>	<b>GUVNL</b>	<b>MPPTCL</b>	<b>CSEB</b>	<b>MSEDCL</b>	<b>GOA</b>	<b>DD</b>	<b>DNH</b>	<b>JINDAL POWER</b>	<b>LANCO</b>
<b>(616.324)</b>	<b>(88.839)</b>	<b>6.248</b>	<b>(358.087)</b>	<b>24.881</b>	<b>(.373)</b>	<b>0.726</b>	<b>7.673</b>	<b>(64.320)</b>	<b>(144.233)</b>

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

**(Figures in bracket are export )**

<b>TOTAL</b>	<b>GUVNL</b>	<b>MPPTCL</b>	<b>CSEB</b>	<b>MSEDCL</b>	<b>GOA</b>	<b>DD</b>	<b>DNH</b>	<b>JINDAL POWER</b>
<b>(91.070)</b>	<b>(37.535)</b>	<b>-</b>	<b>(53.528)</b>	<b>.514</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>(.520)</b>

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

**(F) Regulatory measures (If any) : Nil**

**D I) AUFLS OPERATION DURING DEC - 2010**

In the month of DEC- 2010 , frequency remained below 49.5 Hz for 2.02% 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	Nil	Nil	550	Nil
Gujarat	Nil	Nil	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.

**PROGRESS OF ONGOING GENERATION PROJECT IN WESTERN REGION**

Sr.No.	Name of the power project	Unit No.	Capacity( MW)	commissionig schedule
A	<b><u>GUJARAT</u></b>			
1	Sikka TPP extn	4	250	Jan-11
2	Ukai TPS extn	6	490	Feb-11
3	Pipavav CCPP-GPCL & GSPC joint venture	block 1 block 2	350 350	Feb-11 Mar-11
4	Mundra ultra mega TPP ( TATA)	1 2	800 800	Sep-11 Sep-12
5	Hazira CCPP Expansion GSEG	GT+ST	350	Mar-11
	<b>OTHER PROJECTS</b>			
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)	1 2	660 660	Jan-11 Jun-11
B	<b><u>MADHYA PRADESH</u></b>			
1	Amarkantak TPS	2	500	Apr-11
2	Satpura TPS ext.	10 11	250 250	May-11 Mar-11
	<b>OTHER PROJECTS</b>			
1	Maheshwar HEP		400	2010-2011
2	Malwa TPP	1	500	Mar-11
C	<b><u>CHATTISGARH</u></b>			
1	Marwa TPP	1 2	500 500	Sep-12 Nov'12
2	Korba west -III TPP	1	500	Jun-12
	<b>OTHER PROJECTS</b>			
1	Bhaiyathan TPP Phase 1	1 2	500 500	Dec-12 Aug-13
2	IFFCO	1	660	Aug-12
			660	Dec-12
D	<b><u>MAHARASHTRA</u></b>			
1	Khaperkheda TPS Extn.	1 4	500 500	Mar-11 Mar-11
2	JSW Ratnagiri TPP ( JSW Ltd.)	2 3 4	300 300 300	Apr-11 Jun-11 Mar'11
	<b>OTHER PROJECTS</b>	1	800	Oct-12
1	Koradi TPS extn	1	800	Nov-11
2	Dhopawe TPS	2 block 2	800 340	May-12 Feb-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	<b><u>CENTRAL SECTOR</u></b>			
1	Sipat TPP	1 2 3	660 660 660	Jan'11 May'11 Nov'11
2	Korba STPS - III	1	500	2011-12
3	Mauda TPP	2	500	2012-13

## Generating Station Details

### SUMMARY OF WESTERN REGION

SL. NO.	STATION	INSTALLED CAPACITY		EFFECTIVE CAPACITY	
		UNITS	TOTAL (MW)	UNITS	TOTAL (MW)
TOTAL REGION	HYDRO		7749.86		7445.86
	THERMAL		30272.5		29440.5
	GAS		8143.81		7897
	DIESEL		17.48		17.48
	WIND+RES+SHP		4918.28		4918.28
	NUCLEAR		1840		1840
GRAND TOTAL (WESTERN REGION)			52941.93		51558.93

### 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

	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						
	HYDRO		779		779	
	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						
	HYDRO		3267.2		3267.2	
	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	500
TOTAL THERMAL			1780		1780	
TOTAL CHHATISGARH						
	HYDRO		125		125	
	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	3x300	900	3x300	900
	Wardha Warora	2x135	270	2x135	270
TOTAL THERMAL			9915		9875
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		9915		9875
	GAS		3312		3072
	WIND+RES		79.48		79.48
GRAND TOTAL (MAHARASHTRA)			16885.14		16601.14
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

