



पश्चिम क्षेत्रीय भार प्रेषण केंद्र कि
अक्तुबर 2009 माह की प्रणाली प्रचालन
रिपोर्ट

**System Operation Report
Of Western Region
For the month of
Oct 2009**

पावर ग्रिड कारपोरेशन ऑफ इंडिया लिमिटेड
पश्चिम क्षेत्रीय भार प्रेषण केन्द्र
एफ -3 एम.आय.डि.सी., मरोल, अंधेरी(पूर्व)
मुम्बई-400093

POWERGRID CORPORATION OF INDIA LTD
WESTERN REGIONAL LOAD DESPATCH CENTRE
F-3,MIDC,MAROL,ANDHERI(E),MUMBAI-400093

माह अक्टूबर 09 में पश्चिम क्षेत्र का निष्पादन डाटा

Performance of Western Regional Grid during October -2009

1.0 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. <49Hz (MUs)	Underdrawal at Freq. >50.5Hz (MUs)
1	गुजरात Gujarat	1216.53	927.13	-289.4	0.151	0
2	मध्य प्रदेश Madhya Pradesh	1414.24	1291.78	-122.46	0.091	0
3	महाराष्ट्र Maharashtra	2213.62	2372.58	158.96	0.089	0
4	छत्तिसगढ Chhattisgarh	32.25	28.26	-3.99	0.25	0
5	गोवा Goa	216.15	212.84	-3.31	0.105	0
6	दमन और दीव D&D	167	138.23	-28.77	0.002	0
7	दादर नगर हवेली DNH	318.53	292.34	-26.19	0.009	0
8	पावरग्रिड एचवीडीसी PG(HVDC)	1.963	0.912	-1.051		
9	कुल TOTAL	5580.283	5264.072			

Power Supply Position and Peak Demand / Met In Western Region

a. विद्युत पूर्ति की स्थिति Power Supply Position

	OCT -09			APR -09 TO OCT -09		
	Requirement (MUs)	Availability (MUs)	Shortage (%)	Requirement (MUs)	Availability (MUs)	Shortage (%)
Gujarat	6348	6194	2.43	41564	40591	2.34
CSEB	953	897	5.88	8101	7783	3.93
MPSEB	3751	3204	14.58	23560	19490	17.28
Maharashtra	10770	8904	17.33	73929	61244	17.16
Goa	247	245	0.81	1730	1693	2.14
D&D	152	148	2.63	1047	1020	2.58
DNH	316	314	0.63	2189	2135	2.47
Western Region	22537	19906	11.67	152086	133957	11.92

b. Peak Demand / Demand Met(MW)

	OCT -09			APR -09 to OCT -09		
	Requirement (MW)	Availability (MW)	Shortage (%)	Requirement (MW)	Availability (MW)	Shortage (%)
Gujarat	10855	9964	8.21	10855	9964	8.21
CSEB	2878	2764	3.96	2996	2880	3.87
MPSEB	6977	6154	11.80	6977	6197	11.18
Maharashtra	18784	14411	23.28	19151	14801	22.71
Goa	450	410	8.89	450	410	8.89
D&D	249	237	4.82	280	255	8.93
DNH	509	461	9.43	509	461	9.43
Western **Region	38624	32718	15.29	38739	32718	15.54

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

माह अक्टूबर 09 में अंतर क्षेत्र से पश्चिम क्षेत्र को विद्युत विनिमय

1.0 Inter-Regional Exchange of Power in Western Region during Oct. - 2009

LINES	Import (Mus)
ER(NTPC) to GUVNL	24.404
ER(NTPC) to MPPTCL	12.799
ER(NTPC) to CSEB	5.192
ER(NTPC) to MSEDCL	25.411
ER(NTPC) to GOA	NIL
ER(NTPC) to DD- AC link	0.337
ER(NTPC) to DNH- AC link	0.519
TATA HALDIA(WB) TO MSEB (TPTCL)	0.361
BSES (DTL) TO MPSEB (LANCO)	9.643
WBSEB TO MSEB (TPTCL)	0.387
BSES YM(DTL) TO MPSEB (LANCO)	4.244
WBSEB TO RINFRA MSEB (NVVNL)	15.1
JSWEL TO DNH (IEXL)	0.387
GOA (SR) TO GOA (WHEELING)	11.234
NBFAL (AP) TO MSEB (RETL)	17.445
NBFAL (AP) TO MSEB (TPTCL)	12.387
HSSKN KPTCL TO MSEB (TPTCL)	0.401
ICPL TO MSEB (TPTCL)	0.379
DVC to MPPTCL (Long Term Open Access)	30.907
NGLD TO RINFRA MSEB (NGLD)	16.558
AP-NER TO RINFRA MSEB (AP-NER)	4.159
GBRL KPCL TO TPC MSEB (LANCO)	0.612
NTPC - RAMAGD TO MSEB (NVVNL)	0.116
GEL TO RINFRA MSEB (GETL)	1.678
GEL TO TPC MSEB (GMRETL)	15.27
NBFAL (AP) TO RINFRA MSEB (RETL)	29.075
JSWEL TO RINFRA MSEB (JSW PTL)	5.038
HIRAKUD TO CSEB	1.31
GOA (SR) TO GOA (BILATERAL)	22.954
RIHAND (HYDRO) TO MPPTCL (LONG TERM OPEN ACCESS)	7.245
MATATILA (HYDRO) TO MPPTCL (LONG TERM OPEN ACCESS)	5.057
NBVL TO MSEB (TPTCL)	0.503
TISCO TO RINFRA MSEB (TPTCL)	0.912
JVVNL TO RINFRA MSEB (TPTCL)	5.968
JAIPUR DISCOM TO RINFRA MSEB (TPTCL)	0.428
NET IMPORT FROM NR	0.272
NET IMPORT FROM SR	33.323
NET IMPORT FROM ER	2.705

Lines	Export(Mus)
MPSEB TO BSES_RAJ (PTC)	0.021
CSEB TO JVVNL (PTC)	87.131
BALCO CSEB TO JVVNL (LANCO)	84.732
CSPL CSEB TO OPTCL (IEXL)	0.038
MPSEB TO BSES (DTL) (RETL)	0.05
GFL GUVNL TO JVVNL (LANCO)	7.341
GFL GUVNL TO JVVNL (TPTCL)	3.338
MIEL CSEB TO JVVNL (PTC)	20.739
MPSEB TO BSES YM (DTL) (LANCO)	0.109
MPSEB TO BSES YM (DTL) (PTC)	0.013
SKSIP CSEB TO JVVNL (LANCO)	13.053
VARDHMAN MPSEB TO JVVNL (TPTCL)	2.393
IPL MSEB TO BSES YM (DTL) (RETL)	21.186
RSIPIL CSEB TO RPPC (MPPL MPSEB)	0.169
TPC MSEB TO NDPL (DTL) (TPTCL)	0.044
BPIL CSEB TO UPPCL (KISPL)	4.121
CSPL CSEB TO UPPCL (TPTCL)	6.629
GPIL CSEB TO UPPCL (KISPL)	1.183
GPIL CSEB TO UPPCL (TPTCL)	3.337
HFAL CSEB TO UPPCL (TPTCL)	1.903
HPSL CSEB TO UPPCL (TPTCL)	1.903
JPAL CSEB TO UPPCL (TPTCL)	2.971
MSPPL CSEB TO UPPCL (TPTCL)	0.782
REALISPAT CSEB TO UPPCL (TPTCL)	1.465
RREL CSEB TO UPPCL (TPTCL)	1.703
RSIPIL CSEB TO UPPCL (KISPL)	1.406
SPSL TO UPPCL (KISPL)	0.064
SALS GUVNL TO RPPC (NVVNL)	5.867
SEML CSEB TO UPPCL (TPTCL)	1.152
MCPL MPSEB TO UT- CHANDIGARH (GMRETL)	5.797
MIELMH CSEB TO UT - CHANDIGARH (TPTCL)	3.395
SNIL CSEB TO UPPCL (TPTCL)	1.264
SPEL TO UPPCL (KISPL)	0.62
GUVNL TO VAL ER (PTC)	0.188
TPC MSEB TO UPPCL (TPTCL)	27.108
VGL CSEB TO UPPCL (TPTCL)	10.389

