



पश्चिम क्षेत्रीय भार प्रेषण केंद्र कि  
सितम्बर 2010 माह की प्रणाली प्रचालन  
रिपोर्ट

# **System Operation Report Of Western Region For the month of Sep-2010**

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 SEP 2010**

**A)SUMMARY REPORT**

**I)IMPORTANT EVENTS**

**a)COMMISSIONING OF NEW GENERATING UNITS**

NIL

**b)COMMISSIONING OF NEW TRANSMISSION LINES**

SL.NO.	CONSTITUENT	LINE NAME	CKT NO	KV	DATE
1	Maharashtra	Vapi-Khadoli	II	220	16/09/10
2	APL	Mundra -MPSEZ	I	220	18/09/10
3	POWERGRID	Raipur-Raigarh	III&IV	400	30/09/10

**c)COMMISSIONING OF NEW SUBSTATIONS**

NIL

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

SL.NO.	CONSTITUENT	STATION NAME	KV RATIO	CAPACITY(MVAR)	DATE
1	POWERGRID	Khandwa	400	125	30/09/10

\* **FSC at 400kv Mundra-Sami-II charged on 16/09/10**

\* **SPS at Lanco-Pathadi put in service on 01.09.10 14:42 hrswith unit-I selection**

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

NIL

**i) Grid Separations**

NIL

**ii) Grid Disturbances**

NIL

माह सितम्बर 2010 में पश्चिम क्षेत्र का निष्पादन डाटा

**II Performance of Western Regional Grid during sep -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	780.61	797.42	16.81	0.201	0.055
2	मध्य प्रदेश Madhya Pradesh	1231.76	1161.85	-69.91	0.552	0.025
3	महाराष्ट्र Maharashtra	2607.93	2774.77	166.84	1.18	0.839
4	छत्तिसगढ Chhattisgarh	-30.23	-70.39	-40.16	0.104	0.262
5	गोवा Goa	206.29	157.11	-49.18	0.031	0.488
6	दमन और दीव D&D	160.03	162.14	2.11	0.07	0.057
7	दादर नगर हवेली DNH	334.79	338.55	3.76	0.083	0.106
8	कुल TOTAL	5291.18	5321.45	30.27		

### आवृत्ति रूपरेखा

#### III a. Frequency Profile

MAXIMUM FREQUENCY( Inst.):	50.79 HZ
आधिकतम आवृत्ती एकिकृत :	
Minimum frequency(Inst)	48.76 HZ
न्यूनतम आवृत्ती एकिकृत :	
Average frequency	49.98 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
%	0.02	0.34	1.47	85.89	12.28	0.00

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

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

	SEP-10			APR -10 TO SEP-10		
	Requirement (MUs)	Availability (MUs)	Shortage (%)	Requirement (MUs)	Availability (MUs)	Shortage (%)
Gujarat	5272	5162	2.10	35847.29	33898.10	5.44
CSEB	1740	1736	0.25	10278.60	10162.31	1.13
MPSEB	2964	2762	6.84	20209.97	16644.63	17.64
Maharashtra	9329	8401	9.95	64676.50	54671.95	15.47
Goa	209	192	8.05	1311.68	1226.66	6.48
D&D	167	153	8.05	949.22	857.56	9.66
DNH	335	330	1.32	1945.95	1864.69	4.18
Western Region	20000	18735	6.33	134438.01	118512.26	11.85

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

	Sep-10			APR -10 to Sep -10		
	Requirement (MW)	Availability (MW)	Shortage (%)	Requirement (MW)	Availability (MW)	Shortage (%)
Gujarat	10001	9563	4.38	10620	9725	8.43
CSEB	2911	2884	0.93	3075	2922	4.98
MPSEB	6582	5845	11.20	7113	5845	17.83
Maharashtra	17308	14366	17.00	20308	15945	21.48
Goa	430	391	9.07	544	453	16.73
D&D	264	251	4.92	291	251	13.75
DNH	526	428	18.63	526	505	3.99
Western **Region	36023	32181	10.67	41080	33663	18.06

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

**PEAK DEMAND FOR SEP.2010**

State	Catered	UNSCHLS +SCHLS	FC	PC	Total	Date	Time	Freq.
<b>दिव दमण DD</b>								
पंजीकृत Registered	251	-	-	-	251	21.09.10	15:00	49.75
<b>दादरा नगर हवेली DNH</b>								
पंजीकृत Registered	594	-	-	-	594	24.09.10	23:00	49.76
<b>गुजरात GUJARAT</b>								
पंजीकृत Registered	9563	-	-	-	9563	28.09.10	12:00	49.82
आंकलित Computed	9532	382	87	-	10001	28.09.10	15:00	49.74
असीमित Unrestricted	9532	382	87	0.00	10001	28.09.10	15:00	49.74
<b>छत्तीसगढ रा .वि.बोर्ड Chhattisgarh</b>								
पंजीकृत Registered	2884	-	-	-	2884	28.09.10	19:00	49.91
आंकलित Computed	2884	0	9		2893	28.09.10	19:00	49.91
असीमित Unrestricted	2884	18	9	0	2911	28.09.10	19:00	49.91
<b>मध्य प्रदेश रा .वि.बोर्ड Madhy Pradesh</b>								
पंजीकृत Registered	5845	-	-	-	5845	30.09.10	19:00	49.37
आंकलित Computed	5845	290	129	-	6264	30.09.10	19:00	49.37
असीमित Unrestricted	5845	608	129	0	6582	30.09.10	19:00	49.37
<b>महाराष्ट्र रा .वि.बोर्ड-MAHA-RASHTRA</b>								
पंजीकृत Registered	14366	-	-	-	14366	21.09.10	21:00	49.67
आंकलित Computed	14158	2532	218	-	16908	14.09.10	20:00	49.56
असीमित Unrestricted	14158	2532	218	400	17308	14.09.10	20:00	49.56
<b>पश्चिम क्षेत्र WESTERN REGION</b>								
पंजीकृत Registered	32181	-	-	-	32181	30.09.10	20:00	49.68
आंकलित Computed	32181	2706	360	-	35247	30.09.10	20:00	49.68
असीमित Unrestricted	32181	3082	360	400	36023	30.09.10	20:00	49.68