\*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
<b>A</b>	<b>Gujarat</b>			
	<b>I)400kV Lines</b>			
1	Mundra-Varsana D/C	166	Jan'11	work under progress,ROW Problems
2	Essar - Hadala	226	Feb`11	work under progress,ROW Problems
3	400 kV Adani-Zerda Line no.2	661.12	Oct'11	Kept in abeyance as M/s APL backed out from PPA
4	400 kV Adani-Zerda Line no.1	661.12		LOI issued on 23.09.09, Firm has regretted the LOI
	<b>II)220kV Lines</b>			
1	220 KV D/C Utran- Kosamba s/s from Vav-Zagadia line-II	86	March`11	work under progress, ROW Problem
2	220 KV D/C GSEG(Hazira)-Kosamba line	124	Feb`11	Work under progress
3	220 KV D/C GPPC-Dhokadva line	100	Jan'11	Work under progress
4	LILO of one circuit of 220 KV D/C Savarkundla-Otha line at GPPC	93	March'11	Work under progress
5	LILO of 220 KV Morbi-Halvad line 1 at 400 KV Bhimasar (PG) S/S	215	Jan'11	Check survey work under progress
6	LILO of 220 KV Morbi-Halvad line 2 at 400 KV Bhimasar (PG) S/S	210	April'11	Check survey work under progress
7	220 KV GSEG(Hazira)-Mota line	111.06	April'11	Check survey work under progress
8	220 KV D/C Nakhatrana-Varsana line	190	June'11	Check survey work under progress
<b>B)</b>	<b>Madhya Pradesh</b>			
	<b>I) 400kV Lines</b>			
	<b>II) 220kV Lines</b>			
1	LILO of 1st ckt DCDS200KV Gwalior-Malanpur at 400kv Gwalior PGCIL S/S	16.4	2010-11	Work restarted and is nearing completion
2	Satna - Chhatapur line	156.32	2010-11	Work under progress
3	Amarkantak- Birsinghpur DCDS at 400kv s/s Sukha ( PGCIL )	331.8	2010-11	Work under progress
4	Jabalpur-Narsingpur part line for 400kv PGCIL Sukha	153.14	2010-11	Work almost completed, charging being arranged
5	Chhindwara- Betul	270	2010-11	Work almost completed, railway crossing work balance
6	Chegoan - Nimrani	205	2010-11	Work almost completed, charging being arranged
7	Maheshwar - Rajgarh	230	2011-12	Forest approval not yet received.work not commenced
8	Dewas - Astha line	144	2010-11	Work in progress
<b>C)</b>	<b>Chhatisgarh</b>			
	<b>I) 400kV Lines</b>			
1	LILO of 400 kV Korba(west)-Bhilai to Raipur DCDS	25	Feb'11	Profile of 19.937 km has been approved.
2	400 kV Korba(West) – Khedamara DCDS	224	Dec'11	Work under progress
3	400 KV DCDS Marwa TPP-Proposed 400 KV s/s Raipur	150	Mar'12	Order to be placed in Mar'10

**PROGRESS OF TRANSMISSION LINE CONSTRUCTION IN WR**

	<b>Name of transmission line</b>	<b><u>Length in ckt km.</u></b>	<b>Commissioning Schedule</b>	<b>Remarks</b>
4	LILO of 400 KV Korba(W)Bhilai(Khedmara) line to Marwa TPP	65	Mar'12	Preliminary survey and tender preparation under progress
<b>II) 220kV Lines</b>				
1	Korba- Bishrampur DCSS	153	2010-11	Payment for forest compensation ha been made, work will start after second phase approval of forest.
2	LILO of 220kv Bhatapara-Raipur ( PGCIL )at Doma	21.47	Feb'11	Work under progress
3	220 KV DCSS Kheedmara - 220KV s/s Bentara + 1 no. bay at Khedmara & 1 no. at Betemara	50.9	March'11	Work under progress
4	Chhuri - Mopka DC DS line	90	Aug'11	Profile of 34.84 km has been approved
5	I/C between new power house at Korba ( E )to proposed 220 kv Chhuri	30	2010-11	Work to be taken up
6	Diversion of 220kv line of Korba ( E )- Bhilai emanating from 200 mw ph - II to Korba ( E )	30	2009-10	Work to be taken up
7	Diversion of 220kv line of Korba - Bhatapara and 220k I/C in between Korba ( w ) and proposed 220 kv Cchuri s/s using section of Korba - Amarkantak- I & II	14	2010-11	Work to be taken up
8	Diversion of 220 KV Korba- Amarkantak Ckt-I & II to proposed 200/132 KV Chhuri s/s DCSS	4	2010-11	Land aaquisition under progress
<b>D)</b>	<b>Maharashtra</b>			
<b>I) 400kV Lines</b>				
1	Bhusawal-II -A'rangabad ( location 1-270)	190	March`11	work in progress
2	400 KV D/C line from Chandrapur Wardha via Warora	123	Apr'11	Work in progress
3	400 KV line from Koradi TPS- Wardha s/s	120	Apr'11	Work in progress
<b>II) 220kV Lines</b>				
1	Chitegaon-Shendra D/C	43.1	Feb'11	Excavation work in progress
2	Beed - Patoda D/C	45	March'11	Work in progress
3	Parli TPS-Nanded M/C line (Waghala)	90.3	Feb'11	Work in progress
4	Jaina- Chikhali D/C	150	Apr'11	Work in progress