VIL CSEB TO UPPCL (TPTCL)	0.737
BALCO CSEB TO VAL ER (LANCO)	1.102
MPSEB TO NDPL (DTL) (LANCO)	0.004
BALCO CSEB TO JVVNL (LANCO)	14.542
MIEL CSEB TO NDPL (DTL) (TPTCL)	15.555
MIELMH CSEB TO NDPL (DTL) (TPTCL)	13.053
APL TO HARIYANA (AEL)	0.693
MSEB TO TNEB (NVVNL)	3.220
CIAL CSEB TO BSES_ RAJ(CIAL CSEB)	8.820
CSEB TO HARIYANA (PTC)	34.79
TORRENT GUVNL TO RPPC (NVVNL)	16.832
MCPL MPSEB TO UT- CHANDIGARH (GMRETL)	0.217
SEML CSEB TO UT-CHANDIGARH (LANCO)	3.206
TORRENT GUVNL TO JVVNL (NVVNL)	75.153
TORRENT GUVNL TO HARIYANA (NVVNL)	5.409
AFAL CSEB TO UPPCL (TPTCL)	0.895
AIDCPL CSEB TO UPPCL (TPTCL)	2.221
MPSEB TO PSEB (LANCO)	2.062
APL TO PSEB (AEL)	0.602
SALS GUVNL TO NDPL (DTL) (GETL)	2.857
GUVNL TO HARIYANA (PTC)	2.162
APL TO RPPC (AEL)	57.267
CSEB TO APPCC (NVVNL)	1.425
GUVNL TO APPCC (NVVNL)	4.201
GANDHAR RNLG TO APPCC (NVVNL)	0.888
MSEB TO APPCC (NVVNL)	3.723
TNEB TO HARIYANA (PTC)	0.464
CSEB TO TNEB (PTC)	16.121
TNEB TO HARIYANA (PTC)	0.44
JPL TO BSES_ RAJ (JPL)	104.372
KAWAS- RLNG TO TNEB (NVVNL)	4.040
JPL TO JVVNL (PTC)	69.581
JPL TO JVVNL (NVVNL)	26.834
GANDHAR - RNLG TO TNEB (NVVNL)	5.726
JPL TO UPPCL (NVVNL)	26.237
GUVNL TO TNEB (PTC)	19.204
JPL TO NDPL (DTL) (NDPL (DTL))	0.117
GUVNL TO TNEB (NVVNL)	14.574
JPL TO HARIYANA (NVVNL)	34.790
WELSPUN GUVNL TO JVVNL (TPTCL)	10.014
JPL TO NDPL (DTL) (NDPL (DTL))	69.581
ACC (KYMORE) MPSEB TO JVVNL (TPTCL)	3.316

KAWAS- RLNG TO CESC (NVVNL)	0.552
MSEB TO CESC (NVVNL)	1.068
SALS GUVNL TO NDPL (DTL) (GETL)	0.542
GANDHAR - RNLG TO RPPC (NVVNL)	0.761
KAWAS - RNLG TO RPPC (NVVNL)	0.535
NET EXPORT TO SR	203.913
NET EXPORT TO NR	1239.844
NET EXPORT TO ER	359.611

Progress of Transmission Line under construction in Western Region

	Name of transmission line	Length in ckt km.	Total Locations(Nos)	Commiss- ioning Schedule	Remarks
A	ગુજરાત Gujarat				
	I)400kV Lines				
1	Mundra-Varsana D/C	166	225	,Feb - 10	work under progress.
2	Tappar(Varsana)-Hadala	299.88	458	,Feb - 10	work under progress.
3	Essar - Hadala	232	351	,Nov - 09	work under progress.
4	Lillo to kosamba from Asoj-ukai	64	88		Foundation work under progress
	II)220kV Lines				
1	Lilo at Mota of Ukai (t)-Vav-II ckt	9.6	16	Sep '08	Lilo point jumper work pending
2	Lilo of Mangrol - Mobha D/C line	218	358	9-Jun	ROW problem
3	Chornia- Bala D/C	59.12	96	9-Feb	Line charged on 29.04.09
4	Rajpur - Dudhrej D/C	19.16	40	Dec' 08	Work completed
5	Lilo at Dinod of Vav - Zagadia line	10.2	17	March' 09	Line charged on 08.07.09
6	Lilo at Chitrod of Deodar - Anjar line	2.1	0		Feeder bay work under progress
7	Lilo at Varsana of Shivilakha - Nanikhakhar	34	54	March' 09	ROW problem
8	Mundra-Varsana D/C	166	254	June' 09	Erection work under progress
9	LILO at Lakhani of Kansari-Tharad D/C	8		March' 10	Tender under acceptance
10	LILO at Botad of Kasor-Vartej line	38.8	58	Oct' 09	Agency finalised . Work to be started
11	Varsana - Morbi	214	351	Aug' 09	ROW problem
12	Viramgam - Salejada	124	185	Nov' 09	work under progress.
13	Lilo at Bhat of Viramgam - Salejada line	36	57	Nov' 09	work under progress.
14	Utran- Kosamba D/C	86	143	Oct' 09	R O W problem

	Name of transmission line	Length in ckt km.	Total Locations(Nos)	Commiss- ioning Schedule	Remarks
B)	मध्य प्रदेश Madhya Pradesh				
	I) 400kV Lines				
			NIL		
	II) 220kV Lines				
1	Lilo of 1st ckt DCDS200KV Gwalior- Malanpur at 400kv Gwalior PGCIL S/S	16.9	31	2009-10	Work under progress
2	Satna - Chhatapur line	140	518	2009-10	Work under progress
3	Amarkantak- Birsinghpur DCDS at 400kv s/s Sukha (PGCIL)	300	547	2008-09	Work under progress
4	220KV Chhindwara- 400kv PGCIL Seoni D/C	140	227	2008-09	Line charged on 20.05.09
5	LILO of one ckt of 200kv Jabalpur - Itarsi at Piparia s/s	7.2	13	2009-10	Work almost complted. Line charged upto gantry of 220k Pipariya s/s
6	200kv Bhopal(400kv)- Ashta for Ashta s/s	194	322	2009-10	work stopped due to contracters problem.
7	Sujalpur PGCIL(400KV)- 220KV Rajgarh Biaora line	134.4	227	2008-09	Work completed.
8	Jabalpur-Narsingpur part line for 400kv PGCIL Sukha	158	253	2009-10	Work in progress
9	Chhindwara- Betul	270	462	2009-10	Work in progress
10	Chegoan - Nimrani	220	370	2009-10	Work in progress
11	Lilo of one ckt of 200kv Satpura - Itarsi for Handia	220	273	2009-10	Work in progress . Line charged on 12.06.09
12	Rerouting of 220kv Makronia traction feeder through 220 kv Sagar	10.18	21	2008-09	Work completed.
13	LILO of 2nd ckt of 220 kv Pithampur-Ratlam line for 220kv Badnagar	20.29	35	2008-09	Work completed except termination of gantry