<b>VI</b>	
<b>माह सितम्बर 2010 में अंतर क्षेत्र से पश्चिम क्षेत्र को विद्युत विनिमय</b>	
<b>Inter-Regional Exchange of Power in Western Region during Sep -10</b>	
<b>DESCRIPTION</b>	<b>Import ( Mus )</b>
Indian Energy Exchange (ER to WR)	8.79
Power Exchange of India (ER to WR)	19.81
ER (NTPC) to GUVNL	46.82
ER (NTPC) to MP PTCL	33.99
ER (NTPC) to CSEB	13.79
ER (NTPC) to MSEDCL	57.72
ER (NTPC) to GOA	0.00
ER (NTPC) to D D	0.90
ER (NTPC) to D N H	1.38
DVC to MPPTCL (Long Term Open Access)	41.30
Hirakud to CSEB	1.28
TRIPURA to MSEB ( NVVNL)	6.57
WBSEB to MSEB ( NVVNL)	13.91
TISCO to TPC MSEB ( TPTCL)	13.69
TATA HALDIA(WB) to TPC MSEB ( TPTCL)	17.94
AP-NER to TORRENT_GUVNL ( IEXL)	0.04
Rihand (Hydro) to MPPTCL (LTOA)	2.30
JVVNL to REL MSEB ( IEXL)	0.19
<b>DESCRIPTION</b>	<b>Export(Mus)</b>
Indian Energy Exchange (WR to NR)	44.53
AIDCPL CSEB to BSES_RAJ ( LANCO)	3.69
BALCO CSEB to BSES_RAJ ( LANCO)	20.96
BPIL CSEB to BSES_RAJ ( LANCO)	8.34
CSPL CSEB to BSES_RAJ ( LANCO)	12.16
JPL to BSES_RAJ ( JPL)	95.42
MPSEB to BSES_RAJ ( LANCO)	9.67
MPSEB to BSES_RAJ ( RETL)	38.96
MIEL CSEB to BSES_RAJ ( LANCO)	16.77
MSPPL CSEB to BSES_RAJ ( LANCO)	2.59
MIELMH CSEB to BSES_RAJ ( LANCO)	8.38
MSPSPL CSEB to BSES_RAJ ( LANCO)	3.50
MECBL CSEB to BSES_RAJ ( LANCO)	4.32
REALISPAT CSEB to BSES_RAJ ( LANCO)	5.03
RSIPIL CSEB to BSES_RAJ ( LANCO)	2.52
SNIL CSEB to BSES_RAJ ( LANCO)	6.29
SCPL CSEB to BSES_RAJ ( LANCO)	2.06
SBMPL CSEB to BSES_RAJ ( LANCO)	4.47
VGL CSEB to BSES_RAJ ( LANCO)	12.58
VIL CSEB to BSES_RAJ ( LANCO)	3.57
JPL to BSES YM (DTL) ( JPL)	30.95
MPSEB to BSES YM (DTL) ( LANCO)	34.55
MPSEB to BSES YM (DTL) ( RETL)	61.89
GUVNL to NPCL ( NPCL)	33.91
MPSEB to NDPL(DTL) ( PTC LTD)	8.47
APL GUVNL to PSEB ( AEL)	37.14
GFL GUVNL to PSEB ( TPTCL)	4.90
JPL to PSEB ( LANCO)	12.73

<b>DESCRIPTION</b>	<b>Export(Mus)</b>
MPSEB to PSEB ( LANCO)	33.71
MPSEB to PSEB ( PSEB)	29.60
MSEB to PSEB ( NVVNL)	6.45
MSEB to PSEB ( PSEB)	26.32
TPC MSEB to PSEB ( TPTCL)	14.49
GANDHAR-LNG to RPPC ( NVVNL)	0.36
KAWAS-RLNG to RPPC ( NVVNL)	0.25
MPSEB to RPPC ( MPPL)	9.60
BALCO CSEB to UPPCL ( KISPL)	17.17
GPIL CSEB to UPPCL ( KISPL)	0.46
JBIL CSEB to UPPCL ( KISPL)	0.95
MPSEB to UPPCL ( MPPL)	85.97
MIEL CSEB to UPPCL ( KISPL)	2.48
MIELMH CSEB to UPPCL ( KISPL)	2.75
REALISPAT CSEB to UPPCL ( KISPL)	0.09
RREL CSEB to UPPCL ( KISPL)	1.72
SSPL CSEB to UPPCL ( KISPL)	2.07
TORRENT_GUVNL to UPPCL ( KISPL)	17.30
LAMKPL to BESCO ( PTC LTD)	170.41
TORRENT_GUVNL to BESCO ( NVVNL)	92.52
NSPCL CSEB to SAIL-SLM ( SAIL-SLM)	0.53
GUVNL to TNEB ( PXIL)	171.55
<b>NET EXPORT TO ER</b>	<b>432.04</b>
<b>NET EXPORT TO NR</b>	<b>384.44</b>
<b>NET EXPORT TO SR</b>	<b>488.54</b>



B)