**PROGRESS OF TRANSMISSION LINE CONSTRUCTION IN WR**

	Name of transmission line	<u>Length in ckt km.</u>	Commissioning Schedule	Remarks
5	220kv D/C on D/C tower from 400kv Bhusawal-II to 220kv Amalner	182	Feb'11	Work still in progress
6	220 KV D/C on D/C Tower from Jeur-Paranda	30	Feb'11	Check survey in progress, work not started.
7	220 KV Koradi-Butibori II D/C line on M/C tower at 400 KV Koradi s/s	53	Jan'11	Work in progress
8	220 KV Paras-Balapur D/C on M/C	5.61	Jan'11	Work in progress
<b>Sl.No</b>	<b>POWERGRID</b>			
	<b>765 kV &amp; 400kv</b>			
E)	<b>W R Strengthening scheme-II</b>			
<b>For Absorbing import in Eastern and Central part of WR</b>				
1	765 kv 2nd s/c Seoni(PG)-Wardha(PG)	261	Sep'11	Stringing commenced from April'10
2	400 KV Wardha(PG)-Parli(PG) D/C(quad.)	674	April'11	ROW problem
3	400 KV Raipur(PG) - Wardha(PG) D/C	741	April'11	Work affected due to ROW problem
4	400 KV Bhadravati(PG)-Parli(PG) D/C	776	Jan'11	Work affected due to ROW problem
5	400 KV Parli ( MSEB)-Parli (PG) D/C	14	Jan'11	Engg & survey under progress
<b>For Regional strengthening in southern Maharashtra to be implemented through IPTC Route by WR transmission</b>				
6	400 KV Parli (PG)-Pune D/C	646	June'11	Objection from KEIPL SEZ on the line routing near Pune end.
7	400 KV Pune (PG)-A'bad(MSEB) D/C	450	Apr'11	Objection from KEIPL SEZ on the line routing near Pune end.
8	400 KV Parli(PG)-Pandharpur/Solapur D/C	272	Jan`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	May'11	All cases submitted for forest clearance
10	LILO of L'khand(MSEB)-Kalwa(MSEB) at Pune( PG) D/C	2.4	Jan'11	WRTPL taken up the matter with MSETCL for clearance of LILOing of this line
11	Lilo of Solapur(MSEB)-Karad(MSEB) D/C at Solapur ( PG)	52	Jan'11	WRTPL taken up the matter with MSETCL for clearance of LILOing of this line
<b>For Regional strengthening in Gujarat to be implemented through IPTC Route by WR transmission (Guj) Pvt.</b>				
12	400 KV Rajgarh(PG)-Karamsad(GEB) D/C	468	Mar'11	Forest clearance awaited
13	400 KV Limdi(GEB)-Ranchodpura(GEB) D/C	206	Jan'11	
14	400 KV Ranchodpura(GEB)-Zerda(GEB) D/C	280	March'11	
<b>For Regional strengthening in Northern Madhya Pradesh</b>				
15	400 KV Korba(NTPC)-Birsinghpur(MPSEB) D/C	453	Jan'11	Ist stage forest clearance received
16	400 KV Birsinghpur-Damoh (PG) D/C	452	21/12/2010	
<b>Transmission system associated with Gandhar-II(GBPP)</b>				
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	*	
20	400 KV Lilo of Bina- Nagda D/C at Shujalpur	60	*	