	Name of transmission line	<u>Length in ckt km.</u>	Total Locations(Nos)	Commiss- ioning Schedule	Remarks
14	LILO of 2nd ckt of 220kv Itarsi - Bhopal for 220kv Hosangabad	10.75	22	2009-10	Line charged on 13.06.09
15	Astha - Bercha line	45	158	2009-10	Work in progress
16	Maheshwar - Pithampur	108	189	2009-10	Forest approval received on 01.01.09
17	Maheshwar - Nimrani	54	89	2009-10	Work commenced.
18	Maheshwar - Rajgarh	230	403	2009-10	Forest approval received on 01.01.09
19	Lilo of one ckt of 220kv Bhopal- Bina for Vidisha new s/s	42.32	71	2009-10	Work stopped due to contractor problem . Notice served to contractor.
20	Dewas - Astha line	146	257	2009-10	Work in progress

C)	छत्तिस गढ़ Chhatisgarh				
	I) 400kV Lines				
1	LILO of 400 kV Korba(west)- Bhilai to Raipur DCDS	50		2009-10	Order placed . Work to be started shortly
2	400 kV Korba(West) – Khedamara DCDS	220		2009-10	Order placed . Work to be started shortly
	II) 220kV Lines				
1	Korba- Bishrampur Dess	153	509	2009-10	Case submitted for 2nd phase approval to AIG(FC)Min. of ENV&forest,New Delhi
2	Lilo of 220kv Bhatapara- Raipur (PGCIL)at Doma	21.47	76	2009-10	Work under progress
3	Suhela- PGCIL Bhatapara DCDS line	13.53	45+2G	2009-10	Work under progress

	Name of transmission line	Length in	Total	Commiss-	Remarks
		Ckt. Km	Locations(Nos)	ioning Schedule	
4	I/C Raigarh -PGCIL Raigarh DCDS	10.39	37+6G	2008-09	Charged on 15.04.09
5	LILO of Korba- Sitara at Mopka DCDS	12.14	47	2009-10	Work in progress
6	Khedamara-Bemetara line +1No bay each at Khedamara and Bemetara	50.9	150	2009-10	Work in progress
7	Chhuri - Mopka DC DS line	90		2009-10	Order placed
8	I/C between new power house at Korba (E)to proposed 220 kv Chhuri	30		2009-10	Work to be taken up
9	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
10	Diversion of 220kv line of Korba - Bhatapara and 220k I/C in between Korba (w) and proposed 220 kv Cchuri s/susing section of Korba - Amarkantak- I & II	14		2009-10	Work to be taken up
11	Diversion of 220kv line of Korba -Amarkantakckt I & II to proposed 220/132 kv Chhuri s/s DCDS	4		2009-10	Work to be taken up
D)	महाराष्ट्र Maharashtra				
	I) 400kV Lines				
1	Dabhol-Nagothane ckt-II	134.445	338	Mar, 09	Work in progress
2	LILO of Bhusawal-Koradi Ckt-I at Akola S/S	80	101	2007-08	Work in progress

	Name of transmission line	Length in ckt km.	Total Locations(Nos)	Commiss- ioning Schedule	Remarks
	II) 220kV Lines				
1	LILO B'shwer Aurangabad for Bhenda S/S	37.095	117	2008-09	Tower material required
2	Evacuation of power from Parli ext.project	5.112	20	2008-09	
3	LILO of Nasik-Kalwa for Ghatghar S/S	99	84	2008-09	
4	Padegaon-Sawangi D/C	29.436	52	31.03.07	Line being commissioned soon
5	LILO on Malharpeth-Wankuswade for SataraMIDC	60	98	31.03.07	
6	Interconaction between Kolhapur-II-Kolhapur-III S/S	18.4	36	Sep' 09	ROW problem, Resurvey work under progress
7	LILO on Apta -Chinchwad for URSE S/S	22	37	2008-09	Work order placed
8	Kanhan-Umred S/C on D/C at Umred	50.106	164	2008-09	Foundation, Erection etc. in progress
9	LILO of Dhule-Dondaicha at Amalner D/C	80		2008-09	
10	Boisar(PGCIL 400/220kV)-Wada	55		2008-09	
11	Kolhapur—III- Mundhaltitta	40		2008-09	
12	LILO of Jejuri-Pandharpur at Temburni D/C	6		2008-09	
13	Kanhan-Umred S/C on D/C line	50.1	158	2008-09	Foundation Erection etc. in progress
14	Dhule-Dondaicha D/C at Amalner S/S	44	98	2008-09	Complete stringing material required

	Name of transmission line	Length in ckt km.	Total Locations(Nos)	Commissioning Schedule	Remarks
15	LILO of Tarapur-Borivali for Boisar-II S/S	8	15	Sep' 09	Bloc date extended due to ROW problem
16	220kV line from PGCIL to 220kV Wada S/S	57	199	Dec' 09	Severe ROW problem, 220kV PGCIL .Nalasopara section charged temporarily on 26.01.08 through Boisar S/S
E)	गोवा GOA				
	Xeldem-Cuncolin D/C	20		2008-09	
Sl.No	पावरग्रिड POWERGRID				
	765 kV				
1	Seoni-Bina(to be initially charged at 400kV)	292		Nov-09	
	400kV Lines				
A)	Sipat Trans system stage- II	702	1244	2008-09	
1	Rourkela – Raigarh D/C			Mar-10	
2	Raigarh – Raipur D / C			Mar-10	
3	400 Kv Akola – Aurangaba D/C			Oct-09	
B)	Western Region System Strengthening-I			2008-09	
C)	Sipat-II Suplimentary Trans system	1173	-	2008-09	
1	D/C Wardha-Akola	368		Feb'09	
2	D/C Akola-Aurangabad	530		Mar'09	
3	Korba(NTPC)-Birsingpur(MPGENCO) D/C	454		July'10	
4	Birsingpur(MPGENCO)-Damoh(PGCIL)	508		July'10	
5	Birsingpur-Damoh-Bhopal				
	220 kV Line				

आवृत्ति रूपरेखा

a. Frequency Profile

MAXIMUM FREQUENCY(Inst.):	50.50 HZ
आधिकतम आवृत्ती एकिकृत :	
Minimum frequency(Inst)	48.70 HZ
न्यूनतम आवृत्ती एकिकृत :	
Average frequency	49.66 HZ
औसत आवृत्ती	

b. आवृत्ती वितरण प्रतिशत में Frequency distribution in %

HZ	<48.8	<48.8 - 49.2	49.2 -49.8	49.8-50.3	50.3-51.0	>51.0
%	0.07	4.96	64.89	29.78	0.3	0.00

माह अक्टूबर 09 आवृत्ती रूपरेखा

संलग्नक ANNEX-I

1. FREQUENCY PROFILE FOR THE MONTH OF OCTOBER - 2009

क्षेत्र Region	आवृत्ती स्थिती (प्रतिशत समय) Percentage of time when frequency was							अधिकतम आवृत्ती तात्कालिक Max. freq. (Inst.) Hz	न्यूनतम आवृत्ती Min. freq. (Inst.) Hz	औसत आवृत्ती Average freq. Hz	संक्षिप्त स्पष्टीकरण Brief Explanation
	Below 48.8	48.8- 49.2	49.2- 49.5	49.5- 49.8	49.8- 50.3	50.3- 51	Above 51				
पश्चिम Western	0.37	15.93	23.79	28.41	30.99	0.51	0	50.49	48.65	49.59	Frequency was in the normal range (49.2-50.3 Hz) for 83.19 % of time.