दिनांक 30 | 09 | 2010 को राज्यानुसार संस्थापित क्षमता

## INSTALLED GENERATION CAPACITY OF THE STATES INCLUDING SHARES AS ON 30.09.2010

(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	1640.00	2577.50	0.00	4217.50	0.20	1793.39	6011.09
	Central(firm allo)	0.00	1508.89	424.27	559.32	2492.48	0.00	0.00	2492.48
	Total	772.00	7588.89	3894.49	559.32	12814.70	17.48	1823.29	14655.47
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	1474.60	257.18	273.24	3525.02	0.00	0.00	3525.02
	Total	3223.66	4282.10	257.18	273.24	8036.18	0.00	244.36	8280.54
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	723.00	0.00	47.52	770.52	0.00	0.00	770.52
	Total	120.00	4383.00	0.00	47.52	4550.52	0.00	218.95	4769.47
Maharashtra	State	2884.84	7295.00	912.00	0.00	11091.84	0.00	250.73	11342.57
	Private	447.00	2335.00	180.00	0.00	2962.00	0.00	2282.55	5244.55
	Central(firm allo)	0.00	2003.05	2623.93	690.14	5317.12	0.00	0.00	5317.12
	Total	3331.84	11633.05	3715.93	690.14	19370.96	0.00	2533.28	21904.24
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	277.03	0.00	25.80	302.83	0.00	0.00	302.83
	Total	0.00	277.03	48.00	25.80	350.83	0.00	30.05	380.88
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	19.04	4.20	7.38	30.62	0.00	0.00	30.62
	Total	0.00	19.04	4.20	7.38	30.62	0.00	0.00	30.62
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	22.04	27.10	8.46	57.60	0.00	0.00	57.60
	Total	0.00	21.00	27.10	8.46	57.60	0.00	0.00	57.60
WR	State	5480.50	16602.50	1804.72	0.00	23887.72	17.28	311.49	24216.49
	Private	447.00	5575.00	2805.50	0.00	8827.50	0.20	4538.44	13366.14
	Central(firm allo)*	1520.00	5675.30	3336.68	1611.86	12143.84	0.00	0.00	12143.84
	Unallocated	0.00	950.35	196.91	228.14	1375.40	0.00	0.00	1375.40
	Total	7447.50	28803.15	8143.81	1840.00	46234.46	17.48	4849.93	51454.22

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

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

1. स्थापित क्षमता Installed Capacity	गुजरात Gujarat	मध्य प्रदेश M.P	छत्तिसगढ़ CSEB	महाराष्ट्र Mah.	गोवा Goa	सेंट्रल सेक्टर Central Sector	सेंट्रल सेक्टर Central unlocated	पश्चिम क्षेत्र Western Region
सितम्बर Sep09	12871	8299	4425	20597	381	13585	1375	48036
सितम्बर Sep10	14655	8281	4769	21904	381	13872	1375	51454
वृद्धि प्रतिशतमें % increase	13.87	-0.22	7.79	6.35	0	2.11	0.0	7.12
<b>2. ऊर्जा Energy (Gross)</b>	<b>गुजरात Gujarat</b>	<b>मध्य प्रदेश M.P</b>	<b>छत्तिसगढ़ CSEB</b>	<b>महाराष्ट्र Mah.</b>	<b>गोवा Goa</b>	<b>दिव दमण DD</b>	<b>दादरा नगर हवेली DNH</b>	<b>प क्षेत्र Western Region</b>
असिमित आवश्यकता Unrestricted requirement (MUs)								
सितम्बर Sep09	6134	3296	1155	9835	235	169	323	21147
सितम्बर Sep10	5272	2964	1740	9329	209	167	335	20000
असिमित आवश्यकता Unrestricted Requirement MUs/day								
सितम्बर Sep09	204	110	39	328	8	6	11	705
सितम्बर Sep10	176	99	58	311	7	6	11	667
ऊर्जा उपलब्धता Energy availability (MUs)								
सितम्बर Sep09	6060	2734	1124	8080	231	151	309	18689
सितम्बर Sep10	5162	2762	1736	8401	192	153	330	18735
ऊर्जा उपलब्धता Energy availability MUs/day								
सितम्बर Sep09	202	91	37	269	8	5	10	623
सितम्बर Sep10	172	92	58	280	6	5	11	624
<b>3. मांग Demand</b>	<b>गुजरात Gujarat</b>	<b>मध्य प्रदेश M.P</b>	<b>छत्तिसगढ़ CSEB</b>	<b>महाराष्ट्र Mah.</b>	<b>गोवा Goa</b>	<b>दिव दमण DD</b>	<b>दादरा नगर हवेली DNH</b>	<b>प क्षेत्र Western Region</b>
असिमित मांग Unrestricted demand (MW)								
सितम्बर Sep09	10290	6648	2814	17399	443	252	509	37190
सितम्बर Sep10	10001	6582	2911	17308	430	264	526	36023
प्रतिशत in%	-2.81	-0.99	3.45	-0.52	-2.93	4.76	3.34	-3.14
चरम मांग Peak Demand met (MW)								
सितम्बर Sep09	9389	5970	2695	13463	397	227	461	30916
सितम्बर Sep10	9563	5854	2884	14366	391	251	428	32181
प्रतिशत in%	1.85	-1.94	7.01	6.71	-1.51	10.57	-7.16	4.09
<b>4. मांग और ऊर्जा में कमतरता प्रतिशतमें</b>	<b>Shortage in demand and energy (%)</b>							
<b>क्षमतामें कमी Capacity shortage</b>	<b>गुजरात Gujarat</b>	<b>मध्य प्रदेश M.P</b>	<b>छत्तिसगढ़ CSEB</b>	<b>महाराष्ट्र Mah.</b>	<b>गोवा Goa</b>	<b>दिव दमण DD</b>	<b>दादरा नगर हवेली DNH</b>	<b>पश्चिम क्षेत्र Western Region</b>
अधिशेष (-)/ surplus (+) (MW)								
सितम्बर Sep09	-901	-678	-119	-3936	-46.00	-25.00	-48.00	-6274
प्रतिशत in%	-8.76	-10.20	-4.23	-22.62	-10.38	-9.92	-9.43	-16.87
सितम्बर Sep10	-438	-728	-27	-2942	-39	-13	-98	-3842
प्रतिशत in%	-4.38	-11.06	-0.93	-17.00	-9.07	-4.92	-18.63	-10.67
<b>ऊर्जा में कमी Energy अधिशेष Surplus (+) (MUs)</b>	<b>गुजरात Gujarat</b>	<b>मध्य प्रदेश M.P</b>	<b>छत्तिसगढ़ CSEB</b>	<b>महाराष्ट्र Mah.</b>	<b>गोवा Goa</b>	<b>दिव दमण DD</b>	<b>दादरा नगर हवेली DNH</b>	<b>प क्षेत्र Western</b>
सितम्बर Sep09	-74.00	-562.00	-31.00	-1755.00	-4.00	-18.60	-14.00	-2458.00
प्रतिशत in%	-1.21	-17.05	-2.68	-17.84	-1.70	-10.98	-4.33	-11.62
सितम्बर Sep10	-110.65	-202.00	-4.00	-928.10	-16.82	-13.41	-4.40	-1265.63
प्रतिशत in%	-2.10	-6.82	-0.23	-9.95	-8.05	-8.05	-1.32	-6.33