**PROGRESS OF TRANSMISSION LINE CONSTRUCTION IN WR**

	Name of transmission line	<u>Length in ckt km.</u>	Commissioning Schedule	Remarks
<b>WR strengthening system-V</b>				
21	400 KV Vapi- Navi Mumbai D/C	258	Dec'11	Severe ROW problem
22	Vapi- Khadoli 220kv D/C	56	Feb'11	Severe ROW problem
23	Lilo of L'khand-Kalwa S/C at Navi Mumbai	10	Mar'11	Severe ROW problem
<b>WR strengthening system-VI</b>				
24	400 KV Dehgam Pirana D/C	92	Jan`11	
<b>WR strengthening system-IX</b>				
25	LILO of 400 KV Bina-Nagda Line at Sujalpur	60	Jan'11	Award placed in Nov'09
<b>WR strengthening system-X</b>				
26	LILO of 765 KV Sipat-Seoni line near Sipat at Bilaspur	14	Feb'12	Tendering under progress connected with Bilaspur Pooling station
<b>WR strengthening system-XI</b>				
27	LILO of 765 KV 2nd Sipat-Seoni line near Sipat at Bilaspur	24	Feb'12	Tendering under progress connected with Bilaspur Pooling station
<b>Transmission system associated with Korba-III</b>				
28	400 KV D/C Korba STPS-Raipur line	430	June'11	Effort is being made to complete the line earlier
<b>Transmission system associated with Mundra UMPP</b>				
29	400 KV D/C Mundra-Limbdi	626	Dec'11	Wild life sanctuary portion clearance awaited
30	400 KV D/C Mundra-Bachchauranchodpur	764	Dec'11	Wild life sanctuary portion clearance awaited
31	400 KV D/C Mundra-Bachchaur-Jetpur	666	Mar'12	Wild life sanctuary portion clearance awaited
32	400 KV D/C Gandhar-Navsari line	212	Dec'11	River crossing
33	400 KV D/C Navsari-Mumbai	408	June'12	01 out of 02 package awarded.
34	400 KV D/C Wardha-Aurangabad	800	Oct'12	Tendering under progress
35	400 KV D/C Aurangabad-Aurangabad(MSETCL)line	60	Oct'12	Tendering under progress
36	LILO of both ckt of Kawas-Navsari 220 kV D/C at Navsari	100	Oct'12	Tendering under progress
<b>Transmission system associated with Sasan UMPP</b>				
37	765 KV Sasan-Satna Line-I	257	Dec'12	
38	765 KV Sasan-Satna Line-II	260	Dec'12	Tower package awarded
39	765 KV Satna-Bina Line I	279	Dec'12	
40	765 KV Satna-Bina Line II	274	Dec'12	
41	765 KV Sasaram-Fatehpur line II	352	Dec'12	Tendering under progress
42	765 KV Agra-Fatehpur line	340	Dec'12	Tendering under progress
43	400 KV Bina-Bina(MPPTCL)line	10	Dec'12	Award placed in Mar'09,Engg. Under progress
44	LILO of both ckt of Vindhyanchal Jabalpur 400 KV D/C at Sasan	10	Dec'12	Award placed in Feb'09,Engg. Under progress
45	765 KV Bina-Indore line	320	Dec'12	
46	400 KV Indore-Indore(MPPTCL) line	120	Dec'12	
<b>INTER-REGIONAL LINES</b>				
<b>East-West transmission corridor strengthening scheme</b>				
1	400 KV Raigarh-Rourkela D/C	420	Feb'11	Under Progress