संलग्नक Annex-II

माह अक्टूबर 09 में ग्रिड के प्रमुख उप केन्द्र का विद्युतदाब रूपरेखा

1. Voltage Profile of major Sub-Stations for the month of October -2009

क्षेत्र Region	सब स्टेशनका नाम Sub- Station Name	अधिकतम विद्युतदाब Nominal Voltage (kV)	विद्युतदाब स्थिती (प्रतिशत समय)			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	3.15	96.85	440	400	
	असोज Asoj	400	0	0.03	99.97	428	397	
	कराड Karad	400	0	16.23	83.77	429	400	
	कासोर Kasor	400	0	57.26	42.74	425	391	
	इन्दौर Indore	400	0.18	74.31	25.51	419	386	
	इटारसी Itarsi	400	0.62	29.18	70.2	428	398	
	जेटपुर Jetpur	400	50.28	40.29	9.43	415	351	
	भिलाई Bhilai	400	0.12	5.4	94.48	420	400	
	बिना Bina	400	0.08	70.76	29.16	426	381	
	ग्वालियर Gwalior	400	4.37	79.25	79.25	432	357	

माह अक्तूबर 09 का अंतर राज्य में ऊर्जा पारेषण

A) Inter-State Transfer Of Energy For The Month Of October - 2009

प्रेषक From		प्रती To		द्विहृत्तु Wheeled	कुल ऊर्जा प्रवाह मेगावॉट	चरम पावर मेगावॉट
				Through	Total energy Flow(MUs)	Peak power(MW)
उपयोगीता Utility	क्षेत्र Region	उपयोगीता Utility	क्षेत्र Region			
AP-NER	NORTH EASTERN	RINFRA MSEB (AP NER)	Western	ER-WR AC Link	4.159	,As per schedule
NBVL	SOUTHERN	MSEB (TPTCL)	Western	HVDC BHADRAVATI	0.503	18
NGLD	NORTH EASTERN	RINFRA MSEB (NGLD)	Western	ER-WR AC Link	16.558	30
JSWEL	SOUTHERN	RINFRA MSEB (JSWPTL)	Western	HVDC BHADRAVATI	5.038	150
GBRL(KPCL)	SOUTHERN	TPC MSEB (LANCO)	Western	HVDC BHADRAVATI	0.612	10
WBSEB	EASTERN	MSEB (TPTCL)	Western	ER-WR AC Link	0.387	100
HSSKN(KPTCL)	SOUTHERN	MSEB (TPTCL)	Western	HVDC BHADRAVATI	0.401	9
ICPL	SOUTHERN	MSEB (TPTCL)	Western	HVDC BHADRAVATI	0.379	16
JSWEL	SOUTHERN	DNH (IEXL)	Western	HVDC BHADRAVATI	0.387	26.06
NTPC - RAMAGNDAM	SOUTHERN	MSEB (NVVNL)	Western	HVDC BHADRAVATI	0.116	120
TISCO	NORTH EASTERN	RINFRA MSEB (NVVNL)	Western	ER-WR AC Link	0.912	20
WBSEB	EASTERN	RINFRA MSEB (NVVNL)	Western	ER-WR AC Link	15.1	40
JVVNL	NORTHERN	RINFRA MSEB (TPTCL)	Western	HVDC VINDHYACHAL & NR-WR AC LINK	5.968	31.94

B) INTRA- REGIONAL BI-LATERAL EXCHANGES(All figures are in Mus)

MUNDRA APL TO GUJARAT (LTOA)	NSPCL CSEB TO DNH (BILATERAL)	JPL TO MPSEB (MPSEB)	HFAL CSEB TO DD (IEXL)	NSPCL CSEB TO DD (BILATERAL)	SNIL CSEB TO DD (IEXL)	AFAL CSEB TO DNH (IEXL)
67.580	52.988	26.250	0.035	37.094	0.063	0.030
GPIL CSEB TO DNH (IEXL)	JPAL CSEB TO DNH (IEXL)	IRSL MSEB TO GOA (RETL)	INDORAMA MSEB TO MPSEB (RETL)	I IPL MSEB TO MPSEB (MPSEB)	AFAL CSEB TO MSEB (TPTCL)	AIDCPL CSEB TO MSEB (TPTCL)
0.067	0.102	0.091	14.644	10.618	2.153	0.146
CSPL CSEB TO MSEB (TPTCL)	GPIL CSEB TO MSEB (TPTCL)	HFAL CSEB TO MSEB (TPTCL)	HPSL CSEB TO MSEB (TPTCL)	JPAL CSEB TO MSEB (TPTCL)	MSPPL CSEB TO MSEB (TPTCL)	PCBL GUVNL TO MSEB (TPTCL)
0.585	7.576	4.545	4.545	7.123	1.878	5.374
REALISPAT CSEB TO MSEB (TPTCL)	RREL CSEB TO MSEB (TPTCL)	SNIL CSEB TO MSEB (TPTCL)	VGL CSEB TO MSEB (TPTCL)	VIL CSEB TO MSEB (TPTCL)	APL CSEB TO RINFRA MSEB (AEL)	DNH TO RINFRA MSEB (IEXL)
3.425	3.951	3.165	0.898	1.878	30.520	0.80
JPL TO RINFRA MSEB (RINFRA MSEB)	MPSEB TO RINFRA MSEB (LANCO)	MPSEB TO RINFRA MSEB (RINFRA MSEB)	INDORAMA MSEB TO RINFRA GOA (RETL)	IRSL MSEB TO RINFRA GOA (RETL)		
78.000	31.137	1.800	0.091	0.182		

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

TOTAL	GUVNL	MPPTCL	CSEB	MSEDCL	GOA	DD	DNH	JINDAL POWER
167.02	78.214	24.581	82.467	22.602	5.509	0.010	1.14	36.941

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

TOTAL	GUVNL	MPPTCL	CSEB	MSEDCL	GOA	DD	DNH	JINDAL POWER
49.813	39.229	0.00	13.204	2.620	0.00	0.00	0.00	0.000

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

AUFLS OPERATION DURING OCTOBER - 2009

In the month of October - 2009 , frequency below 49.2 Hz. was 5.03 % of the time.
 AUFLS at stage - I was required to operate on 155 occasions as frequency touched 48.8 HZ.
 But in Maharashtra U F relay operations occurred on 20 occasions , in Gujarat UF relay operation occurred on 14 occasions, in Madhya Pradesh UF relay operation occurred on 28 occasions and in Chhattisgarh UF relay operation occurred on 6 occasions during the month.

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	1st,3rd,6th,13th,22nd to26th	9-222	550	6th,8th,11th,14th,20th,27th and 31st
Gujarat	1st,3rd,13th,22nd to 26th	2-107	220	6th,8th,11th,14th,20th,27th and 31st
Madhya Pradesh	1st , 3rd, 13th , 24th , 26th and 31st	31-199	152	6th,8th,11th,14th,20th,22nd , 23rd, 25th and 27th
CSEB	3rd , 13th and 24th	,7-19	38	1st , 6th,8th,11th, 14th,20th,22nd,23rd 25th,26th,27th,31st

,Dates on which U/F relays at 48.8 hz are required to be operated - 1st, 3rd, 6th, 8th , 9th,11th,14th, 20th,22nd to 27th and 31st .