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

Voltage Profile of major Sub-Stations for the month of SEP-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 0.97p.u.	0.97- 1.03p.u	Above 1.03 p.u.			
Western	धुले Dhule	400	0.00	4.79	95.21	436	400	
	असोज Asoj	400	0.00	0.50	99.50	427	406	
	कराड Karad	400	0.00	7.65	92.35	435	400	
	कासोर Kasor	400	0.00	19.12	80.88	429	400	
	इन्दौर Indore	400	0.00	44.83	55.17	428	390	
	इटारसी Itarsi	400	0.00	15.76	84.24	431	394	
	जेटपुर Jetpur	400	0.70	45.03	54.27	428	372	
	भिलाई Bhilai	400	0.00	30.36	69.64	423	396	
	बिना Bina	400	0.48	46.35	53.17	431	385	
	ग्वालियर Gwalior	400	0.28	37.48	62.24	431	380	

III माह सितम्बर 2010 का अंतर राज्य में ऊर्जा परिवहन

<b>A) Inter-Regional Transfer Of Energy For The Month Of Sep- 2010</b>	
<b>EXPORT</b>	<b>Mus</b>
NET EXPORT TO ER	432.04
NET EXPORT TO NR	384.44
NET EXPORT TO SR	488.54

**Annexure-v(2)**

<b>B) INTRA- REGIONAL ENERGY EXCHANGES( In Mus)</b>	
<b>DESCRIPTION</b>	<b>Mus</b>
NSPCL CSEB to DD ( BILATERAL)	61.42
NSPCL CSEB to DD ( DD)	1.42
NSPCL CSEB to DNH ( BILATERAL)	68.44
NSPCL CSEB to DNH ( DNH)	1.67
JPL to MPSEB ( MPSEB)	24.75
BALCO CSEB to MSEB ( NVVNL)	23.49
JPL to MSEB ( NVVNL)	47.01
JBIL CSEB to MSEB ( RPGPTCL)	2.02
MCPL MPSEB to MSEB ( NVVNL)	3.56
MIELMH CSEB to MSEB ( NVVNL)	3.93
MPSEB to REL MSEB ( RINFRA MSEB)	0.14
JPL to RINFRA MSEB ( JPL)	119.25
MPSEB to RINFRA MSEB ( RINFRA MSEB)	56.74

b)

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

(Figures in bracket are export )

TOTAL	GUVNL	MPPTCL	CSEB	MSEDCL	GOA	DD	DNH	JINDAL POWER	LANCO
0.507	(109.568)	10.064	(65.058)	229.237	3.887	0.065	8.732	(76.853)	0

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

(Figures in bracket are export )

TOTAL	GUVNL	MPPTCL	CSEB	MSEDCL	GOA	DD	DNH	JINDAL POWER
(34.258)	(41.152)	0	(1.656)	8.550	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

**D) AUFLS OPERATION DURING SEP- 2010**

**In the month of Sep- 2010 , frequency remained below 49.5 Hz for 1.83% of the time .  
During the month,U/F relay operated on 4 occasions in Maharashtra ; 4 occasions  
in Gujrat ; 6 occasions in Madhya pradesh and 2 occasions in Chhatisgarh .  
The details of operation of AUFLS are given below.**

<b>State</b>	<b>Dates on which frequency relays at 48.8 Hz operated</b>	<b>Actual load relief obtained (MW) (Range)</b>	<b>Load relief required as per the scheme (MW)</b>	<b>Dates on which U/F relays did not operate</b>
Maharashtra	6th,20th,30th	73 -118	550	Nil
Gujarat	6th,20th,30th	28-34	220	Nil
Madhya Pradesh	6th,20th,30th	24.6-90	152	20th
CSEB	30th	0-12	38	6th,20th

**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 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	Dec'10	work under progress,ROW Problems
2	Tappar(Varsana)-Hadala	318	Oct`10	work under progress,ROW Problems
3	Essar - Hadala	226	Sep`10	work under progress,ROW Problems
5	400 kV Adani-Zerda Line no.2	661.12	Apr'11	Kept in abeyance as M/s APL backed out from PPA
6	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	Sep`10	work under progress, ROW Problem
2	220 KV D/C GSEG(Hazira)-Kosamba line	124	Nov`10	Work under progress
3	220 KV D/C GPPC-Dhokadva line	100	Sep`10	Work under progress
4	LILO of one circuit of 220 KV D/C Savarkundla-Otha line at GPPC	93	Oct'10	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	Jan'11	Check survey work under progress
7	220 KV GSEG(Hazira)-Mota line	111.06	Oct'10	Check survey work under progress
8	220 KV D/C Nakhatrana-Varsana line	190	Dec'10	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	Dec'10	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 has been made, work will start after second phase approval of forest.
2	LILO of 220kv Bhatapara-Raipur ( PGCIL )at Doma	21.47	Sep'10	Work under progress
3	220 KV DCSS Kheedmara - 220KV s/s Bemtara + 1 no. bay at Khedmara & 1 no. at Betemara	50.9	Sep'10	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 Chhuri 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 aquisition under progress
<b>D)</b>	<b>Maharashtra</b>			
	<b>I) 400kV Lines</b>			
1	Bhusawal-II -A'rangabad ( location 1-270)	190	Oct`10	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	Oct'10	Excavation work in progress
2	Beed - Patoda D/C	45	July'10	Work in progress
3	Parli TPS-Nanded M/C line (Waghala)	90.3	July'10	Work in progress
4	Jaina- Chikhali D/C	150	Dec'10	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	Oct'10	Work still in progress
6	220 KV D/C on D/C Tower from Jeur-Paranda	30	oct'10	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	Nov'10	Work in progress
8	220 KV Paras-Balapur D/C on M/C	5.61	Nov'10	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	Dec'10	ROW problem
3	400 KV Raipur(PG) - Wardha(PG) D/C	741	Dec'10	Work affected due to ROW problem
4	400 KV Bhadravati(PG)-Parli(PG) D/C	776	Nov'10	Work affected due to ROW problem
5	400 KV Parli ( MSEB)-Parli (PG) D/C	14	Nov'10	Engg & survey under progress
<b>For Regional strengthening in southern Maharashtra to be implemented through IPTC Route by WR</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	May'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	Dec'10	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	Oct'10	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	Dec'10	
14	400 KV Ranchodpura(GEB)-Zerda(GEB) D/C	280	Dec'10	
<b>For Regional strengthening in Northern Madhya Pradesh</b>				
15	400 KV Korba(NTPC)-Birsinghpur(MPSEB) D/C	453	Dec'10	Ist stage forest clearance received
16	400 KV Birsinghpur-Damoh (PG) D/C	452	Oct'10	
<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**