# Power system Operation Corporation Ltd.

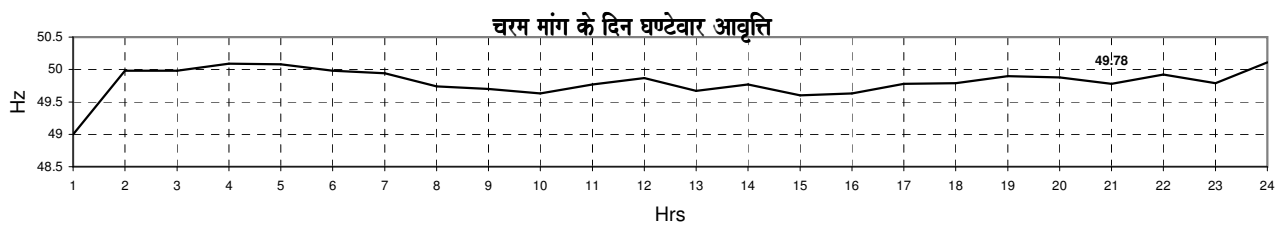
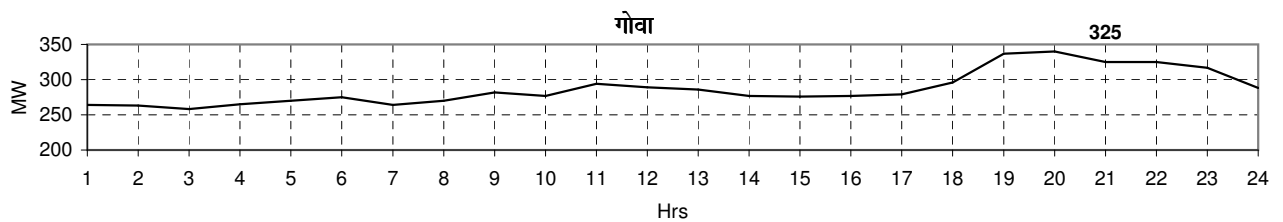
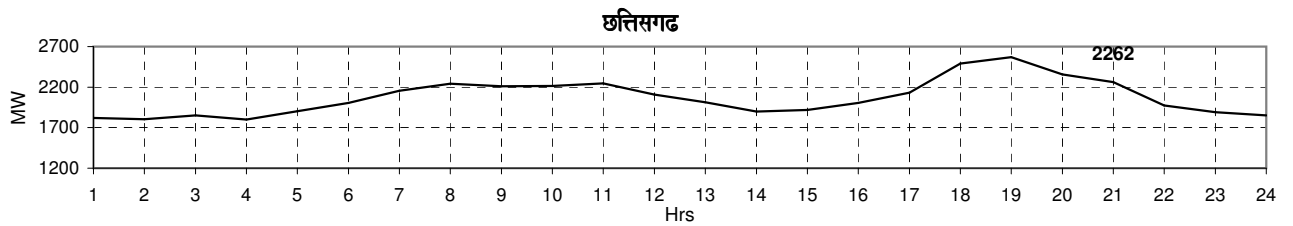
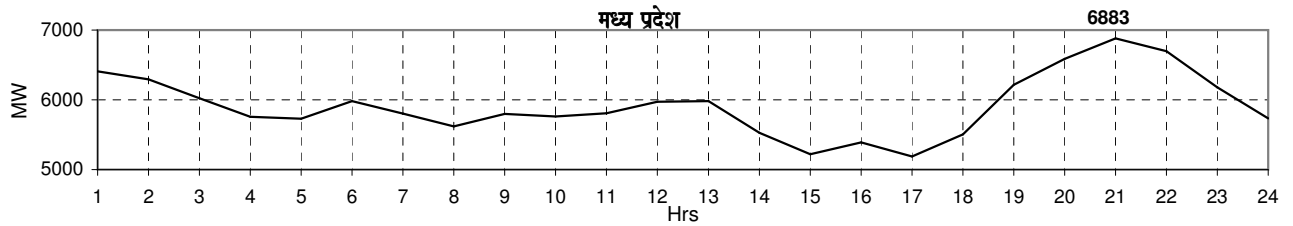
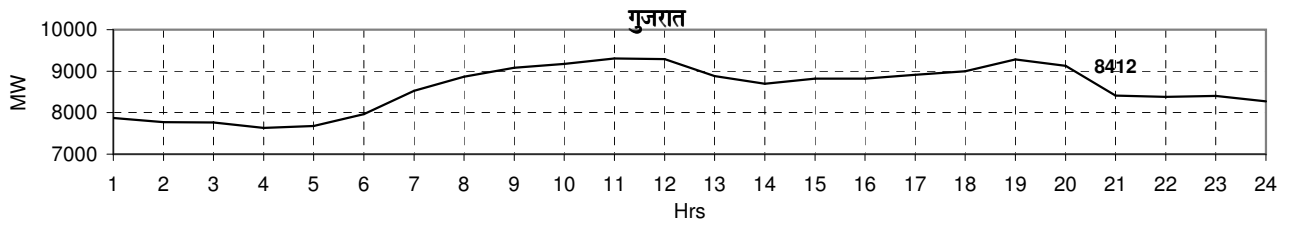
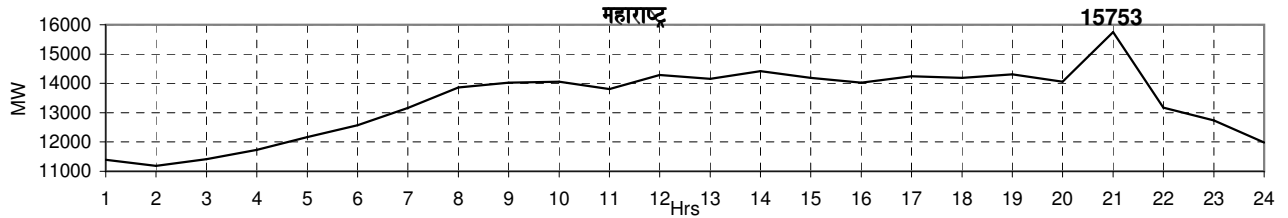
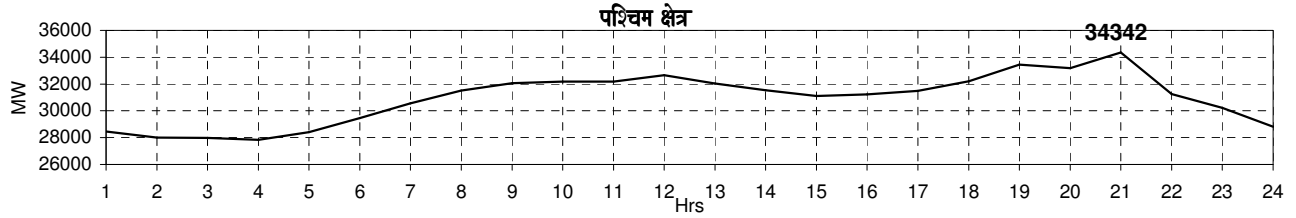
(A wholly owned subsidiary Company of POWERGRID)