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 defense mechanism against major disturbances . The load relief obtained from Maharashtra , chattisgarh and gujarat are inadequate.

माह अक्टूबर 09 में पश्चिम क्षेत्र का निष्पादन डाटा

Performance of Western Regional Grid during October -2009

1.0 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. <49Hz (MUs)	Underdrawal at Freq. >50.5Hz (MUs)
1	गुजरात Gujarat	1216.53	927.13	-289.4	0.151	0
2	मध्य प्रदेश Madhya Pradesh	1414.24	1291.78	-122.46	0.091	0
3	महाराष्ट्र Maharashtra	2213.62	2372.58	158.96	0.089	0
4	छत्तिसगढ Chhattisgarh	32.25	28.26	-3.99	0.25	0
5	गोवा Goa	216.15	212.84	-3.31	0.105	0
6	दमन और दीव D&D	167	138.23	-28.77	0.002	0
7	दादर नगर हवेली DNH	318.53	292.34	-26.19	0.009	0
8	पावरग्रिड एचवीडीसी PG(HVDC)	1.963	0.912	-1.051		
9	कुल TOTAL	5580.283	5264.072			

Power Supply Position and Peak Demand / Met In Western Region

a. विद्युत पूर्ति की स्थिति Power Supply Position

	OCT -09			APR -09 TO OCT -09		
	Requirement (MUs)	Availability (MUs)	Shortage (%)	Requirement (MUs)	Availability (MUs)	Shortage (%)
Gujarat	6348	6194	2.43	41564	40591	2.34
CSEB	953	897	5.88	8101	7783	3.93
MPSEB	3751	3204	14.58	23560	19490	17.28
Maharashtra	10770	8904	17.33	73929	61244	17.16
Goa	247	245	0.81	1730	1693	2.14
D&D	152	148	2.63	1047	1020	2.58
DNH	316	314	0.63	2189	2135	2.47
Western Region	22537	19906	11.67	152086	133957	11.92

b. Peak Demand / Demand Met(MW)

	OCT -09			APR -09 to OCT -09		
	Requirement (MW)	Availability (MW)	Shortage (%)	Requirement (MW)	Availability (MW)	Shortage (%)
Gujarat	10855	9964	8.21	10855	9964	8.21
CSEB	2878	2764	3.96	2996	2880	3.87
MPSEB	6977	6154	11.80	6977	6197	11.18
Maharashtra	18784	14411	23.28	19151	14801	22.71
Goa	450	410	8.89	450	410	8.89
D&D	249	237	4.82	280	255	8.93
DNH	509	461	9.43	509	461	9.43
Western **Region	38624	32718	15.29	38739	32718	15.54

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

माह अक्टूबर 09 में अंतर क्षेत्र से पश्चिम क्षेत्र को विद्युत विनिमय

1.0 Inter-Regional Exchange of Power in Western Region during Oct. - 2009

LINES	Import (Mus)
ER(NTPC) to GUVNL	24.404
ER(NTPC) to MPPTCL	12.799
ER(NTPC) to CSEB	5.192
ER(NTPC) to MSEDCL	25.411
ER(NTPC) to GOA	NIL
ER(NTPC) to DD- AC link	0.337
ER(NTPC) to DNH- AC link	0.519
TATA HALDIA(WB) TO MSEB (TPTCL)	0.361
BSES (DTL) TO MPSEB (LANCO)	9.643
WBSEB TO MSEB (TPTCL)	0.387
BSES YM(DTL) TO MPSEB (LANCO)	4.244
WBSEB TO RINFRA MSEB (NVVNL)	15.1
JSWEL TO DNH (IEXL)	0.387
GOA (SR) TO GOA (WHEELING)	11.234
NBFAL (AP) TO MSEB (RETL)	17.445
NBFAL (AP) TO MSEB (TPTCL)	12.387
HSSKN KPTCL TO MSEB (TPTCL)	0.401
ICPL TO MSEB (TPTCL)	0.379
DVC to MPPTCL (Long Term Open Access)	30.907
NGLD TO RINFRA MSEB (NGLD)	16.558
AP-NER TO RINFRA MSEB (AP-NER)	4.159
GBRL KPCL TO TPC MSEB (LANCO)	0.612
NTPC - RAMAGD TO MSEB (NVVNL)	0.116
GEL TO RINFRA MSEB (GETL)	1.678
GEL TO TPC MSEB (GMRETL)	15.27
NBFAL (AP) TO RINFRA MSEB (RETL)	29.075
JSWEL TO RINFRA MSEB (JSW PTL)	5.038
HIRAKUD TO CSEB	1.31
GOA (SR) TO GOA (BILATERAL)	22.954
RIHAND (HYDRO) TO MPPTCL (LONG TERM OPEN ACCESS)	7.245
MATATILA (HYDRO) TO MPPTCL (LONG TERM OPEN ACCESS)	5.057
NBVL TO MSEB (TPTCL)	0.503
TISCO TO RINFRA MSEB (TPTCL)	0.912
JVVNL TO RINFRA MSEB (TPTCL)	5.968
JAIPUR DISCOM TO RINFRA MSEB (TPTCL)	0.428
NET IMPORT FROM NR	0.272
NET IMPORT FROM SR	33.323
NET IMPORT FROM ER	2.705

Lines	Export(Mus)
MPSEB TO BSES_RAJ (PTC)	0.021
CSEB TO JVVNL (PTC)	87.131
BALCO CSEB TO JVVNL (LANCO)	84.732
CSPL CSEB TO OPTCL (IEXL)	0.038
MPSEB TO BSES (DTL) (RETL)	0.05
GFL GUVNL TO JVVNL (LANCO)	7.341
GFL GUVNL TO JVVNL (TPTCL)	3.338
MIEL CSEB TO JVVNL (PTC)	20.739
MPSEB TO BSES YM (DTL) (LANCO)	0.109
MPSEB TO BSES YM (DTL) (PTC)	0.013
SKSIP CSEB TO JVVNL (LANCO)	13.053
VARDHMAN MPSEB TO JVVNL (TPTCL)	2.393
IPL MSEB TO BSES YM (DTL) (RETL)	21.186
RSIPIL CSEB TO RPPC (MPPL MPSEB)	0.169
TPC MSEB TO NDPL (DTL) (TPTCL)	0.044
BPIL CSEB TO UPPCL (KISPL)	4.121
CSPL CSEB TO UPPCL (TPTCL)	6.629
GPIL CSEB TO UPPCL (KISPL)	1.183
GPIL CSEB TO UPPCL (TPTCL)	3.337
HFAL CSEB TO UPPCL (TPTCL)	1.903
HPSL CSEB TO UPPCL (TPTCL)	1.903
JPAL CSEB TO UPPCL (TPTCL)	2.971
MSPPL CSEB TO UPPCL (TPTCL)	0.782
REALISPAT CSEB TO UPPCL (TPTCL)	1.465
RREL CSEB TO UPPCL (TPTCL)	1.703
RSIPIL CSEB TO UPPCL (KISPL)	1.406
SPSL TO UPPCL (KISPL)	0.064
SALS GUVNL TO RPPC (NVVNL)	5.867
SEML CSEB TO UPPCL (TPTCL)	1.152
MCPL MPSEB TO UT- CHANDIGARH (GMRETL)	5.797
MIELMH CSEB TO UT - CHANDIGARH (TPTCL)	3.395
SNIL CSEB TO UPPCL (TPTCL)	1.264
SPEL TO UPPCL (KISPL)	0.62
GUVNL TO VAL ER (PTC)	0.188
TPC MSEB TO UPPCL (TPTCL)	27.108
VGL CSEB TO UPPCL (TPTCL)	10.389