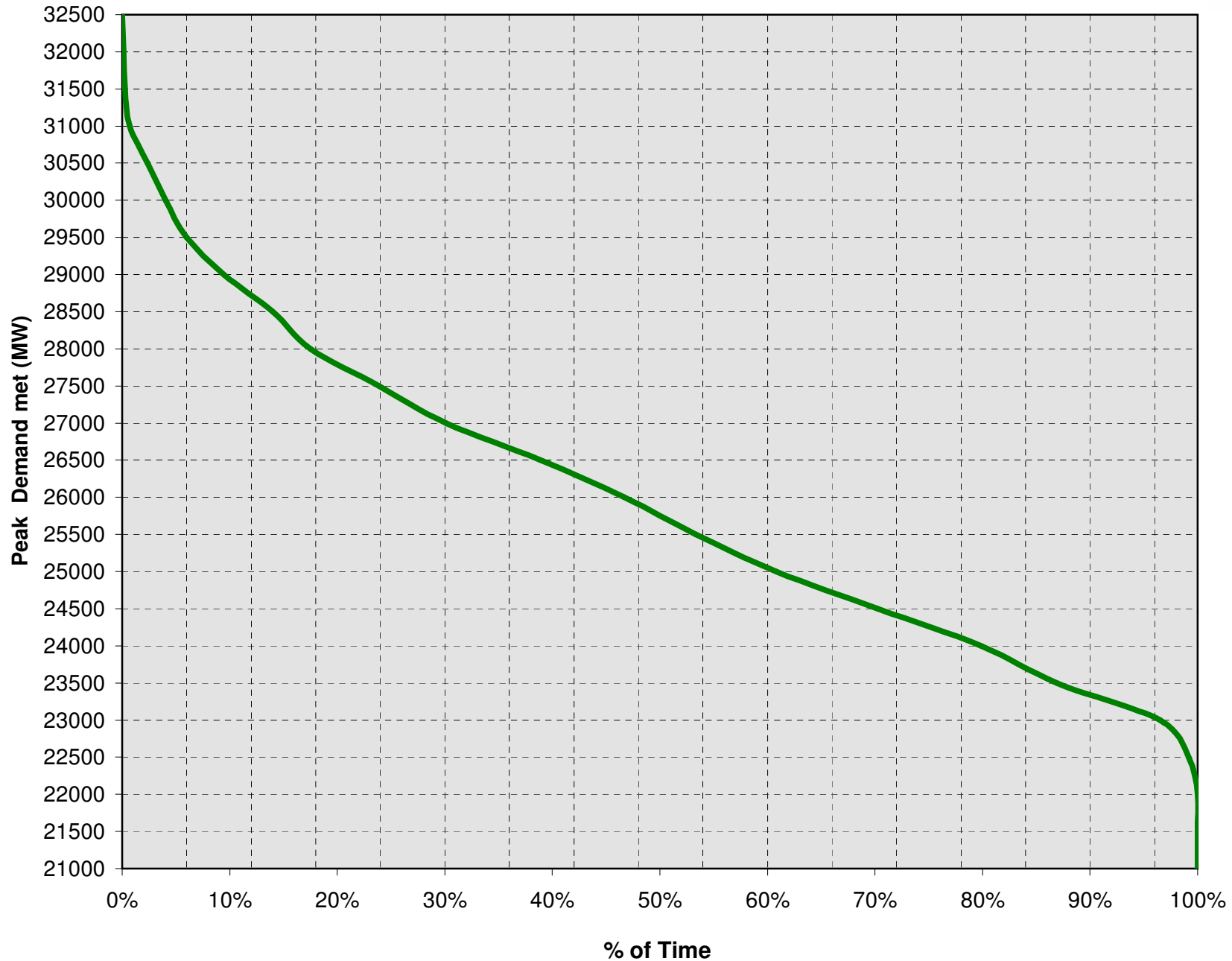
	Name of transmission line	<u>Length in ckt km.</u>	Commissioning Schedule	Remarks
<b>WR strengthening system-V</b>				
21	400 KV Vapi- Navi Mumbai D/C	258	Dec'11	Severe ROW problem
22	Vapi- Khadoli 220kv D/C	56	Nov'10	Severe ROW problem
23	Lilo of L'khand-Kalwa S/C at Navi Mumbai	10	Mar'11	Severe ROW problem
<b>WR strengthening system-VI</b>				
24	400 KV Dehgam Pirana D/C	92	Nov'10	
<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 Ranchi- Rourkela D/C	290	Dec'10	Under Progress
2	400 KV Raigarh-Rourkela D/C	420	Dec'10	Under Progress
3	400 KV Raigarh-Raipur	440	Sep'10	Under Progress