Western Regional Despatch Centre

LOAD DURATION CURVE (DEC-2010) Max.demand met=34342MW Min.demand = 24775 MW

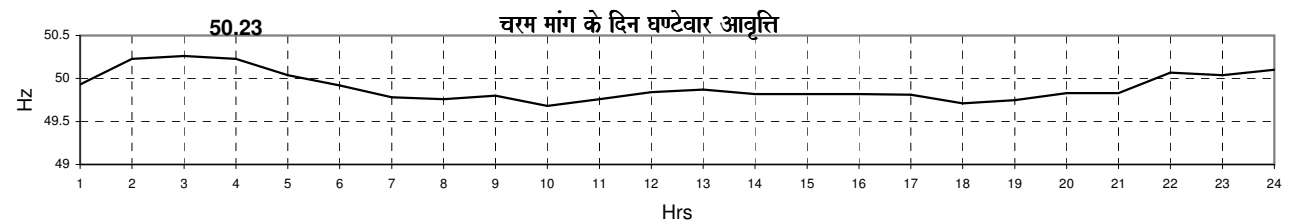
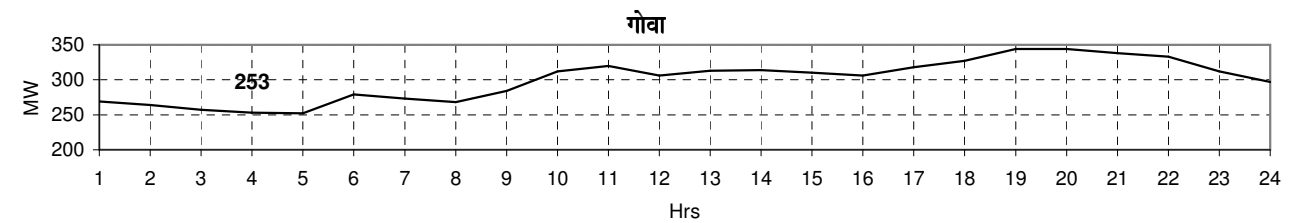
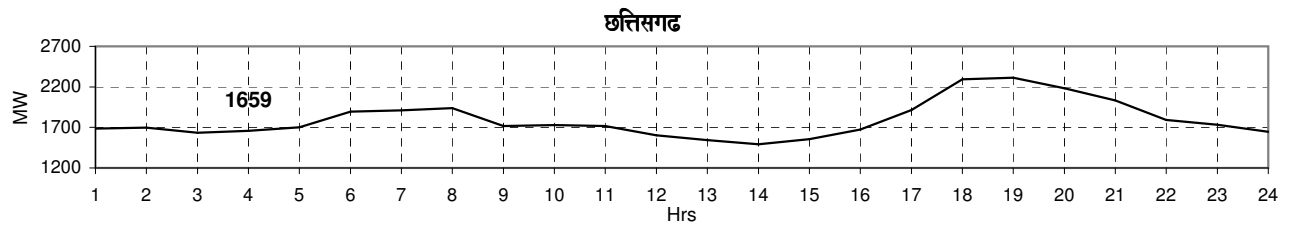
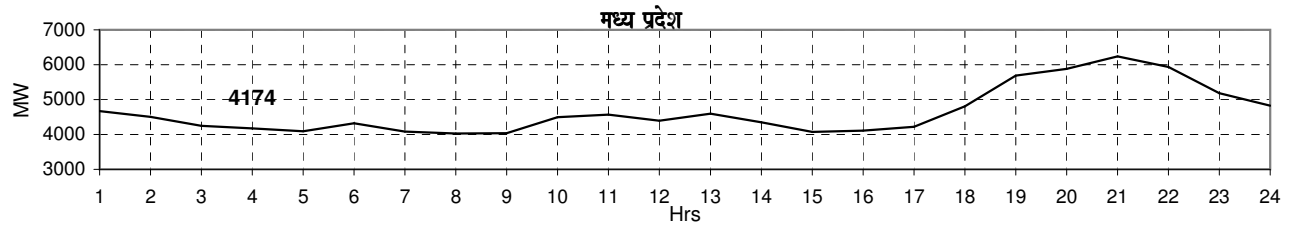
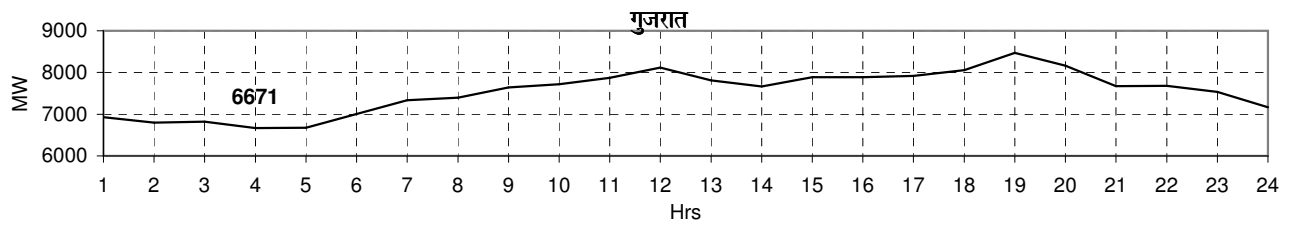
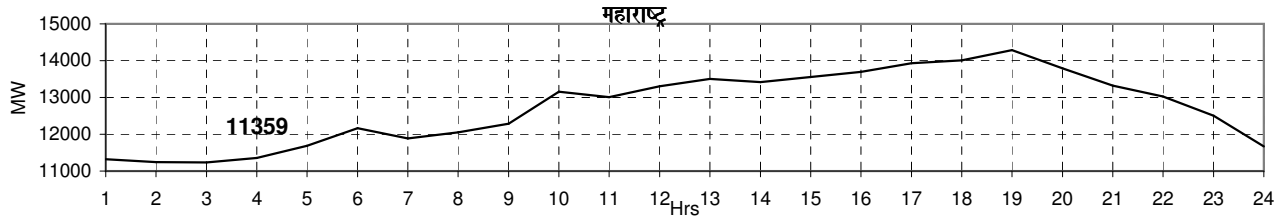
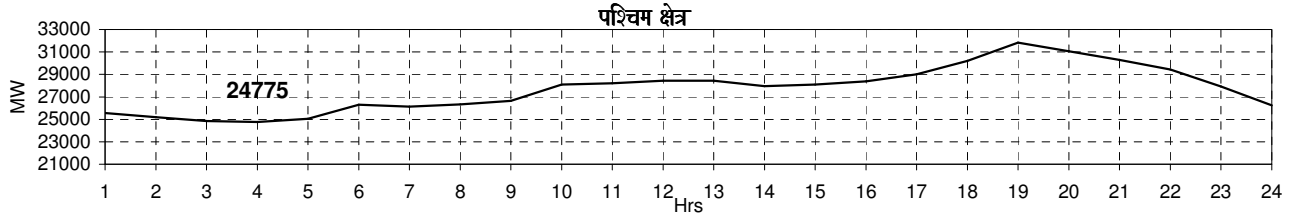