VIL CSEB TO UPPCL (TPTCL)	0.737
BALCO CSEB TO VAL ER (LANCO)	1.102
MPSEB TO NDPL (DTL) (LANCO)	0.004
BALCO CSEB TO JVVNL (LANCO)	14.542
MIEL CSEB TO NDPL (DTL) (TPTCL)	15.555
MIELMH CSEB TO NDPL (DTL) (TPTCL)	13.053
APL TO HARIYANA (AEL)	0.693
MSEB TO TNEB (NVVNL)	3.220
CIAL CSEB TO BSES_ RAJ(CIAL CSEB)	8.820
CSEB TO HARIYANA (PTC)	34.79
TORRENT GUVNL TO RPPC (NVVNL)	16.832
MCPL MPSEB TO UT- CHANDIGARH (GMRETL)	0.217
SEML CSEB TO UT-CHANDIGARH (LANCO)	3.206
TORRENT GUVNL TO JVVNL (NVVNL)	75.153
TORRENT GUVNL TO HARIYANA (NVVNL)	5.409
AFAL CSEB TO UPPCL (TPTCL)	0.895
AIDCPL CSEB TO UPPCL (TPTCL)	2.221
MPSEB TO PSEB (LANCO)	2.062
APL TO PSEB (AEL)	0.602
SALS GUVNL TO NDPL (DTL) (GETL)	2.857
GUVNL TO HARIYANA (PTC)	2.162
APL TO RPPC (AEL)	57.267
CSEB TO APPCC (NVVNL)	1.425
GUVNL TO APPCC (NVVNL)	4.201
GANDHAR RNLG TO APPCC (NVVNL)	0.888
MSEB TO APPCC (NVVNL)	3.723
TNEB TO HARIYANA (PTC)	0.464
CSEB TO TNEB (PTC)	16.121
TNEB TO HARIYANA (PTC)	0.44
JPL TO BSES_ RAJ (JPL)	104.372
KAWAS- RLNG TO TNEB (NVVNL)	4.040
JPL TO JVVNL (PTC)	69.581
JPL TO JVVNL (NVVNL)	26.834
GANDHAR - RNLG TO TNEB (NVVNL)	5.726
JPL TO UPPCL (NVVNL)	26.237
GUVNL TO TNEB (PTC)	19.204
JPL TO NDPL (DTL) (NDPL (DTL))	0.117
GUVNL TO TNEB (NVVNL)	14.574
JPL TO HARIYANA (NVVNL)	34.790
WELSPUN GUVNL TO JVVNL (TPTCL)	10.014
JPL TO NDPL (DTL) (NDPL (DTL))	69.581
ACC (KYMORE) MPSEB TO JVVNL (TPTCL)	3.316

KAWAS- RLNG TO CESC (NVVNL)	0.552
MSEB TO CESC (NVVNL)	1.068
SALS GUVNL TO NDPL (DTL) (GETL)	0.542
GANDHAR - RNLG TO RPPC (NVVNL)	0.761
KAWAS - RNLG TO RPPC (NVVNL)	0.535
NET EXPORT TO SR	203.913
NET EXPORT TO NR	1239.844
NET EXPORT TO ER	359.611

Progress of Transmission Line under construction in Western Region

	Name of transmission line	Length in ckt km.	Total Locations(Nos)	Commiss- ioning Schedule	Remarks
A	ગુજરાત Gujarat				
	I)400kV Lines				
1	Mundra-Varsana D/C	166	225	,Feb - 10	work under progress.
2	Tappar(Varsana)-Hadala	299.88	458	,Feb - 10	work under progress.
3	Essar - Hadala	232	351	,Nov - 09	work under progress.
4	Lillo to kosamba from Asoj-ukai	64	88		Foundation work under progress
	II)220kV Lines				
1	Lilo at Mota of Ukai (t)-Vav-II ckt	9.6	16	Sep '08	Lilo point jumper work pending
2	Lilo of Mangrol - Mobha D/C line	218	358	9-Jun	ROW problem
3	Chornia- Bala D/C	59.12	96	9-Feb	Line charged on 29.04.09
4	Rajpur - Dudhrej D/C	19.16	40	Dec' 08	Work completed
5	Lilo at Dinod of Vav - Zagadia line	10.2	17	March' 09	Line charged on 08.07.09
6	Lilo at Chitrod of Deodar - Anjar line	2.1	0		Feeder bay work under progress
7	Lilo at Varsana of Shivilakha - Nanikhakhar	34	54	March' 09	ROW problem
8	Mundra-Varsana D/C	166	254	June' 09	Erection work under progress
9	LILO at Lakhani of Kansari-Tharad D/C	8		March' 10	Tender under acceptance
10	LILO at Botad of Kasor-Vartej line	38.8	58	Oct' 09	Agency finalised . Work to be started
11	Varsana - Morbi	214	351	Aug' 09	ROW problem
12	Viramgam - Salejada	124	185	Nov' 09	work under progress.
13	Lilo at Bhat of Viramgam - Salejada line	36	57	Nov' 09	work under progress.
14	Utran- Kosamba D/C	86	143	Oct' 09	R O W problem

	Name of transmission line	Length in ckt km.	Total Locations(Nos)	Commiss- ioning Schedule	Remarks
B)	मध्य प्रदेश Madhya Pradesh				
	I) 400kV Lines				
			NIL		
	II) 220kV Lines				
1	Lilo of 1st ckt DCDS200KV Gwalior- Malanpur at 400kv Gwalior PGCIL S/S	16.9	31	2009-10	Work under progress
2	Satna - Chhatapur line	140	518	2009-10	Work under progress
3	Amarkantak- Birsinghpur DCDS at 400kv s/s Sukha (PGCIL)	300	547	2008-09	Work under progress
4	220KV Chhindwara- 400kv PGCIL Seoni D/C	140	227	2008-09	Line charged on 20.05.09
5	LILO of one ckt of 200kv Jabalpur - Itarsi at Piparia s/s	7.2	13	2009-10	Work almost complted. Line charged upto gantry of 220k Pipariya s/s
6	200kv Bhopal(400kv)- Ashta for Ashta s/s	194	322	2009-10	work stopped due to contracters problem.
7	Sujalpur PGCIL(400KV)- 220KV Rajgarh Biaora line	134.4	227	2008-09	Work completed.
8	Jabalpur-Narsingpur part line for 400kv PGCIL Sukha	158	253	2009-10	Work in progress
9	Chhindwara- Betul	270	462	2009-10	Work in progress
10	Chegoan - Nimrani	220	370	2009-10	Work in progress
11	Lilo of one ckt of 200kv Satpura - Itarsi for Handia	220	273	2009-10	Work in progress . Line charged on 12.06.09
12	Rerouting of 220kv Makronia traction feeder through 220 kv Sagar	10.18	21	2008-09	Work completed.
13	LILO of 2nd ckt of 220 kv Pithampur-Ratlam line for 220kv Badnagar	20.29	35	2008-09	Work completed except termination of gantry