# Power system Operation Corporation Ltd.

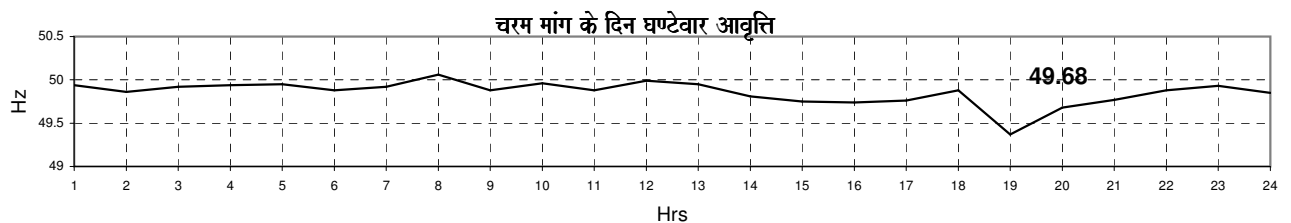
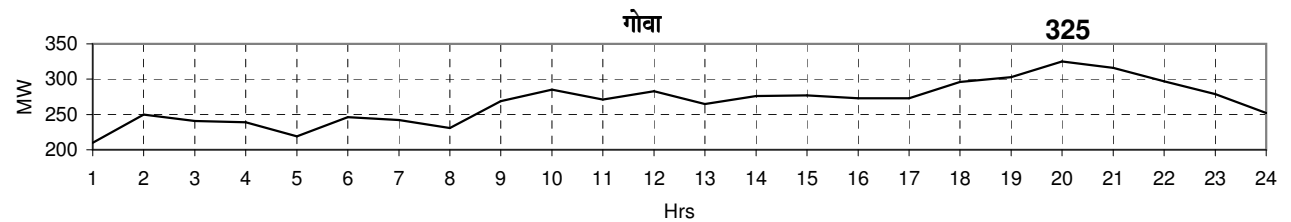
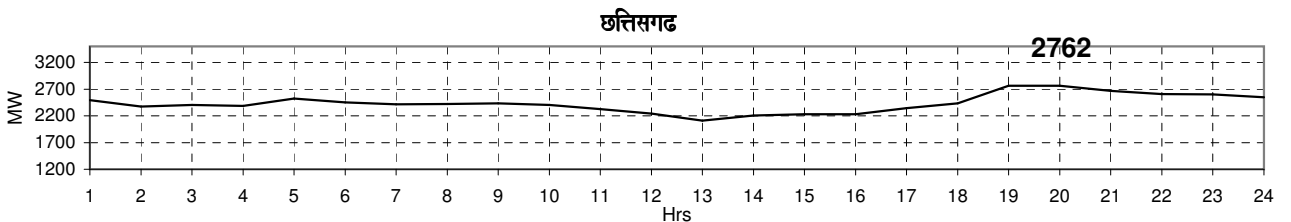
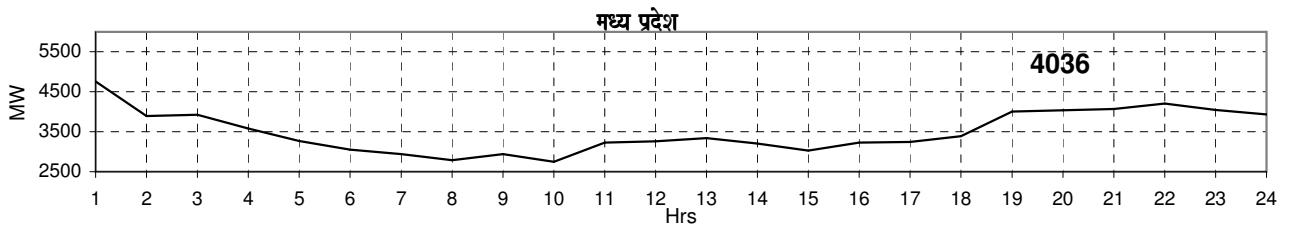
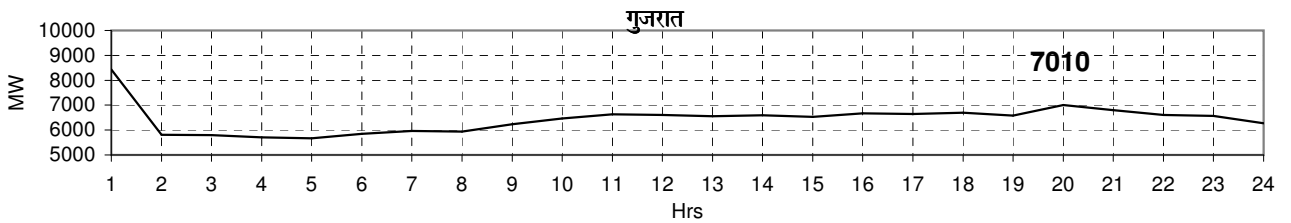
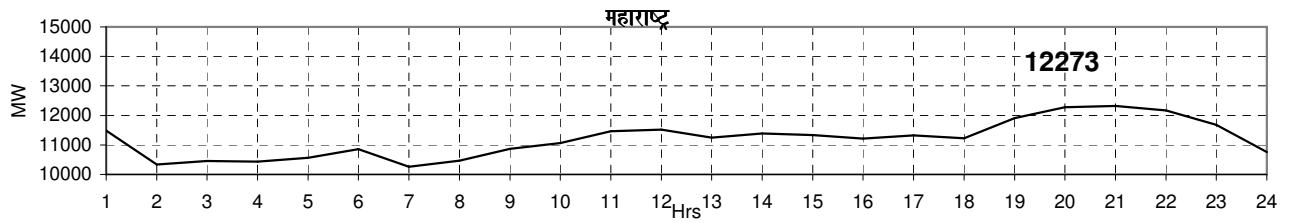
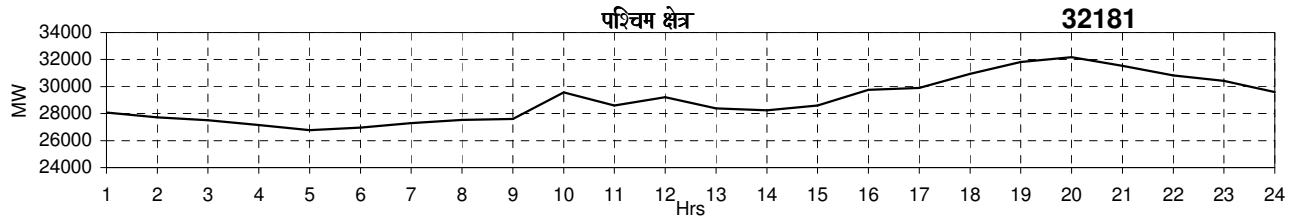
(A wholly owned subsidiary Company of POWERGRID)