**पश्चिम क्षेत्र का चरम भार दिन के प्रतिघंटा भार वक**  
**HOURLY PEAK DEMAND CURVES ON REGIONAL PEAK DAY 28.12.2010**



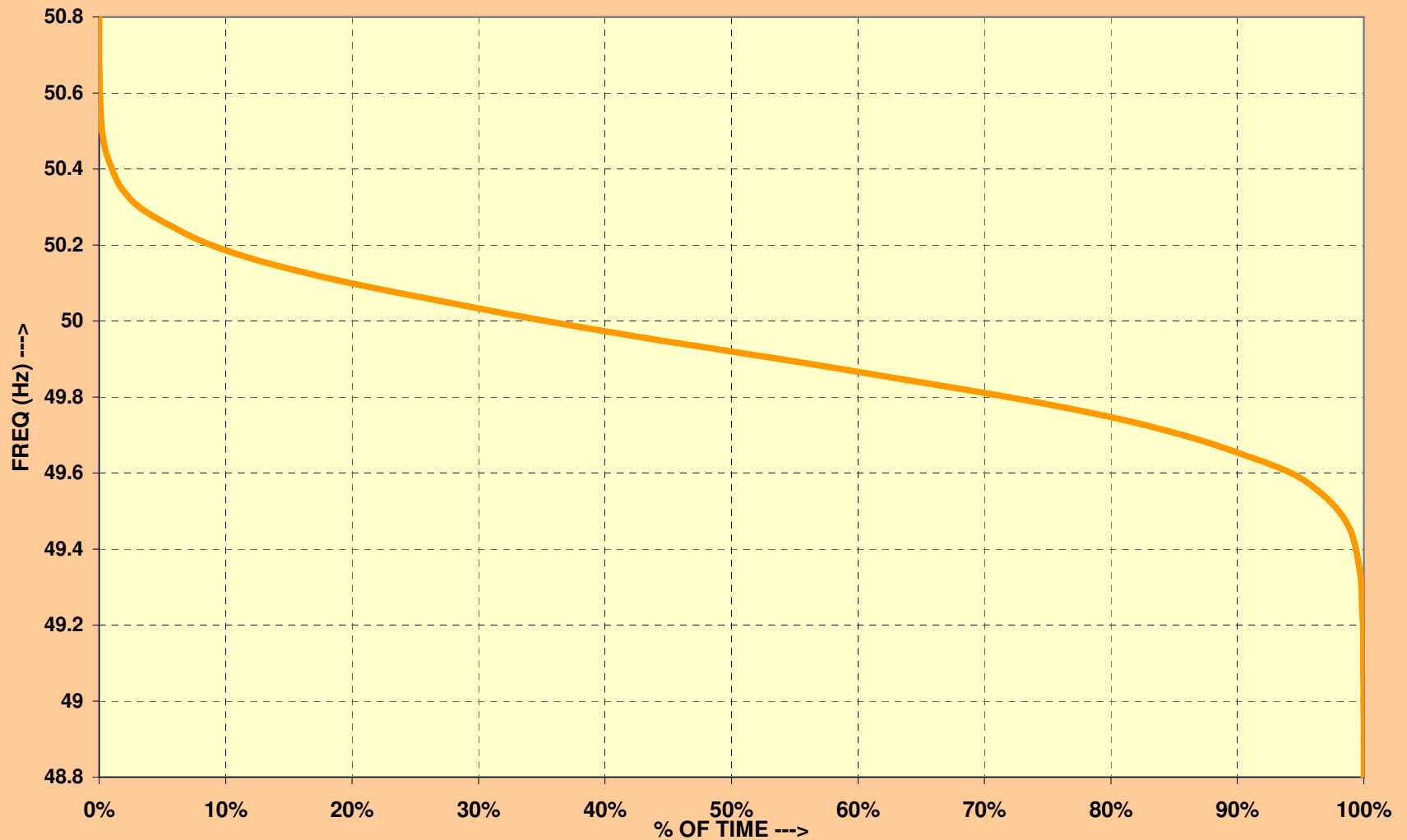


पश्चिम क्षेत्र का न्यूनतम भार दिन के प्रतिघंटा भार वक  
 HOURLY MIN.DEMAND CURVES ON REGIONAL MIN DAY 01.12.2010