	Name of transmission line	Length in ckt km.	Total Locations(Nos)	Commissioning Schedule	Remarks
14	LILO of 2nd ckt of 220kv Itarsi - Bhopal for 220kv Hosangabad	10.75	22	2009-10	Line charged on 13.06.09
15	Astha - Bercha line	45	158	2009-10	Work in progress
16	Maheshwar - Pithampur	108	189	2009-10	Forest approval received on 01.01.09
17	Maheshwar - Nimrani	54	89	2009-10	Work commenced.
18	Maheshwar - Rajgarh	230	403	2009-10	Forest approval received on 01.01.09
19	Lilo of one ckt of 220kv Bhopal- Bina for Vidisha new s/s	42.32	71	2009-10	Work stopped due to contractor problem . Notice served to contractor.
20	Dewas - Astha line	146	257	2009-10	Work in progress

C)	छत्तिस गढ़ Chhatisgarh				
	I) 400kV Lines				
1	LILO of 400 kV Korba(west)- Bhilai to Raipur DCDS	50		2009-10	Order placed . Work to be started shortly
2	400 kV Korba(West) – Khedamara DCDS	220		2009-10	Order placed . Work to be started shortly
	II) 220kV Lines				
1	Korba- Bishrampur Dess	153	509	2009-10	Case submitted for 2nd phase approval to AIG(FC)Min. of ENV&forest,New Delhi
2	Lilo of 220kv Bhatapara- Raipur (PGCIL)at Doma	21.47	76	2009-10	Work under progress
3	Suhela- PGCIL Bhatapara DCDS line	13.53	45+2G	2009-10	Work under progress

	Name of transmission line	Length in	Total	Commiss-	Remarks
		Ckt. Km	Locations(Nos)	ioning Schedule	
4	I/C Raigarh -PGCIL Raigarh DCDS	10.39	37+6G	2008-09	Charged on 15.04.09
5	LILO of Korba- Sitara at Mopka DCDS	12.14	47	2009-10	Work in progress
6	Khedamara-Bemetara line +1No bay each at Khedamara and Bemetara	50.9	150	2009-10	Work in progress
7	Chhuri - Mopka DC DS line	90		2009-10	Order placed
8	I/C between new power house at Korba (E)to proposed 220 kv Chhuri	30		2009-10	Work to be taken up
9	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
10	Diversion of 220kv line of Korba - Bhatapara and 220k I/C in between Korba (w) and proposed 220 kv Cchuri s/susing section of Korba - Amarkantak- I & II	14		2009-10	Work to be taken up
11	Diversion of 220kv line of Korba -Amarkantakckt I & II to proposed 220/132 kv Chhuri s/s DCDS	4		2009-10	Work to be taken up
D)	महाराष्ट्र Maharashtra				
	I) 400kV Lines				
1	Dabhol-Nagothane ckt-II	134.445	338	Mar, 09	Work in progress
2	LILO of Bhusawal-Koradi Ckt-I at Akola S/S	80	101	2007-08	Work in progress

	Name of transmission line	Length in ckt km.	Total Locations(Nos)	Commiss- ioning Schedule	Remarks
	II) 220kV Lines				
1	LILO B'shwer Aurangabad for Bhenda S/S	37.095	117	2008-09	Tower material required
2	Evacuation of power from Parli ext.project	5.112	20	2008-09	
3	LILO of Nasik-Kalwa for Ghatghar S/S	99	84	2008-09	
4	Padegaon-Sawangi D/C	29.436	52	31.03.07	Line being commissioned soon
5	LILO on Malharpeth-Wankuswade for SataraMIDC	60	98	31.03.07	
6	Interconaction between Kolhapur-II-Kolhapur-III S/S	18.4	36	Sep' 09	ROW problem, Resurvey work under progress
7	LILO on Apta -Chinchwad for URSE S/S	22	37	2008-09	Work order placed
8	Kanhan-Umred S/C on D/C at Umred	50.106	164	2008-09	Foundation, Erection etc. in progress
9	LILO of Dhule-Dondaicha at Amalner D/C	80		2008-09	
10	Boisar(PGCIL 400/220kV)-Wada	55		2008-09	
11	Kolhapur—III-Mundhaltitta	40		2008-09	
12	LILO of Jejuri-Pandharpur at Temburni D/C	6		2008-09	
13	Kanhan-Umred S/C on D/C line	50.1	158	2008-09	Foundation Erection etc. in progress
14	Dhule-Dondaicha D/C at Amalner S/S	44	98	2008-09	Complete stringing material required

	Name of transmission line	Length in ckt km.	Total Locations(Nos)	Commissioning Schedule	Remarks
15	LILO of Tarapur-Borivali for Boisar-II S/S	8	15	Sep' 09	Bloc date extended due to ROW problem
16	220kV line from PGCIL to 220kV Wada S/S	57	199	Dec' 09	Severe ROW problem, 220kV PGCIL .Nalasopara section charged temporarily on 26.01.08 through Boisar S/S
E)	गोवा GOA				
	Xeldem-Cuncolin D/C	20		2008-09	
Sl.No	पावरग्रिड POWERGRID				
	765 kV				
1	Seoni-Bina(to be initially charged at 400kV)	292		Nov-09	
	400kV Lines				
A)	Sipat Trans system stage- II	702	1244	2008-09	
1	Rourkela – Raigarh D/C			Mar-10	
2	Raigarh – Raipur D / C			Mar-10	
3	400 Kv Akola – Aurangaba D/C			Oct-09	
B)	Western Region System Strengthening-I			2008-09	
C)	Sipat-II Suplimentary Trans system	1173	-	2008-09	
1	D/C Wardha-Akola	368		Feb'09	
2	D/C Akola-Aurangabad	530		Mar'09	
3	Korba(NTPC)-Birsingpur(MPGENCO) D/C	454		July'10	
4	Birsingpur(MPGENCO)-Damoh(PGCIL)	508		July'10	
5	Birsingpur-Damoh-Bhopal				
	220 kV Line				

आवृत्ति रूपरेखा

a. Frequency Profile

MAXIMUM FREQUENCY(Inst.):	50.50 HZ
आधिकतम आवृत्ती एकिकृत :	
Minimum frequency(Inst)	48.70 HZ
न्यूनतम आवृत्ती एकिकृत :	
Average frequency	49.66 HZ
औसत आवृत्ती	

b. आवृत्ती वितरण प्रतिशत में Frequency distribution in %

HZ	<48.8	<48.8 - 49.2	49.2 -49.8	49.8-50.3	50.3-51.0	>51.0
%	0.07	4.96	64.89	29.78	0.3	0.00

माह अक्टूबर 09 आवृत्ती रूपरेखा

संलग्नक ANNEX-I

1. FREQUENCY PROFILE FOR THE MONTH OF OCTOBER - 2009

क्षेत्र Region	आवृत्ती स्थिती (प्रतिशत समय) Percentage of time when frequency was							अधिकतम आवृत्ती तात्कालिक Max. freq. (Inst.) Hz	न्यूनतम आवृत्ती Min. freq. (Inst.) Hz	औसत आवृत्ती Average freq. Hz	संक्षिप्त स्पष्टीकरण Brief Explanation
	Below 48.8	48.8- 49.2	49.2- 49.5	49.5- 49.8	49.8- 50.3	50.3- 51	Above 51				
पश्चिम Western	0.37	15.93	23.79	28.41	30.99	0.51	0	50.49	48.65	49.59	Frequency was in the normal range (49.2-50.3 Hz)for 83.19 % of time.