Western Regional Despatch Centre

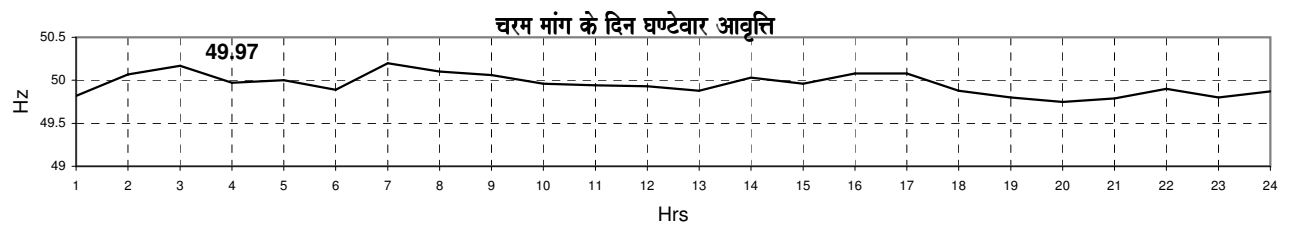
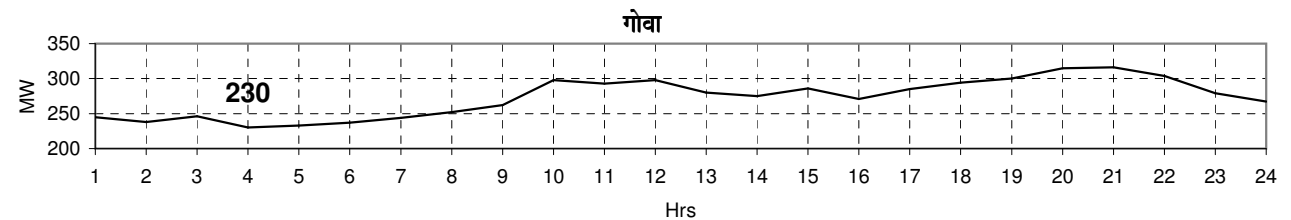
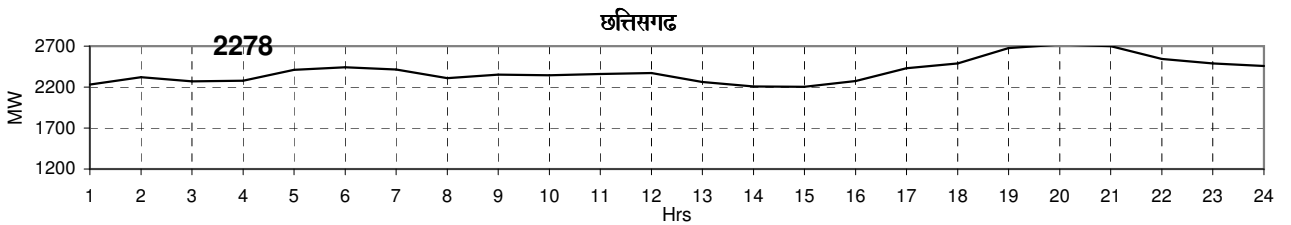
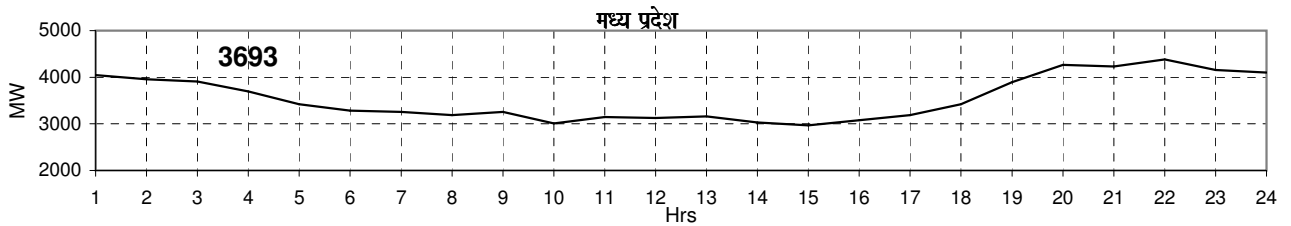
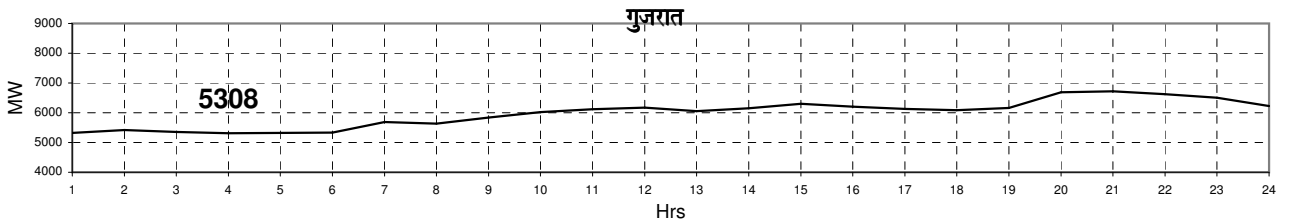
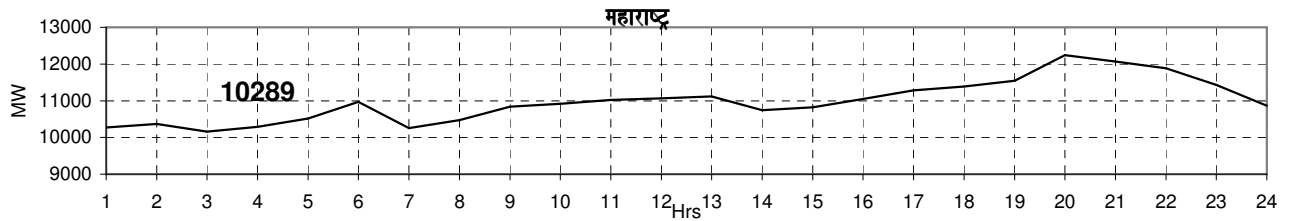
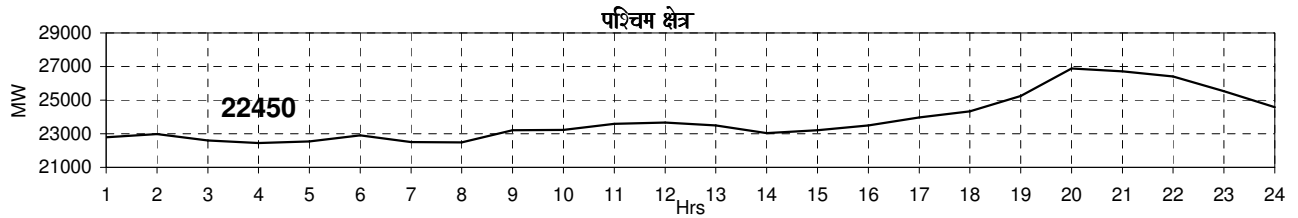
LOAD DURATION CURVE (Sep-2010) Max.demand met=32181 MW Min.demand = 22450 MW