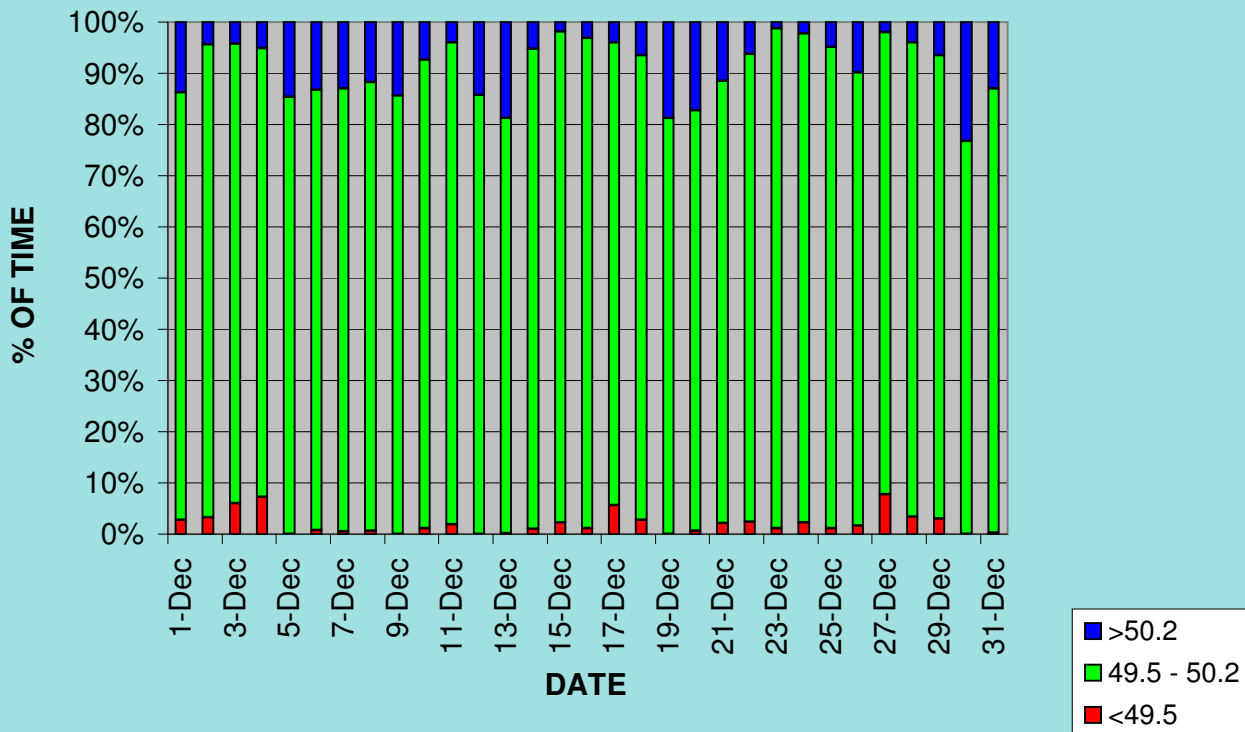


# NEW GRID FREQUENCY DURATION CURVE FOR DEC`10

Max =50.68Hz, Min=49.94Hz Average = 49.92



### Frequency Profile - DEC'10



### % of time Freq remained less than 49.5 in DEC'10 -Max 7.8 as compared to max 3.3 in NOV'10