संलग्नक Annex-II

माह अक्टूबर 09 में ग्रिड के प्रमुख उप केन्द्र का विद्युतदाब रूपरेखा

1. Voltage Profile of major Sub-Stations for the month of October -2009

क्षेत्र Region	सब स्टेशनका नाम Sub- Station Name	अधिकतम विद्युतदाब Nominal Voltage (kV)	विद्युतदाब स्थिती (प्रतिशत समय)			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	3.15	96.85	440	400	
	असोज Asoj	400	0	0.03	99.97	428	397	
	कराड Karad	400	0	16.23	83.77	429	400	
	कासोर Kasor	400	0	57.26	42.74	425	391	
	इन्दौर Indore	400	0.18	74.31	25.51	419	386	
	इटारसी Itarsi	400	0.62	29.18	70.2	428	398	
	जेतपुर Jetpur	400	50.28	40.29	9.43	415	351	
	भिलाई Bhilai	400	0.12	5.4	94.48	420	400	
	बिना Bina	400	0.08	70.76	29.16	426	381	
	ग्वालियर Gwalior	400	4.37	79.25	79.25	432	357	

माह अक्तूबर 09 का अंतर राज्य में ऊर्जा पारेषण

A) Inter-State Transfer Of Energy For The Month Of October - 2009

प्रेषक From		प्रती To		द्विचु यु Wheeled	कुल ऊर्जा प्रवाह मेगावॉट	चरम पावर मेगावॉट
				Through	Total energy Flow(MUs)	Peak power(MW)
उपयोगीता Utility	क्षेत्र Region	उपयोगीता Utility	क्षेत्र Region			
AP-NER	NORTH EASTERN	RINFRA MSEB (AP NER)	Western	ER-WR AC Link	4.159	,As per schedule
NBVL	SOUTHERN	MSEB (TPTCL)	Western	HVDC BHADRAVATI	0.503	18
NGLD	NORTH EASTERN	RINFRA MSEB (NGLD)	Western	ER-WR AC Link	16.558	30
JSWEL	SOUTHERN	RINFRA MSEB (JSWPTL)	Western	HVDC BHADRAVATI	5.038	150
GBRL(KPCL)	SOUTHERN	TPC MSEB (LANCO)	Western	HVDC BHADRAVATI	0.612	10
WBSEB	EASTERN	MSEB (TPTCL)	Western	ER-WR AC Link	0.387	100
HSSKN(KPTCL)	SOUTHERN	MSEB (TPTCL)	Western	HVDC BHADRAVATI	0.401	9
ICPL	SOUTHERN	MSEB (TPTCL)	Western	HVDC BHADRAVATI	0.379	16
JSWEL	SOUTHERN	DNH (IEXL)	Western	HVDC BHADRAVATI	0.387	26.06
NTPC - RAMAGNDAM	SOUTHERN	MSEB (NVVNL)	Western	HVDC BHADRAVATI	0.116	120
TISCO	NORTH EASTERN	RINFRA MSEB (NVVNL)	Western	ER-WR AC Link	0.912	20
WBSEB	EASTERN	RINFRA MSEB (NVVNL)	Western	ER-WR AC Link	15.1	40
JVVNL	NORTHERN	RINFRA MSEB (TPTCL)	Western	HVDC VINDHYACHAL & NR-WR AC LINK	5.968	31.94

B) INTRA- REGIONAL BI-LATERAL EXCHANGES(All figures are in Mus)

MUNDRA APL TO GUJARAT (LTOA)	NSPCL CSEB TO DNH (BILATERAL)	JPL TO MPSEB (MPSEB)	HFAL CSEB TO DD (IEXL)	NSPCL CSEB TO DD (BILATERAL)	SNIL CSEB TO DD (IEXL)	AFAL CSEB TO DNH (IEXL)
67.580	52.988	26.250	0.035	37.094	0.063	0.030
GPIL CSEB TO DNH (IEXL)	JPAL CSEB TO DNH (IEXL)	IRSL MSEB TO GOA (RETL)	INDORAMA MSEB TO MPSEB (RETL)	I IPL MSEB TO MPSEB (MPSEB)	AFAL CSEB TO MSEB (TPTCL)	AIDCPL CSEB TO MSEB (TPTCL)
0.067	0.102	0.091	14.644	10.618	2.153	0.146
CSPL CSEB TO MSEB (TPTCL)	GPIL CSEB TO MSEB (TPTCL)	HFAL CSEB TO MSEB (TPTCL)	HPSL CSEB TO MSEB (TPTCL)	JPAL CSEB TO MSEB (TPTCL)	MSPPL CSEB TO MSEB (TPTCL)	PCBL GUVNL TO MSEB (TPTCL)
0.585	7.576	4.545	4.545	7.123	1.878	5.374
REALISPAT CSEB TO MSEB (TPTCL)	RREL CSEB TO MSEB (TPTCL)	SNIL CSEB TO MSEB (TPTCL)	VGL CSEB TO MSEB (TPTCL)	VIL CSEB TO MSEB (TPTCL)	APL CSEB TO RINFRA MSEB (AEL)	DNH TO RINFRA MSEB (IEXL)
3.425	3.951	3.165	0.898	1.878	30.520	0.80
JPL TO RINFRA MSEB (RINFRA MSEB)	MPSEB TO RINFRA MSEB (LANCO)	MPSEB TO RINFRA MSEB (RINFRA MSEB)	INDORAMA MSEB TO RINFRA GOA (RETL)	IRSL MSEB TO RINFRA GOA (RETL)		
78.000	31.137	1.800	0.091	0.182		

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

TOTAL	GUVNL	MPPTCL	CSEB	MSEDCL	GOA	DD	DNH	JINDAL POWER
167.02	78.214	24.581	82.467	22.602	5.509	0.010	1.14	36.941

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

TOTAL	GUVNL	MPPTCL	CSEB	MSEDCL	GOA	DD	DNH	JINDAL POWER
49.813	39.229	0.00	13.204	2.620	0.00	0.00	0.00	0.000

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

AUFLS OPERATION DURING OCTOBER - 2009

In the month of October - 2009 , frequency below 49.2 Hz. was 5.03 % of the time.
 AUFLS at stage - I was required to operate on 155 occasions as frequency touched 48.8 HZ.
 But in Maharashtra U F relay operations occurred on 20 occasions , in Gujarat UF relay operation occurred on 14 occasions, in Madhya Pradesh UF relay operation occurred on 28 occasions and in Chhattisgarh UF relay operation occurred on 6 occasions during the month.

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	1st,3rd,6th,13th,22nd to26th	9-222	550	6th,8th,11th,14th,20th,27th and 31st
Gujarat	1st,3rd,13th,22nd to 26th	2-107	220	6th,8th,11th,14th,20th,27th and 31st
Madhya Pradesh	1st , 3rd, 13th , 24th , 26th and 31st	31-199	152	6th,8th,11th,14th,20th,22nd , 23rd, 25th and 27th
CSEB	3rd , 13th and 24th	,7-19	38	1st , 6th,8th,11th, 14th,20th,22nd,23rd 25th,26th,27th,31st

,Dates on which U/F relays at 48.8 hz are required to be operated - 1st, 3rd, 6th, 8th , 9th,11th,14th, 20th,22nd to 27th and 31st .

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 defense mechanism against major disturbances .
 The load relief obtained from Maharashtra , chattisgarh and gujarat are inadequate.