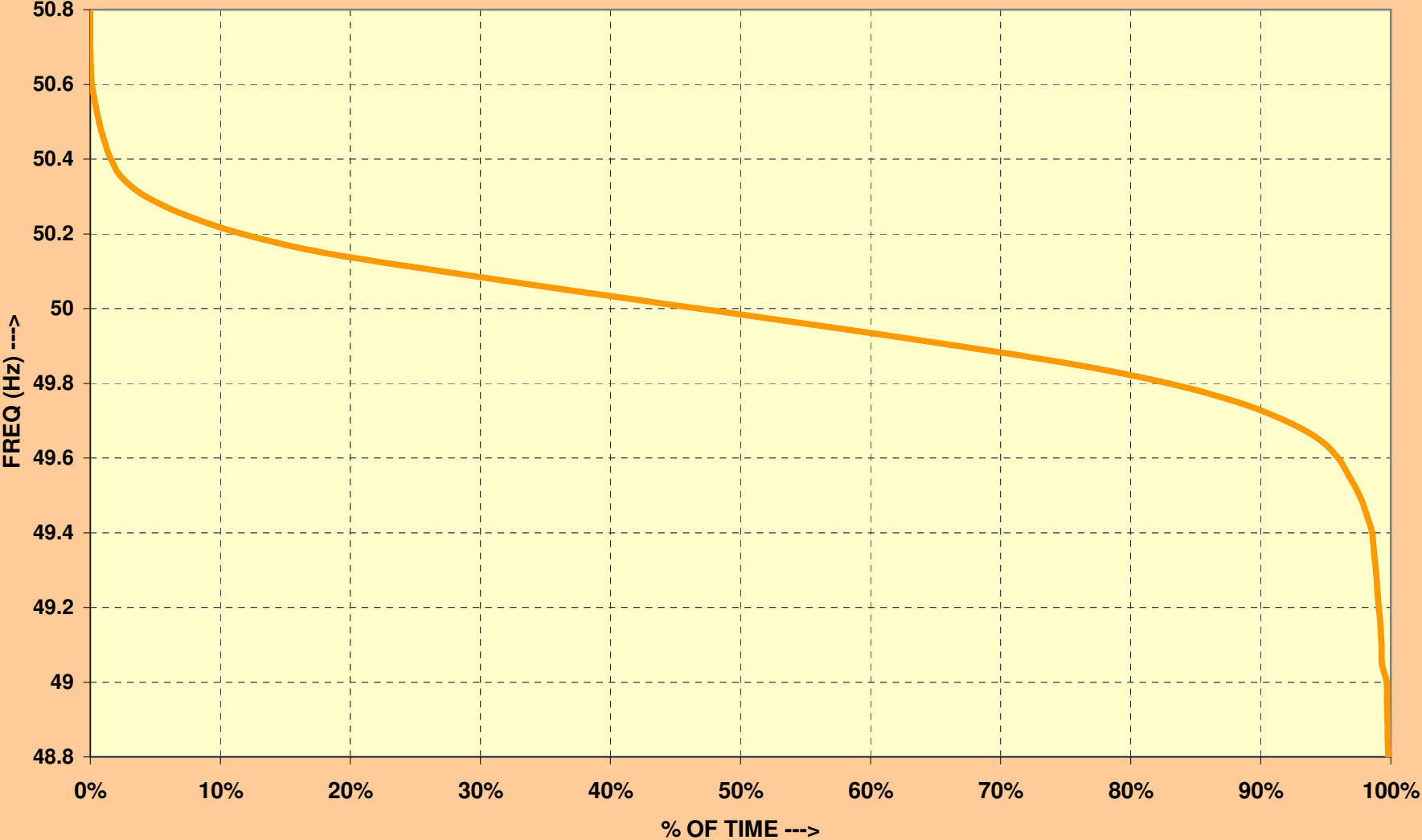
पश्चिम क्षेत्र का चरम भार दिन के प्रतिघंटा भार वक्र  
 HOURLY DEMAND CURVES ON REGIONAL PEAK DAY 30.09.2010



पश्चिम क्षेत्र का न्युनतम भार दिन के प्रतिघंटा भार वक  
 HOURLY .DEMAND CURVES ON REGIONAL MIN. DAY 03.09.2010



# NEW GRID FREQUENCY DURATION CURVE FOR Sep' 2010



Frequency Profile - sep'10

